HELUKABEL®

CABLE ACCESSORIES

2013/2014

www.helukabel.de

Welcome

Photo: HELUKABEL® – Headquarters Hemmingen

HELUKABEL® are today one of Germany´s leading cable companies, boasting an extensive range of cables, wires, special cables, media technology, cable accessories, as well as Data, Network & Bus Technology and cable protection systems for robotics and handling systems.

Today, we produce for all markets and for every purpose. Our extensive warehouse stock, containing over 33,000 articles, enables us to deliver your order within extremely short delivery times.

The catalogue provides a full overview of cables according to overseas standards, which is constantly being expanded according to the market´s requirements. The employees of our internal and field sales teams are happy to advise and assist you in finding the best solution for your needs.

You can reach us at:

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Fax +49 7150 81786
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Domestic sales: Monday to Friday	7:00 a.m. to 6:00 p.m.
Export:	7:00 a.m. to 6:00 p.m. (German time)

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The production Windsbach/Nuremberg

Here we are realizing standard cables, special cables and customer-specific special solutions.

The annual production of our own plant in Windsbach/Nuremberg, which has a production surface area over 10,000 m^2 and approx. 145 employees, this equates to approx. 50,000 km of cable or 340,000 core kilometres.

The products include shielded, unshielded and steel wire reinforced control cables with PVC/PUR sheath or thermoplastic elastomers and halogen-free, flame-resistant and heat-resistant shielded and unshielded cables. Our range is rounded off by special-purpose cables produced to customer requirements.

The logistics centre

A large part of the product assortment, which has over 33,000 articles, is held starting from the Hemmingen storage.

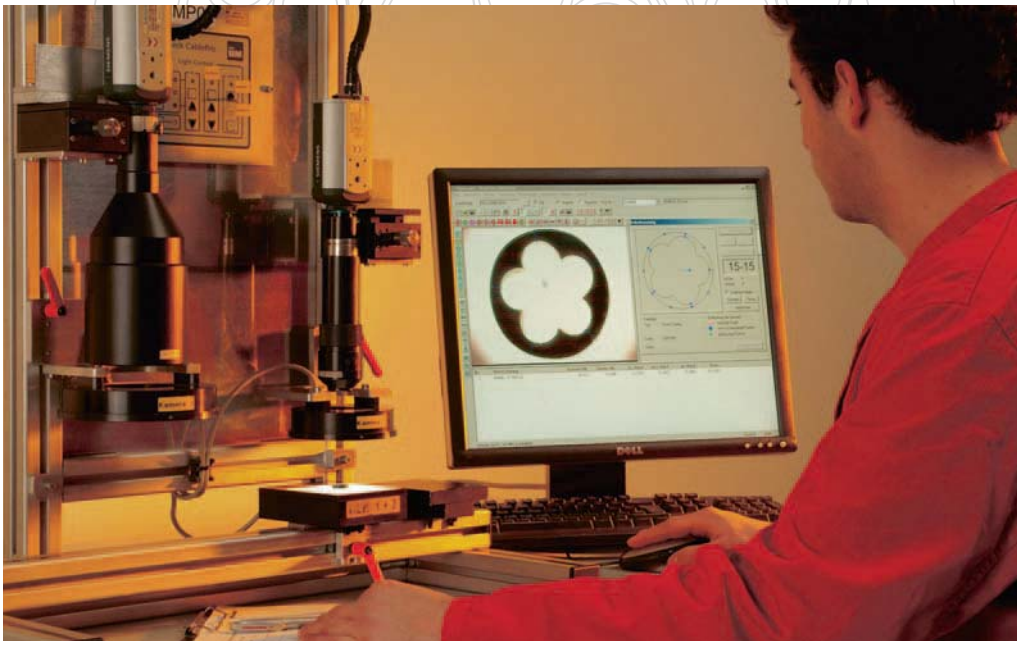
To meet the increasing demands of the market, HELUKABEL® opened a logistics centre. The goal of the logistics centre is to increase the order to deliveryprocess through automation.

Innovative warehouse engineering and high-tech information techniques make this installation unique in the cable business.

"State of the Art" automation allows hundreds of orders to be filled daily. Our "Just in Time" system pulls product from over 16,000 pallet storage locations.

Research & development

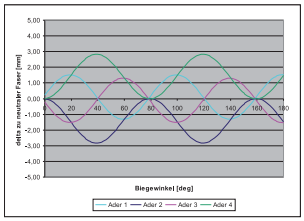
We devise optimised cable solutions for our customers.



Photos: HELUKABEL®

The focus is very much on products for mobile use with a high level of vertical integration. Our customers expect extreme resistance to chemical, electrical and mechanical stresses combined with small bending radii, a high number of flexing cycles and outstanding service lives – we are happy to comply.

Our design engineers rely on the latest software to develop our cables. This software makes the cores' movement scenarios in the cable sheath visible.

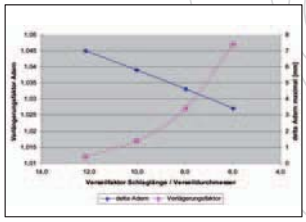


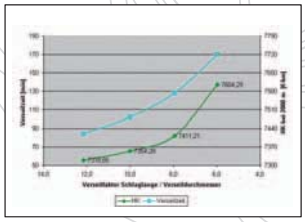
Once these prereqisites are met, we can optimize the products - according to the type of stranding, lay-length and material - and the corresponding manufacturing technique.

New products are tested in the state-of-the-art Test Center in Windsbach/Nuremberg to ensure their suitability for daily use and readiness for standard production. Our stringent quality standard is also upheld with measurements and random sample checks carried out during production.

In order to provide information on the service life, we document the real-life tests we carry out on our cables suitable for use in drag chains.

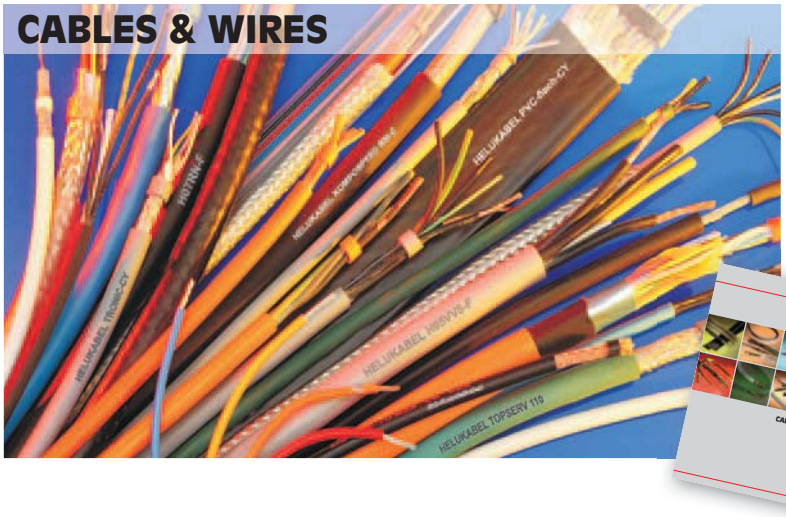
The effect of changing the lay-length





Our product ranges

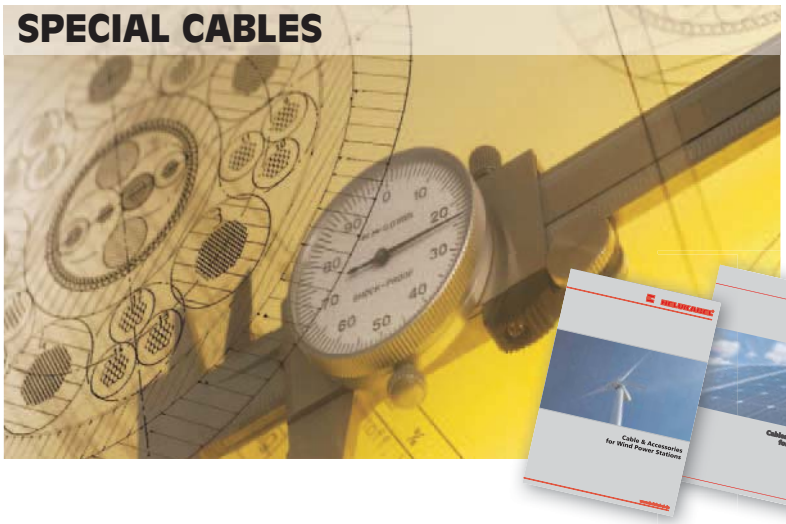
CABLES & WIRES



HELUKABEL® can deliver cables and wires for any industrial application. Our extensive warehouse stock, containing over 33,000 articles, enables us to deliver order within extremely short delivery times.

You can find more information about this in our actually catalogue CABLES & WIRES.

SPECIAL CABLES



We supply cables and wires for both standard applications and bespoke solutions to meet customers' individual and application-specific requirements. Those cables can be designed, constructed and produced in our own factory, encluded cables for photovoltaic and wind power.

Just give us a call – our team will be happy to advise you.

CABLE ACCESSORIES

As a significant addition to the extensive program of cables and wires, HELUKABEL® provides a cables accessories program according to the latest guidelines and standards. For example: Cable glands, cable glands accessories, protective tubes, drag and guidance chains.

More information and all products in our catalogue CABLE ACCESSORIES.

If you require additional copies of any catalogues or brochures below, simply fill out the request from provided at the back of this catalogue or at the internet.

DATA, NETWORK & BUS TECHNOLOGY

HELUKABEL® can offer an extensive range of equipment for networking heterogenous systems using fibre optic and copper techniques. HELUKABEL® is able to meet with its brands HELUCOM®, HELUCOM Connecting Systems®, HELUKAT® and HELUKAT Connecting Systems® all of your cable and accessories you needs.

All products to find in the catalogue DATA, NETWORK & BUS TECHNOLOGY.

MEDIA TECHNOLOGY

For years, our cables have ensured perfect performances on Europe's leading musical and theatrical stages. They are also used in professional television, radio and studio equipment and at large-scale events such as the football world championships.

Our product range for media equipment encompasses cables for both indoor and outdoor use. It guarantees high transmission quality for fixed installations or for mobile use.

More information in our new catalogue MEDIA TECHNOLOGY.

Our registered trademarks

CABLES AND WIRES	
BIOFLEX-500®	Bio-Oil resistant Cables
DATAFLAMM®	Data and Computer Cables halogen-free
DATAPUR-C®	Data and Computer Cables
GALVANICABLE®	High-current cathode Cables
HELUFLON®	Heat resistant Cables
HELUTHERM®	Heat resistant Cables
HELUTRAIN®	Train Cables
HELUTRUCK®	Vehicle Cables / Truck Cables
HELUWIND®	Cables for Wind Power
KOMPOFLEX®	Microbial resistant Cables
KOMPOSPEED®	Bio-Oil resistant Cables for Drag Chains
LIFT-TRAGO®	Lift hoist control Cables
MEGAFLEX®	Flexible Control Cables halogen-free (UL/CSA)
MULTIFLEX 512®	Cables for Drag Chains PUR
MULTISPEED®	Cables for Drag Chains
SENSORFLEX®	Sensor Cables
SOLARFLEX®	Cables for photovoltaic
SUPER-PAAR-TRONIC-C-PUR®	Cables for Drag Chains halogen-free
SUPERTRONIC®	Cables for Drag Chains
THERMFLEX®	Heat resistant Cables
TOPFLEX®	Servo, Feedback and Motor Cables
TOPSERV®	Servo, Feedback and Motor Cables
TRAYCONTROL®	Cable for open installation, exposed run
TROMMPUR®	Trailing Cables
UNIPUR®	Flexible Control Cables PUR
DATA, NETWORK AND BUS TECHNOLOGY	
HELUCOM®	Fibre optic Cables
HELUCOM CONNECTING SYSTEMS	Fibre optic connecting equipment
HELUKAT®	Copper data Cables
HELUKAT CONNECTING SYSTEMS	Copper connecting equipment
MEDIA TECHNOLOGY	
HELULIGHT	Cables for light control
HELUSOUND	Audio Cables
CABLE ACCESSORIES	
HELUCHAIN®	Cables for Drag Chains program
HELUTEC®	Industrial connectors series
HELUTOP®	Cable glands program
HELUROBOTICS	
HELUROBOTICS®	Pre-assembled dress package systems for Robotics

Achieving success through quality and innovation

VDE Prüf- und Zertifizierungsinstitut

VDE VERBAND DER ELEKTROTECHNIK ELEKTRONIK INFORMATIONSTECHNIK e.V.

CERTIFICATE

Registration Number: 15191/QM/03.97

This is to certify that the company

HELUKABEL GmbH

at the following location

Neuseser Weg 11
D-91575 Windsbach
Germany

has implemented and maintains a Quality Management System for the following scope:

Development, design and manufacture of cables and wires

According to audit report 1519100-9100-0001/95075 this QM System complies with the requirements of:

DIN EN ISO 9001:2008

This Certificate is valid until 2012-06-04.

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Certification

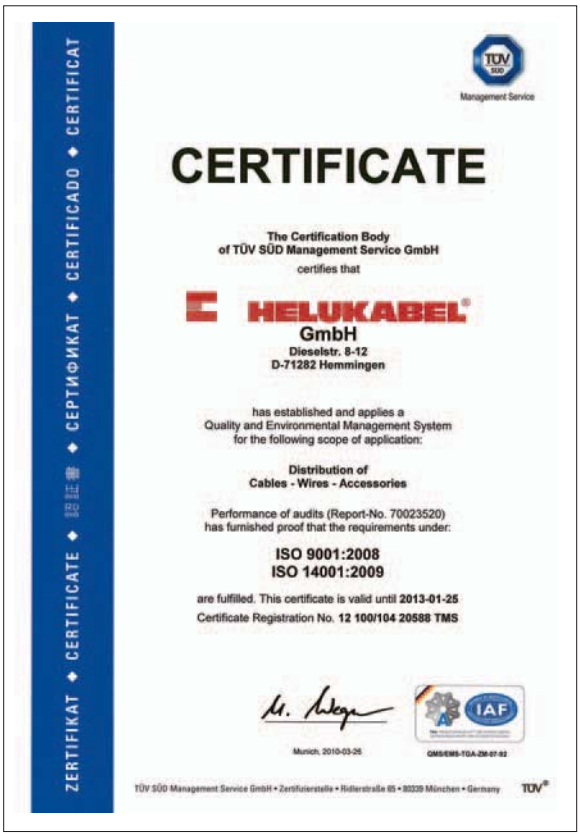
Date: 2009-07-20

The VDE Testing and Certification Institute is accredited by DAR Accreditation Bodies according to DIN EN ISO/IEC 17020 and DIN EN ISO/IEC 17021 and notified in the EU under ID. No. 0366.

TGA-ZM-09-02-00

Product certificates document the tested quality level of our products

ISO 9000ff is used as the basis for quality management processes carried out at HELUKABEL®. Product certificates issued by accredited institutions also make it easier for you to evaluate your suppliers.



ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Management Service

CERTIFICATE

The Certification Body
of TÜV SÜD Management Service GmbH
certifies that

HELUKABEL GmbH
Dieselstr. 8-12
D-71282 Hemmingen

has established and applies a
Quality and Environmental Management System
for the following scope of application:

Distribution of
Cables - Wires - Accessories

Performance of audits (Report-No. 70023520)
has furnished proof that the requirements under:

ISO 9001:2008
ISO 14001:2009

are fulfilled. This certificate is valid until 2013-01-25
Certificate Registration No. 12 100/104 20588 TMS

Munich, 2010-03-26

TÜV SÜD Management Service GmbH • Zertifizierstelle • Ridlerstraße 65 • 80339 München • Germany

Our continuous quality improvement process enables us not only to maintain a consistently high quality standard, it also ensures continued development and new product development.

Our commitment to protexting the environment can be seen in our-rate environment management systems.

Contact – Germany

Sales office
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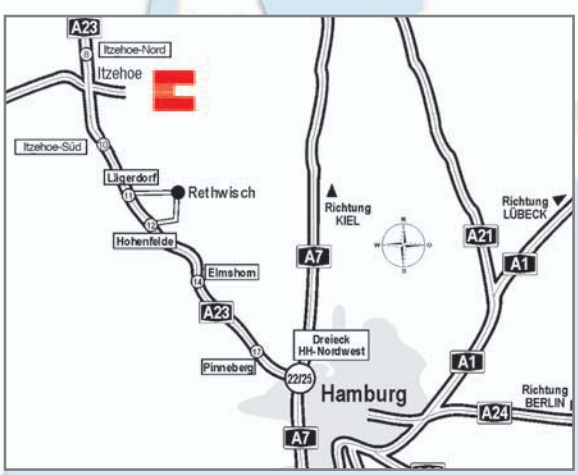
Bahnhofstraße 9
Telephone +49 4821 40394-0 • Fax +49 4821 40394-29



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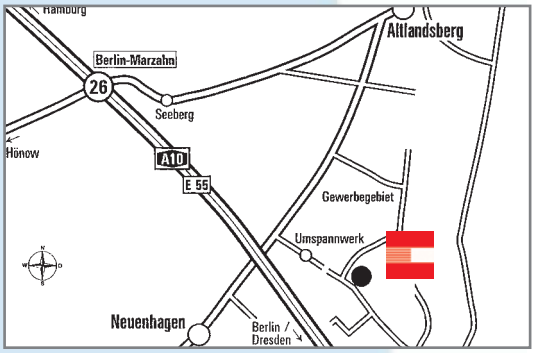

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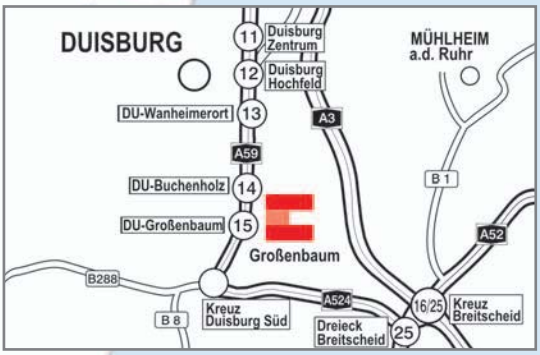

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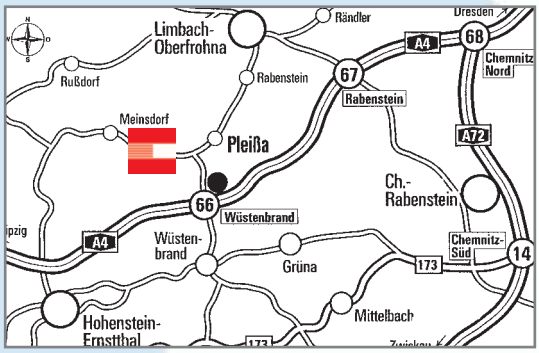

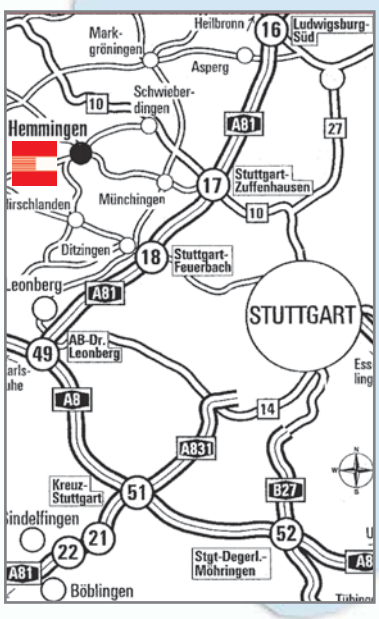

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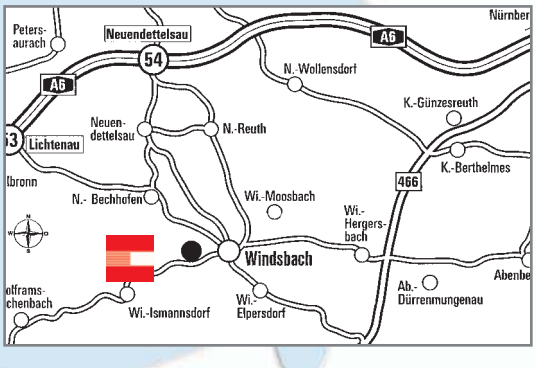

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kabelmat®
WICKELTECHNIK

The system provider for winding, measuring & warehouse systems

Kabelmat® Wickeltechnik GmbH's history goes back to the sixties and for a long time, the company has been among the market leaders for winding systems for the cable and wire industry and/or processing. Customers include manufacturers, retailers and processors of cables and wires as well as fitters, electrical installers, machine construction companies and many more.

The product portfolio includes almost all devices and machines for storage, winding and hanging of cables and wires, steel cables, pipes, hoses and profiles. The tasks completed worldwide by Kabelmat® products include winding from and to drums, as well as from drums to rings.

TROMTRAK 1250

TISCHROL II

Manual winding systems

These are Kabelmat® winding devices and machines without electromotive actuation. When it comes to winding systems, Kabelmat® differentiates between rewinding and unwinding. Kabelmat® offers different designs and sizes for rewinders as well as unwinders, for drums and rings.

Measuring systems

Our length measuring devices are available in different designs and sizes. The size depends on the maximum diameter of the material to be measured. The MESSBOI 40, for example, is qualified for measuring round material up to a diameter of 40 mm. Flat materials can also be measured. We currently have measuring devices for a maximum of 100 mm diameters in our program.

MESSBOI M40 Band

MESSBOI M30

MESSBOI M40/025 BAE

Ringrol 300 / 400 / 500

MOTROL 1000 AUF

Machine winding systems

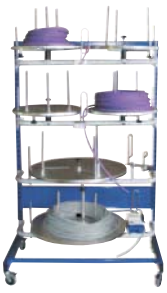
These are Kabelmat® winding devices and machines with electromotive actuation. Efficient, cost-effective cutting, measuring and winding of cables and wires, steel cables, pipes, hoses and profiles requires high-performing but easily operatable machines. Modern control systems and drive technologies of well-known German suppliers are used by Kabelmat® in the field.

Warehouse systems

These are Kabelmat® cable drum or cable ring storage and unwinding systems. With its warehouse systems MATBOI, SPULBOI®, LAGBOI® and LAGROL®, Kabelmat® offers to organize your cable warehouse. In addition, the LAGROL system provides the option to use a manual or machine-driven winder for direct unwinding.

SPULBOI®

LAGBOI® S



MATBOI® 450 / 650

Become aquianted with our complete winding, measuring & warehouse product range. Just download our catalogue via www.kabelmat.com

Contents

A Cable glands 17 – 192

Cable glands for standard applications
- made of plastic
- made of brass
- Accessories / Components

Cable glands for special usage conditions
- for electromagnetic compatibility (EMC)
- for robust applications and special chemical resistance
- for increased usage temperature
- for potentially explosive atmospheres
- for special installation conditions
- for special pressure conditions
- Accessories / Components

B Cable protection tubes 193 – 297

Corrugated tubes
- for standard applications
- in oversize
- dividable
- tube connectors

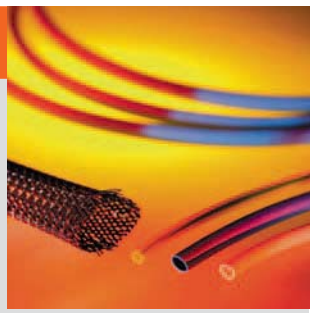
High flexible protection tubes
- made of plastic with coil springs
- made of metal, spiral wound
- tube connectors

Cable protection tubes for heavy-duty applications
- metal protection tubes, with plastic jacket
- plastic protection tube
- tube connectors for metal protection tube

C Cable drag chains 299 – 324

Open chains
Closed chains
Accessories
Installation notes
Selection tables

D Insulating, shrunk, braided and high temperature tubes 325 – 350



Braided sleeves
High temperature protection
Insulating tubes
Shrink-on sleeves
End caps

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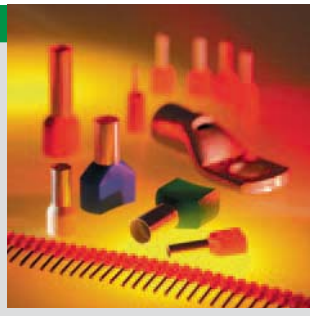
Mounting base

G Identification and marking 385 – 392

Marking rings
Cable markers

H Core end sleeves and cable lugs 393 – 446

Core end sleeves
Shield connectors
Solderless terminals
Tubular lugs
Compression joints



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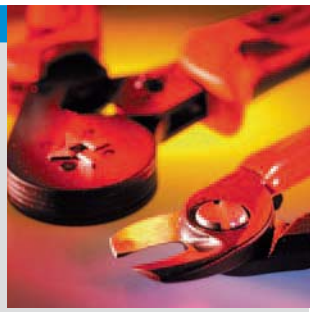

Cable shear
Stripping / dismantle
Crimping / press
Shield-Kon tools
Fastening
Cable binding tools
Handling
Mounting

J HELUTEC® Signal and power connectors 505 – 522

HELUTEC®-Series 617 / 623 / 627
HELUTEC®-Series 917 / 923 / 932 / 940 / 958
HELUTEC®-Series 723
HELUTEC®-Series 615 / 915
HELUTEC®-Series 926
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Selection Guide

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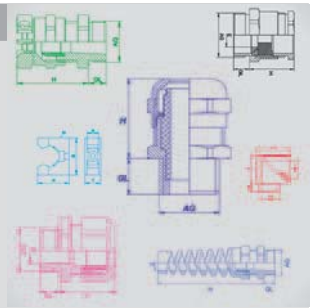

Notes for cable glands
Protection classifications
Fire protection
Metric / PG / NPT / BSP
Spanner size / dimensions
Size comparison AWG / mm
Alphabetical index
Part number index

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Cable glands

Cable glands overview

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General information

Basic functions of a cable gland

Transferring cables and wires

- Power (electricity)
- Signals and data (current, voltage, light)

Cable protection

If a wire is to be connected in a housing, the housing must have a protective lead-through. Otherwise there is a danger that the wire will become damaged in case of movement.

Strain relief

A wire always moves to a greater or lesser extent – both during installation, and in long-term use. It is important to protect it against tensile loads. The movements may be either constant or intermittent. For this reason, a cable gland with strain relief is necessary.
Strain reliefs are described in EN 50262. A distinction is made between retention, strain relief A and strain relief B. Generally, cable glands have strain relief A.

Protection classification

The lead-through in the wall of the housing must be sealed. This is described by ingress protection IP. The cable glands presented here have protection classification IP 68 – 5 bar. The 6 stands for "No dust penetration", while the 8 stands for "Protected when permanently submerged in water" – this is tested at a water pressure of 5 bar (corresponds to 50 m water depth) for a duration of 30 min.

Seal with insert

A seal is compressed by tightening the cap nut. A particularly high quality seal and strain relief are achieved.

Sealing with clamping plates

When the cap nuts are screwed tight, lamellae press against the moulded seal – the wire is thereby sealed and the strain is relieved. The particular advantage of the clamping lamellae is that they make a large clamping range possible, to allow for different wire diameters.

Resistance

Different applications demand different degrees of resistance.
Plastic cable glands made from polyamide can be used at a temperature range of between -20 °C and +100 °C. They are abrasion- and impact resistant as well as being resistant against hydrocarbons/fuels and cleaning agents.
Stainless steel glands are suitable for heavy-duty use– they are waterproof and resistant to a large number of disinfectants used in food production.
Brass glands are used when a long-lasting metal gland is required. Cable glands for EMC applications are also made from brass (EMC = Electro-magnetic Compatibility).

Compact design

- No disassembly during final assembly. Simply loosening the cap nuts is sufficient.
- No losing components
- Quick assembly

Standard EN 50262

Cable glands are produced and tested according to the standard EN 50262. This stipulates the dimensions of the connection threads ("metric threaded connection") as well as a series of safety-relevant parameters, e.g. strain relief. Cable glands are also available with another threaded connection (PG, NPT, etc.).

RoHS

Directive 2002/95/EC defines environment-relevant standards for electrical and electronic components and devices. This is known as RoHS for short: „Restriction of the use of certain hazardous substances in electrical and electronic equipment". The use of heavy metals (lead, cadmium, etc.) and a number of other hazardous substances is forbidden.

Installation notes

No disassembly

Disassembly of the glands HELUTOP® HT, HSK, Helufast, UNI-DICHT, KVA, SD are not necessary – provided that the cap nut is applied in such a way as to allow smooth running, there is no problem with subsequent insertion of the cable.

Screwing in

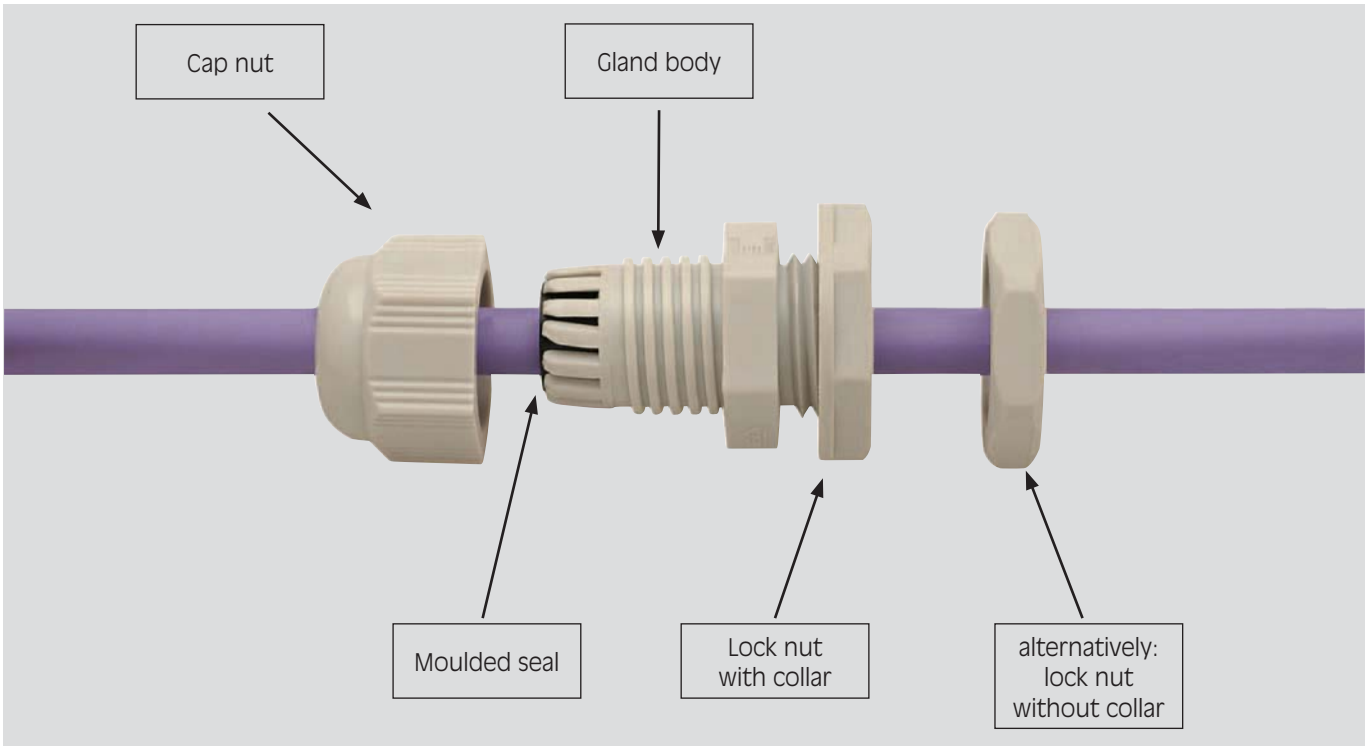
When screwing, observe the necessary tightening torque. If only one through-hole without thread is available, a lock nut must be used.

Protection classification

In order to achieve the desired protection classification even when working with an unfavourable surface, it may be necessary to use an O-ring or a connection thread gasket. To ensure a consistently high-quality seal, we recommend re-tightening the gland some time after assembly.

Lead through cable – turn cap nut – that's all there is to it!

Plastic cable glands



Cable gland

Cap nut and gland body are made of polyamide PA6 in the following colours:
- light grey RAL 7035
- dark grey RAL 7001
- black RAL 9005.

Polyamide PA6 is abrasion- and impact resistant, and resistant against hydrocarbons/fuels and cleaning agents. It is tried-and-tested as a material for cable glands in standard applications.

The moulded seal is made from CR.

The cable glands HELUTOP® HT and HSK are fitted with vibration protection for secure attachment in mobile applications.

Lock nut

The lock nuts with or without collar are made from polyamide PA6.

Accessories

Accessories suitable for use with the plastic cable glands:
- Lock nuts
- Adapters
- Extenders
- Reducers

Accessories suitable for use with all HELUTOP® cable glands:
- Sealing plugs
- Multiple sealing inserts / lock bolts
- O-rings
- Connection thread gaskets
- Blind plates

Cable glands made of plastic for standard applications

Seal with clamping plates

Series HELUTOP® HT
- Standard
  - **HELUTOP® HT** ... 26
- Dust protection / Seal
  - **HELUTOP® HT-BS** ... 28
  - **HELUTOP® Sealing inserts** ... 29
- Multiple sealing inserts
  - **HELUTOP® HT-MFDE** ... 30
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- Kink protection
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- Accessories / Parts
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Cable glands made of plastic for standard applications

Conventional design

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Flat cable gland
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Thread adapter

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Sealing insert
Incision sealing ring 78
Elbow
OF 79
HSSV-KF 80
Fastening
BW 81

HELUTOP® HT cable gland

HELUTOP® HT
The plastic cable gland with vibration protection

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

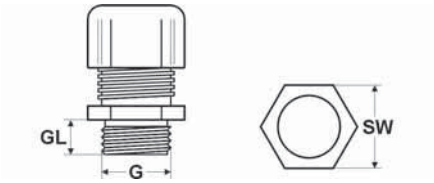
Properties
- Optimum strain relief through clamping plates
- Easy to assemble
- Large clamping areas

Note
Details on the individual tests appear in section "Technical Information".
UV-resistant (RAL 9005)

Technical data
Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions
G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93908	93923	93937	M12 x 1,5	3,0 - 6,5	6,0	15	100	o. r.	o. r.	o. r.
93909	93924	93938	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
92667	92668	92669	M16 x 1,5	5,0 - 10,0	10,0	22	50	o. r.	o. r.	o. r.
93910	93925	93939	M20 x 1,5	6,0 - 12,0	10,0	24	50	o. r.	o. r.	o. r.
93911	93926	93940	M25 x 1,5	11,0 - 17,0	8,0	29	50	o. r.	o. r.	o. r.
93912	93927	93941	M32 x 1,5	15,0 - 21,0	10,0	36	25	o. r.	o. r.	o. r.
93913	93928	93942	M40 x 1,5	19,0 - 28,0	10,0	46	20	o. r.	o. r.	o. r.
93914	93929	93943	M50 x 1,5	30,0 - 38,0	18,0	60	10	o. r.	o. r.	o. r.
93915	93930	93944	M63 x 1,5	34,0 - 44,0	18,0	65	10	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903532	903542	903552	M12 x 1,5	2,0 - 5,0	8,0	15	100	o. r.	o. r.	o. r.
903533	903543	903553	M16 x 1,5	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
903534	903544	903554	M20 x 1,5	5,0 - 9,0	10,0	24	50	o. r.	o. r.	o. r.
903535	903545	903555	M25 x 1,5	9,0 - 13,0	8,0	29	50	o. r.	o. r.	o. r.
903536	903546	903556	M32 x 1,5	11,0 - 15,0	10,0	36	25	o. r.	o. r.	o. r.
903537	903547	903557	M40 x 1,5	16,0 - 23,0	10,0	46	20	o. r.	o. r.	o. r.
903538	903548	903558	M50 x 1,5	25,0 - 31,0	18,0	60	10	o. r.	o. r.	o. r.
903539	903549	903559	M63 x 1,5	29,0 - 35,0	18,0	65	10	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HELUTOP® HT cable gland

PG thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99300	99310	99320	7	3,0 - 6,5	8,0	15	100	o. r.	o. r.	o. r.
99301	99311	99321	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
99302	99312	99322	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
99303	99313	99323	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
99304	99314	99324	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
99305	99315	99325	21	13,0 - 18,0	11,0	33	25	o. r.	o. r.	o. r.
99306	99316	99326	29	18,0 - 25,0	11,0	42	20	o. r.	o. r.	o. r.
99307	99317	99327	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
99308	99318	99328	42	30,0 - 38,0	13,0	60	10	o. r.	o. r.	o. r.
99309	99319	99329	48	34,0 - 44,0	14,0	65	10	o. r.	o. r.	o. r.

NPT thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92780	92790	92800	3/8"	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
92781	92791	92801	1/2"	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
92782	92792	92802	1/2"	10,0 - 14,0	15,0	27	50	o. r.	o. r.	o. r.
92783	92793	92803	3/4"	14,0 - 18,0	15,0	33	25	o. r.	o. r.	o. r.
92784	92794	92804	1"	18,0 - 25,0	18,0	42	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® HT-BS cable gland

with dust protection

HELUTOP® HT-BS

The plastic cable gland with vibration protection and pre-assembled dust protection

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
Dust protection: foam rubber

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Properties

- Optimum strain relief through clamping plates
- Easy to assemble
- Large clamping areas

Note

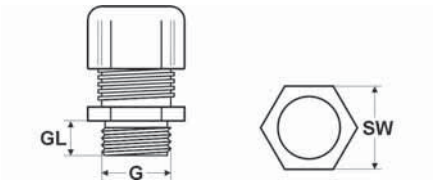
Details on the individual tests appear in section "Technical Information".
UV-resistant (RAL 9005).
The informaion of the protection classification applies only by use as cable gland, but not for the blind plugs.

Technical data

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94530	94540	94550	M12 x 1,5	3,0 - 6,5	8,0	15	100	o. r.	o. r.	o. r.
94531	94541	94551	M16 x 1,5	5,0 - 10,0	10,0	22	50	o. r.	o. r.	o. r.
94532	94542	94552	M20 x 1,5	6,0 - 12,0	10,0	24	50	o. r.	o. r.	o. r.
94533	94543	94553	M25 x 1,5	11,0 - 17,0	8,0	29	25	o. r.	o. r.	o. r.
94534	94544	94554	M32 x 1,5	15,0 - 21,0	10,0	36	25	o. r.	o. r.	o. r.
94535	94545	94555	M40 x 1,5	19,0 - 28,0	10,0	46	20	o. r.	o. r.	o. r.
94536	94546	94556	M50 x 1,5	30,0 - 38,0	18,0	60	10	o. r.	o. r.	o. r.
94537	94547	94557	M63 x 1,5	34,0 - 44,0	18,0	65	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® sealing inserts

HELUTOP® HT protection tab

Protection tab HT for sealing of empty cable glands HELUTOP® HT

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

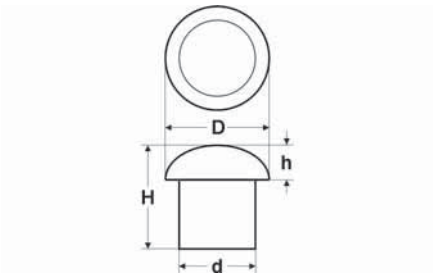
Material

Polyamide 6

Colours: black

Note

UV-resistant (RAL 9005).
*Protection tab 903492 only for cable glands type HT and HT-MS with clamping range 5-10mm.



Dimensions

D	Outer diameter head
d	Outer diameter insert
H	Height total
h	Height head

Part no.	Size metric	Outer diameter head mm	Outer diameter insert mm	Height total mm	Height head mm	Unit	Net EUR/100 items at a purchase of 5 - 100	105 - 500	505 - 1000
903492*	M16 x 1,5	13,5	10,0	20,5	5,5	100	o. r.	o. r.	o. r.
903493	M20 x 1,5	16,0	12,0	18,0	8,0	100	o. r.	o. r.	o. r.
903494	M25 x 1,5	20,0	16,5	18,5	7,5	100	o. r.	o. r.	o. r.
903495	M32 x 1,5	24,0	20,5	21,0	9,0	100	o. r.	o. r.	o. r.
903496	M40 x 1,5	32,0	27,5	25,0	9,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® HT-MFDE multiple sealing inserts

HELUTOP® HT-MFDE
for HELUTOP®HT gland shells

Material
NBR

Colours: black

Technical data
Temperature range: -20°C up to +100°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Note
Inserts for size M16 are suitable for cable glands M16x1,5 with clamping range 5-10mm.

Part no.	Size metric	Insert colour	Number x Ø borehole mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905773	M16 x 1,5	black	2x 2,0	1	o. r.	o. r.	o. r.
920102	M16 x 1,5	black	2x 4,0	1	o. r.	o. r.	o. r.
905776	M16 x 1,5	black	3x 4,0	1	o. r.	o. r.	o. r.
905775	M16 x 1,5	black	2x 5,0	1	o. r.	o. r.	o. r.
905774	M16 x 1,5	black	2x 3,0	1	o. r.	o. r.	o. r.
920103	M20 x 1,5	black	2x 5,0	1	o. r.	o. r.	o. r.
920105	M20 x 1,5	black	3x 4,0	1	o. r.	o. r.	o. r.
920104	M20 x 1,5	black	2x 6,0	1	o. r.	o. r.	o. r.
905777	M20 x 1,5	black	4x 4,0	1	o. r.	o. r.	o. r.
920109	M20 x 1,5	black	4x 3,0	1	o. r.	o. r.	o. r.
920106	M20 x 1,5	black	3x 5,0	1	o. r.	o. r.	o. r.
920113	M25 x 1,5	black	3x 7,0	1	o. r.	o. r.	o. r.
905779	M25 x 1,5	black	5x 4,0	1	o. r.	o. r.	o. r.
905778	M25 x 1,5	black	3x 5,0	1	o. r.	o. r.	o. r.
903529	M25 x 1,5	black	7x 3,0	1	o. r.	o. r.	o. r.
920114	M25 x 1,5	black	4x 5,0	1	o. r.	o. r.	o. r.
920112	M25 x 1,5	black	3x 6,0	1	o. r.	o. r.	o. r.
920117	M25 x 1,5	black	6x 4,0	1	o. r.	o. r.	o. r.
920110	M25 x 1,5	black	2x 6,0	1	o. r.	o. r.	o. r.
920119	M32 x 1,5	black	2x 8,0	1	o. r.	o. r.	o. r.
920129	M32 x 1,5	black	9x 4,0	1	o. r.	o. r.	o. r.
905781	M32 x 1,5	black	3x 7,0	1	o. r.	o. r.	o. r.
904926	M32 x 1,5	black	4x 8,0	1	o. r.	o. r.	o. r.
920126	M32 x 1,5	black	6x 5,0	1	o. r.	o. r.	o. r.
905783	M32 x 1,5	black	8x 4,0	1	o. r.	o. r.	o. r.
905782	M32 x 1,5	black	4x 7,0	1	o. r.	o. r.	o. r.
903531	M32 x 1,5	black	9x 3,0	1	o. r.	o. r.	o. r.
905780	M32 x 1,5	black	2x 7,0	1	o. r.	o. r.	o. r.
920122	M32 x 1,5	black	3x 8,0	1	o. r.	o. r.	o. r.
903530	M32 x 1,5	black	6x 6,0	1	o. r.	o. r.	o. r.
920120	M32 x 1,5	black	2x 9,0	1	o. r.	o. r.	o. r.
920123	M32 x 1,5	black	4x 6,0	1	o. r.	o. r.	o. r.
905784	M32 x 1,5	black	8x 5,0	1	o. r.	o. r.	o. r.
920125	M32 x 1,5	black	5x 6,0	1	o. r.	o. r.	o. r.
905788	M40 x 1,5	black	5x 8,0	1	o. r.	o. r.	o. r.
905786	M40 x 1,5	black	3x 10,0	1	o. r.	o. r.	o. r.
905789	M40 x 1,5	black	6x 7,0	1	o. r.	o. r.	o. r.
905785	M40 x 1,5	black	2x 10,0	1	o. r.	o. r.	o. r.
905791	M40 x 1,5	black	9x 7,0	1	o. r.	o. r.	o. r.
905790	M40 x 1,5	black	8x 6,0	1	o. r.	o. r.	o. r.
905787	M40 x 1,5	black	4x 8,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Sealing billets

Sealing billets
for empty penetrations.

Material
Polyethylene

Technical data
Temperature range: -20°C up to +100°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Dimensions
l Length
d Diameter

Part no. black	Diameter x Length	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903515	3,0 x 25,0	100	o. r.	o. r.	o. r.
903516	4,0 x 20,0	100	o. r.	o. r.	o. r.
903517	4,0 x 25,0	100	o. r.	o. r.	o. r.
903518	5,3 x 25,0	100	o. r.	o. r.	o. r.
903519	6,0 x 25,0	100	o. r.	o. r.	o. r.
903520	6,4 x 25,0	100	o. r.	o. r.	o. r.
903521	7,0 x 25,0	100	o. r.	o. r.	o. r.
903522	7,5 x 20,0	100	o. r.	o. r.	o. r.
903523	8,0 x 20,0	100	o. r.	o. r.	o. r.
903524	9,0 x 20,0	100	o. r.	o. r.	o. r.
903525	9,3 x 20,0	100	o. r.	o. r.	o. r.
903526	10,0 x 20,0	100	o. r.	o. r.	o. r.

Part no. white	Diameter x Length	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903502	3,0 x 25,0	100	o. r.	o. r.	o. r.
903503	4,0 x 20,0	100	o. r.	o. r.	o. r.
903504	4,0 x 25,0	100	o. r.	o. r.	o. r.
903505	5,0 x 25,0	100	o. r.	o. r.	o. r.
903506	6,0 x 28,0	100	o. r.	o. r.	o. r.
903507	6,4 x 25,0	100	o. r.	o. r.	o. r.
903508	7,0 x 28,0	100	o. r.	o. r.	o. r.
903509	7,5 x 20,0	100	o. r.	o. r.	o. r.
903510	8,0 x 30,0	100	o. r.	o. r.	o. r.
903511	9,0 x 30,0	100	o. r.	o. r.	o. r.
903512	10,0 x 30,0	100	o. r.	o. r.	o. r.
903513	11,0 x 30,0	100	o. r.	o. r.	o. r.
903514	12,0 x 30,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® HT-K cable gland

with anti-bend spirals

HELUTOP® HT-K

With anti-kink spirals for movable, flexible lines.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology

Material

Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Properties

- Optimum strain relief through clamping plates
- Easy to assemble

Note

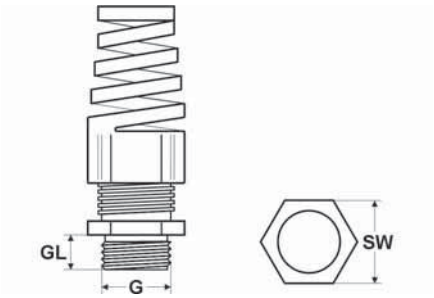
Details on the individual tests appear in section "Technical Information".
UV-resistant (RAL 9005).

Technical data

Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93867	93856	93878	M12 x 1,5	3,0 - 6,5	8,0	15	100	o. r.	o. r.	o. r.
93868	93857	93879	M16 x 1,5	5,0 - 10,0	10,0	22	50	o. r.	o. r.	o. r.
93869	93858	93880	M20 x 1,5	6,0 - 12,0	10,0	24	50	o. r.	o. r.	o. r.
93870	93859	93881	M20 x 1,5	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
93871	93860	93882	M25 x 1,5	13,0 - 18,0	10,0	33	25	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93861	93850	93872	7	3,0 - 6,5	8,0	15	100	o. r.	o. r.	o. r.
93862	93851	93873	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
93863	93852	93874	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
93864	93853	93875	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
93865	93854	93876	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
93866	93855	93877	21	13,0 - 18,0	11,0	33	25	o. r.	o. r.	o. r.

NPT thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99804	99901	99905	3/8"	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
99805	99902	99906	1/2"	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
99806	99903	99907	3/4"	14,0 - 18,0	15,0	33	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-METRICA-P cable gland

HSK-METRICA-P

The cable gland to meet stringent requirements in technology

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Clamping areas with metric dimensions

Material

Polyamide
Moulded seal: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data

Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C

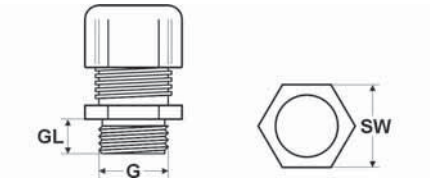
Test standard: EN50262

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Note

For the intrinsically safe area type "i" cable glands in blue, RAL 5012, are used.



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99520	99530	M12 x 1,5	4,0 - 7,0	8,0	15	50	o. r.	o. r.	o. r.
99521	99531	M16 x 1,5	6,0 - 10,0	8,0	19	50	o. r.	o. r.	o. r.
99522	99532	M20 x 1,5	8,0 - 13,0	9,0	24	50	o. r.	o. r.	o. r.
99523	99533	M25 x 1,5	11,0 - 17,0	10,0	30	50	o. r.	o. r.	o. r.
99524	99534	M32 x 1,5	11,0 - 21,0	10,0	36	25	o. r.	o. r.	o. r.
99525	99535	M40 x 1,5	19,0 - 28,0	12,0	46	10	o. r.	o. r.	o. r.
99526	99536	M50 x 1,5	27,0 - 35,0	12,0	55	5	o. r.	o. r.	o. r.
99527	99537	M63 x 1,5	34,0 - 48,0	12,0	68	5	o. r.	o. r.	o. r.

metric thread - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99540	M12 x 1,5	4,0 - 7,0	8,0	15	50	o. r.	o. r.	o. r.
99541	M16 x 1,5	6,0 - 10,0	8,0	19	50	o. r.	o. r.	o. r.
99542	M20 x 1,5	8,0 - 13,0	9,0	24	50	o. r.	o. r.	o. r.
99543	M25 x 1,5	11,0 - 17,0	10,0	30	50	o. r.	o. r.	o. r.
99544	M32 x 1,5	11,0 - 21,0	10,0	36	25	o. r.	o. r.	o. r.
99545	M40 x 1,5	19,0 - 28,0	12,0	46	10	o. r.	o. r.	o. r.
99546	M50 x 1,5	27,0 - 35,0	12,0	55	5	o. r.	o. r.	o. r.
99547	M63 x 1,5	34,0 - 48,0	12,0	68	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK cable gland

HSK
The cable gland to meet stringent requirements in technology
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide
Moulded seal: NBR

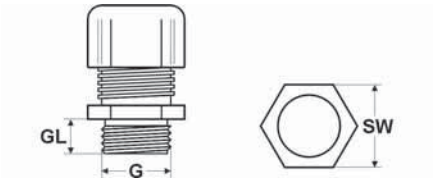
- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
For the intrinsically safe area type "i" cable glands in blue, RAL 5012, are used.

Technical data
Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97558	97550	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
96967	97551	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97956	97960	M16 x 1,5	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
96968	97552	M20 x 1,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97957	97961	M20 x 1,5	10,0 - 14,0	9,0	27	50	o. r.	o. r.	o. r.
96969	97553	M25 x 1,5	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
96970	97554	M32 x 1,5	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
96971	97555	M40 x 1,5	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
96972	97556	M50 x 1,5	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
96973	97557	M63 x 1,5	37,0 - 44,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

metric thread - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97967	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
97968	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97969	M16 x 1,5	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
97970	M20 x 1,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97971	M20 x 1,5	10,0 - 14,0	9,0	27	50	o. r.	o. r.	o. r.
97972	M25 x 1,5	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
97973	M32 x 1,5	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
97974	M40 x 1,5	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
97975	M50 x 1,5	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
97976	M63 x 1,5	37,0 - 44,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK cable gland

metric thread - with reducing seal

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97873	98205	M12 x 1,5	2,0 - 5,0	8,0	15	50	o. r.	o. r.	o. r.
96974	97977	M16 x 1,5	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
96975	97979	M20 x 1,5	5,0 - 9,0	9,0	24	50	o. r.	o. r.	o. r.
96976	97981	M25 x 1,5	9,0 - 16,0	11,0	33	50	o. r.	o. r.	o. r.
96977	97982	M32 x 1,5	13,0 - 20,0	11,0	42	25	o. r.	o. r.	o. r.
96978	97983	M40 x 1,5	20,0 - 26,0	13,0	53	10	o. r.	o. r.	o. r.
96979	97984	M50 x 1,5	25,0 - 31,0	13,0	60	5	o. r.	o. r.	o. r.
96980	97985	M63 x 1,5	29,0 - 35,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91826	M12 x 1,5	2,0 - 5,0	8,0	15	50	o. r.	o. r.	o. r.
91827	M16 x 1,5	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
91828	M20 x 1,5	5,0 - 9,0	9,0	24	50	o. r.	o. r.	o. r.
91829	M25 x 1,5	9,0 - 16,0	11,0	33	50	o. r.	o. r.	o. r.
91830	M32 x 1,5	13,0 - 20,0	11,0	42	25	o. r.	o. r.	o. r.
91831	M40 x 1,5	20,0 - 26,0	13,0	53	10	o. r.	o. r.	o. r.
91832	M50 x 1,5	25,0 - 31,0	13,0	60	5	o. r.	o. r.	o. r.
91833	M63 x 1,5	29,0 - 35,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90000	90020	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
90001	90021	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
90002	90022	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
90003	90023	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
90004	90024	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
90005	90025	21	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
90006	90026	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
90007	90027	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
90008	90028	42	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
90009	90029	48	37,0 - 44,0	14,0	65	5	o. r.	o. r.	o. r.

PG thread - for intrinsically safe application

Part no. blue RAL 5012	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96106	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
96107	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
96108	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
96456	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
96455	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
96912	21	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
97802	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
97803	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
97965	42	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
97966	48	37,0 - 44,0	14,0	65	5	o. r.	o. r.	o. r.

PG thread - with reducing seal

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90010	98290	7	2,0 - 5,0	8,0	15	50	o. r.	o. r.	o. r.
90011	96883	9	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
90012	96104	11	3,0 - 7,0	8,0	22	50	o. r.	o. r.	o. r.
90013	96544	13,5	5,0 - 9,0	9,0	24	50	o. r.	o. r.	o. r.
90014	96105	16	7,0 - 12,0	10,0	27	50	o. r.	o. r.	o. r.
90015	97306	21	9,0 - 16,0	11,0	33	50	o. r.	o. r.	o. r.
90016	96403	29	13,0 - 20,0	11,0	42	25	o. r.	o. r.	o. r.
90017	98202	36	20,0 - 26,0	13,0	53	10	o. r.	o. r.	o. r.
90018	98203	42	25,0 - 31,0	13,0	60	5	o. r.	o. r.	o. r.
90019	98204	48	29,0 - 35,0	14,0	65	5	o. r.	o. r.	o. r.

PG thread - with reducing seal - for intrinsically safe application

Part no. blue RAL 5012	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91816	7	2,0 - 5,0	8,0	15	50	o. r.	o. r.	o. r.
91817	9	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
91818	11	3,0 - 7,0	8,0	22	50	o. r.	o. r.	o. r.
91819	13,5	5,0 - 9,0	9,0	24	50	o. r.	o. r.	o. r.
91820	16	7,0 - 12,0	10,0	27	50	o. r.	o. r.	o. r.
91821	21	9,0 - 16,0	11,0	33	50	o. r.	o. r.	o. r.
91822	29	13,0 - 20,0	11,0	42	25	o. r.	o. r.	o. r.
91823	36	20,0 - 26,0	13,0	53	10	o. r.	o. r.	o. r.
91824	42	25,0 - 31,0	13,0	60	5	o. r.	o. r.	o. r.
91825	48	29,0 - 35,0	14,0	65	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK cable gland

NPT thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91630	91637	3/8"	4,0 - 8,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
91631	91638	1/2"	6,0 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
91632	91639	1/2"	10,0 - 14,0	13,0	27	50	o. r.	o. r.	o. r.
91633	91640	3/4"	13,0 - 18,0	14,0	33	50	o. r.	o. r.	o. r.
91634	91641	1"	18,0 - 25,0	19,0	42	25	o. r.	o. r.	o. r.
91635	91642	1,25"	18,0 - 25,0	16,0	42 / 46	10	o. r.	o. r.	o. r.
91636	91643	1,5"	22,0 - 32,0	20,0	53	5	o. r.	o. r.	o. r.

NPT thread - for intrinsically safe application

Part no. blue RAL 5012	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91644	3/8"	4,0 - 8,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
91645	1/2"	6,0 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
91646	1/2"	10,0 - 14,0	13,0	27	50	o. r.	o. r.	o. r.
91647	3/4"	13,0 - 18,0	14,0	33	50	o. r.	o. r.	o. r.
91648	1"	18,0 - 25,0	19,0	42	25	o. r.	o. r.	o. r.
91649	1,25"	18,0 - 25,0	16,0	42 / 46	10	o. r.	o. r.	o. r.
91650	1,5"	22,0 - 32,0	20,0	53	5	o. r.	o. r.	o. r.

NPT thread - with reducing seal

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92610	92620	3/8"	2,0 - 6,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
92611	92621	1/2"	5,0 - 9,0	13,0	24	50	o. r.	o. r.	o. r.
92612	92622	1/2"	7,0 - 12,0	13,0	27	50	o. r.	o. r.	o. r.
92613	92623	3/4"	9,0 - 16,0	14,0	33	50	o. r.	o. r.	o. r.
92614	92624	1"	13,0 - 20,0	19,0	42	25	o. r.	o. r.	o. r.
92615	92625	1,25"	13,0 - 20,0	16,0	42 / 46	10	o. r.	o. r.	o. r.
92616	92626	1,5"	20,0 - 26,0	20,0	53	5	o. r.	o. r.	o. r.

NPT thread - with reducing seal - for intrinsically safe application

Part no. blue RAL 5012	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92630	3/8"	2,0 - 6,0	15,0	22	50	o. r.	o. r.	o. r.
92631	1/2"	5,0 - 9,0	13,0	24	50	o. r.	o. r.	o. r.
92632	1/2"	7,0 - 12,0	13,0	27	50	o. r.	o. r.	o. r.
92633	3/4"	9,0 - 16,0	14,0	33	50	o. r.	o. r.	o. r.
92634	1"	13,0 - 20,0	19,0	42	25	o. r.	o. r.	o. r.
92635	1,25"	13,0 - 20,0	16,0	42 / 46	10	o. r.	o. r.	o. r.
92636	1,5"	20,0 - 26,0	20,0	53	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-EW cable gland
expanded design

HSK-EW
EW – expanded design

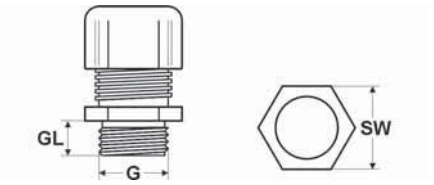
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
PA 6, V0 acc. to UL 94
Moulded seal: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data
Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93010	93020	7	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
93012	93022	9	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
93014	93024	11	6,0 - 12,0	8,0	24	50	o. r.	o. r.	o. r.
93016	93026	13,5	10,0 - 14,0	9,0	27	50	o. r.	o. r.	o. r.
93018	93028	16	13,0 - 18,0	10,0	33	50	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93011	93021	7	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
93013	93023	9	3,0 - 7,0	8,0	22	50	o. r.	o. r.	o. r.
93015	93025	11	5,0 - 9,0	8,0	24	50	o. r.	o. r.	o. r.
93017	93027	13,5	7,0 - 12,0	9,0	27	50	o. r.	o. r.	o. r.
93019	93029	16	9,0 - 16,0	10,0	33	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-RE cable gland

reduced design

HSK-RE

RE - reduced design

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

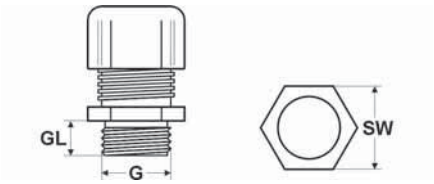
PA 6, V0 acc. to UL 94
Moulded seal: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data

Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91925	91935	9	3,0 - 6,5	8,0	19	50	o. r.	o. r.	o. r.
91927	91937	11	4,0 - 8,0	8,0	22	50	o. r.	o. r.	o. r.
91929	91939	13,5	5,0 - 10,0	9,0	24	50	o. r.	o. r.	o. r.
91931	91941	16	6,0 - 12,0	10,0	27	50	o. r.	o. r.	o. r.
91933	91943	21	10,0 - 14,0	11,0	33	50	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91926	91936	9	2,0 - 5,0	8,0	19	50	o. r.	o. r.	o. r.
91928	91938	11	2,0 - 6,0	8,0	22	50	o. r.	o. r.	o. r.
91930	91940	13,5	3,0 - 7,0	9,0	24	50	o. r.	o. r.	o. r.
91932	91942	16	5,0 - 9,0	10,0	27	50	o. r.	o. r.	o. r.
91934	91944	21	7,0 - 12,0	11,0	33	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-L cable gland
long thread

HSK-L
With long threaded connection
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
PA 6, V0 acc. to UL 94
Moulded seal: NBR

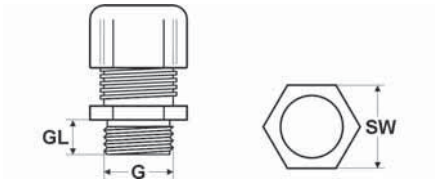
- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
For the intrinsically safe area type "i" cable glands in blue, RAL 5012, are used.

Technical data
Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91690	91700	M12 x 1,5	3,0 - 6,5	15,0	15	50	o. r.	o. r.	o. r.
91691	91701	M16 x 1,5	4,0 - 8,0	15,0	19	50	o. r.	o. r.	o. r.
99841	99849	M16 x 1,5	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
99842	99850	M20 x 1,5	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
99843	99851	M20 x 1,5	10,0 - 14,0	15,0	27	50	o. r.	o. r.	o. r.
99844	99852	M25 x 1,5	13,0 - 18,0	15,0	33	50	o. r.	o. r.	o. r.
99845	99853	M32 x 1,5	18,0 - 25,0	15,0	42	25	o. r.	o. r.	o. r.
99846	99854	M40 x 1,5	22,0 - 32,0	18,0	53	10	o. r.	o. r.	o. r.
99847	99855	M50 x 1,5	32,0 - 38,0	18,0	60	5	o. r.	o. r.	o. r.
99848	99856	M63 x 1,5	37,0 - 44,0	18,0	65 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK-L cable gland

long thread

metric thread - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91710	M12 x 1,5	3,0 - 6,5	15,0	15	50	o. r.	o. r.	o. r.
91711	M16 x 1,5	4,0 - 8,0	15,0	19	50	o. r.	o. r.	o. r.
99857	M16 x 1,5	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
99858	M20 x 1,5	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
99859	M20 x 1,5	10,0 - 14,0	15,0	27	50	o. r.	o. r.	o. r.
99860	M25 x 1,5	13,0 - 18,0	15,0	33	50	o. r.	o. r.	o. r.
99861	M32 x 1,5	18,0 - 25,0	15,0	42	25	o. r.	o. r.	o. r.
99862	M40 x 1,5	22,0 - 32,0	18,0	53	10	o. r.	o. r.	o. r.
99863	M50 x 1,5	32,0 - 38,0	18,0	60	5	o. r.	o. r.	o. r.
99864	M63 x 1,5	37,0 - 44,0	18,0	65 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91692	91702	M20 x 1,5	5,0 - 9,0	15,0	24	50	o. r.	o. r.	o. r.
91693	91703	M25 x 1,5	9,0 - 16,0	15,0	33	50	o. r.	o. r.	o. r.
91694	91704	M32 x 1,5	13,0 - 20,0	15,0	42	25	o. r.	o. r.	o. r.
91695	91705	M40 x 1,5	20,0 - 26,0	18,0	53	10	o. r.	o. r.	o. r.
91696	91706	M50 x 1,5	25,0 - 31,0	18,0	60	5	o. r.	o. r.	o. r.
91697	91707	M63 x 1,5	29,0 - 35,0	18,0	65 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91712	M20 x 1,5	5,0 - 9,0	15,0	24	50	o. r.	o. r.	o. r.
91713	M25 x 1,5	9,0 - 16,0	15,0	33	50	o. r.	o. r.	o. r.
91714	M32 x 1,5	13,0 - 20,0	15,0	42	25	o. r.	o. r.	o. r.
91715	M40 x 1,5	20,0 - 26,0	18,0	53	10	o. r.	o. r.	o. r.
91716	M50 x 1,5	25,0 - 31,0	18,0	60	5	o. r.	o. r.	o. r.
91717	M63 x 1,5	29,0 - 35,0	18,0	65 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90040	97418	7	3,0 - 6,5	15,0	15	50	o. r.	o. r.	o. r.
90041	97419	9	4,0 - 8,0	15,0	19	50	o. r.	o. r.	o. r.
90042	96405	11	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
90043	96404	13,5	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
90044	96003	16	10,0 - 14,0	15,0	27	50	o. r.	o. r.	o. r.
90045	97767	21	13,0 - 18,0	15,0	33	50	o. r.	o. r.	o. r.
90046	96004	29	18,0 - 25,0	15,0	42	25	o. r.	o. r.	o. r.
90047	96253	36	22,0 - 32,0	18,0	53	10	o. r.	o. r.	o. r.
90048	96254	42	32,0 - 38,0	18,0	60	5	o. r.	o. r.	o. r.
90049	96256	48	37,0 - 44,0	18,0	65	5	o. r.	o. r.	o. r.

PG thread - for intrinsically safe application

Part no. blue RAL 5012	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91680	7	3,0 - 6,5	15,0	15	50	o. r.	o. r.	o. r.
91681	9	4,0 - 8,0	15,0	19	50	o. r.	o. r.	o. r.
91682	11	5,0 - 10,0	15,0	22	50	o. r.	o. r.	o. r.
91683	13,5	6,0 - 12,0	15,0	24	50	o. r.	o. r.	o. r.
91684	16	10,0 - 14,0	15,0	27	50	o. r.	o. r.	o. r.
91685	21	13,0 - 18,0	15,0	33	50	o. r.	o. r.	o. r.
91686	29	18,0 - 25,0	15,0	42	25	o. r.	o. r.	o. r.
91687	36	22,0 - 32,0	18,0	53	10	o. r.	o. r.	o. r.
91688	42	32,0 - 38,0	18,0	60	5	o. r.	o. r.	o. r.
91689	48	37,0 - 44,0	18,0	65	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-B cable gland
anti-kink

HSK-B
With anti-bend spirals
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

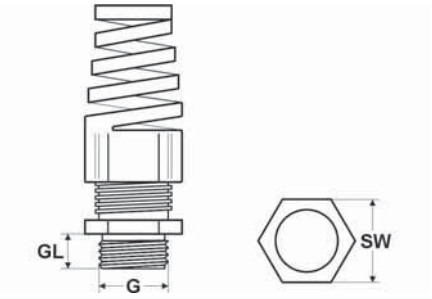
Material
Polyamide
Moulded seal: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data
Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98005	98011	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
98006	98012	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
98008	98014	M20 x 1,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
98009	98015	M20 x 1,5	10,0 - 14,0	9,0	27	25	o. r.	o. r.	o. r.
98010	98016	M25 x 1,5	13,0 - 18,0	11,0	33	20	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90320	90326	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
90321	90327	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
90322	90328	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
90323	90329	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
90324	90330	16	10,0 - 14,0	10,0	27	25	o. r.	o. r.	o. r.
90325	90331	21	13,0 - 18,0	11,0	33	20	o. r.	o. r.	o. r.

NPT thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92300	92305	3/8"	4,0 - 8,0	15,0	22 / 19	50	o. r.	o. r.	o. r.
92301	92306	1/2"	6,0 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
92302	92307	1/2"	10,0 - 14,0	13,0	27	25	o. r.	o. r.	o. r.
92303	92308	3/4"	13,0 - 18,0	14,0	33	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-WI elbow gland

HSK-WI
Folding profile gland for simple cable insertion.
The profile can be re-opened at any time.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide
Moulded seal: NBR
O-ring: NBR

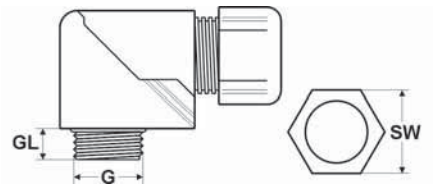
- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
Elbow gland with NPT thread without O-Ring

Technical data
Protection class: IP 68

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91284	91840	M16 x 1,5	4,0 - 8,0	8,0	19	25	o. r.	o. r.	o. r.
91285	91841	M20 x 1,5	6,0 - 12,0	9,0	24	25	o. r.	o. r.	o. r.
91286	91842	M25 x 1,5	13,0 - 18,0	11,0	33	10	o. r.	o. r.	o. r.
91287	91843	M32 x 1,5	18,0 - 25,0	11,0	42	5	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96981	96581	9	4,0 - 8,0	8,0	19	25	o. r.	o. r.	o. r.
96982	96103	11	5,0 - 10,0	8,0	22	25	o. r.	o. r.	o. r.
96983	96582	13,5	6,0 - 12,0	9,0	24	25	o. r.	o. r.	o. r.
96984	96583	16	10,0 - 14,0	10,0	27	25	o. r.	o. r.	o. r.
96985	96584	21	13,0 - 18,0	11,0	33	10	o. r.	o. r.	o. r.
96986	96406	29	18,0 - 25,0	11,0	42	5	o. r.	o. r.	o. r.

NPT thread

Part no. light grey RAL 7035	Part no. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92690	92700	3/8"	4,0 - 8,0	15,0	19	25	o. r.	o. r.	o. r.
92691	92701	1/2"	6,0 - 12,0	13,0	24	25	o. r.	o. r.	o. r.
92692	92702	1/2"	10,0 - 14,0	13,0	27	25	o. r.	o. r.	o. r.
92693	92703	3/4"	13,0 - 18,0	13,0	33	20	o. r.	o. r.	o. r.
92694	92704	1"	18,0 - 25,0	19,0	42	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUFAST – The threadless cable gland

- Simple and extremely quick assembly
- Can be installed next to each other and also in constrained locations
- Optimum price / performance ratio
- No lock nut needed
- No slackening due to vibration is possible as it is firmly clamped and not screwed together
- Infinitely variable insert for all usual wall thickness ranges; Identification using the colour of the rings
- The HELUFAST cable gland meets all requirements for cable glands, strain relief, protection class etc.
- Tested according to EN 50262
- *VDE test (for M16, M20 and M25 for wall thicknesses 1 – 2.5 mm)

RoHS

Areas of application:
- Switch cabinet construction
- Installation technology
- Applications with high density mounting
- Applications with frequent, fast and permanent mounting

HELUFAST plain cable gland

HELUFAST
The plain plastic cable gland.

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
PA 6, V2 acc. to UL 94
Moulded seal: NBR

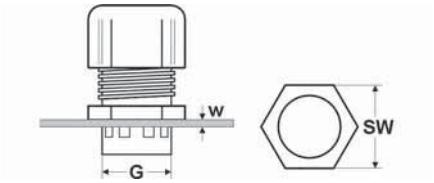
- halogen-free

Properties
- Quick and simple assembly
- Can be mounted close together
- No locknut required
- Optimum strain relief
- Large clamping areas
- Infinitely applicable for different wall thicknesses

Note
Wall thickness 2,5-4,0 m.
Color of clamping ring: green

Technical data
Protection class: IP 68 - 5 bar

Temperature range: -20°C up to +100°C



Dimensions

G	Size
w	Wall thickness
SW	Spanner size

wall thickness range from 1mm to 2,5mm

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903120	903140	903130	M12	4,0 - 6,5	15	50	o. r.	o. r.	o. r.
903121	903141	903131	M16	6,0 - 9,5	20	50	o. r.	o. r.	o. r.
903122	903142	903132	M20	7,0 - 12,0	24	50	o. r.	o. r.	o. r.
903123	903143	903133	M25	11,0 - 16,0	28	25	o. r.	o. r.	o. r.
903124	903144	903134	M32	14,0 - 21,0	36	25	o. r.	o. r.	o. r.

wall thickness range from 2,5mm to 4mm

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903125	903145	903135	M12	4,0 - 6,5	15	50	o. r.	o. r.	o. r.
903126	903146	903136	M16	6,0 - 9,5	20	50	o. r.	o. r.	o. r.
903127	903147	903137	M20	7,0 - 12,0	24	50	o. r.	o. r.	o. r.
903128	903148	903138	M25	11,0 - 16,0	28	25	o. r.	o. r.	o. r.
903129	903149	903139	M32	14,0 - 21,0	36	25	o. r.	o. r.	o. r.

wall thickness range from 1mm to 4mm

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Cable Ø from / to mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
900015	904278	904280	M40	19,0 - 27,5	46	10	o. r.	o. r.	o. r.
900016	904279	904281	M50	26,0 - 34,0	55	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUFAST circlip pliers

HELUFAST circlip pliers

Pliers for threadless plastic cable gland.

Combined with the correct insert, the pliers can be used for all HELUFAST cable glands.

The metal plier insert is simple to change by hand.

pliers

Part no.	Size	Unit	Net EUR/item at a purchase of		
			1	2 - 5	6 - 10
980000	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUFAST circlip pliers

storage battery-hydraulic systems

new

HELUFAST circlip pliers, storage battery-hydraulic systems

Electro-hydraulic circlip pliers for threadless plastic cable gland.

Combined with the correct insert, the pliers can be used for all HELUFAST cable glands.

With rechargeable NIMH battery adjustable compression and automatic return.

The metal plier insert is simple to change by hand.

pliers

Part no.	Size	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
905332	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUFAST inserts

HELUFAST

Inserts for the new, threadless plastic cable gland.
Combined with the correct insert, the pliers can be used for all HELUFAST glands.
The metal plier insert is simple to change by hand.

inserts

Part no.	Size	Unit	Net EUR/item at a purchase of		
			1	2 - 5	6 - 10
980010	M12 x 1,5	1	o. r.	o. r.	o. r.
980011	M16 x 1,5	1	o. r.	o. r.	o. r.
980012	M20 x 1,5	1	o. r.	o. r.	o. r.
980013	M25 x 1,5	1	o. r.	o. r.	o. r.
980014	M32 x 1,5	1	o. r.	o. r.	o. r.
980015	M40 x 1,5	1	o. r.	o. r.	o. r.
980016	M50 x 1,5	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-PA cable gland

UNI-DICHT-PA
Plastic sealing cable gland with colour-coded inserts made by TPE

Material
Polyamide PA6-3
Moulded seal: TPE

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

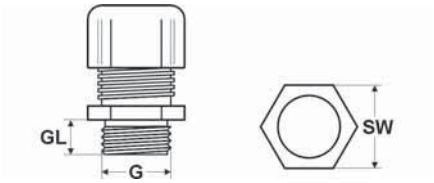
Properties
- Large-area cable sealing
- Easy to assemble
- Large clamping areas

Note
Cable glands in black colour on request.
UL- and CSA- approval for use with TPE-V inserts, TPE-V inserts on request.

Technical data
Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903800	M12 x 1,5	yellow	4,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
903801	M16 x 1,5	yellow	4,0 - 6,5	9,0	19	50	o. r.	o. r.	o. r.
903802	M16 x 1,5	grey	5,0 - 8,0	9,0	19	50	o. r.	o. r.	o. r.
903803	M16 x 1,5	black	6,5 - 9,5	9,0	19	50	o. r.	o. r.	o. r.
903804	M20 x 1,5	yellow	4,0 - 6,5	9,0	24	50	o. r.	o. r.	o. r.
903805	M20 x 1,5	grey	5,0 - 8,0	9,0	24	50	o. r.	o. r.	o. r.
903806	M20 x 1,5	black	6,5 - 9,5	9,0	24	50	o. r.	o. r.	o. r.
903807	M20 x 1,5	green	7,0 - 10,5	9,0	24	50	o. r.	o. r.	o. r.
903808	M20 x 1,5	red	9,0 - 13,0	9,0	24	50	o. r.	o. r.	o. r.
903809	M25 x 1,5	yellow	4,0 - 6,5	9,0	30	50	o. r.	o. r.	o. r.
903810	M25 x 1,5	grey	5,0 - 8,0	9,0	30	50	o. r.	o. r.	o. r.
903811	M25 x 1,5	black	6,5 - 9,5	9,0	30	50	o. r.	o. r.	o. r.
903812	M25 x 1,5	green	7,0 - 10,5	9,0	30	50	o. r.	o. r.	o. r.
903813	M25 x 1,5	red	9,0 - 13,0	9,0	30	50	o. r.	o. r.	o. r.
903814	M25 x 1,5	white	11,5 - 15,5	9,0	30	50	o. r.	o. r.	o. r.
903815	M32 x 1,5	green	7,0 - 10,5	11,0	36	25	o. r.	o. r.	o. r.
903816	M32 x 1,5	red	9,0 - 13,0	11,0	36	25	o. r.	o. r.	o. r.
903817	M32 x 1,5	white	11,5 - 15,5	11,0	36	25	o. r.	o. r.	o. r.
903818	M32 x 1,5	blue	14,0 - 18,0	11,0	36	25	o. r.	o. r.	o. r.
903819	M32 x 1,5	brown	17,0 - 20,5	11,0	36	25	o. r.	o. r.	o. r.
903820	M40 x 1,5	blue	14,0 - 18,0	11,5	46	10	o. r.	o. r.	o. r.
903821	M40 x 1,5	brown	17,0 - 20,5	11,5	46	10	o. r.	o. r.	o. r.
903822	M40 x 1,5	orange	20,0 - 25,0	11,5	46	10	o. r.	o. r.	o. r.
903823	M40 x 1,5	light yellow	24,0 - 28,0	11,5	46	10	o. r.	o. r.	o. r.
903824	M50 x 1,5	anthracite	27,0 - 32,0	14,0	56	5	o. r.	o. r.	o. r.
903825	M50 x 1,5	light blue	29,0 - 34,0	14,0	56	5	o. r.	o. r.	o. r.
904295	M50 x 1,5	pink	32,0 - 36,0	14,0	56	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT-PA cable gland

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903826	9	yellow	4,0 - 6,5	9,0	19	50	o. r.	o. r.	o. r.
903827	9	grey	5,0 - 8,0	9,0	19	50	o. r.	o. r.	o. r.
903828	9	black	6,5 - 9,5	9,0	19	50	o. r.	o. r.	o. r.
903829	11	yellow	4,0 - 6,5	9,0	22	50	o. r.	o. r.	o. r.
903830	11	grey	5,0 - 8,0	9,0	22	50	o. r.	o. r.	o. r.
903831	11	black	6,5 - 9,5	9,0	22	50	o. r.	o. r.	o. r.
903832	11	green	7,0 - 10,5	9,0	22	50	o. r.	o. r.	o. r.
903833	13,5	yellow	4,0 - 6,5	9,0	24	50	o. r.	o. r.	o. r.
903834	13,5	grey	5,0 - 8,0	9,0	24	50	o. r.	o. r.	o. r.
903835	13,5	black	6,5 - 9,5	9,0	24	50	o. r.	o. r.	o. r.
903836	13,5	green	7,0 - 10,5	9,0	24	50	o. r.	o. r.	o. r.
903837	13,5	red	9,0 - 13,0	9,0	24	50	o. r.	o. r.	o. r.
903838	16	yellow	4,0 - 6,5	9,0	27	50	o. r.	o. r.	o. r.
903839	16	grey	5,0 - 8,0	9,0	27	50	o. r.	o. r.	o. r.
903840	16	black	6,5 - 9,5	9,0	27	50	o. r.	o. r.	o. r.
903841	16	green	7,0 - 10,5	9,0	27	50	o. r.	o. r.	o. r.
903842	16	red	9,0 - 13,0	9,0	27	50	o. r.	o. r.	o. r.
903843	16	white	11,5 - 15,5	9,0	27	50	o. r.	o. r.	o. r.
903844	21	green	7,0 - 10,5	11,0	33	25	o. r.	o. r.	o. r.
903845	21	red	9,0 - 13,0	11,0	33	25	o. r.	o. r.	o. r.
903846	21	white	11,5 - 15,5	11,0	33	25	o. r.	o. r.	o. r.
903847	21	blue	14,0 - 18,0	11,0	33	25	o. r.	o. r.	o. r.
903848	21	brown	17,0 - 20,5	11,0	33	25	o. r.	o. r.	o. r.
903849	29	blue	14,0 - 18,0	11,0	43	10	o. r.	o. r.	o. r.
903850	29	brown	17,0 - 20,5	11,0	43	10	o. r.	o. r.	o. r.
903851	29	orange	20,0 - 25,0	11,0	43	10	o. r.	o. r.	o. r.
903852	29	light yellow	24,0 - 28,0	11,0	43	10	o. r.	o. r.	o. r.
903853	36	anthracite	27,0 - 32,0	14,0	53	5	o. r.	o. r.	o. r.
903854	36	light blue	29,0 - 34,0	14,0	53	5	o. r.	o. r.	o. r.
903855	36	pink	32,0 - 36,0	14,0	53	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-MFD-PA cable gland

with multiple sealing inserts

UNI-DICHT-MFD-PA

Plastic sealing cable gland with multiple sealing inserts made by TPE.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA6-3
Moulded seal: TPE

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Properties

- Large-area cable sealing
- Easy to assemble

Note

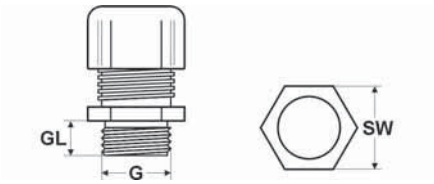
IP 68, subject to the bore diameter in the sealing insert area and cable diameter being identical.

Technical data

Protection class: IP 65

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7032	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903856	M16 x 1,5	2 x 1,2	9,0	19	50	o. r.	o. r.	o. r.
903857	M16 x 1,5	2 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
903858	M16 x 1,5	4 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
903859	M16 x 1,5	2 x 4,0	9,0	19	50	o. r.	o. r.	o. r.
903860	M16 x 1,5	1 x 5,0	9,0	19	50	o. r.	o. r.	o. r.
903861	M20 x 1,5	6 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
903862	M20 x 1,5	2 x 2,3	9,0	24	50	o. r.	o. r.	o. r.
903863	M20 x 1,5	6 x 2,5	9,0	24	50	o. r.	o. r.	o. r.
903864	M20 x 1,5	2 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
903865	M20 x 1,5	3 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
903866	M20 x 1,5	2 x 5,0	9,0	24	50	o. r.	o. r.	o. r.
903867	M25 x 1,5	7 x 2,0	9,0	29	50	o. r.	o. r.	o. r.
903868	M25 x 1,5	2 x 4,0	9,0	29	50	o. r.	o. r.	o. r.
903869	M25 x 1,5	4 x 4,0	9,0	29	50	o. r.	o. r.	o. r.
903870	M25 x 1,5	6 x 4,0	9,0	29	50	o. r.	o. r.	o. r.
903871	M25 x 1,5	2 x 6,0	9,0	29	50	o. r.	o. r.	o. r.
903872	M25 x 1,5	3 x 7,0	9,0	29	50	o. r.	o. r.	o. r.
903873	M32 x 1,5	21 x 2,0	11,0	38	25	o. r.	o. r.	o. r.
903874	M32 x 1,5	8 x 3,0	11,0	38	25	o. r.	o. r.	o. r.
903875	M32 x 1,5	6 x 4,0	11,0	38	25	o. r.	o. r.	o. r.
903876	M32 x 1,5	8 x 4,0	11,0	38	25	o. r.	o. r.	o. r.
903877	M32 x 1,5	4 x 5,0	11,0	38	25	o. r.	o. r.	o. r.
903878	M32 x 1,5	4 x 6,0	11,0	38	25	o. r.	o. r.	o. r.
903879	M32 x 1,5	6 x 6,5	11,0	38	25	o. r.	o. r.	o. r.
903880	M32 x 1,5	3 x 7,0	11,0	38	25	o. r.	o. r.	o. r.
903881	M32 x 1,5	4 x 8,0	11,0	38	25	o. r.	o. r.	o. r.
903882	M32 x 1,5	2 x 9,0	11,0	38	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT-MFD-PA cable gland

with multiple sealing inserts

metric thread

Part no. light grey RAL 7032	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903883	M40 x 1,5	6 x 6,0	11,5	46	10	o. r.	o. r.	o. r.
903884	M40 x 1,5	10 x 6,0	11,5	46	10	o. r.	o. r.	o. r.
903885	M40 x 1,5	4 x 6,5	11,5	46	10	o. r.	o. r.	o. r.
903886	M40 x 1,5	6 x 8,0	11,5	46	10	o. r.	o. r.	o. r.
903887	M40 x 1,5	4 x 9,0	11,5	46	10	o. r.	o. r.	o. r.
903888	M40 x 1,5	5 x 9,0	11,5	46	10	o. r.	o. r.	o. r.
903889	M40 x 1,5	5 x 10,0	11,5	46	10	o. r.	o. r.	o. r.
903890	M40 x 1,5	2 x 11,0	11,5	46	10	o. r.	o. r.	o. r.
903891	M50 x 1,5	15 x 5,0	14,0	55	5	o. r.	o. r.	o. r.
903892	M50 x 1,5	8 x 9,0	14,0	55	5	o. r.	o. r.	o. r.
903893	M50 x 1,5	3 x 10,0	14,0	55	5	o. r.	o. r.	o. r.
903894	M50 x 1,5	2 x 15,0	14,0	55	5	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7032	Size PG	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903895	9	2 x 1,2	9,0	19	50	o. r.	o. r.	o. r.
903896	9	2 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
903897	9	4 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
903898	9	2 x 4,0	9,0	19	50	o. r.	o. r.	o. r.
903899	9	1 x 5,0	9,0	19	50	o. r.	o. r.	o. r.
903900	11	6 x 2,0	9,0	22	50	o. r.	o. r.	o. r.
903901	11	2 x 2,3	9,0	22	50	o. r.	o. r.	o. r.
903902	11	6 x 2,5	9,0	22	50	o. r.	o. r.	o. r.
903903	11	2 x 3,0	9,0	22	50	o. r.	o. r.	o. r.
903904	11	3 x 3,0	9,0	22	50	o. r.	o. r.	o. r.
903905	11	2 x 5,0	9,0	22	50	o. r.	o. r.	o. r.
903906	13,5	3 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
903907	13,5	10 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
903908	13,5	2 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
903909	13,5	3 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
903910	13,5	6 x 3,5	9,0	24	50	o. r.	o. r.	o. r.
903911	13,5	2 x 5,0	9,0	24	50	o. r.	o. r.	o. r.
903912	13,5	2 x 6,0	9,0	24	50	o. r.	o. r.	o. r.
903913	16	7 x 2,0	9,0	27	50	o. r.	o. r.	o. r.
903914	16	2 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
903915	16	4 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
903916	16	6 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
903917	16	2 x 6,0	9,0	27	50	o. r.	o. r.	o. r.
903918	16	3 x 7,0	9,0	27	50	o. r.	o. r.	o. r.
903919	21	21 x 2,0	11,0	33	25	o. r.	o. r.	o. r.
903920	21	8 x 3,0	11,0	33	25	o. r.	o. r.	o. r.
903921	21	6 x 4,0	11,0	33	25	o. r.	o. r.	o. r.
903922	21	8 x 4,0	11,0	33	25	o. r.	o. r.	o. r.
903923	21	4 x 5,0	11,0	33	25	o. r.	o. r.	o. r.
903924	21	4 x 6,0	11,0	33	25	o. r.	o. r.	o. r.
903925	21	6 x 6,5	11,0	33	25	o. r.	o. r.	o. r.
903926	21	3 x 7,0	11,0	33	25	o. r.	o. r.	o. r.
903927	21	4 x 8,0	11,0	33	25	o. r.	o. r.	o. r.
903928	21	2 x 9,0	11,0	33	25	o. r.	o. r.	o. r.
903929	29	6 x 6,0	11,0	43	10	o. r.	o. r.	o. r.
903930	29	10 x 6,0	11,0	43	10	o. r.	o. r.	o. r.
903931	29	4 x 6,5	11,0	43	10	o. r.	o. r.	o. r.
903932	29	6 x 8,0	11,0	43	10	o. r.	o. r.	o. r.
903933	29	4 x 9,0	11,0	43	10	o. r.	o. r.	o. r.
903934	29	5 x 9,0	11,0	43	10	o. r.	o. r.	o. r.
903935	29	5 x 10,0	11,0	43	10	o. r.	o. r.	o. r.
903936	29	2 x 11,0	11,0	43	10	o. r.	o. r.	o. r.
903937	36	8 x 9,0	14,0	53	5	o. r.	o. r.	o. r.
903938	36	15 x 5,0	14,0	53	5	o. r.	o. r.	o. r.
903939	36	3 x 10,0	14,0	53	5	o. r.	o. r.	o. r.
903940	36	2 x 15,0	14,0	53	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-VK-PA gland body

UNI-DICHT-VK-PA
Gland body made of polyamide for populating with sealing inserts made by TPE.

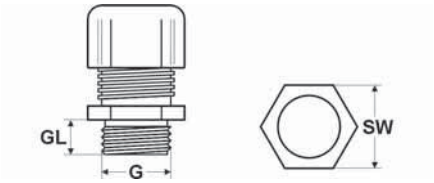
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA6-3

Note
The gland body M20x1,5 part no. 903941 is used with inserts PG 11; also part no. 90831 is used with inserts PG 13,5.

Technical data
Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. grey RAL 7032	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90829	M12 x 1,5	8,0	15	50	o. r.	o. r.	o. r.
90830	M16 x 1,5	9,0	19	50	o. r.	o. r.	o. r.
903941	M20 x 1,5	9,0	24	50	o. r.	o. r.	o. r.
90831	M20 x 1,5	9,0	24	50	o. r.	o. r.	o. r.
90832	M25 x 1,5	9,0	29	50	o. r.	o. r.	o. r.
90833	M32 x 1,5	11,0	38	25	o. r.	o. r.	o. r.
90834	M40 x 1,5	11,5	46	10	o. r.	o. r.	o. r.
90835	M50 x 1,5	14,0	55	5	o. r.	o. r.	o. r.

PG thread

Part no. grey RAL 7032	Size PG	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96043	9	9,0	19	50	o. r.	o. r.	o. r.
96044	11	9,0	22	50	o. r.	o. r.	o. r.
96045	13,5	9,0	24	50	o. r.	o. r.	o. r.
96046	16	9,0	27	50	o. r.	o. r.	o. r.
96047	21	11,0	33	25	o. r.	o. r.	o. r.
96048	29	11,0	43	10	o. r.	o. r.	o. r.
96049	36	14,0	53	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT sealing insert
closed

UNI-DICHT sealing insert, closed
Closed inserts made by TPE-V. For use with UNI-DICHT gland bodies made by polyamide or by brass.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
TPE-V

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
UNI-DICHT sealing insert M20 (part no. 903944) can be used only with UNI-DICHT gland body made by polyamide M20x1,5 (part no. 90831). The sealing insert M20 (part no. 903945) can be used only with UNI-DICHT gland body made by brass M20x1,5 (part no. 904213).

Technical data
Temperature range: -40°C up to +135°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903942	9	M16 x 1,5	white	-	100	o. r.	o. r.	o. r.
903943	11	M20 x 1,5	white	-	100	o. r.	o. r.	o. r.
903944	-	M20 x 1,5	white/short	-	100	o. r.	o. r.	o. r.
903945	13,5	M20 x 1,5	white	-	100	o. r.	o. r.	o. r.
903946	16	M25 x 1,5	white	-	100	o. r.	o. r.	o. r.
903947	21	M32 x 1,5	white	-	50	o. r.	o. r.	o. r.
903948	29	M40 x 1,5	white	-	25	o. r.	o. r.	o. r.
903949	36	M50 x 1,5	white	-	10	o. r.	o. r.	o. r.
903950	42	-	white	-	10	o. r.	o. r.	o. r.
903951	48	M63 x 1,5	white	-	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT sealing insert

standard

UNI-DICHT sealing insert, standard

Colour coded sealing inserts made by TPE for use with UNI-DICHT gland bodies made by polyamide or by brass.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

TPE

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note

UNI-DICHT sealing inserts M20 (part nos. 903961 up to 903965) can be used only with UNI-DICHT gland body made by polyamide M20x1,5 (part no. 90831). UNI-DICHT sealing inserts M20 (part nos. 903966 up to 903970) can be used only with UNI-DICHT gland body made by brass M20x1,5 (part no. 904213). UNI-DICHT sealing insert PG21 (part no. 903981) can be used only with UNI-DICHT gland body made by brass (part no. 904226). UNI-DICHT sealing insert M32 (part no. 903981) can be used only with UNI-DICHT gland body made by brass (part no. 904216).

Technical data

Temperature range: -40°C up to +130°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903952	-	M12 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903953	7	-	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903954	9	M16 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903955	9	M16 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
903956	9	M16 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
903957	11	M20 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903958	11	M20 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
903959	11	M20 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
903960	11	M20 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
903961	-	M20 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903962	-	M20 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
903963	-	M20 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
903964	-	M20 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
903965	-	M20 x 1,5	red	9,0 - 13,0	50	o. r.	o. r.	o. r.
903966	13,5	M20 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903967	13,5	M20 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
903968	13,5	M20 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
903969	13,5	M20 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
903970	13,5	M20 x 1,5	red	9,0 - 13,0	50	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT sealing insert

standard

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903971	16	M25 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
903972	16	M25 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
903973	16	M25 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
903974	16	M25 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
903975	16	M25 x 1,5	red	9,0 - 13,0	50	o. r.	o. r.	o. r.
903976	16	M25 x 1,5	white	11,5 - 15,5	50	o. r.	o. r.	o. r.
903977	21	M32 x 1,5	green	7,0 - 10,5	25	o. r.	o. r.	o. r.
903978	21	M32 x 1,5	red	9,0 - 13,0	25	o. r.	o. r.	o. r.
903979	21	M32 x 1,5	white	11,5 - 15,5	25	o. r.	o. r.	o. r.
903980	21	M32 x 1,5	blue	14,0 - 18,0	25	o. r.	o. r.	o. r.
903981	21	M32 x 1,5	brown	17,0 - 20,5	25	o. r.	o. r.	o. r.
903982	29	M40 x 1,5	white	11,5 - 15,5	10	o. r.	o. r.	o. r.
903983	29	M40 x 1,5	blue	14,0 - 18,0	10	o. r.	o. r.	o. r.
903984	29	M40 x 1,5	brown	17,0 - 20,5	10	o. r.	o. r.	o. r.
903985	29	M40 x 1,5	orange	20,0 - 25,0	10	o. r.	o. r.	o. r.
903986	29	M40 x 1,5	light yellow	24,0 - 28,0	10	o. r.	o. r.	o. r.
903987	36	M50 x 1,5	anthracite	27,0 - 32,0	10	o. r.	o. r.	o. r.
903988	36	M50 x 1,5	light blue	29,0 - 34,0	10	o. r.	o. r.	o. r.
903989	36	M50 x 1,5	pink	32,0 - 36,0	10	o. r.	o. r.	o. r.
903990	42	M50 x 1,5	white	36,0 - 40,0	5	o. r.	o. r.	o. r.
903991	48	M63 x 1,5	white	39,0 - 44,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Classification
UNI-DICHT sealing insert/gland body

UNI-DICHT sealing insert

UNI-DICHT gland body

Part No.	Size PG	Size metrisch	Sealing insert colour	Size PG		Size metrical	
				Polyamide	Brass	Polyamide	Brass
903952	-	M12 x 1,5	yellow			90829 VK PA M12	904210 VK MS M12
903953	7	-	yellow		904220 VK MS PG7		
903954	9	M16 x 1,5	yellow	96043 VK PA PG9	904221 VK MS PG9	90830 VK PA M16	904211 VK MS M16
903955	9	M16 x 1,5	grey				
903956	9	M16 x 1,5	black				
903957	11	M20 x 1,5	yellow	96044 VK PA PG11	904222 VK MS PG11	903941 VK PA M20 (PG11)	
903958	11	M20 x 1,5	grey				
903959	11	M20 x 1,5	black				
903960	11	M20 x 1,5	green				
903961	-	M20 x 1,5	yellow			90831 VK PA M20	
903962	-	M20 x 1,5	grey				
903963	-	M20 x 1,5	black				
903964	-	M20 x 1,5	green				
903965	-	M20 x 1,5	red				
903966	13,5	M20 x 1,5	yellow	96045 VK PA PG13,5	904223 VK MS PG13,5		904213 VK MS M20 (PG13,5)
903967	13,5	M20 x 1,5	grey				
903968	13,5	M20 x 1,5	black				
903969	13,5	M20 x 1,5	green				
903970	13,5	M20 x 1,5	red				
903971	16	M25 x 1,5	yellow	96046 VK PA PG16	904224 VK MS PG16	90832 VK PA M25	904214 VK MS M25
903972	16	M25 x 1,5	grey				
903973	16	M25 x 1,5	black				
903974	16	M25 x 1,5	green				
903975	16	M25 x 1,5	red				
903976	16	M25 x 1,5	white				
903977	21	M32 x 1,5	green	96047 VK PA PG21	904225 VK MS PG21 (18mm)	90833 VK PA M32	904215 VK MS M32 (18 mm)
903978	21	M32 x 1,5	red				
903979	21	M32 x 1,5	white				
903980	21	M32 x 1,5	blue				
903981	21	M32 x 1,5	brown				904216 VK MS M32 (21 mm)
903982	29	M40 x 1,5	white	96048 VK PA PG29	904227 VK MS PG29	90834 VK PA M40	904217 VK MS M40
903983	29	M40 x 1,5	blue				
903984	29	M40 x 1,5	brown				
903985	29	M40 x 1,5	orange				
903986	29	M40 x 1,5	light yellow				
903987	36	M50 x 1,5	anthracite	96049 VK PA PG36	904228 VK MS PG36	90835 VK PA M50	904218 VK MS M50
903988	36	M50 x 1,5	light blue				
903989	36	M50 x 1,5	pink				
903990	42	M50 x 1,5	white		904229 VK MS PG42		
903991	48	M63 x 1,5	white		904230 VK MS PG48		904219 VK MS M63

UNI-DICHT ZUG sealing inserts

for increased strain relief

new

UNI-DICHT ZUG

Colour coded sealing inserts made by TPE for increased strain relief. For populating UNI-DICHT body glands made of plastic or brass.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

TPE

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note

Assignment to gland body: see table

Technical data

Temperature range: -20°C up to +100°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905690	-	M12 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
905691	7	-	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
905692	9	M16 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
905693	9	M16 x 1,5	black	5,5 - 9,0	50	o. r.	o. r.	o. r.
905694	11	-	black	5,5 - 9,0	50	o. r.	o. r.	o. r.
905695	11	-	green	6,0 - 10,0	50	o. r.	o. r.	o. r.
905696	-	M20 x 1,5	black	5,5 - 9,0	50	o. r.	o. r.	o. r.
905697	-	M20 x 1,5	green	6,0 - 10,0	50	o. r.	o. r.	o. r.
905698	-	M20 x 1,5	red	8,0 - 12,0	50	o. r.	o. r.	o. r.
905699	13,5	M20 x 1,5	black	5,5 - 9,0	50	o. r.	o. r.	o. r.
905700	13,5	M20 x 1,5	green	6,0 - 10,0	50	o. r.	o. r.	o. r.
905701	13,5	M20 x 1,5	red	8,0 - 12,0	50	o. r.	o. r.	o. r.
905702	16	M25 x 1,5	green	6,0 - 10,0	50	o. r.	o. r.	o. r.
905703	16	M25 x 1,5	red	8,0 - 12,0	50	o. r.	o. r.	o. r.
905704	16	M25 x 1,5	white	12,0 - 15,0	50	o. r.	o. r.	o. r.
905705	21	M32 x 1,5	red	8,0 - 12,0	25	o. r.	o. r.	o. r.
905706	21	M32 x 1,5	white	12,0 - 15,0	25	o. r.	o. r.	o. r.
905707	21	M32 x 1,5	blue	14,0 - 17,0	25	o. r.	o. r.	o. r.
905708	21	M32 x 1,5	brown	16,0 - 20,0	25	o. r.	o. r.	o. r.
905709	29	M40 x 1,5	brown	16,0 - 20,0	10	o. r.	o. r.	o. r.
905710	29	M40 x 1,5	orange	20,0 - 24,0	10	o. r.	o. r.	o. r.
905711	29	M40 x 1,5	light yellow	23,0 - 27,0	10	o. r.	o. r.	o. r.
905712	36	M50 x 1,5	anthracite	27,0 - 31,5	5	o. r.	o. r.	o. r.
905713	36	M50 x 1,5	pink	32,0 - 36,0	5	o. r.	o. r.	o. r.
905714	42	-	white	34,0 - 40,0	5	o. r.	o. r.	o. r.
905715	48	M63 x 1,5	white	39,0 - 43,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Classification
UNI-DICHT-ZUG sealing insert/gland body

UNI-DICHT-ZUG sealing insert UNI-DICHT-ZUG gland body

Part No.	Size PG	Size metrical	Sealing insert colour	Size PG		Size metrical	
				Polyamide	Brass	Polyamide	Brass
905690	-	M12 x 1,5	yellow			90829 VK PA M12	904210 VK MS M12
905691	7	-	yellow		904220 VK MS PG7		
905692	9	M16 x 1,5	yellow	96043 VK PA PG9	904221 VK MS PG9	90830 VK PA M16	904211 VK MS M16
905693	9	M16 x 1,5	black				
905694	11	-	black	96044 VK PA PG11	904222 VK MS PG11		
905695	11	-	green				
905696	-	M20 x 1,5	black			90831 VK PA M20	
905697	-	M20 x 1,5	green				
905698	-	M20 x 1,5	red				
905699	13,5	M20 x 1,5	black	96045 VK PA PG13,5	904223 VK MS PG13,5		904213 VK MS M20 (PG13,5)
905700	13,5	M20 x 1,5	green				
905701	13,5	M20 x 1,5	red				
905702	16	M25 x 1,5	green	96046 VK PA PG16	904224 VK MS PG16	90832 VK PA M25	904214 VK MS M25
905703	16	M25 x 1,5	red				
905704	16	M25 x 1,5	white				
905705	21	M32 x 1,5	red	96047 VK PA PG21	904225 VK MS PG21 (18 mm)	90833 VK PA M32	904215 VK MS M32 (18 mm)
905706	21	M32 x 1,5	white				
905707	21	M32 x 1,5	blue				
905708	21	M32 x 1,5	brown		904226 VK MS PG21 (21 mm)		904216 VK MS M32 (21 mm)
905709	29	M40 x 1,5	brown	96048 VK PA PG29	904227 VK MS PG29	90834 VK PA M40	904217 VK MS M40
905710	29	M40 x 1,5	orange				
905711	29	M40 x 1,5	light yellow				
905712	36	M50 x 1,5	anthracite	96049 VK PA PG36	904228 VK MS PG36	90835 VK PA M50	904218 VK MS M50
905713	36	M50 x 1,5	pink				
905714	42	-	white		904229 VK MS PG42		
905715	48	M63 x 1,5	white		904230 VK MS PG48		904219 VK MS M63

UNI-DICHT MFDE multiple sealing insert

UNI-DICHT multiple sealing insert

Multiple sealing inserts made by TPE for populating the UNI-DICHT gland bodies made by polyamide or by brass.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

TPE

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note

UNI-DICHT sealing inserts M20 (part nos. 904004 to 904010) can be used only with UNI-DICHT gland body made by polyamide M20x1,5 (part no. 90831). The sealing inserts M20 (part nos. 904011 to 904017) can only be used with UNI-DICHT gland body made by brass M20x1,5 (part no. 904213) and with UNI-DICHT gland body PG 13,5 (PA and brass).

Technical data

Temperature range: -40°C up to +130°C

Part no.	Size PG	Size metric	Insert colour	Number x Ø borehole mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903994	9	M16 x 1,5	white	2 x 1,2	50	o. r.	o. r.	o. r.
903995	9	M16 x 1,5	white	2 x 3,0	50	o. r.	o. r.	o. r.
903996	9	M16 x 1,5	white	4 x 3,0	50	o. r.	o. r.	o. r.
903997	9	M16 x 1,5	white	2 x 4,0	50	o. r.	o. r.	o. r.
903998	9	M16 x 1,5	white	1 x 5,0	50	o. r.	o. r.	o. r.
903999	11	M20 x 1,5	white	6 x 2,0	50	o. r.	o. r.	o. r.
904000	11	M20 x 1,5	white	2 x 3,0	50	o. r.	o. r.	o. r.
904001	11	M20 x 1,5	white	3 x 3,0	50	o. r.	o. r.	o. r.
904002	11	M20 x 1,5	white	2 x 4,0	50	o. r.	o. r.	o. r.
904003	11	M20 x 1,5	white	2 x 5,0	50	o. r.	o. r.	o. r.
904004	-	M20 x 1,5	white	3 x 2,0	50	o. r.	o. r.	o. r.
904006	-	M20 x 1,5	white	2 x 3,0	50	o. r.	o. r.	o. r.
904007	-	M20 x 1,5	white	3 x 3,0	50	o. r.	o. r.	o. r.
904008	-	M20 x 1,5	white	3 x 4,0	50	o. r.	o. r.	o. r.
904009	-	M20 x 1,5	white	2 x 5,0	50	o. r.	o. r.	o. r.
904010	-	M20 x 1,5	white	2 x 6,0	50	o. r.	o. r.	o. r.
904011	13,5	M20 x 1,5	white	3 x 2,0	50	o. r.	o. r.	o. r.
904012	13,5	M20 x 1,5	white	10 x 2,0	50	o. r.	o. r.	o. r.
904013	13,5	M20 x 1,5	white	2 x 3,0	50	o. r.	o. r.	o. r.
904014	13,5	M20 x 1,5	white	3 x 3,0	50	o. r.	o. r.	o. r.
904015	13,5	M20 x 1,5	white	3 x 4,0	50	o. r.	o. r.	o. r.
904016	13,5	M20 x 1,5	white	2 x 5,0	50	o. r.	o. r.	o. r.
904017	13,5	M20 x 1,5	white	2 x 6,0	50	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT MFDE multiple sealing insert

Part no.	Size PG	Size metric	Insert colour	Number x Ø borehole mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904018	16	M25 x 1,5	white	7 x 2,0	50	o. r.	o. r.	o. r.
904019	16	M25 x 1,5	white	3 x 3,0	50	o. r.	o. r.	o. r.
904020	16	M25 x 1,5	white	2 x 4,0	50	o. r.	o. r.	o. r.
904021	16	M25 x 1,5	white	4 x 4,0	50	o. r.	o. r.	o. r.
904022	16	M25 x 1,5	white	6 x 4,0	50	o. r.	o. r.	o. r.
904023	16	M25 x 1,5	white	2 x 6,0	50	o. r.	o. r.	o. r.
904024	16	M25 x 1,5	white	3 x 6,0	50	o. r.	o. r.	o. r.
904025	16	M25 x 1,5	white	4 x 6,0	50	o. r.	o. r.	o. r.
904026	16	M25 x 1,5	white	3 x 7,0	50	o. r.	o. r.	o. r.
904027	16	M25 x 1,5	white	2 x 8,0	50	o. r.	o. r.	o. r.
904028	21	M32 x 1,5	white	21 x 2,0	50	o. r.	o. r.	o. r.
904029	21	M32 x 1,5	white	8 x 3,0	50	o. r.	o. r.	o. r.
904030	21	M32 x 1,5	white	6 x 4,0	50	o. r.	o. r.	o. r.
904031	21	M32 x 1,5	white	8 x 4,0	50	o. r.	o. r.	o. r.
904032	21	M32 x 1,5	white	4 x 5,0	50	o. r.	o. r.	o. r.
904033	21	M32 x 1,5	white	8 x 5,0	50	o. r.	o. r.	o. r.
904034	21	M32 x 1,5	white	6 x 5,5	50	o. r.	o. r.	o. r.
904035	21	M32 x 1,5	white	4 x 6,0	50	o. r.	o. r.	o. r.
904036	21	M32 x 1,5	white	4 x 6,5	50	o. r.	o. r.	o. r.
904037	21	M32 x 1,5	white	6 x 6,5	50	o. r.	o. r.	o. r.
904038	21	M32 x 1,5	white	3 x 7,0	50	o. r.	o. r.	o. r.
904039	21	M32 x 1,5	white	2 x 8,0	50	o. r.	o. r.	o. r.
904040	21	M32 x 1,5	white	4 x 8,0	50	o. r.	o. r.	o. r.
904041	21	M32 x 1,5	white	2 x 9,0	50	o. r.	o. r.	o. r.
904042	21	M32 x 1,5	white	3 x 9,0	50	o. r.	o. r.	o. r.
904043	29	M40 x 1,5	white	6 x 6,0	25	o. r.	o. r.	o. r.
904044	29	M40 x 1,5	white	10 x 6,0	25	o. r.	o. r.	o. r.
904045	29	M40 x 1,5	white	4 x 6,5	25	o. r.	o. r.	o. r.
904046	29	M40 x 1,5	white	7 x 7,0	25	o. r.	o. r.	o. r.
904047	29	M40 x 1,5	white	6 x 8,0	25	o. r.	o. r.	o. r.
904048	29	M40 x 1,5	white	4 x 9,0	25	o. r.	o. r.	o. r.
904049	29	M40 x 1,5	white	5 x 9,0	25	o. r.	o. r.	o. r.
904050	29	M40 x 1,5	white	5 x 10,0	25	o. r.	o. r.	o. r.
904051	29	M40 x 1,5	white	2 x 11,0	25	o. r.	o. r.	o. r.
904052	29	M40 x 1,5	white	3 x 11,0	25	o. r.	o. r.	o. r.
904053	29	M40 x 1,5	white	2 x 13,0	25	o. r.	o. r.	o. r.
904054	36	M50 x 1,5	white	15 x 5,0	10	o. r.	o. r.	o. r.
904055	36	M50 x 1,5	white	13 x 7,0	10	o. r.	o. r.	o. r.
904056	36	M50 x 1,5	white	7 x 9,0	10	o. r.	o. r.	o. r.
904057	36	M50 x 1,5	white	8 x 9,0	10	o. r.	o. r.	o. r.
904058	36	M50 x 1,5	white	3 x 10,0	10	o. r.	o. r.	o. r.
904059	36	M50 x 1,5	white	4 x 13,0	10	o. r.	o. r.	o. r.
904060	36	M50 x 1,5	white	2 x 15,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Matching accessory

Sealing billets
for empty penetrations.

confer page 31

UNI-DICHT-ASI-PA cable gland

profile fits to ASI-bus line

UNI-DICHT-ASI-PA

Plastic sealing cable gland with inserts made by TPE-V. Profile fitting to ASI- bus line.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Installation technology
- Control cabinet construction

Material

Polyamide
Moulded seal: TPE-V

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Properties

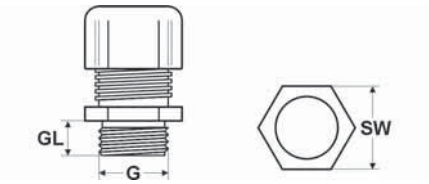
- Large-area cable sealing
- Easy to assemble

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903796	M20 x 1,5	grey, left	-	9,0	24	50	o. r.	o. r.	o. r.
903797	M20 x 1,5	grey, right	-	9,0	24	50	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903798	13,5	grey, left	-	9,0	24	50	o. r.	o. r.	o. r.
903799	13,5	grey, right	-	9,0	24	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT sealing insert

profile fits to ASI-bus line

UNI-DICHT Sealing insert ASI

Sealing inserts made of TPE-V for populating UNI-DICHT gland bodies made of polyamide or of brass. Profile fits to ASI- bus line.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Installation technology
- Control cabinet construction

Material

TPE-V

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Properties

- Large-area cable sealing
- Easy to assemble

Note

UNI-DICHT inserts M20 with part nos. 905910 and 905911 are suitable for UNI-DICHT gland body made of polyamide. The part nos. 903992 and 903993 are suitable for UNI-DICHT gland body M20 made of brass and for UNI-DICHT body gland PG 13,5.

Technical data

Temperature range: -20°C up to +100°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903992	13,5	M20 x 1,5	grau, links	-	50	o. r.	o. r.	o. r.
903993	13,5	M20 x 1,5	grau, rechts	-	50	o. r.	o. r.	o. r.
905910	-	M20 x 1,5	grau, links	-	50	o. r.	o. r.	o. r.
905911	-	M20 x 1,5	grau, rechts	-	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STK-PA cable gland to DIN

STK-PA
The polyamide cable gland to DIN 46320.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

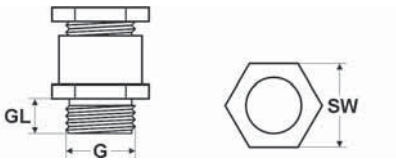
Material
Polyamide
Moulded seal: SBR/NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data
Protection class: IP 54

Temperature range: -30°C up to +80°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92819	M12 x 1,5	5,0 - 8,0	11,0	19	50	o. r.	o. r.	o. r.
92820	M16 x 1,5	7,0 - 9,0	11,0	19	50	o. r.	o. r.	o. r.
92821	M20 x 1,5	8,0 - 12,0	11,0	24	50	o. r.	o. r.	o. r.
92823	M25 x 1,5	11,0 - 14,0	11,0	27	50	o. r.	o. r.	o. r.
92824	M25 x 1,5	13,0 - 17,0	11,0	32	50	o. r.	o. r.	o. r.
92825	M32 x 1,5	18,0 - 26,0	11,0	42	10	o. r.	o. r.	o. r.
92826	M40 x 1,5	23,0 - 26,0	11,0	42	10	o. r.	o. r.	o. r.
92827	M50 x 1,5	25,0 - 33,0	11,0	53	10	o. r.	o. r.	o. r.
92828	M50 x 1,5	32,0 - 40,0	11,0	60	5	o. r.	o. r.	o. r.
92829	M63 x 1,5	38,0 - 44,0	11,0	65	5	o. r.	o. r.	o. r.

PG thread

Part no. light grey RAL 7035	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90559	7	3,0 - 6,0	8,0	15	50	o. r.	o. r.	o. r.
90560	9	4,5 - 7,0	8,0	19	50	o. r.	o. r.	o. r.
90561	11	6,0 - 9,0	8,0	22	50	o. r.	o. r.	o. r.
90562	13,5	9,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
90563	16	11,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
90564	21	14,0 - 18,0	11,0	33	25	o. r.	o. r.	o. r.
90565	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
90566	36	25,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
90567	42	30,0 - 38,0	13,0	60 / 55	5	o. r.	o. r.	o. r.
90568	48	34,0 - 42,0	14,0	65 / 60	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STK-PA cable gland
with incision sealing ring

ME01

STK-PA with incision ring
The polyamide cable gland to DIN 46320 with incision sealing ring.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

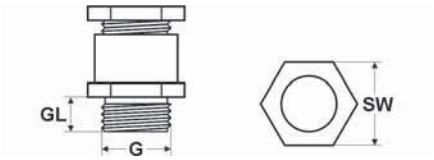
Material
Polyamide
Moulded seal: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
Protection classification IP 65 with an additional O-ring on the external thread

Technical data
Protection class: IP 54

Temperature range: -20°C up to +60°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

PG thread

Part no. grey RAL 7035	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904231	9	4,0 - 10,0	8,0	19 / 16	50	o. r.	o. r.	o. r.
904232	11	6,5 - 12,0	8,0	22 / 19	50	o. r.	o. r.	o. r.
904233	13,5	6,5 - 13,5	9,0	24 / 21	50	o. r.	o. r.	o. r.
904234	16	6,5 - 16,0	10,0	27 / 23	50	o. r.	o. r.	o. r.
904235	21	9,0 - 20,0	11,0	33 / 30	50	o. r.	o. r.	o. r.
904236	29	17,0 - 28,0	11,0	42 / 40	25	o. r.	o. r.	o. r.
904237	36	23,0 - 34,0	13,0	53 / 50	10	o. r.	o. r.	o. r.
904238	42	29,0 - 40,0	13,0	60 / 55	5	o. r.	o. r.	o. r.
904239	48	35,0 - 46,0	14,0	65 / 60	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STK-F flat cable gland

STK-F
The plastic flat cable gland.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

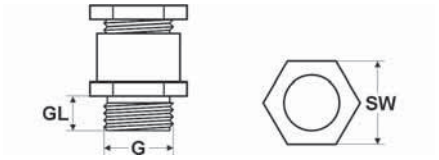
Material
Polyamide
Moulded seal: SBR
Thrust washers: Galvanised steel

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
Protection classification IP 65 with an additional O-ring on the external thread

Technical data
Protection class: IP 54

Temperature range: -30°C up to +80°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric

Part no. light grey RAL 7035	Size Metr.	Cable thickness from / to mm	Cable width from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904996	M25 x 1,5	3,0 - 8,0	9,0 - 21,0	11,0	32	50	o. r.	o. r.	o. r.
904997	M32 x 1,5	4,0 - 11,5	14,0 - 30,0	11,0	42	50	o. r.	o. r.	o. r.
905067	M40 x 1,5	4,0 - 11,5	14,0 - 30,0	11,0	42	20	o. r.	o. r.	o. r.
904998	M50 x 1,5	4,0 - 11,5	24,0 - 40,0	11,0	60	20	o. r.	o. r.	o. r.
905068	M63 x 1,5	5,0 - 12,0	34,0 - 50,0	11,0	65	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

WN blanking plug

closed

WN closed

Self-sealing grommet with flexible plastic lead-through diaphragm for simple cable inlet.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet technology

Material

Polyethylene

- halogen-free

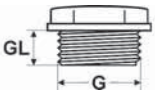
Note

Open blanking plugs: on request.

Technical data

Protection class: IP 54

Temperature range: -20°C up to +70°C



Dimensions

G Thread size
GL Thread length

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94120	M12 x 1,5	3,0 - 5,0	10,0	100	o. r.	o. r.	o. r.
94121	M16 x 1,5	5,0 - 10,0	10,0	100	o. r.	o. r.	o. r.
94122	M20 x 1,5	8,0 - 13,5	12,0	100	o. r.	o. r.	o. r.
94123	M25 x 1,5	9,0 - 16,0	12,0	100	o. r.	o. r.	o. r.
94124	M32 x 1,5	11,0 - 22,0	14,0	50	o. r.	o. r.	o. r.
94125	M40 x 1,5	17,0 - 24,0	16,0	25	o. r.	o. r.	o. r.
94126	M50 x 1,5	22,0 - 35,0	18,0	10	o. r.	o. r.	o. r.
94127	M63 x 1,5	24,0 - 43,0	20,0	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90116	9	6,0 - 8,0	12,0	100	o. r.	o. r.	o. r.
90117	11	7,0 - 10,0	14,0	100	o. r.	o. r.	o. r.
90118	13,5	9,0 - 12,0	17,0	100	o. r.	o. r.	o. r.
90119	16	9,0 - 14,0	19,0	100	o. r.	o. r.	o. r.
90120	21	11,0 - 17,0	24,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Adapter PA

Adapter PA
The adapter made of polyamide for solving problems when converting from PG to metric.

Application
- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material
Polyamide

Colours: light grey
RAL: 7035

- halogen-free
- phosphor-free
- silicone-free

Note
Black on request.

Technical data
Temperature range: -40°C up to +100°C

Dimensions

G	Thread size outside
IG	Thread size inside

from metric to PG

Part no.	Size metr. outside	Size PG inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93670	M12 x 1,5	7	100	o. r.	o. r.	o. r.
93671	M12 x 1,5	9	100	o. r.	o. r.	o. r.
93672	M16 x 1,5	9	100	o. r.	o. r.	o. r.
93673	M20 x 1,5	11	100	o. r.	o. r.	o. r.
93674	M20 x 1,5	13,5	100	o. r.	o. r.	o. r.
93675	M20 x 1,5	16	100	o. r.	o. r.	o. r.
93676	M25 x 1,5	16	50	o. r.	o. r.	o. r.
93677	M25 x 1,5	21	50	o. r.	o. r.	o. r.
93678	M32 x 1,5	29	25	o. r.	o. r.	o. r.
93679	M40 x 1,5	29	10	o. r.	o. r.	o. r.
93680	M50 x 1,5	36	10	o. r.	o. r.	o. r.
93681	M50 x 1,5	42	10	o. r.	o. r.	o. r.
93682	M63 x 1,5	48	10	o. r.	o. r.	o. r.

from PG to metric

Part no.	Size PG outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93650	7	M12 x 1,5	100	o. r.	o. r.	o. r.
93651	7	M16 x 1,5	100	o. r.	o. r.	o. r.
93652	9	M12 x 1,5	100	o. r.	o. r.	o. r.
93653	9	M16 x 1,5	100	o. r.	o. r.	o. r.
93654	9	M20 x 1,5	100	o. r.	o. r.	o. r.
93655	11	M16 x 1,5	100	o. r.	o. r.	o. r.
93656	11	M20 x 1,5	100	o. r.	o. r.	o. r.
93657	13,5	M16 x 1,5	100	o. r.	o. r.	o. r.
93658	13,5	M20 x 1,5	100	o. r.	o. r.	o. r.
93659	13,5	M25 x 1,5	100	o. r.	o. r.	o. r.
93660	16	M20 x 1,5	100	o. r.	o. r.	o. r.
93661	16	M25 x 1,5	50	o. r.	o. r.	o. r.
93662	21	M25 x 1,5	50	o. r.	o. r.	o. r.
93663	21	M32 x 1,5	50	o. r.	o. r.	o. r.
93664	29	M32 x 1,5	50	o. r.	o. r.	o. r.
93665	29	M40 x 1,5	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EW-PA extender

EW-PA
The extender made of polyamide.
Transition from small to large thread.

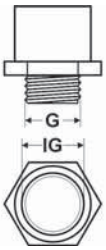
Material
Polyamide

Colours: light grey
RAL: 7035

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note
Black on request.

Technical data
Temperature range: -40°C up to +100°C



Dimensions

G	Thread size outside
IG	Thread size inside

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98585	M12 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.
98586	M16 x 1,5	M20 x 1,5	100	o. r.	o. r.	o. r.
95099	M20 x 1,5	M25 x 1,5	100	o. r.	o. r.	o. r.
98587	M25 x 1,5	M32 x 1,5	50	o. r.	o. r.	o. r.
98588	M32 x 1,5	M40 x 1,5	50	o. r.	o. r.	o. r.
98589	M40 x 1,5	M50 x 1,5	25	o. r.	o. r.	o. r.

from PG to PG

Part no.	Size PG outside	Size PG inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90076	7	9	100	o. r.	o. r.	o. r.
90077	9	11	100	o. r.	o. r.	o. r.
90078	11	13,5	100	o. r.	o. r.	o. r.
96618	11	16	100	o. r.	o. r.	o. r.
90079	13,5	16	100	o. r.	o. r.	o. r.
90080	16	21	50	o. r.	o. r.	o. r.
90081	21	29	25	o. r.	o. r.	o. r.
90082	29	36	20	o. r.	o. r.	o. r.
90083	36	42	10	o. r.	o. r.	o. r.
90084	42	48	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

RE-PA reducer

RE-PA
The reducer made of polyamide.
Transition from large to small thread.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

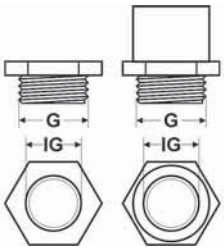
Material
Polyamide

Colours: light grey
RAL: 7035

- halogen-free
- phosphor-free
- silicone-free

Note
Black on request.

Technical data
Temperature range: -30°C up to +100°C



Dimensions
G Thread size outside
IG Thread size inside

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97829	M20 x 1,5	M12 x 1,5	100	o. r.	o. r.	o. r.
97830	M20 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.
97831	M25 x 1,5	M12 x 1,5	100	o. r.	o. r.	o. r.
97832	M25 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.
97833	M25 x 1,5	M20 x 1,5	100	o. r.	o. r.	o. r.
97834	M32 x 1,5	M12 x 1,5	50	o. r.	o. r.	o. r.
97835	M32 x 1,5	M16 x 1,5	50	o. r.	o. r.	o. r.
97836	M32 x 1,5	M20 x 1,5	50	o. r.	o. r.	o. r.
97837	M32 x 1,5	M25 x 1,5	50	o. r.	o. r.	o. r.
97838	M40 x 1,5	M16 x 1,5	50	o. r.	o. r.	o. r.
97839	M40 x 1,5	M20 x 1,5	50	o. r.	o. r.	o. r.
97840	M40 x 1,5	M25 x 1,5	50	o. r.	o. r.	o. r.
97841	M40 x 1,5	M32 x 1,5	50	o. r.	o. r.	o. r.
97842	M50 x 1,5	M20 x 1,5	25	o. r.	o. r.	o. r.
97843	M50 x 1,5	M25 x 1,5	25	o. r.	o. r.	o. r.
97844	M50 x 1,5	M32 x 1,5	25	o. r.	o. r.	o. r.
97845	M50 x 1,5	M40 x 1,5	25	o. r.	o. r.	o. r.
97846	M63 x 1,5	M25 x 1,5	25	o. r.	o. r.	o. r.
97847	M63 x 1,5	M32 x 1,5	25	o. r.	o. r.	o. r.
97848	M63 x 1,5	M40 x 1,5	25	o. r.	o. r.	o. r.
97849	M63 x 1,5	M50 x 1,5	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

RE-PA reducer

from PG to PG

Part no.	Size PG outside	Size PG inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96187	11	7	100	o. r.	o. r.	o. r.
96189	13,5	7	100	o. r.	o. r.	o. r.
90069	13,5	9	100	o. r.	o. r.	o. r.
90070	16	9	100	o. r.	o. r.	o. r.
90071	16	11	100	o. r.	o. r.	o. r.
96192	21	11	100	o. r.	o. r.	o. r.
90072	21	13,5	100	o. r.	o. r.	o. r.
90073	21	16	100	o. r.	o. r.	o. r.
97007	29	13,5	50	o. r.	o. r.	o. r.
96193	29	16	50	o. r.	o. r.	o. r.
90074	29	21	50	o. r.	o. r.	o. r.
97008	36	16	50	o. r.	o. r.	o. r.
97009	36	21	50	o. r.	o. r.	o. r.
90075	36	29	50	o. r.	o. r.	o. r.
97010	42	21	25	o. r.	o. r.	o. r.
97011	42	29	25	o. r.	o. r.	o. r.
96194	42	36	25	o. r.	o. r.	o. r.
97012	48	29	25	o. r.	o. r.	o. r.
97013	48	36	25	o. r.	o. r.	o. r.
96195	48	42	25	o. r.	o. r.	o. r.

from PG to PG - high-profile design

Part no.	Size PG outside	Size PG inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96186	9	7	100	o. r.	o. r.	o. r.
96188	11	9	100	o. r.	o. r.	o. r.
96190	13,5	11	100	o. r.	o. r.	o. r.
96191	16	13,5	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KMK-PA-MB counternut with collar

KMK-PA-MB

The counternut made of polyamide.
The counternut with collar has a bigger sealing area - sealing with an additional O-ring will be simplified.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

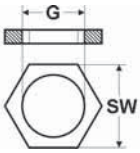
- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note

UV-resistant (RAL 9005).

Technical data

Temperature range: -40°C up to +100°C



Dimensions

G Thread size inside
SW Spanner size

metric thread

Part no. RAL 7035	Part no. RAL 7001	Part no. RAL 9005	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97816	94260	98163	M12 x 1,5	18	100	o. r.	o. r.	o. r.
97817	94261	98164	M16 x 1,5	22	100	o. r.	o. r.	o. r.
97818	94262	98165	M20 x 1,5	26	100	o. r.	o. r.	o. r.
97819	94263	98166	M25 x 1,5	32	100	o. r.	o. r.	o. r.
97820	94264	98167	M32 x 1,5	41	100	o. r.	o. r.	o. r.
97821	94265	98168	M40 x 1,5	50	50	o. r.	o. r.	o. r.
97822	94266	98169	M50 x 1,5	60	50	o. r.	o. r.	o. r.
97823	94267	98170	M63 x 1,5	75	25	o. r.	o. r.	o. r.

PG thread

Part no. RAL 7035	Part no. RAL 7001	Part no. RAL 9005	Size PG	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90710	94250	96458	7	19	100	o. r.	o. r.	o. r.
90711	94251	96228	9	22	100	o. r.	o. r.	o. r.
90712	94252	96459	11	24	100	o. r.	o. r.	o. r.
90713	94253	96460	13,5	27	100	o. r.	o. r.	o. r.
90714	94254	96461	16	30	100	o. r.	o. r.	o. r.
90715	94255	96176	21	36	100	o. r.	o. r.	o. r.
90716	94256	96177	29	46	50	o. r.	o. r.	o. r.
90717	94257	96462	36	60	25	o. r.	o. r.	o. r.
90718	94258	96463	42	65	25	o. r.	o. r.	o. r.
90719	94259	96464	48	70	25	o. r.	o. r.	o. r.

NPT thread

Part no. RAL 7035	Part no. RAL 7001	Part no. RAL 9005	Size NPT	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97317	90870	90875	3/8"	22	100	o. r.	o. r.	o. r.
97316	90871	90876	1/2"	27	100	o. r.	o. r.	o. r.
97315	90872	90877	3/4"	33	100	o. r.	o. r.	o. r.
98366	90873	90878	1"	47	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KMK-PA-OB counternut without collar

KMK-PA-OB
The locknut made of polyamide with collar.

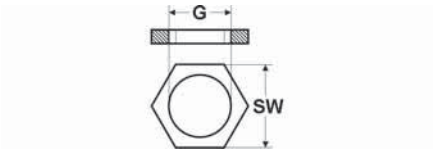
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide

- halogen-free
- phosphor-free
- silicone-free

Note
UV-resistant (RAL 9005).

Technical data
Temperature range: -40°C up to +100°C



Dimensions

G	Thread size inside
SW	Spanner size

metric thread

Part no. RAL 7035	Part no. RAL 7001	Part no. RAL 9005	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94630	94640	94650	M12 x 1,5	18	100	o. r.	o. r.	o. r.
94631	94641	94651	M16 x 1,5	22	50	o. r.	o. r.	o. r.
94632	94642	94652	M20 x 1,5	26	50	o. r.	o. r.	o. r.
94633	94643	94653	M25 x 1,5	32	50	o. r.	o. r.	o. r.
94634	94644	94654	M32 x 1,5	41	25	o. r.	o. r.	o. r.
94635	94645	94655	M40 x 1,5	50	10	o. r.	o. r.	o. r.
94636	94646	94656	M50 x 1,5	60	10	o. r.	o. r.	o. r.
94637	94647	94657	M63 x 1,5	75	10	o. r.	o. r.	o. r.

PG tread

Part no. RAL 7035	Part no. RAL 7001	Part no. RAL 9005	Size PG	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94270	94280	94290	7	19	50	o. r.	o. r.	o. r.
94271	94281	94291	9	22	50	o. r.	o. r.	o. r.
94272	94282	94292	11	24	50	o. r.	o. r.	o. r.
94273	94283	94293	13,5	27	50	o. r.	o. r.	o. r.
94274	94284	94294	16	30	50	o. r.	o. r.	o. r.
94275	94285	94295	21	36	25	o. r.	o. r.	o. r.
94276	94286	94296	29	46	20	o. r.	o. r.	o. r.
94277	94287	94297	36	60	10	o. r.	o. r.	o. r.
94278	94288	94298	42	65	10	o. r.	o. r.	o. r.
94279	94289	94299	48	70	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

VSK-PA screw plug

VSK-PA
The screw plug made of polyamide.

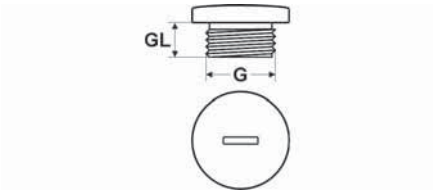
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide

- halogen-free
- phosphor-free

Technical data
Protection class: IP 54

Temperature range: -40°C up to +100°C



Dimensions
G Thread size
GL Thread length

metric thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size Metr.	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94700	94980	94750	M12 x 1,5	6,0	100	o. r.	o. r.	o. r.
94701	94981	94751	M16 x 1,5	7,0	100	o. r.	o. r.	o. r.
94702	94982	94752	M20 x 1,5	7,0	100	o. r.	o. r.	o. r.
94703	94983	94753	M25 x 1,5	10,0	100	o. r.	o. r.	o. r.
94704	94984	94754	M32 x 1,5	11,0	50	o. r.	o. r.	o. r.
94705	94985	94755	M40 x 1,5	13,0	50	o. r.	o. r.	o. r.
94706	94986	94756	M50 x 1,5	14,0	25	o. r.	o. r.	o. r.
94707	94987	94757	M63 x 1,5	15,0	25	o. r.	o. r.	o. r.

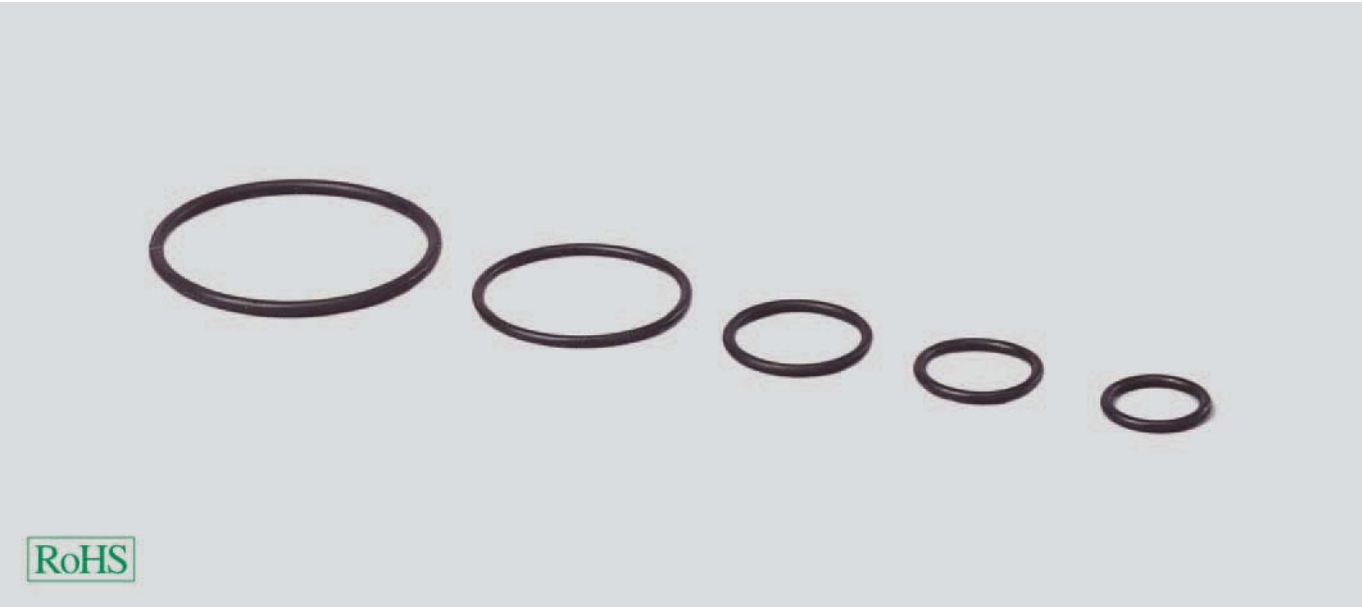
PG thread

Part no. light grey RAL 7035	Part no. dark grey RAL 7001	Part no. black RAL 9005	Size PG	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96593	94970	96997	7	6,0	100	o. r.	o. r.	o. r.
96179	94971	96998	9	6,5	100	o. r.	o. r.	o. r.
96180	94972	96999	11	6,5	100	o. r.	o. r.	o. r.
96181	94973	97000	13,5	6,5	100	o. r.	o. r.	o. r.
96182	94974	97001	16	6,5	100	o. r.	o. r.	o. r.
96183	94975	97002	21	8,0	50	o. r.	o. r.	o. r.
96184	94976	96527	29	8,0	25	o. r.	o. r.	o. r.
96185	94977	97004	36	10,0	25	o. r.	o. r.	o. r.
96960	94978	97005	42	10,0	25	o. r.	o. r.	o. r.
96961	94979	97006	48	12,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

O-ring



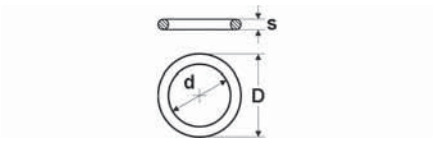
O-ring
O-rings for sealing against water, dust and oil.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
NBR

- halogen-free
- phosphor-free
- silicone-free

Technical data
Temperature range: -30°C up to +120°C



Dimensions

D	Outer diameter
d	Inner diameter
s	Thickness

for metric thread

Part no.	Size	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90263	M12 x 1,5	9,0	12,0	1,5	100	o. r.	o. r.	o. r.
90264	M16 x 1,5	13,0	16,0	1,5	100	o. r.	o. r.	o. r.
90265	M20 x 1,5	17,0	20,0	1,5	100	o. r.	o. r.	o. r.
90266	M25 x 1,5	22,0	26,0	2,0	100	o. r.	o. r.	o. r.
90267	M32 x 1,5	29,0	33,0	2,0	100	o. r.	o. r.	o. r.
90268	M40 x 1,5	35,0	39,0	2,0	100	o. r.	o. r.	o. r.
90269	M50 x 1,5	45,0	49,0	2,0	100	o. r.	o. r.	o. r.
90270	M63 x 1,5	59,0	63,0	2,0	100	o. r.	o. r.	o. r.

for PG thread

Part no.	Size	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96366	7	10,0	13,0	1,5	100	o. r.	o. r.	o. r.
96367	9	13,0	16,0	1,5	100	o. r.	o. r.	o. r.
96368	11	16,0	19,0	1,5	100	o. r.	o. r.	o. r.
96369	13,5	18,0	21,0	1,5	100	o. r.	o. r.	o. r.
96370	16	20,0	23,0	1,5	100	o. r.	o. r.	o. r.
96371	21	25,0	29,0	2,0	100	o. r.	o. r.	o. r.
96372	29	33,0	37,0	2,0	100	o. r.	o. r.	o. r.
96373	36	43,0	47,0	2,0	100	o. r.	o. r.	o. r.
96374	42	50,0	54,0	2,0	100	o. r.	o. r.	o. r.
96375	48	55,0	59,0	2,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

AGDR-PE connecting thread sealing ring

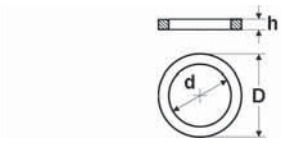
AGDR-PE
Threaded connection rings for sealing against water and dust.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyethylene

- halogen-free
- phosphor-free
- cadmium-free

Technical data
Temperature range: -30°C up to +70°C



Dimensions

D	Outer diameter
d	Innder diameter
h	Thickness

for metric thread

Part no.	Size	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90890	M12 x 1,5	12,0	16,0	2,0	500	o. r.	o. r.	o. r.
90891	M16 x 1,5	16,0	20,0	2,0	500	o. r.	o. r.	o. r.
90892	M20 x 1,5	20,0	25,0	2,0	500	o. r.	o. r.	o. r.
90893	M25 x 1,5	25,0	31,0	2,0	500	o. r.	o. r.	o. r.
90894	M32 x 1,5	32,0	38,0	2,0	250	o. r.	o. r.	o. r.
90896	M50 x 1,5	50,0	58,0	2,0	50	o. r.	o. r.	o. r.
90897	M63 x 1,5	63,0	72,0	2,0	50	o. r.	o. r.	o. r.

for PG thread

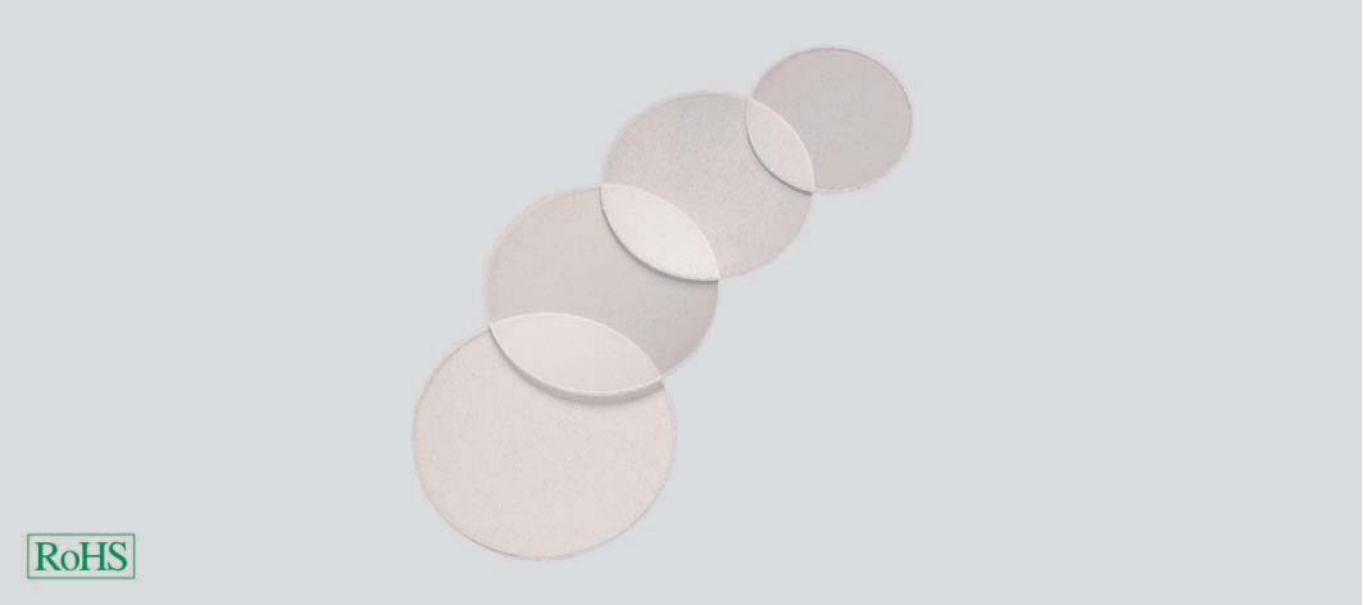
Part no.	Size	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96529	7	12,5	16,5	1,5	500	o. r.	o. r.	o. r.
96530	9	15,2	19,0	1,5	500	o. r.	o. r.	o. r.
96531	11	18,6	22,5	1,5	500	o. r.	o. r.	o. r.
96532	13,5	20,4	25,0	1,5	500	o. r.	o. r.	o. r.
96533	16	22,5	27,0	1,5	500	o. r.	o. r.	o. r.
96534	21	28,3	33,5	2,0	500	o. r.	o. r.	o. r.
96535	29	37,0	43,5	2,0	250	o. r.	o. r.	o. r.
96537	42	54,0	63,0	2,0	50	o. r.	o. r.	o. r.
96538	48	59,3	69,0	2,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

BL-H blind plug

hard



Blind plug BL-H

Blind plates as dust cap for HSK cable glands.

Material

Hard PVC

Technical data

Temperature range: -20°C up to +70°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Dimensions

D Outer diameter

BL-H hard

Part no. clear	Size PG	Size metric	Size NPT	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96416	7	-	-	11,0	500	o. r.	o. r.	o. r.
96417	9	M16 x 1,5	3/8"	13,5	500	o. r.	o. r.	o. r.
96418	11	-	-	17,0	500	o. r.	o. r.	o. r.
96419	13,5	M20 x 1,5	1/2"	18,5	500	o. r.	o. r.	o. r.
96420	16	-	-	20,5	500	o. r.	o. r.	o. r.
96421	21	M25 x 1,5	3/4"	26,0	500	o. r.	o. r.	o. r.
96422	29	M32 x 1,5	1"	35,0	250	o. r.	o. r.	o. r.
96423	36	M40 x 1,5	1 1/2"	45,0	100	o. r.	o. r.	o. r.
96424	42	M50 x 1,5	-	52,0	50	o. r.	o. r.	o. r.
96425	48	M63 x 1,5	-	57,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

BL-W blind plug

soft

Blind plug BL-W

Blind plates as dust cap for HSK cable glands.

Material

Foam

Technical data

Temperature range: -20°C up to +70°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Dimensions

D Outer diameter

BL-W flexible

Part no. black	Size PG	Size metric	Size NPT	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96376	7	-	-	11,0	500	o. r.	o. r.	o. r.
96377	9	M16 x 1,5	3/8"	13,5	500	o. r.	o. r.	o. r.
96378	11	-	-	17,0	500	o. r.	o. r.	o. r.
96915	13,5	M20 x 1,5	1/2"	18,8	500	o. r.	o. r.	o. r.
96379	16	-	-	20,9	500	o. r.	o. r.	o. r.
96380	21	M25 x 1,5	3/4"	26,5	500	o. r.	o. r.	o. r.
96381	29	M32 x 1,5	1"	35,0	250	o. r.	o. r.	o. r.
96382	36	M40 x 1,5	1 1/2"	45,0	100	o. r.	o. r.	o. r.
96383	42	M50 x 1,5	-	52,0	50	o. r.	o. r.	o. r.
96384	48	M63 x 1,5	-	57,4	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Incision sealing ring

Incision sealing ring
Incision sealing rings for universal cable inlet through large cable clamping areas.

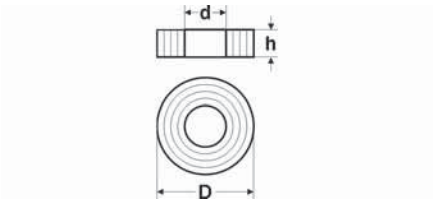
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
chloroprene-rubber (CR)

Colours: black

Note
Incision sealing rings for PG thread:
Material: NR
Temperature range: -40°C up to +90°C

Technical data
Temperature range: -30°C up to +120°C



Dimensions

D	Outer diameter
d	Inner diameter
h	Thickness

for metric thread

Part no.	Size	Inner Ø mm	Outer Ø mm	incisions mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94860	M12 x 1,5	5,0	10,7	-	5,0	100	o. r.	o. r.	o. r.
94861	M16 x 1,5	3,0	13,8	39938	5,5	100	o. r.	o. r.	o. r.
94863	M20 x 1,5	4,0	17,7	7/10/13	6,0	100	o. r.	o. r.	o. r.
94865	M25 x 1,5	8,5	22,5	11/14/17	8,0	100	o. r.	o. r.	o. r.
94866	M32 x 1,5	16,0	29,5	19/21/24	9,5	100	o. r.	o. r.	o. r.
94867	M40 x 1,5	23,0	37,5	26/29/32	11,0	50	o. r.	o. r.	o. r.
94868	M50 x 1,5	32,0	47,5	35/38/41	12,0	50	o. r.	o. r.	o. r.
94869	M63 x 1,5	41,0	60,3	44/47/50	14,0	50	o. r.	o. r.	o. r.

for PG thread

Part no.	Size	Inner Ø mm	Outer Ø mm	incisions mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96357	9	5,0	13,3	7,5/10	5,5	100	o. r.	o. r.	o. r.
96358	11	7,5	16,5	10/12,5	6,0	100	o. r.	o. r.	o. r.
96359	13,5	7,5	18,3	10/12,5	6,0	100	o. r.	o. r.	o. r.
96360	16	7,5	20,4	10/12.5/15	7,0	100	o. r.	o. r.	o. r.
96361	21	10,0	25,9	13/16/19	8,0	100	o. r.	o. r.	o. r.
96362	29	18,0	34,7	21/24/27	9,5	100	o. r.	o. r.	o. r.
96363	36	24,0	44,7	27/30/33	12,0	100	o. r.	o. r.	o. r.
96364	42	30,0	51,7	33/36/39	14,0	50	o. r.	o. r.	o. r.
96365	48	36,0	56,9	39/42/45	14,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

OF collapsible angle

OF
Open folding profile for simple cable insertion.
The profile can be re-opened at any time.

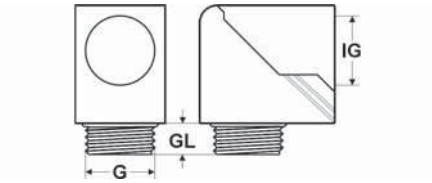
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide
O-ring: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data
Protection class: IP 68

Temperature range: -20°C up to +80°C



Dimensions

G	Thread size outside
GL	Thread length
IG	Thread size inside

from metric to metric

Part no. light grey RAL 7035	Part no. black RAL 9005	Size Metr.	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90271	91835	M16 x 1,5	8,0	25	o. r.	o. r.	o. r.
90272	91836	M20 x 1,5	9,0	25	o. r.	o. r.	o. r.
90273	91837	M25 x 1,5	11,0	10	o. r.	o. r.	o. r.

from PG to PG

Part no. light grey RAL 7035	Part no. black RAL 9005	Size PG	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90383	97110	9	8,0	25	o. r.	o. r.	o. r.
90384	97502	11	8,0	25	o. r.	o. r.	o. r.
90385	97073	13,5	9,0	25	o. r.	o. r.	o. r.
90386	94781	16	10,0	25	o. r.	o. r.	o. r.
90387	94782	21	11,0	25	o. r.	o. r.	o. r.
90388	96102	29	11,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV-KF collapsible flange gland

HSSV-KF folding flange

Opening flange angle for connection glands or cable glands.

- Flange angle opened to enable simple insertion of pre-assembled cables
- Simple assembly
- Highly stable

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

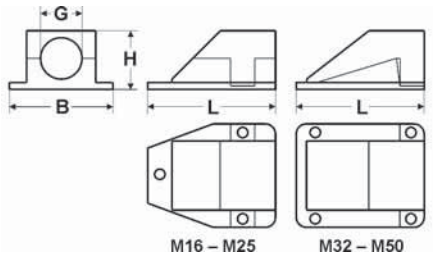
- UR-tested

Threaded connection:
metric to EN 60423

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C
Temperature range temporary up to +140°C



Dimensions

G	Thread size inside
H	Height
B	Width
L	Length

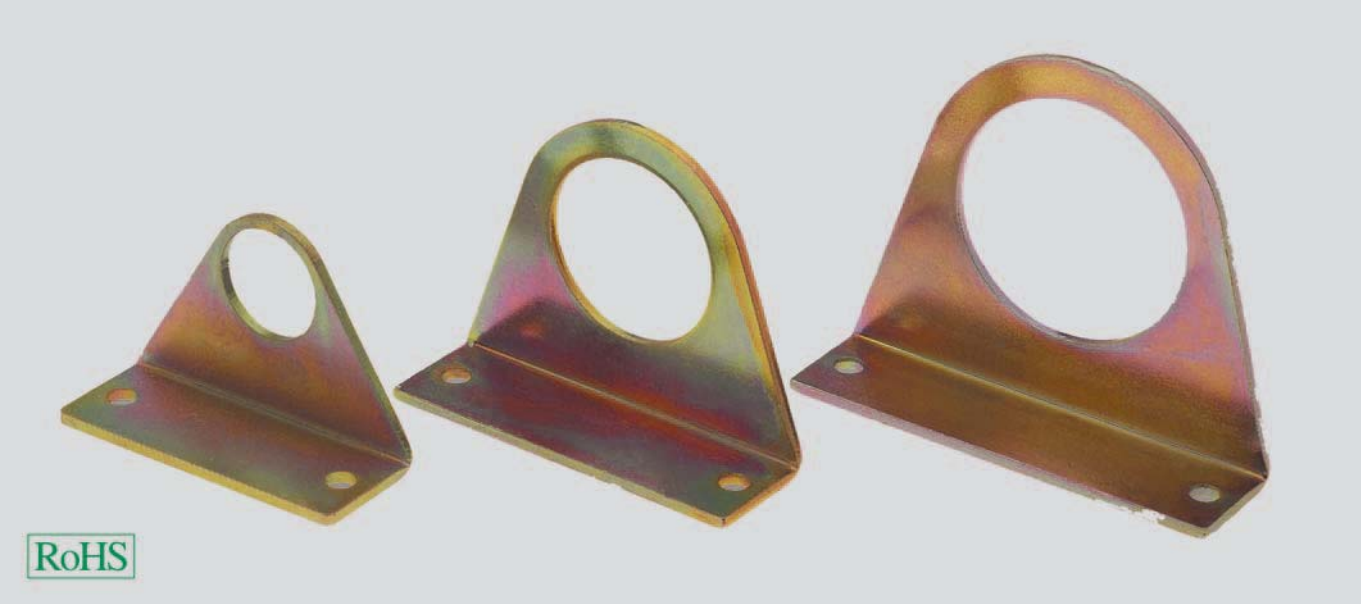
metric thread - female

Part no. grey	Part no. black	Size metr. inside	Height mm	Width mm	Length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920507	920513	M16 x 1,5	35	47	49	10	o. r.	o. r.	o. r.
920508	920514	M20 x 1,5	35	47	49	10	o. r.	o. r.	o. r.
920509	920515	M25 x 1,5	44	65	69	10	o. r.	o. r.	o. r.
920510	920516	M32 x 1,5	55	78	90	10	o. r.	o. r.	o. r.
920511	920517	M40 x 1,5	66	94	99	10	o. r.	o. r.	o. r.
920512	920518	M50 x 1,5	76	101	116	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

BW fastening elbow

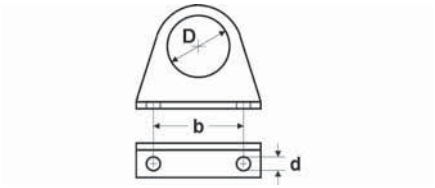


BW

Mounting bracket with penetration and two fastening bores.
For mounting in a door or door elements, as earthing connection and also to equalise potentials in metallic glands.

Material

Steel, chromated yellow



Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Dimensions

D	Inner diameter
d	Boring diameter
b	Distance boring (center/center)

for metric thread

Part no.	Size	Inner Ø mm	Boring mm	Boring spacing mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93720	M16 x 1,5	17,0	4,5	40	25	o. r.	o. r.	o. r.
93721	M20 x 1,5	21,0	4,5	40	25	o. r.	o. r.	o. r.
93722	M25 x 1,5	26,0	4,5	50	25	o. r.	o. r.	o. r.
93723	M32 x 1,5	33,0	4,5	60	25	o. r.	o. r.	o. r.
93724	M40 x 1,5	41,0	4,5	70	25	o. r.	o. r.	o. r.
93725	M50 x 1,5	51,0	4,5	80	25	o. r.	o. r.	o. r.

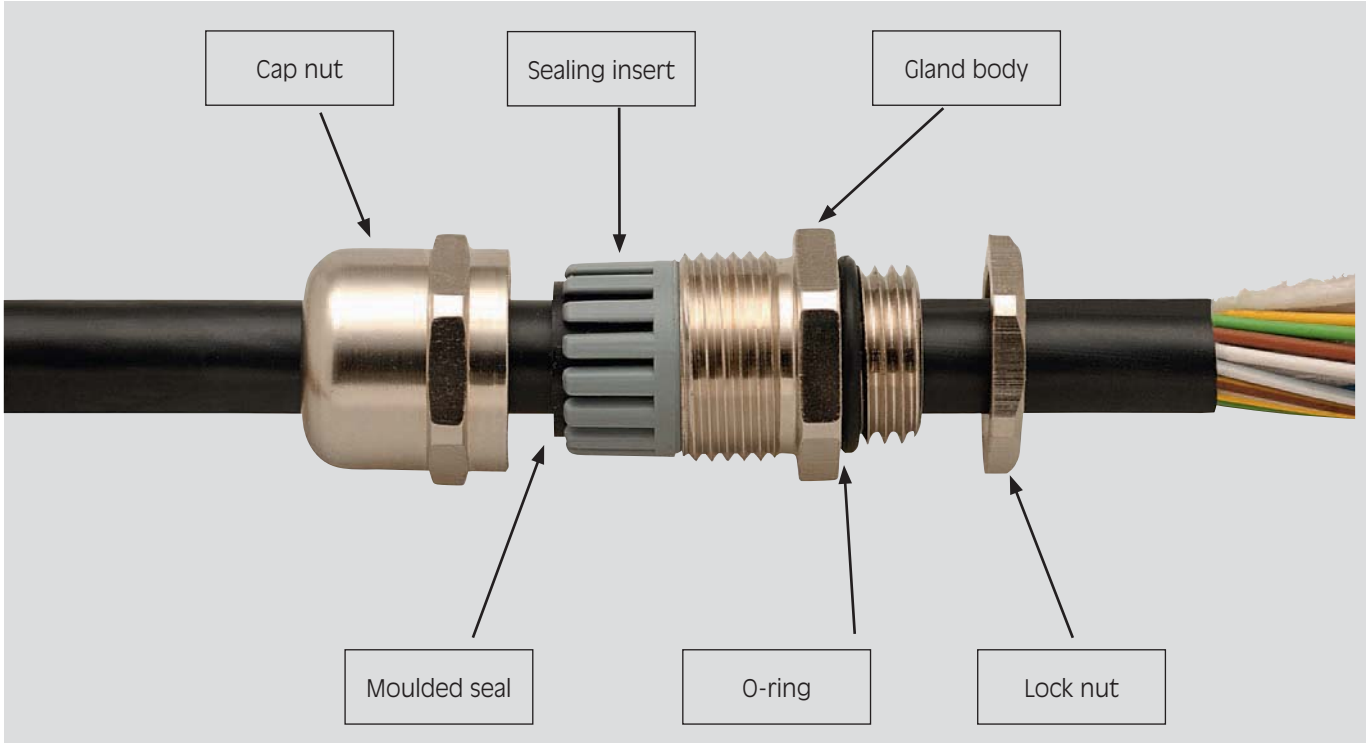
for PG thread

Part no.	Size	Inner Ø mm	Boring mm	Boring spacing mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93715	16	23,0	4,5	40	25	o. r.	o. r.	o. r.
93716	21	29,0	4,5	50	25	o. r.	o. r.	o. r.
93717	29	37,5	4,5	60	25	o. r.	o. r.	o. r.
93718	36	47,5	4,5	70	25	o. r.	o. r.	o. r.
93719	48	60,0	4,5	80	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Brass cable glands



Cable gland

Cap nut and gland body are made from nickel-plated brass. These glands are used for those standard applications where metal glands are needed.

The terminal insert is made from polyamide PA6.

The moulded seal is made from CR.

The O-ring is made from NBR.

Lock nut

The lock nuts are made from nickel-plated brass.

Accessories

Accessories suitable for use with the brass cable glands:
- Lock nuts
- Adapters
- Extenders
- Reducers

Accessories suitable for use with all cable glands:
- Sealing plugs
- Multiple sealing inserts / lock bolts
- O-rings
- Connection thread gaskets
- Blind plates

Cable glands made of brass for standard applications

Seal with clamping plates

Series HELUTOP® HT
- Standard
  - **HELUTOP® HT-MS** ... 86
- Dust protection / sealing
  - **HELUTOP® Sealing inserts** ... 88
- Multiple sealing inserts
  - **HELUTOP® HT-MFDE** ... 88
  - **Sealing billets** ... 88

Series HSK
- Standard
  - **HSK-MS** ... 89
- Long threaded connection
  - **HSK-MS-L** ... 91
- Kink protection
  - **HSK-MS-B** ... 92

Seal with insert

Series HELUTOP® HT
- Strain relief class B
  - **HELUTOP® HT-MS Plus** ... 93
  - **HELUTOP® HT-MS c Plus** ... 94

Series UNI-DICHT
- Standard
  - **UNI-DICHT-MS** ... 95
- With pre-assembled multiple sealing inserts
  - **UNI-DICHT-MFD-MS** ... 97
- Gland body
  - **UNI-DICHT-VK-MS** ... 99
- Sealing inserts
  - **UNI-DICHT sealing insert,** closed ... 100
  - **UNI-DICHT sealing insert,** single ... 100
  - **UNI-DICHT ZUG** Sealing insert for high strain relief ... 100
  - **UNI-DICHT ZUG Sealing insert silicone** ... 100
  - **UNI-DICHT MFDE** Multiple sealing insert ... 100
  - **Sealing billets** ... 101
- For ASI-bus line
  - **UNI-DICHT-ASI-MS** ... 102
  - **UNI-DICHT sealing insert** for ASI-bus line ... 102

Series KVA
- Standard
  - **KVA-MS** ... 103
- With pre-assembled multiple sealing inserts
  - **KVA-MFD-MS** ... 105
- Gland body
  - **KVA-VK-MS** ... 107
- Sealing inserts
  - **KVA sealing insert,** closed ... 108
  - **KVA sealing insert,** single ... 109
  - **KVA MFDE** Multiple sealing insert ... 110
  - **Sealing billets** ... 111
- for ASI-bus line ...
  - **KVA-ASI-MS** ... 112
  - **KVA sealing insert** for ASI-bus line ... 113

Cable glands made of brass for standard applications

Series KVA-XXL
For particularly large cable diameters
KVA-XXL-MS Cable gland 114
KVA-XXL-VK-MS Gland body 115
KVA-XXL sealing insert, single 116
Series SD
Standard
SD 117
For particularly large cable diameters
SD-XXL 118

Conventional design

Cable gland according to DIN
STS 119
STV 120
STR 121
Flat cable gland
STS-F 122
Strain relief gland
ZE 123
ZES 124
ZEI 125

Thread adapter

Adapter
Adapter hexagonal 126
Adapter round 128
Enhancement
EW round 130
Reducers
RE hexagonal 131
RE round 133

Accessories / Parts

Counter nut
KM 134
Screw plug
VS 136
VS-O 137
Reinforced wall sealing
O-ring 138
AGDR-PE 138
Dust protection / sealing
BL-H 138
BL-W 138
Sealing insert
Incision sealing ring 138
Elbow
WV 139
WVF 140
Fastening
BW 141

HELUTOP® HT-MS cable gland

HELUTOP® HT-MS
The nickel-coated brass cable gland.

Application
- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material
Brass, nickel plated
Clamp: Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
O-ring: NBR

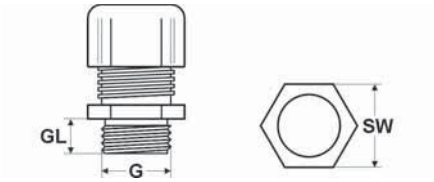
Properties
- Optimum strain relief through clamping plates
- Easy to assemble
- Large clamping areas

Note
Details on the individual tests appear in section "Technical Information".

Technical data
Protection class: IP 68 - 5 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90760	M12 x 1,5	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
99960	M16 x 1,5	5,0 - 10,0	7,0	20	50	o. r.	o. r.	o. r.
90762	M20 x 1,5	6,0 - 12,0	8,0	22	50	o. r.	o. r.	o. r.
99961	M25 x 1,5	11,0 - 17,0	8,0	27	25	o. r.	o. r.	o. r.
94624	M32 x 1,5	15,0 - 21,0	8,0	34	20	o. r.	o. r.	o. r.
99962	M40 x 1,5	19,0 - 28,0	9,0	43	5	o. r.	o. r.	o. r.
99963	M50 x 1,5	30,0 - 38,0	9,0	58	5	o. r.	o. r.	o. r.
90767	M63 x 1,5	34,0 - 44,0	14,0	64 / 68	5	o. r.	o. r.	o. r.
906199	M63 x 1,5	44,0 - 55,0	10,0	75	5	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903560	M12 x 1,5	2,0 - 5,0	6,0	14	50	o. r.	o. r.	o. r.
903561	M16 x 1,5	3,0 - 7,0	7,0	20	50	o. r.	o. r.	o. r.
903562	M20 x 1,5	5,0 - 9,0	8,0	22	50	o. r.	o. r.	o. r.
903563	M25 x 1,5	9,0 - 13,0	8,0	27	25	o. r.	o. r.	o. r.
903564	M32 x 1,5	11,0 - 15,5	8,0	34	20	o. r.	o. r.	o. r.
903565	M40 x 1,5	16,0 - 23,0	9,0	43	5	o. r.	o. r.	o. r.
903566	M50 x 1,5	25,0 - 31,0	9,0	58	5	o. r.	o. r.	o. r.
903567	M63 x 1,5	29,0 - 35,0	14,0	64 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HELUTOP® HT-MS cable gland

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90750	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
90751	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
90752	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90753	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
90754	16	10,0 - 14,0	6,5	24	25	o. r.	o. r.	o. r.
90755	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90756	29	18,0 - 25,0	8,0	40	20	o. r.	o. r.	o. r.
90757	36	22,0 - 32,0	9,0	50	5	o. r.	o. r.	o. r.
90758	42	32,0 - 38,0	14,0	58	5	o. r.	o. r.	o. r.
90759	48	37,0 - 44,0	14,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99965	3/8"	5,0 - 10,0	15,0	20	50	o. r.	o. r.	o. r.
99966	1/2"	6,0 - 12,0	15,0	22	50	o. r.	o. r.	o. r.
99967	3/4"	13,0 - 18,0	15,0	27	25	o. r.	o. r.	o. r.
99968	1"	18,0 - 25,0	17,0	34	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® sealing inserts, multiple sealing inserts, sealing billets

Sealing billets
for empty penetrations.

confer page 31

UNI-DICHT sealing insert, closed
Closed inserts made by TPE-V. For use with UNI-DICHT gland bodies made by polyamide or by brass.

confer page 53

HELUTOP® HT-MFDE
for HELUTOP® HT gland shells

confer page 30

HSK-MS cable gland

HSK-MS
The cable gland to meet stringent requirements in technology
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

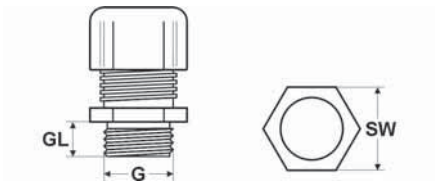
Material
Brass, nickel plated
Clamp: Polyamide
Moulded seal: NBR
O-ring: NBR

Technical data
Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98285	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
90292	M16 x 1,5	4,0 - 8,0	6,0	17 / 19	50	o. r.	o. r.	o. r.
98033	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90293	M20 x 1,5	6,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
98034	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
90294	M25 x 1,5	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90295	M32 x 1,5	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
90296	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90297	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90298	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98035	M12 x 1,5	2,0 - 5,0	6,5	14	50	o. r.	o. r.	o. r.
98036	M16 x 1,5	2,0 - 6,0	6,0	17 / 19	50	o. r.	o. r.	o. r.
98038	M20 x 1,5	5,0 - 9,0	6,0	22	50	o. r.	o. r.	o. r.
98040	M25 x 1,5	9,0 - 16,0	7,0	30	25	o. r.	o. r.	o. r.
98041	M32 x 1,5	13,0 - 20,0	8,0	40	25	o. r.	o. r.	o. r.
98042	M40 x 1,5	20,0 - 26,0	8,0	50	10	o. r.	o. r.	o. r.
98043	M50 x 1,5	25,0 - 31,0	9,0	57	5	o. r.	o. r.	o. r.
98044	M63 x 1,5	29,0 - 35,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK-MS cable gland

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90300	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
90301	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
90302	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90303	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
90304	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
90305	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90306	29	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
90307	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90308	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90309	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

PG thread - with reducing seal

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99208	7	2,0 - 5,0	5,0	14	50	o. r.	o. r.	o. r.
99209	9	2,0 - 6,0	6,0	17	50	o. r.	o. r.	o. r.
99210	11	3,0 - 7,0	6,0	20	50	o. r.	o. r.	o. r.
99211	13,5	5,0 - 9,0	6,5	22	50	o. r.	o. r.	o. r.
99212	16	7,0 - 12,0	6,5	24	50	o. r.	o. r.	o. r.
99213	21	9,0 - 16,0	7,0	30	25	o. r.	o. r.	o. r.
99214	29	13,0 - 20,0	8,0	40	25	o. r.	o. r.	o. r.
99215	36	20,0 - 26,0	8,0	50	10	o. r.	o. r.	o. r.
99216	42	25,0 - 31,0	9,0	57	5	o. r.	o. r.	o. r.
99217	48	29,0 - 35,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91845	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
91846	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
91847	3/4"	13,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.
91848	1"	18,0 - 25,0	19,0	40	25	o. r.	o. r.	o. r.

NPT thread - with reducing seal

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96678	3/8"	2,0 - 6,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
97103	1/2"	5,0 - 9,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
97661	3/4"	9,0 - 16,0	13,0	30	25	o. r.	o. r.	o. r.
97662	1"	13,0 - 20,0	19,0	40	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-L cable gland

long thread

HSK-MS-L

With long threaded connection
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Material

Brass, nickel plated
Clamp: Polyamide
Moulded seal: NBR
O-ring: NBR

Technical data

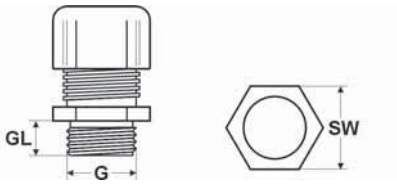
Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91720	M12 x 1,5	3,0 - 6,5	10,0	14	50	o. r.	o. r.	o. r.
91721	M16 x 1,5	4,0 - 8,0	10,0	17 / 19	50	o. r.	o. r.	o. r.
94559	M20 x 1,5	10,0 - 14,0	10,0	24	50	o. r.	o. r.	o. r.
903527	M25 x 1,5	13,0 - 18,0	12,0	30	25	o. r.	o. r.	o. r.
93539	M32 x 1,5	18,0 - 25,0	12,0	40	25	o. r.	o. r.	o. r.
91725	M40 x 1,5	20,0 - 26,0	15,0	50	10	o. r.	o. r.	o. r.
91726	M50 x 1,5	25,0 - 31,0	15,0	57	5	o. r.	o. r.	o. r.
91727	M63 x 1,5	29,0 - 35,0	15,0	64 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91722	M20 x 1,5	5,0 - 9,0	10,0	22	50	o. r.	o. r.	o. r.
91723	M25 x 1,5	9,0 - 16,0	12,0	30	25	o. r.	o. r.	o. r.
91724	M32 x 1,5	13,0 - 20,0	12,0	40	25	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90310	7	3,0 - 6,5	10,0	14	50	o. r.	o. r.	o. r.
90311	9	4,0 - 8,0	10,0	17	50	o. r.	o. r.	o. r.
90312	11	5,0 - 10,0	10,0	20	50	o. r.	o. r.	o. r.
90313	13,5	6,0 - 12,0	10,0	22	50	o. r.	o. r.	o. r.
90314	16	10,0 - 14,0	10,0	24	50	o. r.	o. r.	o. r.
90315	21	13,0 - 18,0	12,0	30	25	o. r.	o. r.	o. r.
90316	29	18,0 - 25,0	12,0	40	25	o. r.	o. r.	o. r.
90317	36	22,0 - 32,0	15,0	50	10	o. r.	o. r.	o. r.
90318	42	32,0 - 38,0	15,0	57	5	o. r.	o. r.	o. r.
90319	48	37,0 - 44,0	15,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-B cable gland

anti-kink

HSK-MS-B

With anti-bend spirals

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

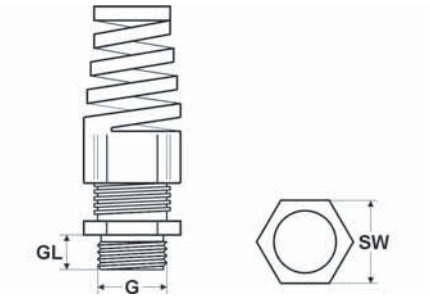
Brass, nickel plated
Clamp: Polyamide PA 6
Moulded seal: NBR
O-ring: NBR
Kinking protection spring: Stainless steel (1.4310)

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92917	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
92918	M16 x 1,5	4,0 - 8,0	6,0	19	50	o. r.	o. r.	o. r.
92919	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
92920	M20 x 1,5	6,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
92921	M20 x 1,5	10,0 - 14,0	6,0	24	25	o. r.	o. r.	o. r.
92922	M25 x 1,5	13,0 - 18,0	7,0	30	20	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92911	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
92912	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
92913	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
92914	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
92915	16	10,0 - 14,0	6,5	24	25	o. r.	o. r.	o. r.
92916	21	13,0 - 18,0	7,0	30	20	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92923	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
92924	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
92925	3/4"	13,0 - 18,0	13,0	33	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® HT-MS Plus cable gland

for increased strain relief

new

HELUTOP® HT-MS Plus

The nickel-coated brass cable gland for very high density and strain relief.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Moulded seal: NBR
O-ring: NBR

Properties

- Optimum strain relief through clamping plates (strain relief B to EN 50262 over the entire clamping region)
- Easy to assemble
- Large clamping areas

Note

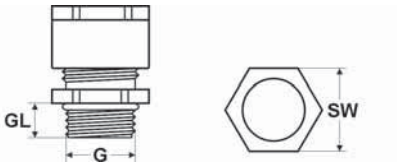
For rotating the cap nut use tool. Note tightening torque!
Details on the individual tests appear in section "Technical Information".

Technical data

Protection class: IP 68 - 40 bar / IP 69K

Temperature range: -40°C up to +120°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905720	M16 x 1,5	grey	4,0 - 11,0	8,0	21	100	o. r.	o. r.	o. r.
905721	M20 x 1,5	grey	5,0 - 13,0	10,0	24	100	o. r.	o. r.	o. r.
905722	M25 x 1,5	grey	6,5 - 15,5	10,0	28	50	o. r.	o. r.	o. r.
905723	M25 x 1,5	grey	10,0 - 20,0	10,0	30	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® HT-MS c Plus cable gland

for increased strain relief, chromated

new

RoHS

HELUTOP® HT-MS c Plus

The black-chromated brass cable gland for very high density and strain relief.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Brass
Moulded seal: NBR
O-ring: NBR

Properties

- Optimum strain relief through clamping plates (strain relief B to EN 50262 over the entire clamping region)
- Easy to assemble
- Large clamping areas

Note

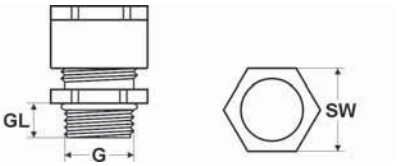
For rotating the cap nut use tool. Note tightening torque!
Details on the individual tests appear in section "Technical Information".

Technical data

Protection class: IP 68 - 40 bar / IP 69K

Temperature range: -40°C up to +120°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905724	M16 x 1,5	grey	4,0 - 11,0	8,0	21	100	o. r.	o. r.	o. r.
905725	M20 x 1,5	grey	5,0 - 13,0	9,0	24	100	o. r.	o. r.	o. r.
905726	M25 x 1,5	grey	6,5 - 15,5	10,0	28	50	o. r.	o. r.	o. r.
905727	M25 x 1,5	grey	10,0 - 20,0	10,0	30	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-MS cable gland

UNI-DICHT-MS
Sealing cable gland. Nickel-coated brass with colour-coded inserts made by TPE.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet technology

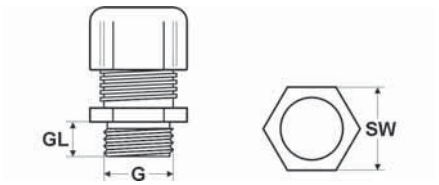
Material
Brass, nickel plated
Moulded seal: TPE

Properties
- Large-area cable sealing
- Easy to assemble
- Large clamping areas

Technical data
Protection class: IP 68 - 10 bar

Temperature range: -40°C up to +130°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904061	M12 x 1,5	yellow/short	4,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
904062	M16 x 1,5	yellow	4,0 - 6,5	6,0	18	50	o. r.	o. r.	o. r.
904063	M16 x 1,5	grey	5,0 - 8,0	6,0	18	50	o. r.	o. r.	o. r.
904064	M16 x 1,5	black	6,5 - 9,5	6,0	18	50	o. r.	o. r.	o. r.
904065	M20 x 1,5	yellow	4,0 - 6,5	6,5	22	50	o. r.	o. r.	o. r.
904066	M20 x 1,5	grey	5,0 - 8,0	6,5	22	50	o. r.	o. r.	o. r.
904067	M20 x 1,5	black	6,5 - 9,5	6,5	22	50	o. r.	o. r.	o. r.
904068	M20 x 1,5	green	7,0 - 10,5	6,5	22	50	o. r.	o. r.	o. r.
904069	M20 x 1,5	red	9,0 - 13,0	6,5	22	50	o. r.	o. r.	o. r.
904070	M25 x 1,5	yellow	4,0 - 6,5	7,5	28	50	o. r.	o. r.	o. r.
904071	M25 x 1,5	grey	5,0 - 8,0	7,5	28	50	o. r.	o. r.	o. r.
904072	M25 x 1,5	black	6,5 - 9,5	7,5	28	50	o. r.	o. r.	o. r.
904073	M25 x 1,5	green	7,0 - 10,5	7,5	28	50	o. r.	o. r.	o. r.
904074	M25 x 1,5	red	9,0 - 13,0	7,5	28	50	o. r.	o. r.	o. r.
904075	M25 x 1,5	white	11,5 - 15,5	7,5	28	50	o. r.	o. r.	o. r.
904076	M32 x 1,5	green	7,0 - 10,5	8,0	35	25	o. r.	o. r.	o. r.
904077	M32 x 1,5	red	9,0 - 13,0	8,0	35	25	o. r.	o. r.	o. r.
904078	M32 x 1,5	white	11,5 - 15,5	8,0	35	25	o. r.	o. r.	o. r.
904079	M32 x 1,5	blue	14,0 - 18,0	8,0	35	25	o. r.	o. r.	o. r.
904080	M32 x 1,5	brown	17,0 - 20,5	8,0	35	25	o. r.	o. r.	o. r.
904081	M40 x 1,5	blue	14,0 - 18,0	8,0	43	10	o. r.	o. r.	o. r.
904082	M40 x 1,5	brown	17,0 - 20,5	8,0	43	10	o. r.	o. r.	o. r.
904083	M40 x 1,5	orange	20,0 - 25,0	8,0	43	10	o. r.	o. r.	o. r.
904084	M40 x 1,5	light yellow	24,0 - 28,0	8,0	43	10	o. r.	o. r.	o. r.
904085	M50 x 1,5	anthracite	27,0 - 32,0	10,0	54	5	o. r.	o. r.	o. r.
904086	M50 x 1,5	light blue	29,0 - 34,0	10,0	54	5	o. r.	o. r.	o. r.
904087	M50 x 1,5	pink	32,0 - 36,0	10,0	54	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT-MS cable gland

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904088	7	yellow	4,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
904089	9	yellow	4,0 - 6,5	6,0	17	50	o. r.	o. r.	o. r.
904090	9	grey	5,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
904091	9	black	6,5 - 9,5	6,0	17	50	o. r.	o. r.	o. r.
904092	11	yellow	4,0 - 6,5	6,0	20	50	o. r.	o. r.	o. r.
904093	11	grey	5,0 - 8,0	6,0	20	50	o. r.	o. r.	o. r.
904094	11	black	6,5 - 9,5	6,0	20	50	o. r.	o. r.	o. r.
904095	11	green	7,0 - 10,5	6,0	20	50	o. r.	o. r.	o. r.
904096	13,5	yellow	4,0 - 6,5	6,5	22	50	o. r.	o. r.	o. r.
904097	13,5	grey	5,0 - 8,0	6,5	22	50	o. r.	o. r.	o. r.
904098	13,5	black	6,5 - 9,5	6,5	22	50	o. r.	o. r.	o. r.
904099	13,5	green	7,0 - 10,5	6,5	22	50	o. r.	o. r.	o. r.
904100	13,5	red	9,0 - 13,0	6,5	22	50	o. r.	o. r.	o. r.
904101	16	yellow	4,0 - 6,5	6,5	24	50	o. r.	o. r.	o. r.
904102	16	grey	5,0 - 8,0	6,5	24	50	o. r.	o. r.	o. r.
904103	16	black	6,5 - 9,5	6,5	24	50	o. r.	o. r.	o. r.
904104	16	green	7,0 - 10,5	6,5	24	50	o. r.	o. r.	o. r.
904105	16	red	9,0 - 13,0	6,5	24	50	o. r.	o. r.	o. r.
904106	16	white	11,5 - 15,5	6,5	24	50	o. r.	o. r.	o. r.
904107	21	green	7,0 - 10,5	7,0	30	25	o. r.	o. r.	o. r.
904108	21	red	9,0 - 13,0	7,0	30	25	o. r.	o. r.	o. r.
904109	21	white	11,5 - 15,5	7,0	30	25	o. r.	o. r.	o. r.
904110	21	blue	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
904111	21	brown	17,0 - 20,5	7,0	30	25	o. r.	o. r.	o. r.
904112	29	blue	14,0 - 18,0	8,0	40	10	o. r.	o. r.	o. r.
904113	29	brown	17,0 - 20,5	8,0	40	10	o. r.	o. r.	o. r.
904114	29	orange	20,0 - 25,0	8,0	40	10	o. r.	o. r.	o. r.
904115	29	light yellow	24,0 - 28,0	8,0	40	10	o. r.	o. r.	o. r.
904116	36	anthracite	27,0 - 32,0	9,0	50	10	o. r.	o. r.	o. r.
904117	36	light blue	29,0 - 34,0	9,0	50	10	o. r.	o. r.	o. r.
904118	36	pink	32,0 - 36,0	9,0	50	10	o. r.	o. r.	o. r.
904119	42	white	36,0 - 40,0	10,0	57	5	o. r.	o. r.	o. r.
904120	48	white	39,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-MFD-MS cable gland

with multiple sealing inserts

UNI-DICHT-MFD-MS

Sealing cable gland made of brass with multiple sealing inserts made by TPE.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Moulded seal: TPE

Properties

- Large-area cable seal
- Easy to assemble

Note

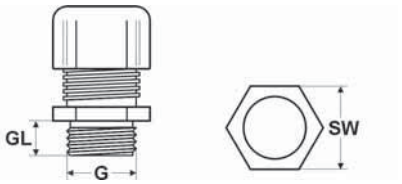
Protection classification IP 68, subject to the bore diameter in the sealing insert area and cable diameter being identical.

Technical data

Protection class: IP 65

Temperature range: -40°C up to +130°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904125	M16 x 1,5	2 x 1,2	9,0	19	50	o. r.	o. r.	o. r.
904126	M16 x 1,5	2 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
905024	M16 x 1,5	3 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
904127	M16 x 1,5	4 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
904128	M16 x 1,5	2 x 4,0	9,0	19	50	o. r.	o. r.	o. r.
904129	M16 x 1,5	1 x 5,0	9,0	19	50	o. r.	o. r.	o. r.
904130	M20 x 1,5	6 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
904131	M20 x 1,5	2 x 2,3	9,0	24	50	o. r.	o. r.	o. r.
904132	M20 x 1,5	6 x 2,5	9,0	24	50	o. r.	o. r.	o. r.
904133	M20 x 1,5	2 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
904134	M20 x 1,5	3 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
904135	M20 x 1,5	2 x 5,0	9,0	24	50	o. r.	o. r.	o. r.
904136	M25 x 1,5	7 x 2,0	9,0	30	50	o. r.	o. r.	o. r.
904137	M25 x 1,5	2 x 4,0	9,0	30	50	o. r.	o. r.	o. r.
904138	M25 x 1,5	4 x 4,0	9,0	30	50	o. r.	o. r.	o. r.
904139	M25 x 1,5	6 x 4,0	9,0	30	50	o. r.	o. r.	o. r.
904140	M25 x 1,5	2 x 6,0	9,0	30	50	o. r.	o. r.	o. r.
904141	M25 x 1,5	3 x 7,0	9,0	30	50	o. r.	o. r.	o. r.
904142	M32 x 1,5	21 x 2,0	11,0	36	25	o. r.	o. r.	o. r.
904143	M32 x 1,5	8 x 3,0	11,0	36	25	o. r.	o. r.	o. r.
904144	M32 x 1,5	6 x 4,0	11,0	36	25	o. r.	o. r.	o. r.
904145	M32 x 1,5	8 x 4,0	11,0	36	25	o. r.	o. r.	o. r.
904146	M32 x 1,5	4 x 5,0	11,0	36	25	o. r.	o. r.	o. r.
904147	M32 x 1,5	4 x 6,0	11,0	36	25	o. r.	o. r.	o. r.
904148	M32 x 1,5	6 x 6,5	11,0	36	25	o. r.	o. r.	o. r.
904149	M32 x 1,5	3 x 7,0	11,0	36	25	o. r.	o. r.	o. r.
904150	M32 x 1,5	4 x 8,0	11,0	36	25	o. r.	o. r.	o. r.
904151	M32 x 1,5	2 x 9,0	11,0	36	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

UNI-DICHT-MFD-MS cable gland

with multiple sealing inserts

metric thread

Part no.	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904152	M40 x 1,5	6 x 6,0	11,5	46	10	o. r.	o. r.	o. r.
904153	M40 x 1,5	10 x 6,0	11,5	46	10	o. r.	o. r.	o. r.
904154	M40 x 1,5	4 x 6,5	11,5	46	10	o. r.	o. r.	o. r.
904155	M40 x 1,5	6 x 8,0	11,5	46	10	o. r.	o. r.	o. r.
904156	M40 x 1,5	4 x 9,0	11,5	46	10	o. r.	o. r.	o. r.
904157	M40 x 1,5	5 x 9,0	11,5	46	10	o. r.	o. r.	o. r.
904158	M40 x 1,5	5 x 10,0	11,5	46	10	o. r.	o. r.	o. r.
904159	M40 x 1,5	2 x 11,0	11,5	46	10	o. r.	o. r.	o. r.
904160	M50 x 1,5	15 x 5,0	14,0	55	5	o. r.	o. r.	o. r.
904161	M50 x 1,5	8 x 9,0	14,0	55	5	o. r.	o. r.	o. r.
904162	M50 x 1,5	3 x 10,0	14,0	55	5	o. r.	o. r.	o. r.
904163	M50 x 1,5	2 x 15,0	14,0	55	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904164	9	2 x 1,2	9,0	19	50	o. r.	o. r.	o. r.
904165	9	2 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
904166	9	4 x 3,0	9,0	19	50	o. r.	o. r.	o. r.
904167	9	2 x 4,0	9,0	19	50	o. r.	o. r.	o. r.
904168	9	1 x 5,0	9,0	19	50	o. r.	o. r.	o. r.
904169	11	6 x 2,0	9,0	22	50	o. r.	o. r.	o. r.
904170	11	2 x 2,3	9,0	22	50	o. r.	o. r.	o. r.
904171	11	6 x 2,5	9,0	22	50	o. r.	o. r.	o. r.
904172	11	2 x 3,0	9,0	22	50	o. r.	o. r.	o. r.
904173	11	3 x 3,0	9,0	22	50	o. r.	o. r.	o. r.
904174	11	2 x 5,0	9,0	22	50	o. r.	o. r.	o. r.
904175	13,5	3 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
904176	13,5	10 x 2,0	9,0	24	50	o. r.	o. r.	o. r.
904177	13,5	2 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
904178	13,5	3 x 3,0	9,0	24	50	o. r.	o. r.	o. r.
904179	13,5	6 x 3,5	9,0	24	50	o. r.	o. r.	o. r.
904180	13,5	2 x 5,0	9,0	24	50	o. r.	o. r.	o. r.
904181	13,5	2 x 6,0	9,0	24	50	o. r.	o. r.	o. r.
904182	16	7 x 2,0	9,0	27	50	o. r.	o. r.	o. r.
904183	16	2 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
904184	16	4 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
904185	16	6 x 4,0	9,0	27	50	o. r.	o. r.	o. r.
904186	16	2 x 6,0	9,0	27	50	o. r.	o. r.	o. r.
904187	16	3 x 7,0	9,0	27	50	o. r.	o. r.	o. r.
904188	21	21 x 2,0	11,0	33	25	o. r.	o. r.	o. r.
904189	21	8 x 3,0	11,0	33	25	o. r.	o. r.	o. r.
904190	21	6 x 4,0	11,0	33	25	o. r.	o. r.	o. r.
904191	21	8 x 4,0	11,0	33	25	o. r.	o. r.	o. r.
904192	21	4 x 5,0	11,0	33	25	o. r.	o. r.	o. r.
904193	21	4 x 6,0	11,0	33	25	o. r.	o. r.	o. r.
904194	21	6 x 6,5	11,0	33	25	o. r.	o. r.	o. r.
904195	21	3 x 7,0	11,0	33	25	o. r.	o. r.	o. r.
904196	21	4 x 8,0	11,0	33	25	o. r.	o. r.	o. r.
904197	21	2 x 9,0	11,0	33	25	o. r.	o. r.	o. r.
904198	29	6 x 6,0	11,0	43	10	o. r.	o. r.	o. r.
904199	29	10 x 6,0	11,0	43	10	o. r.	o. r.	o. r.
904200	29	4 x 6,5	11,0	43	10	o. r.	o. r.	o. r.
904201	29	6 x 8,0	11,0	43	10	o. r.	o. r.	o. r.
904202	29	4 x 9,0	11,0	43	10	o. r.	o. r.	o. r.
904203	29	5 x 9,0	11,0	43	10	o. r.	o. r.	o. r.
904204	29	5 x 10,0	11,0	43	10	o. r.	o. r.	o. r.
904205	29	2 x 11,0	11,0	43	10	o. r.	o. r.	o. r.
904206	36	8 x 9,0	14,0	53	10	o. r.	o. r.	o. r.
904207	36	15 x 5,0	14,0	53	10	o. r.	o. r.	o. r.
904208	36	3 x 10,0	14,0	53	10	o. r.	o. r.	o. r.
904209	36	2 x 15,0	14,0	53	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-VK-MS gland body

UNI-DICHT gland body MS

Gland body made of brass for populating with inserts made by TPE.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated

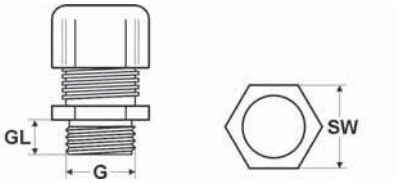
Note

Gland body M20x1.5 (part No. 904212) is populated by inserts PG11; part No. 9042313 is used with inserts PG13.5.
Part Nos. 904215 and 904225 cap aperture 18mm.
Part Nos. 904216 and 904226 cap aperture 21mm.

Technical data

Temperature range: up to +200°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904210	M12 x 1,5	5,0	14	50	o. r.	o. r.	o. r.
904211	M16 x 1,5	6,0	18	50	o. r.	o. r.	o. r.
904212	M20 x 1,5	6,5	22	50	o. r.	o. r.	o. r.
904213	M20 x 1,5	6,5	22	50	o. r.	o. r.	o. r.
904214	M25 x 1,5	7,5	28	50	o. r.	o. r.	o. r.
904215	M32 x 1,5	8,0	35	25	o. r.	o. r.	o. r.
904216	M32 x 1,5	8,0	35	25	o. r.	o. r.	o. r.
904217	M40 x 1,5	8,0	43	10	o. r.	o. r.	o. r.
904218	M50 x 1,5	10,0	54	5	o. r.	o. r.	o. r.
904219	M63 x 1,5	10,0	68	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904220	7	5,0	14	50	o. r.	o. r.	o. r.
904221	9	6,0	17	50	o. r.	o. r.	o. r.
904222	11	6,0	20	50	o. r.	o. r.	o. r.
904223	13,5	6,5	22	50	o. r.	o. r.	o. r.
904224	16	6,5	24	50	o. r.	o. r.	o. r.
904225	21	7,0	30	25	o. r.	o. r.	o. r.
904226	21	7,0	30	25	o. r.	o. r.	o. r.
904227	29	8,0	40	10	o. r.	o. r.	o. r.
904228	36	9,0	50	10	o. r.	o. r.	o. r.
904229	42	10,0	57	5	o. r.	o. r.	o. r.
904230	48	10,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT sealing inserts

UNI-DICHT sealing insert, closed

Closed inserts made by TPE-V. For use with UNI-DICHT gland bodies made by polyamide or by brass.

confer page 53

UNI-DICHT sealing insert, standard

Colour coded sealing inserts made by TPE for use with UNI-DICHT gland bodies made by polyamide or by brass.

confer page 54

UNI-DICHT ZUG

Colour coded sealing inserts made by TPE for increased strain relief. For populating UNI-DICHT body glands made of plastic or brass.

confer page 57

UNI-DICHT sealing insert silicone

Sealing inserts made by silicone for populating of UNI-DICHT gland bodies. For use in chemical industry and at high temperatures.

confer page 168

UNI-DICHT multiple sealing insert

Multiple sealing inserts made by TPE for populating the UNI-DICHT gland bodies made by polyamide or by brass.

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Sealing billets

Sealing billets
for empty penetrations.

confer page 31

UNI-DICHT-ASI-MS cable gland

profile fits to ASI-bus line

UNI-DICHT-ASI-MS

Sealing cable gland. Nickel-coated brass with inserts made by TPE-V. Profile fitting to ASI- bus line.

Material

Brass, nickel plated
Moulded seal: TPE-V
UV-resistant

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -40°C up to +135°C

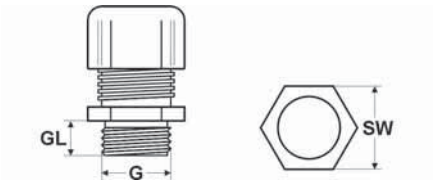
Test standard: EN50262

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Installation technology
- Control cabinet construction

Properties

- Large-area cable sealing
- Easy to assemble



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904121	M20 x 1,5	grey, left	-	6,5	22	50	o. r.	o. r.	o. r.
904122	M20 x 1,5	grey, right	-	6,5	22	50	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904123	13,5	grey, left	-	6,5	22	50	o. r.	o. r.	o. r.
904124	13,5	grey, right	-	6,5	22	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Matching accessory

UNI-DICHT Sealing insert ASI

Sealing inserts made of TPE-V for populating UNI-DICHT gland bodies made of polyamide or of brass. Profile fits to ASI- bus line.

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KVA-MS cable gland

KVA-MS
Sealing cable gland
Nickel-coated brass with colour-coded inserts.

Material
Brass, nickel plated
Moulded seal: Soft PVC
O-ring: NBR

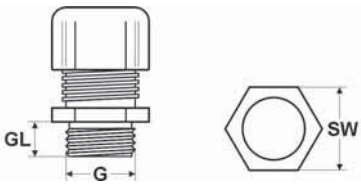
Technical data
Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +105°C

Test standard: EN50262

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Properties
- Large-area cable sealing
- Easy to assemble
- Large clamping areas



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90800	M12 x 1,5	yellow	4,0 - 6,5	6,0	14	100	o. r.	o. r.	o. r.
90801	M16 x 1,5	yellow	4,0 - 6,5	6,5	17	100	o. r.	o. r.	o. r.
90802	M16 x 1,5	grey	5,0 - 8,0	6,5	17	100	o. r.	o. r.	o. r.
90803	M16 x 1,5	black	6,5 - 9,5	6,5	17	100	o. r.	o. r.	o. r.
90804	M20 x 1,5	yellow	4,0 - 6,5	7,0	22	50	o. r.	o. r.	o. r.
90805	M20 x 1,5	grey	5,0 - 8,0	7,0	22	50	o. r.	o. r.	o. r.
90807	M20 x 1,5	black	6,5 - 9,5	7,0	22	50	o. r.	o. r.	o. r.
90808	M20 x 1,5	green	7,0 - 10,5	7,0	22	50	o. r.	o. r.	o. r.
90809	M20 x 1,5	red	9,0 - 13,0	7,0	22	50	o. r.	o. r.	o. r.
90811	M25 x 1,5	yellow	4,0 - 6,5	7,5	27	50	o. r.	o. r.	o. r.
90812	M25 x 1,5	grey	5,0 - 8,0	7,5	27	50	o. r.	o. r.	o. r.
90813	M25 x 1,5	black	6,5 - 9,5	7,5	27	50	o. r.	o. r.	o. r.
90814	M25 x 1,5	green	7,0 - 10,5	7,5	27	50	o. r.	o. r.	o. r.
90815	M25 x 1,5	red	9,0 - 13,0	7,5	27	50	o. r.	o. r.	o. r.
90816	M25 x 1,5	white	11,5 - 15,5	7,5	27	50	o. r.	o. r.	o. r.
90817	M32 x 1,5	green	7,0 - 10,5	8,0	35	25	o. r.	o. r.	o. r.
90818	M32 x 1,5	red	9,0 - 13,0	8,0	35	25	o. r.	o. r.	o. r.
90819	M32 x 1,5	white	11,5 - 15,5	8,0	35	25	o. r.	o. r.	o. r.
90820	M32 x 1,5	blue	14,0 - 18,0	8,0	35	25	o. r.	o. r.	o. r.
90821	M32 x 1,5	brown	17,0 - 21,0	8,0	35	25	o. r.	o. r.	o. r.
90822	M40 x 1,5	blue	14,0 - 18,0	8,0	43	10	o. r.	o. r.	o. r.
90823	M40 x 1,5	brown	17,0 - 21,0	8,0	43	10	o. r.	o. r.	o. r.
90824	M40 x 1,5	orange	20,0 - 25,0	8,0	43	10	o. r.	o. r.	o. r.
90825	M40 x 1,5	light yellow	24,0 - 28,0	8,0	43	10	o. r.	o. r.	o. r.
90826	M50 x 1,5	anthracite	27,0 - 32,0	10,0	54	10	o. r.	o. r.	o. r.
90827	M50 x 1,5	light blue	29,0 - 34,0	10,0	54	10	o. r.	o. r.	o. r.
90828	M50 x 1,5	pink	32,0 - 37,0	10,0	54	10	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

KVA-MS cable gland

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90354	7	yellow	4,0 - 6,5	5,0	14	100	o. r.	o. r.	o. r.
90355	9	yellow	4,0 - 6,5	6,0	17	100	o. r.	o. r.	o. r.
90356	9	grey	5,0 - 8,0	6,0	17	100	o. r.	o. r.	o. r.
90357	9	black	6,5 - 9,5	6,0	17	100	o. r.	o. r.	o. r.
96149	11	yellow	4,0 - 6,5	6,0	20	50	o. r.	o. r.	o. r.
90358	11	grey	5,0 - 8,0	6,0	20	50	o. r.	o. r.	o. r.
90359	11	black	6,5 - 9,5	6,0	20	50	o. r.	o. r.	o. r.
90360	11	green	7,0 - 10,5	6,0	20	50	o. r.	o. r.	o. r.
97119	13,5	yellow	4,0 - 6,5	6,5	22	50	o. r.	o. r.	o. r.
97120	13,5	grey	5,0 - 8,0	6,5	22	50	o. r.	o. r.	o. r.
90361	13,5	black	6,5 - 9,5	6,5	22	50	o. r.	o. r.	o. r.
90362	13,5	green	7,0 - 10,5	6,5	22	50	o. r.	o. r.	o. r.
90363	13,5	red	9,0 - 13,0	6,5	22	50	o. r.	o. r.	o. r.
90364	13,5	white	11,0 - 15,5	6,5	24	50	o. r.	o. r.	o. r.
91974	16	yellow	4,0 - 6,5	6,5	24	50	o. r.	o. r.	o. r.
92093	16	grey	5,0 - 8,0	6,5	24	50	o. r.	o. r.	o. r.
90365	16	black	6,5 - 9,5	6,5	24	50	o. r.	o. r.	o. r.
90366	16	green	7,0 - 10,5	6,5	24	50	o. r.	o. r.	o. r.
90367	16	red	9,0 - 13,0	6,5	24	50	o. r.	o. r.	o. r.
90368	16	white	11,5 - 15,5	6,5	24	50	o. r.	o. r.	o. r.
90369	21	green	7,0 - 10,5	7,0	30	25	o. r.	o. r.	o. r.
90370	21	red	9,0 - 13,0	7,0	30	25	o. r.	o. r.	o. r.
90371	21	white	11,5 - 15,5	7,0	30	25	o. r.	o. r.	o. r.
90372	21	blue	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90373	21	brown	17,0 - 21,0	7,0	30	25	o. r.	o. r.	o. r.
90374	29	blue	14,0 - 18,0	8,0	40	10	o. r.	o. r.	o. r.
90375	29	brown	17,0 - 21,0	8,0	40	10	o. r.	o. r.	o. r.
90376	29	orange	20,0 - 25,0	8,0	40	10	o. r.	o. r.	o. r.
96526	29	light yellow	24,0 - 28,0	8,0	40	10	o. r.	o. r.	o. r.
90390	36	anthracite	27,0 - 32,0	9,0	50	10	o. r.	o. r.	o. r.
90391	36	light blue	29,0 - 34,0	9,0	50	10	o. r.	o. r.	o. r.
90392	36	pink	32,0 - 37,0	9,0	50	10	o. r.	o. r.	o. r.
90393	42	white	36,0 - 41,0	10,0	60	10	o. r.	o. r.	o. r.
90394	48	white	39,0 - 45,0	10,0	65	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-MFD-MS cable gland

with multiple sealing inserts

KVA-MFD-MS

Sealing cable gland with multiple sealing inserts.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Moulded seal: Soft PVC
O-ring: NBR

Properties

- Large-area cable sealing
- Easy to assemble

Note

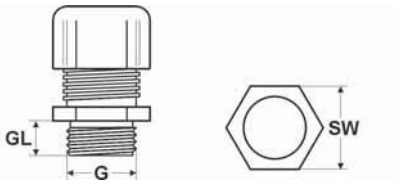
IP 68, subject to the bore diameter in the sealing insert area and cable diameter being identical.

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +105°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93400	M16 x 1,5	2 x 1,0	6,5	17	100	o. r.	o. r.	o. r.
93401	M16 x 1,5	2 x 3,0	6,5	17	100	o. r.	o. r.	o. r.
93402	M16 x 1,5	4 x 3,0	6,5	17	100	o. r.	o. r.	o. r.
93403	M16 x 1,5	2 x 4,0	6,5	17	100	o. r.	o. r.	o. r.
93404	M16 x 1,5	1 x 5,0	6,5	17	100	o. r.	o. r.	o. r.
93405	M20 x 1,5	6 x 2,0	7,0	22	50	o. r.	o. r.	o. r.
93406	M20 x 1,5	2 x 2,3	7,0	22	50	o. r.	o. r.	o. r.
93407	M20 x 1,5	6 x 2,5	7,0	22	50	o. r.	o. r.	o. r.
93408	M20 x 1,5	2 x 3,0	7,0	22	50	o. r.	o. r.	o. r.
93409	M20 x 1,5	3 x 3,0	7,0	22	50	o. r.	o. r.	o. r.
93410	M20 x 1,5	2 x 5,0	7,0	22	50	o. r.	o. r.	o. r.
93411	M25 x 1,5	7 x 2,0	7,5	27	50	o. r.	o. r.	o. r.
93412	M25 x 1,5	2 x 4,0	7,5	27	50	o. r.	o. r.	o. r.
93413	M25 x 1,5	4 x 4,0	7,5	27	50	o. r.	o. r.	o. r.
93414	M25 x 1,5	6 x 4,0	7,5	27	50	o. r.	o. r.	o. r.
93415	M25 x 1,5	2 x 6,0	7,5	27	50	o. r.	o. r.	o. r.
93416	M25 x 1,5	3 x 7,0	7,5	27	50	o. r.	o. r.	o. r.
93417	M32 x 1,5	21 x 2,0	8,0	35	25	o. r.	o. r.	o. r.
93418	M32 x 1,5	8 x 3,0	8,0	35	25	o. r.	o. r.	o. r.
93419	M32 x 1,5	6 x 4,0	8,0	35	25	o. r.	o. r.	o. r.
93420	M32 x 1,5	8 x 4,0	8,0	35	25	o. r.	o. r.	o. r.
93421	M32 x 1,5	4 x 5,0	8,0	35	25	o. r.	o. r.	o. r.
93422	M32 x 1,5	4 x 6,0	8,0	35	25	o. r.	o. r.	o. r.
93423	M32 x 1,5	6 x 6,5	8,0	35	25	o. r.	o. r.	o. r.
93424	M32 x 1,5	3 x 7,0	8,0	35	25	o. r.	o. r.	o. r.
93425	M32 x 1,5	4 x 8,0	8,0	35	25	o. r.	o. r.	o. r.
93426	M32 x 1,5	2 x 9,0	8,0	35	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

KVA-MFD-MS cable gland

with multiple sealing inserts

metric thread

Part no.	Size Metr.	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93429	M40 x 1,5	6 x 6,0	8,0	43	10	o. r.	o. r.	o. r.
93427	M40 x 1,5	10 x 6,0	8,0	43	10	o. r.	o. r.	o. r.
93428	M40 x 1,5	4 x 6,5	8,0	43	10	o. r.	o. r.	o. r.
93430	M40 x 1,5	6 x 8,0	8,0	43	10	o. r.	o. r.	o. r.
93431	M40 x 1,5	4 x 9,0	8,0	43	10	o. r.	o. r.	o. r.
93432	M40 x 1,5	5 x 9,0	8,0	43	10	o. r.	o. r.	o. r.
93433	M40 x 1,5	5 x 10,0	8,0	43	10	o. r.	o. r.	o. r.
93434	M40 x 1,5	2 x 11,0	8,0	43	10	o. r.	o. r.	o. r.
93436	M50 x 1,5	15 x 5,0	10,0	54	10	o. r.	o. r.	o. r.
93435	M50 x 1,5	8 x 9,0	10,0	54	10	o. r.	o. r.	o. r.
93437	M50 x 1,5	3 x 10,0	10,0	54	10	o. r.	o. r.	o. r.
93438	M50 x 1,5	2 x 15,0	10,0	54	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Number holes x cable-Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92094	9	2 x 1,0	6,0	17 / 20	100	o. r.	o. r.	o. r.
92039	9	2 x 3,0	6,0	17 / 20	100	o. r.	o. r.	o. r.
92041	9	4 x 3,0	6,0	17 / 20	100	o. r.	o. r.	o. r.
92042	9	2 x 4,0	6,0	17 / 20	100	o. r.	o. r.	o. r.
92043	9	1 x 5,0	6,0	17 / 20	100	o. r.	o. r.	o. r.
92044	11	6 x 2,0	6,0	20 / 22	50	o. r.	o. r.	o. r.
92045	11	2 x 2,3	6,0	20 / 22	50	o. r.	o. r.	o. r.
92046	11	6 x 2,5	6,0	20 / 22	50	o. r.	o. r.	o. r.
92047	11	2 x 3,0	6,0	20 / 22	50	o. r.	o. r.	o. r.
92048	11	3 x 3,0	6,0	20 / 22	50	o. r.	o. r.	o. r.
96881	11	2 x 5,0	6,0	20 / 22	50	o. r.	o. r.	o. r.
92052	13,5	3 x 2,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92053	13,5	10 x 2,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92054	13,5	2 x 3,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92055	13,5	3 x 3,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92095	13,5	6 x 3,5	6,5	24 / 30	50	o. r.	o. r.	o. r.
92096	13,5	2 x 5,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92057	13,5	2 x 6,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92058	16	7 x 2,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92097	16	2 x 4,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92060	16	4 x 4,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92061	16	6 x 4,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92062	16	2 x 6,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
96434	16	3 x 7,0	6,5	24 / 30	50	o. r.	o. r.	o. r.
92064	21	21 x 2,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92065	21	8 x 3,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92066	21	6 x 4,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92067	21	8 x 4,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
96956	21	4 x 5,0	7,0	30 / 40	50	o. r.	o. r.	o. r.
92069	21	4 x 6,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92068	21	6 x 6,5	7,0	30 / 40	25	o. r.	o. r.	o. r.
92070	21	3 x 7,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92072	21	4 x 8,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
92098	21	2 x 9,0	7,0	30 / 40	25	o. r.	o. r.	o. r.
96430	29	6 x 6,0	8,0	40	25	o. r.	o. r.	o. r.
97327	29	10 x 6,0	8,0	40	25	o. r.	o. r.	o. r.
92099	29	4 x 6,5	8,0	40	10	o. r.	o. r.	o. r.
96710	29	6 x 8,0	8,0	40	10	o. r.	o. r.	o. r.
92074	29	4 x 9,0	8,0	40	10	o. r.	o. r.	o. r.
96564	29	5 x 9,0	8,0	40	10	o. r.	o. r.	o. r.
92075	29	5 x 10,0	8,0	40	10	o. r.	o. r.	o. r.
92076	29	2 x 11,0	8,0	40	10	o. r.	o. r.	o. r.
92077	36	15 x 5,0	8,5	50	10	o. r.	o. r.	o. r.
96336	36	8 x 9,0	8,5	50	25	o. r.	o. r.	o. r.
92079	36	3 x 10,0	8,5	50	10	o. r.	o. r.	o. r.
96397	36	2 x 15,0	8,5	50	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-VK-MS body gland

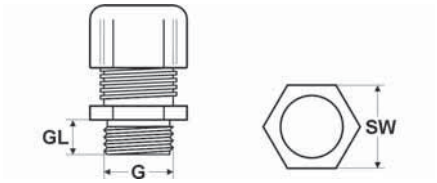
KVA gland body MS
Gland made of brass for populating with KVA and multiple sealing inserts.

Material
Brass, nickel plated
O-ring: NBR

Technical data
Temperature range: -30°C up to +100°C

Test standard: EN50262

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90788	M12 x 1,5	6,0	14	100	o. r.	o. r.	o. r.
90789	M16 x 1,5	6,5	17	100	o. r.	o. r.	o. r.
90790	M20 x 1,5	7,0	22	50	o. r.	o. r.	o. r.
90792	M25 x 1,5	7,5	27	50	o. r.	o. r.	o. r.
91367	M32 x 1,5	8,0	35	25	o. r.	o. r.	o. r.
90794	M40 x 1,5	8,0	43	10	o. r.	o. r.	o. r.
90795	M50 x 1,5	10,0	54	10	o. r.	o. r.	o. r.
90796	M63 x 1,5	10,0	65	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96033	7	5,0	14	100	o. r.	o. r.	o. r.
96034	9	6,0	17	100	o. r.	o. r.	o. r.
96035	11	6,0	20	50	o. r.	o. r.	o. r.
96036	13,5	6,5	22	50	o. r.	o. r.	o. r.
96037	16	6,5	24	50	o. r.	o. r.	o. r.
96038	21	7,0	30	25	o. r.	o. r.	o. r.
96039	29	8,0	40	10	o. r.	o. r.	o. r.
96040	36	9,0	50	10	o. r.	o. r.	o. r.
96041	42	10,0	57	5	o. r.	o. r.	o. r.
96042	48	10,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA sealing insert
closed

KVA sealing inserts closed
Colour-coded sealing inserts for populating the KVA glands.

Material
Soft PVC

Technical data
Temperature range: -20°C up to +105°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97087	9	M16 x 1,5	white	-	100	o. r.	o. r.	o. r.
97088	11	-	white	-	100	o. r.	o. r.	o. r.
97089	13,5	M20 x 1,5	white	-	100	o. r.	o. r.	o. r.
97090	16	M25 x 1,5	white	-	50	o. r.	o. r.	o. r.
97091	21	M32 x 1,5	white	-	50	o. r.	o. r.	o. r.
97092	29	M40 x 1,5	white	-	25	o. r.	o. r.	o. r.
97093	36	M50 x 1,5	white	-	25	o. r.	o. r.	o. r.
97094	42	-	white	-	10	o. r.	o. r.	o. r.
97095	48	M63 x 1,5	white	-	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA sealing insert
standard

KVA standard sealing inserts
Colour-coded sealing inserts for populating KVA gland bodies.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Soft PVC

Note
Thread size M12x1,5:
** Part No. 90291 only for KVA **polyamide** cable glands
* Part No. 90299 only for KVA **brass** cable glands

Technical data
Temperature range: -20°C up to +105°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96005	7	-	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
90299*	-	M12 x 1,5	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
90291**	-	M12 x 1,5	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
96006	9	M16 x 1,5	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
96007	9	M16 x 1,5	grey	5,0 - 8,0	100	o. r.	o. r.	o. r.
96008	9	M16 x 1,5	black	6,5 - 9,5	100	o. r.	o. r.	o. r.
96387	11	M20 x 1,5	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
96009	11	M20 x 1,5	grey	5,0 - 8,0	100	o. r.	o. r.	o. r.
96010	11	M20 x 1,5	black	6,5 - 9,5	100	o. r.	o. r.	o. r.
96011	11	M20 x 1,5	green	7,0 - 10,5	100	o. r.	o. r.	o. r.
96389	13,5	M20 x 1,5	yellow	4,0 - 6,5	100	o. r.	o. r.	o. r.
96388	13,5	M20 x 1,5	grey	5,0 - 8,0	100	o. r.	o. r.	o. r.
96012	13,5	M20 x 1,5	black	6,5 - 9,5	100	o. r.	o. r.	o. r.
96013	13,5	M20 x 1,5	green	7,0 - 10,5	100	o. r.	o. r.	o. r.
96014	13,5	M20 x 1,5	red	9,0 - 13,0	100	o. r.	o. r.	o. r.
96391	16	M25 x 1,5	yellow	4,0 - 6,5	50	o. r.	o. r.	o. r.
96390	16	M25 x 1,5	grey	5,0 - 8,0	50	o. r.	o. r.	o. r.
96016	16	M25 x 1,5	black	6,5 - 9,5	50	o. r.	o. r.	o. r.
96017	16	M25 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
96018	16	M25 x 1,5	red	9,0 - 13,0	50	o. r.	o. r.	o. r.
96019	16	M25 x 1,5	white	11,5 - 15,5	50	o. r.	o. r.	o. r.
96020	21	M32 x 1,5	green	7,0 - 10,5	50	o. r.	o. r.	o. r.
96021	21	M32 x 1,5	red	9,0 - 13,0	50	o. r.	o. r.	o. r.
96022	21	M32 x 1,5	white	11,5 - 15,5	50	o. r.	o. r.	o. r.
96023	21	M32 x 1,5	blue	14,0 - 18,0	50	o. r.	o. r.	o. r.
96024	21	M32 x 1,5	brown	17,0 - 21,0	50	o. r.	o. r.	o. r.
96025	29	M40 x 1,5	blue	14,0 - 18,0	25	o. r.	o. r.	o. r.
96026	29	M40 x 1,5	brown	17,0 - 21,0	25	o. r.	o. r.	o. r.
96027	29	M40 x 1,5	orange	20,0 - 25,0	25	o. r.	o. r.	o. r.
96393	29	M40 x 1,5	light yellow	24,0 - 28,0	25	o. r.	o. r.	o. r.
96028	36	M50 x 1,5	anthracite	27,0 - 32,0	25	o. r.	o. r.	o. r.
96029	36	M50 x 1,5	light blue	29,0 - 34,0	25	o. r.	o. r.	o. r.
96030	36	M50 x 1,5	pink	32,0 - 37,0	25	o. r.	o. r.	o. r.
96031	42	M50 x 1,5	white	36,0 - 41,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA MFDE multiple sealing insert

KVA multiple sealing inserts
Multiple sealing inserts for populating KVA gland bodies.

Material
Soft PVC

Technical data
Temperature range: -20°C up to +105°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Part no.	Size PG	Size metric	Insert colour	Number x Ø borehole mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96050	9	M16 x 1,5	white	2 x 1,0	100	o. r.	o. r.	o. r.
96051	9	M16 x 1,5	white	2 x 3,0	100	o. r.	o. r.	o. r.
96052	9	M16 x 1,5	white	4 x 3,0	100	o. r.	o. r.	o. r.
96053	9	M16 x 1,5	white	2 x 4,0	100	o. r.	o. r.	o. r.
96054	9	M16 x 1,5	white	1 x 5,0	100	o. r.	o. r.	o. r.
96055	11	M20 x 1,5	white	6 x 2,0	100	o. r.	o. r.	o. r.
96058	11	M20 x 1,5	white	2 x 3,0	100	o. r.	o. r.	o. r.
96059	11	M20 x 1,5	white	3 x 3,0	100	o. r.	o. r.	o. r.
96485	11	M20 x 1,5	white	2 x 4,0	100	o. r.	o. r.	o. r.
97277	11	M20 x 1,5	white	4 x 4,0	100	o. r.	o. r.	o. r.
96060	11	M20 x 1,5	white	2 x 5,0	100	o. r.	o. r.	o. r.
96062	13,5	M20 x 1,5	white	3 x 2,0	100	o. r.	o. r.	o. r.
96063	13,5	M20 x 1,5	white	10 x 2,0	100	o. r.	o. r.	o. r.
96064	13,5	M20 x 1,5	white	2 x 3,0	100	o. r.	o. r.	o. r.
96065	13,5	M20 x 1,5	white	3 x 3,0	100	o. r.	o. r.	o. r.
96621	13,5	M20 x 1,5	white	3 x 4,0	100	o. r.	o. r.	o. r.
96067	13,5	M20 x 1,5	white	2 x 5,0	100	o. r.	o. r.	o. r.
96068	13,5	M20 x 1,5	white	2 x 6,0	100	o. r.	o. r.	o. r.
96069	16	M25 x 1,5	white	7 x 2,0	50	o. r.	o. r.	o. r.
96438	16	M25 x 1,5	white	3 x 3,0	50	o. r.	o. r.	o. r.
97512	16	M25 x 1,5	white	5 x 3,0	50	o. r.	o. r.	o. r.
97513	16	M25 x 1,5	white	7 x 3,0	50	o. r.	o. r.	o. r.
96436	16	M25 x 1,5	white	8 x 3,0	50	o. r.	o. r.	o. r.
96070	16	M25 x 1,5	white	2 x 4,0	50	o. r.	o. r.	o. r.
97472	16	M25 x 1,5	white	3 x 4,0	50	o. r.	o. r.	o. r.
96071	16	M25 x 1,5	white	4 x 4,0	50	o. r.	o. r.	o. r.
97473	16	M25 x 1,5	white	5 x 4,0	50	o. r.	o. r.	o. r.
96072	16	M25 x 1,5	white	6 x 4,0	50	o. r.	o. r.	o. r.
96073	16	M25 x 1,5	white	2 x 6,0	50	o. r.	o. r.	o. r.
96723	16	M25 x 1,5	white	3 x 6,0	50	o. r.	o. r.	o. r.
96443	16	M25 x 1,5	white	4 x 6,0	50	o. r.	o. r.	o. r.
96074	16	M25 x 1,5	white	3 x 7,0	50	o. r.	o. r.	o. r.
96075	16	M25 x 1,5	white	2 x 8,0	50	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

KVA MFDE multiple sealing insert

Part no.	Size PG	Size metric	Insert colour	Number x Ø borehole mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96076	21	M32 x 1,5	white	21 x 2,0	50	o. r.	o. r.	o. r.
96077	21	M32 x 1,5	white	8 x 3,0	50	o. r.	o. r.	o. r.
96078	21	M32 x 1,5	white	6 x 4,0	50	o. r.	o. r.	o. r.
96079	21	M32 x 1,5	white	8 x 4,0	50	o. r.	o. r.	o. r.
96080	21	M32 x 1,5	white	4 x 5,0	50	o. r.	o. r.	o. r.
96926	21	M32 x 1,5	white	8 x 5,0	50	o. r.	o. r.	o. r.
96714	21	M32 x 1,5	white	6 x 5,5	25	o. r.	o. r.	o. r.
96439	21	M32 x 1,5	white	2 x 6,0	50	o. r.	o. r.	o. r.
96081	21	M32 x 1,5	white	4 x 6,0	50	o. r.	o. r.	o. r.
96230	21	M32 x 1,5	white	4 x 6,5	50	o. r.	o. r.	o. r.
96231	21	M32 x 1,5	white	5 x 6,5	50	o. r.	o. r.	o. r.
96082	21	M32 x 1,5	white	6 x 6,5	50	o. r.	o. r.	o. r.
96083	21	M32 x 1,5	white	3 x 7,0	50	o. r.	o. r.	o. r.
96441	21	M32 x 1,5	white	4 x 7,0	50	o. r.	o. r.	o. r.
96445	21	M32 x 1,5	white	2 x 8,0	50	o. r.	o. r.	o. r.
96638	21	M32 x 1,5	white	3 x 8,0	25	o. r.	o. r.	o. r.
96084	21	M32 x 1,5	white	4 x 8,0	50	o. r.	o. r.	o. r.
96085	21	M32 x 1,5	white	2 x 9,0	50	o. r.	o. r.	o. r.
96232	21	M32 x 1,5	white	3 x 9,0	50	o. r.	o. r.	o. r.
96088	29	M40 x 1,5	white	6 x 6,0	25	o. r.	o. r.	o. r.
96086	29	M40 x 1,5	white	10 x 6,0	25	o. r.	o. r.	o. r.
96087	29	M40 x 1,5	white	4 x 6,5	25	o. r.	o. r.	o. r.
97289	29	M40 x 1,5	white	8 x 6,5	25	o. r.	o. r.	o. r.
96238	29	M40 x 1,5	white	7 x 7,0	25	o. r.	o. r.	o. r.
96089	29	M40 x 1,5	white	6 x 8,0	25	o. r.	o. r.	o. r.
96090	29	M40 x 1,5	white	4 x 9,0	25	o. r.	o. r.	o. r.
96091	29	M40 x 1,5	white	5 x 9,0	25	o. r.	o. r.	o. r.
96092	29	M40 x 1,5	white	5 x 10,0	25	o. r.	o. r.	o. r.
96093	29	M40 x 1,5	white	2 x 11,0	25	o. r.	o. r.	o. r.
97448	29	M40 x 1,5	white	3 x 11,0	25	o. r.	o. r.	o. r.
96237	29	M40 x 1,5	white	2 x 13,0	25	o. r.	o. r.	o. r.
96095	36	M50 x 1,5	white	15 x 5,0	25	o. r.	o. r.	o. r.
97853	36	M50 x 1,5	white	13 x 7,0	25	o. r.	o. r.	o. r.
96235	36	M50 x 1,5	white	7 x 9,0	25	o. r.	o. r.	o. r.
96094	36	M50 x 1,5	white	8 x 9,0	25	o. r.	o. r.	o. r.
96096	36	M50 x 1,5	white	3 x 10,0	25	o. r.	o. r.	o. r.
96236	36	M50 x 1,5	white	4 x 13,0	25	o. r.	o. r.	o. r.
96097	36	M50 x 1,5	white	2 x 15,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Matching accessory

Sealing billets
for empty penetrations.

confer page 31

KVA-ASI-MS cable gland

to ASI-bus-line

KVA-ASI-MS

Sealing cable gland made by brass with PVC inserts. Profile fits to ASI bus-line.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Installation technology
- Control cabinet construction

Material

Brass
Moulded seal: Soft PVC
UV-resistant

Properties

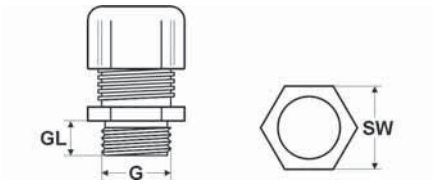
- Large-area cable sealing
- Easy to assemble

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +105°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904686	M20 x 1,5	black, left	-	6,5	22	50	o. r.	o. r.	o. r.
904687	M20 x 1,5	white, right	-	6,5	22	50	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Sealing insert colour	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97390	13,5	black, left	-	6,5	22	50	o. r.	o. r.	o. r.
97408	13,5	white, right	-	6,5	22	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA sealing insert
to ASI-bus-line

KVA sealing insert ASI
Sealing inserts made of PVC for populating KVA gland bodies made of polyamide or of brass. Profile fits to ASI- bus line.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
Soft PVC

Properties
- Large-area cable sealing
- Easy to assemble

Technical data
Temperature range: -20°C up to +105°C

Part no.	Size PG	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97389	11	M20 x 1,5	black/left-hand	-	100	o. r.	o. r.	o. r.
97396	11	M20 x 1,5	white/right-hand	-	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-XXL-MS cable gland

for particularly large cable diameters

KVA-XXL-MS

Cable gland made of brass for very large cable diameters.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Moulded seal: TPE-V
O-ring: NBR

Properties

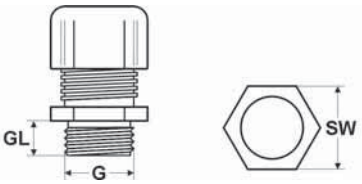
- Large-area cable sealing
- Easy to assemble
- Large clamping range

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -40°C up to +135°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905957	M63 x 1,5	42,0 - 48,0	10,0	70	1	o. r.	o. r.	o. r.
93569	M63 x 1,5	45,0 - 51,0	10,0	70	1	o. r.	o. r.	o. r.
92779	M72 x 2,0	46,0 - 52,0	15,0	80	1	o. r.	o. r.	o. r.
93727	M72 x 2,0	51,0 - 55,0	15,0	80	1	o. r.	o. r.	o. r.
905958	M75 x 1,5	51,0 - 55,0	15,0	80	1	o. r.	o. r.	o. r.
905959	M75 x 1,5	54,0 - 58,0	15,0	80	1	o. r.	o. r.	o. r.
93105	M80 x 2,0	58,0 - 64,0	15,0	95	1	o. r.	o. r.	o. r.
905960	M80 x 2,0	63,0 - 70,0	15,0	95	1	o. r.	o. r.	o. r.
905961	M90 x 2,0	69,0 - 75,0	20,0	110	1	o. r.	o. r.	o. r.
905962	M90 x 2,0	74,0 - 80,0	20,0	110	1	o. r.	o. r.	o. r.
905963	M100 x 2,0	79,0 - 85,0	20,0	110	1	o. r.	o. r.	o. r.
905964	M105 x 2,0	84,0 - 90,0	20,0	120	1	o. r.	o. r.	o. r.
905965	M110 x 2,0	89,0 - 95,0	20,0	120	1	o. r.	o. r.	o. r.
905966	M115 x 2,0	89,0 - 95,0	20,0	120	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-XXL-VK-MS body gland

for particularly large cable diameter

KVA-XXL-VK-MS

Gland body made of brass for populating with inserts for large cable diameters.

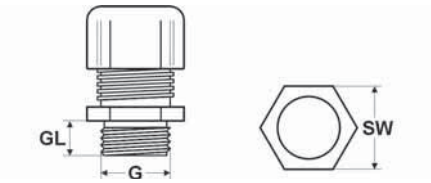
Material

Brass, nickel plated
O-ring: NBR

Technical data

Temperature range: -30°C up to +100°C

Test standard: EN50262



Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920144	M72 x 2,0	8,0	80	1	o. r.	o. r.	o. r.
920145	M75 x 1,5	8,0	80	1	o. r.	o. r.	o. r.
920146	M80 x 2,0	8,0	95	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-XXL sealing insert standard

for particularly large cable diameters

KVA-XXL Sealing inserts

Sealing inserts made by PVC for populating KVA-XXL-MS gland bodies. Used for large cable diameters.

Material

Soft PVC

Technical data

Temperature range: -20°C up to +105°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Part no.	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96032	M63 x 1,5	white	39,0 - 45,0	1	o. r.	o. r.	o. r.
99434	M72 x 2,0	white	45,0 - 51,0	1	o. r.	o. r.	o. r.
99435	M72 x 2,0	white	51,0 - 55,0	1	o. r.	o. r.	o. r.
99436	M75 x 1,5	white	51,0 - 55,0	1	o. r.	o. r.	o. r.
99437	M75 x 1,5	white	54,0 - 58,0	1	o. r.	o. r.	o. r.
99438	M80 x 2,0	white	58,0 - 64,0	1	o. r.	o. r.	o. r.
99439	M80 x 2,0	white	63,0 - 70,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SD cable gland

SD
The gas and water-tight gland. The finish, similar to that of an incision sealing ring, guarantees very large clamping areas.

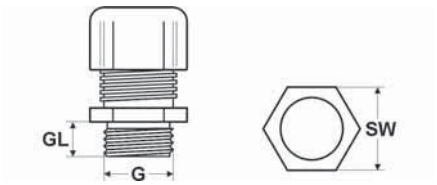
Application
- Plant and machine construction
- Automation and intallation technology
- Vehicle construction and shipbuilding

Material
Brass, nickel plated
Moulded seal: NBR
O-ring: NBR

Technical data
Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +120°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98108	M12 x 1,5	5,0 - 7,0	5,0	14	100	o. r.	o. r.	o. r.
98109	M16 x 1,5	5,0 - 10,0	5,5	17	50	o. r.	o. r.	o. r.
98110	M20 x 1,5	8,0 - 14,0	6,0	22	50	o. r.	o. r.	o. r.
98111	M25 x 1,5	12,0 - 19,0	7,0	30	25	o. r.	o. r.	o. r.
98112	M32 x 1,5	15,0 - 22,0	8,0	34	25	o. r.	o. r.	o. r.
98113	M40 x 1,5	22,0 - 28,0	8,0	44	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90586	7	5,0 - 7,0	5,0	14	100	o. r.	o. r.	o. r.
90587	9	5,0 - 10,0	6,0	17	50	o. r.	o. r.	o. r.
90588	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90589	13,5	9,0 - 14,0	6,5	22	50	o. r.	o. r.	o. r.
90590	16	10,0 - 15,0	6,5	24	50	o. r.	o. r.	o. r.
90591	21	12,0 - 19,0	7,0	30	25	o. r.	o. r.	o. r.
90592	29	22,0 - 28,0	8,0	40	25	o. r.	o. r.	o. r.
90593	36	28,0 - 36,0	9,0	50	10	o. r.	o. r.	o. r.
90594	42	35,0 - 45,0	10,0	60	10	o. r.	o. r.	o. r.
90595	48	34,0 - 49,0	11,0	65	10	o. r.	o. r.	o. r.

BSP thread

Part no.	Size BSP	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90596	G 3/8"	4,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
90597	G 1/2"	7,0 - 15,0	8,0	24	50	o. r.	o. r.	o. r.
90598	G 3/4"	9,0 - 20,0	10,0	32	25	o. r.	o. r.	o. r.
90599	G 1"	18,0 - 28,0	11,0	40	25	o. r.	o. r.	o. r.
90600	G 1 1/2"	25,0 - 35,0	12,0	50	10	o. r.	o. r.	o. r.
90601	G 2"	34,0 - 49,0	12,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SD-XXL cable gland

for particularly large cable diameters

SD-XXL

For very large cable diameters. The gas and water-tight gland. The finish, similar to that of an incision sealing ring, guarantees very large clamping areas.

Material

Brass, nickel plated
Moulded seal: NBR
O-ring: NBR

Properties

- Large-area cable sealing
- Easy to assemble
- Large clamping range

Note

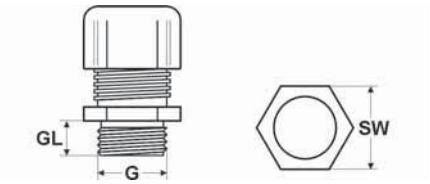
BSP-variant: Without O-ring at threaded connection. Sealing insert made by TPE.

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905570	M72 x 2,0	56,0 - 61,0	16,0	77	1	o. r.	o. r.	o. r.
905506	M75 x 1,5	56,0 - 61,0	16,0	77	1	o. r.	o. r.	o. r.
905571	M75 x 2,0	56,0 - 61,0	16,0	77	1	o. r.	o. r.	o. r.
905573	M80 x 2,0	50,0 - 56,0	18,0	90	1	o. r.	o. r.	o. r.
905572	M80 x 2,0	60,0 - 66,0	18,0	90	1	o. r.	o. r.	o. r.
905575	M85 x 2,0	63,0 - 70,0	22,0	96	1	o. r.	o. r.	o. r.
905574	M85 x 2,0	68,0 - 76,0	22,0	96	1	o. r.	o. r.	o. r.
905576	M90 x 2,0	68,0 - 76,0	22,0	98 / 96	1	o. r.	o. r.	o. r.
905577	M110 x 2,0	75,0 - 82,0	25,0	125 / 110	1	o. r.	o. r.	o. r.
905578	M120 x 2,0	88,0 - 95,0	25,0	120 / 116	1	o. r.	o. r.	o. r.

BSP thread

Part no.	Size BSP	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90602	G 2 1/2"	48,0 - 55,0	18,0	90	1	o. r.	o. r.	o. r.
90603	G 2 1/2"	53,0 - 60,0	18,0	90	1	o. r.	o. r.	o. r.
90604	G 3"	58,0 - 65,0	18,0	100	1	o. r.	o. r.	o. r.
90605	G 3"	63,0 - 70,0	18,0	100	1	o. r.	o. r.	o. r.
90606	G 4"	68,0 - 75,0	22,0	125	1	o. r.	o. r.	o. r.
90607	G 4"	73,0 - 80,0	22,0	125	1	o. r.	o. r.	o. r.
90608	G 4"	78,0 - 85,0	22,0	125	1	o. r.	o. r.	o. r.
90609	G 4"	83,0 - 90,0	22,0	125	1	o. r.	o. r.	o. r.
93440	G 5"	91,0 - 97,0	22,0	150	1	o. r.	o. r.	o. r.
93441	G 5"	97,0 - 104,0	22,0	150	1	o. r.	o. r.	o. r.
93442	G 5"	102,0 - 109,0	22,0	150	1	o. r.	o. r.	o. r.
93443	G 5"	109,0 - 116,0	22,0	150	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STS cable gland to DIN
hexagonal

STS
The hexagonal brass gland to DIN 46320.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

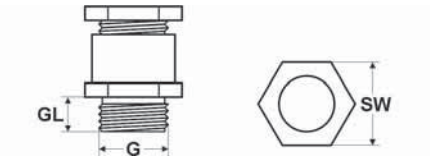
Material
Brass, nickel plated
Moulded seal: NR
Thrust rings: Galvanised steel

Note
Protection classification IP 65 with additional O-ring mounted at the thread.

Technical data
Protection class: IP 54

Temperature range: -20°C up to +60°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98098	M12 x 1,5	4,0 - 6,0	5,0	14	100	o. r.	o. r.	o. r.
98099	M16 x 1,5	8,0 - 10,0	5,0	18	100	o. r.	o. r.	o. r.
98100	M20 x 1,5	8,0 - 10,0	6,0	22	50	o. r.	o. r.	o. r.
98101	M20 x 1,5	10,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
98102	M20 x 1,5	12,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
98103	M25 x 1,5	17,0 - 19,0	7,0	30	50	o. r.	o. r.	o. r.
98104	M32 x 1,5	26,0 - 27,0	8,0	39	25	o. r.	o. r.	o. r.
98105	M40 x 1,5	33,0 - 35,0	8,0	50	10	o. r.	o. r.	o. r.
98106	M50 x 1,5	39,0 - 41,0	9,0	57	5	o. r.	o. r.	o. r.
98107	M63 x 1,5	43,0 - 45,0	10,0	66	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90540	7	6,0 - 8,0	5,0	14 / 13	50	o. r.	o. r.	o. r.
90541	9	8,0 - 10,0	6,0	17 / 15	50	o. r.	o. r.	o. r.
90542	11	10,0 - 12,0	6,0	20 / 18	50	o. r.	o. r.	o. r.
90543	13,5	12,0 - 14,0	6,5	22 / 20	50	o. r.	o. r.	o. r.
90544	16	14,0 - 16,0	6,5	24 / 22	50	o. r.	o. r.	o. r.
90545	21	17,0 - 19,0	7,0	30 / 28	25	o. r.	o. r.	o. r.
90546	29	26,0 - 28,0	8,0	40 / 37	25	o. r.	o. r.	o. r.
90547	36	33,0 - 35,0	9,0	50 / 47	10	o. r.	o. r.	o. r.
90548	42	39,0 - 41,0	10,0	57 / 54	5	o. r.	o. r.	o. r.
90549	48	45,0 - 47,0	10,0	64 / 60	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STV cable cland to DIN

hexagonal - with incision sealing ring

STV

The hexagonal brass gland with incision sealing ring to DIN 46320.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Moulded seal: cutable sealing ring (NR)
Thrust rings: Galvanised steel

Note

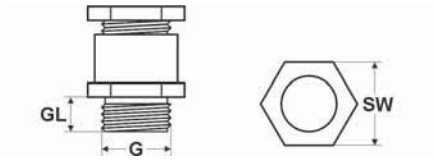
Protection classification IP 65 with additional O-ring mounted at the thread.

Technical data

Protection class: IP 54

Temperature range: -30°C up to +80°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø incisions from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90090	M16 x 1,5	5/7,5/10	5,0	18	100	o. r.	o. r.	o. r.
90091	M20 x 1,5	7,5/10/12,5	6,0	22	50	o. r.	o. r.	o. r.
90092	M20 x 1,5	7,5/10/12,5/15	6,0	24	50	o. r.	o. r.	o. r.
90093	M25 x 1,5	10/13/16/19	6,0	30	50	o. r.	o. r.	o. r.
90094	M32 x 1,5	18/21/24/27	6,0	39	25	o. r.	o. r.	o. r.
90095	M40 x 1,5	24/27/30/33	7,0	50	10	o. r.	o. r.	o. r.
90096	M50 x 1,5	30/33/36/39	8,0	57	5	o. r.	o. r.	o. r.
90097	M63 x 1,5	36/39/42/45	9,0	66	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø incisions from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90550	9	5/7,5/10	6,0	17	100	o. r.	o. r.	o. r.
90551	11	7,5/10/12,5	6,0	20	50	o. r.	o. r.	o. r.
90552	13,5	7,5/10/12,5	6,5	22	50	o. r.	o. r.	o. r.
90553	16	7,5/10/12,5/15	6,5	24	50	o. r.	o. r.	o. r.
90554	21	10/13/16/19	7,0	30	50	o. r.	o. r.	o. r.
90555	29	18/21/24/27	8,0	40	25	o. r.	o. r.	o. r.
90556	36	24/27/30/33	9,0	50	20	o. r.	o. r.	o. r.
90557	42	30/33/36/39	10,0	57	10	o. r.	o. r.	o. r.
90558	48	36/39/42/45	10,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STR cable gland to DIN
round

STR
The round brass gland to DIN 46320.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

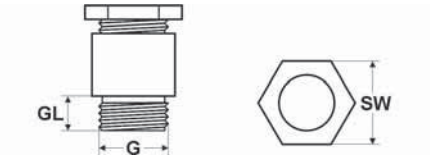
Material
Brass, nickel plated
Moulded seal: NR

Note
Protection classification IP 65 with additional O-ring mounted at the thread.

Technical data
Protection class: IP 54

Temperature range: -30°C up to +80°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98088	M12 x 1,5	4,0 - 6,0	5,0	13	100	o. r.	o. r.	o. r.
98089	M16 x 1,5	8,0 - 10,0	5,0	15	100	o. r.	o. r.	o. r.
98090	M20 x 1,5	8,0 - 10,0	6,0	18	50	o. r.	o. r.	o. r.
98091	M20 x 1,5	10,0 - 12,0	6,0	20	50	o. r.	o. r.	o. r.
98092	M20 x 1,5	12,0 - 14,0	6,0	22	50	o. r.	o. r.	o. r.
98093	M25 x 1,5	17,0 - 19,0	6,0	28	50	o. r.	o. r.	o. r.
98094	M32 x 1,5	26,0 - 27,0	6,0	37	25	o. r.	o. r.	o. r.
98095	M40 x 1,5	33,0 - 35,0	7,0	47	10	o. r.	o. r.	o. r.
98096	M50 x 1,5	39,0 - 41,0	8,0	54	5	o. r.	o. r.	o. r.
98097	M63 x 1,5	43,0 - 45,0	9,0	60	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90530	7	4,0 - 6,0	5,0	13	50	o. r.	o. r.	o. r.
90531	9	8,0 - 10,0	6,0	15	50	o. r.	o. r.	o. r.
90532	11	8,0 - 10,0	6,0	18	50	o. r.	o. r.	o. r.
90533	13,5	10,0 - 12,0	6,5	20	50	o. r.	o. r.	o. r.
90534	16	12,0 - 14,0	6,5	22	50	o. r.	o. r.	o. r.
90535	21	17,0 - 19,0	7,0	28	25	o. r.	o. r.	o. r.
90536	29	26,0 - 28,0	8,0	37	25	o. r.	o. r.	o. r.
90537	36	33,0 - 35,0	9,0	47	10	o. r.	o. r.	o. r.
90538	42	39,0 - 41,0	10,0	54	5	o. r.	o. r.	o. r.
90539	48	45,0 - 47,0	10,0	60	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

STS-F flat cable gland

STS-F
The brass flat cable gland.

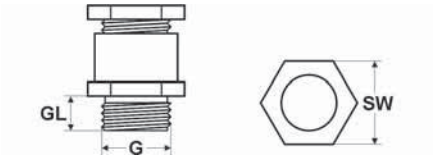
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Brass, nickel plated
Moulded seal: SBR
Thrust rings: Galvanised steel
Thrust washers: Galvanised steel

Note
Protection classification IP 65 with an additional O-ring on the external thread

Technical data
Protection class: IP 54

Temperature range: -30°C up to +80°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable thickness from / to mm	Cable width from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94484	M20 x 1,5	1,0 - 5,0	3,0 - 16,0	6,0	24 / 22	50	o. r.	o. r.	o. r.
94485	M25 x 1,5	3,0 - 8,0	9,0 - 21,0	7,0	30 / 28	50	o. r.	o. r.	o. r.
94486	M32 x 1,5	4,0 - 11,5	14,0 - 30,0	8,0	39 / 37	25	o. r.	o. r.	o. r.
94487	M40 x 1,5	4,0 - 11,5	24,0 - 40,0	8,0	50 / 47	10	o. r.	o. r.	o. r.
94488	M50 x 1,5	5,0 - 12,0	29,0 - 45,0	9,0	57 / 54	5	o. r.	o. r.	o. r.
94489	M63 x 1,5	5,0 - 12,0	34,0 - 50,0	10,0	66 / 60	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable thickness from / to mm	Cable width from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90100	16	1,0 - 5,0	3,0 - 16,0	6,5	24 / 22	50	o. r.	o. r.	o. r.
90101	21	3,0 - 8,0	9,0 - 21,0	7,0	30 / 28	50	o. r.	o. r.	o. r.
90102	29	4,0 - 11,5	14,0 - 30,0	8,0	40 / 37	25	o. r.	o. r.	o. r.
90103	36	4,0 - 11,5	24,0 - 40,0	9,0	50 / 47	20	o. r.	o. r.	o. r.
90104	42	5,0 - 12,0	29,0 - 45,0	10,0	57 / 54	10	o. r.	o. r.	o. r.
90105	48	5,0 - 12,0	34,0 - 50,0	10,0	64 / 60	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

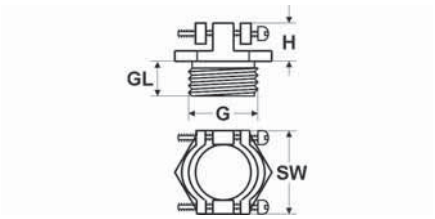
ZE strain relief

ZE
For relieving strain on lines.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size
H	Hight without thread

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905877	M12 x 1,5	5,5	16	9,5	100	o. r.	o. r.	o. r.
905878	M16 x 1,5	6,0	19	10,0	100	o. r.	o. r.	o. r.
905879	M20 x 1,5	6,5	24	11,5	50	o. r.	o. r.	o. r.
905880	M25 x 1,5	8,0	34	13,0	50	o. r.	o. r.	o. r.
905881	M32 x 1,5	8,0	42	14,0	25	o. r.	o. r.	o. r.
905882	M40 x 1,5	9,5	52	16,0	25	o. r.	o. r.	o. r.
905883	M50 x 1,5	9,5	52	16,0	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Thread length mm	Spanner size mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99049	7	5,5	16	9,3	100	o. r.	o. r.	o. r.
99050	9	6,0	19	10,6	100	o. r.	o. r.	o. r.
99051	11	6,0	22	10,7	100	o. r.	o. r.	o. r.
99052	13,5	6,5	24	11,3	50	o. r.	o. r.	o. r.
99053	16	6,5	26	11,8	50	o. r.	o. r.	o. r.
99054	21	7,5	33	13,3	50	o. r.	o. r.	o. r.
99055	29	8,0	42	13,8	25	o. r.	o. r.	o. r.
99056	36	9,5	52	15,8	10	o. r.	o. r.	o. r.
99057	42	10,0	59	16,3	10	o. r.	o. r.	o. r.
99058	48	11,0	64	16,3	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ZES cable gland

with strain relief and incision sealing ring

ZES

The hexagonal brass strain relief gland with incision sealing ring.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

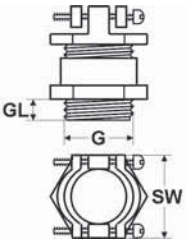
Brass, nickel plated
Moulded seal: NBR
Thrust rings: Galvanised steel

Technical data

Protection class: IP 54

Temperature range: -20°C up to +60°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø incisions from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90275	M12 x 1,5	5/7	5,0	14	50	o. r.	o. r.	o. r.
90276	M16 x 1,5	5,5/9	5,0	18	50	o. r.	o. r.	o. r.
90278	M20 x 1,5	7/10/13	6,0	22	50	o. r.	o. r.	o. r.
90279	M20 x 1,5	9/11/13	6,0	24	50	o. r.	o. r.	o. r.
90280	M25 x 1,5	11/14/17	7,0	30	25	o. r.	o. r.	o. r.
90281	M32 x 1,5	19/21/24	8,0	39	20	o. r.	o. r.	o. r.
90282	M40 x 1,5	26/29/32	8,0	50	10	o. r.	o. r.	o. r.
90283	M50 x 1,5	35/38/41	9,0	57	5	o. r.	o. r.	o. r.
90284	M63 x 1,5	44/47/50	10,0	66	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø incisions from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90569	7	7	5,0	14	50	o. r.	o. r.	o. r.
90570	9	5/7,5/10	6,0	17	50	o. r.	o. r.	o. r.
90571	11	7,5/10/12,5	6,0	20	50	o. r.	o. r.	o. r.
90572	13,5	7,5/10/12,5	6,5	22	50	o. r.	o. r.	o. r.
90573	16	7,5/10/12,5/15	6,5	24	50	o. r.	o. r.	o. r.
90574	21	10/13/16/19	7,0	30	25	o. r.	o. r.	o. r.
90575	29	18/21/24/27	8,0	40	25	o. r.	o. r.	o. r.
90576	36	24/27/30/33	9,0	50	10	o. r.	o. r.	o. r.
90577	42	30/33/36/39	10,0	57	5	o. r.	o. r.	o. r.
90578	48	36/39/42/45	10,0	64	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

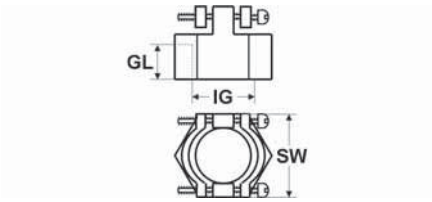
ZEI strain relief

ZEI
Strain relief with female thread. For relieving strain on lines where protection tubes are used.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

IG	Thread size inside
GL	Thread length
SW	Spanner size

PG thread - female

Part no.	Size PG	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94240	7	7,0	16	100	o. r.	o. r.	o. r.
94241	9	7,0	19	100	o. r.	o. r.	o. r.
94242	11	7,0	22	100	o. r.	o. r.	o. r.
94244	16	7,0	26	50	o. r.	o. r.	o. r.
94245	21	10,0	33	25	o. r.	o. r.	o. r.
94246	29	10,0	42	10	o. r.	o. r.	o. r.
94247	36	10,0	52	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

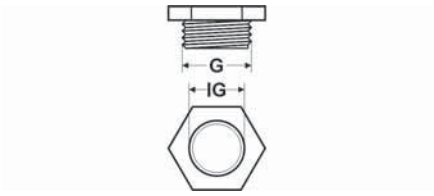
Adapter hexagonal

Adapter hexagonal brass
Hexagonal adapters made by brass for solving the transition from PG to metric thread.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size outside
IG	Thread size inside
GL	Thread length
SW	Spanner size

from metric to PG

Part no.	Size metr. outside	Size PG inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904296	M16 x 1,5	7	6,5	17	100	o. r.	o. r.	o. r.
904297	M20 x 1,5	7	7,0	22	50	o. r.	o. r.	o. r.
904298	M20 x 1,5	9	7,0	22	50	o. r.	o. r.	o. r.
904299	M25 x 1,5	9	7,5	27	50	o. r.	o. r.	o. r.
904300	M25 x 1,5	11	7,5	27	50	o. r.	o. r.	o. r.
904301	M25 x 1,5	13,5	7,5	27	50	o. r.	o. r.	o. r.
904302	M25 x 1,5	16	7,5	27	50	o. r.	o. r.	o. r.
904303	M32 x 1,5	13,5	8,0	35	25	o. r.	o. r.	o. r.
904304	M32 x 1,5	16	8,0	35	25	o. r.	o. r.	o. r.
904305	M32 x 1,5	21	8,0	35	25	o. r.	o. r.	o. r.
904306	M40 x 1,5	16	8,0	43	10	o. r.	o. r.	o. r.
904307	M40 x 1,5	21	8,0	43	10	o. r.	o. r.	o. r.
904308	M50 x 1,5	21	10,0	54	10	o. r.	o. r.	o. r.
904309	M50 x 1,5	29	10,0	54	10	o. r.	o. r.	o. r.
904310	M63 x 1,5	29	10,0	65	5	o. r.	o. r.	o. r.
904311	M63 x 1,5	36	10,0	65	5	o. r.	o. r.	o. r.
904312	M63 x 1,5	42	10,0	65	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

Adapter hexagonal

from metric to PG - high-profile design

Part no.	Size metr. outside	Size PG inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904313	M12 x 1,5	7	5,0	14	100	o. r.	o. r.	o. r.
904314	M12 x 1,5	9	6,0	17	100	o. r.	o. r.	o. r.
904315	M16 x 1,5	9	6,0	18	100	o. r.	o. r.	o. r.
904316	M16 x 1,5	11	5,0	20	100	o. r.	o. r.	o. r.
904317	M20 x 1,5	11	6,0	22	100	o. r.	o. r.	o. r.
904318	M20 x 1,5	13,5	6,5	22	100	o. r.	o. r.	o. r.
904319	M20 x 1,5	16	6,5	24	100	o. r.	o. r.	o. r.
904320	M25 x 1,5	21	7,0	30	50	o. r.	o. r.	o. r.
904321	M32 x 1,5	29	8,0	40	25	o. r.	o. r.	o. r.
904322	M40 x 1,5	29	8,0	43	25	o. r.	o. r.	o. r.
904323	M40 x 1,5	36	9,0	50	25	o. r.	o. r.	o. r.
904324	M50 x 1,5	36	10,0	54	10	o. r.	o. r.	o. r.
904325	M50 x 1,5	42	10,0	57	10	o. r.	o. r.	o. r.
904326	M63 x 1,5	48	10,0	66	5	o. r.	o. r.	o. r.

from metric to NPT - high-profile design

Part no.	Size metr. outside	Size NPT inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94166	M16 x 1,5	1/2"	6,0	24	50	o. r.	o. r.	o. r.
94167	M20 x 1,5	1/2"	6,0	24	50	o. r.	o. r.	o. r.
94168	M25 x 1,5	1/2"	7,0	30	50	o. r.	o. r.	o. r.
94169	M25 x 1,5	3/4"	7,0	30	50	o. r.	o. r.	o. r.

from PG to metric

Part no.	Size PG outside	Size metr. inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904327	13,5	M16 x 1,5	6,5	24	50	o. r.	o. r.	o. r.
904328	16	M20 x 1,5	6,5	24	50	o. r.	o. r.	o. r.
904329	21	M25 x 1,5	7,0	30	25	o. r.	o. r.	o. r.
904330	29	M32 x 1,5	8,0	40	10	o. r.	o. r.	o. r.
904331	36	M40 x 1,5	9,0	50	10	o. r.	o. r.	o. r.

from PG to metric - high profile design

Part no.	Size PG outside	Size metr. inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904332	7	M12 x 1,5	5,0	14	100	o. r.	o. r.	o. r.
904333	9	M16 x 1,5	6,0	19	100	o. r.	o. r.	o. r.
904334	11	M16 x 1,5	6,0	22	50	o. r.	o. r.	o. r.
904335	13,5	M20 x 1,5	6,5	24	50	o. r.	o. r.	o. r.
904336	16	M20 x 1,5	6,5	27	50	o. r.	o. r.	o. r.
904337	16	M25 x 1,5	6,5	30	50	o. r.	o. r.	o. r.
904338	21	M25 x 1,5	7,0	32	50	o. r.	o. r.	o. r.
904339	21	M32 x 1,5	7,0	36	25	o. r.	o. r.	o. r.
904340	29	M40 x 1,5	8,0	43	25	o. r.	o. r.	o. r.
904341	36	M50 x 1,5	9,0	55	10	o. r.	o. r.	o. r.
904342	42	M63 x 1,5	10,0	65	10	o. r.	o. r.	o. r.

from PG to NPT - high profile design

Part no.	Size PG outside	Size NPT inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94174	11	1/2"	6,0	24	50	o. r.	o. r.	o. r.
94175	13,5	1/2"	6,5	24	50	o. r.	o. r.	o. r.
94176	16	1/2"	6,5	24	50	o. r.	o. r.	o. r.
94177	21	1/2"	7,0	30	50	o. r.	o. r.	o. r.
94178	21	3/4"	7,0	30	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

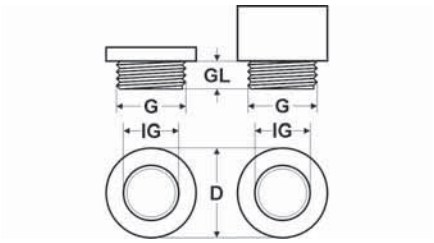
Adapter round

Adapter round brass
Round adapters made by brass for solving the transition from PG to metric thread.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size outside
IG	Thread size inside
GL	Thread length
D	Outer diameter

from metric to PG

Part no.	Size metr. outside	Size PG inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904343	M16 x 1,5	7	6,5	18,0	100	o. r.	o. r.	o. r.
904344	M20 x 1,5	7	7,0	22,0	50	o. r.	o. r.	o. r.
904345	M20 x 1,5	9	7,0	22,0	50	o. r.	o. r.	o. r.
904346	M25 x 1,5	9	7,5	27,0	50	o. r.	o. r.	o. r.
904347	M25 x 1,5	11	7,5	27,0	50	o. r.	o. r.	o. r.
904348	M25 x 1,5	13,5	7,5	27,0	50	o. r.	o. r.	o. r.
904349	M25 x 1,5	16	7,5	27,0	50	o. r.	o. r.	o. r.
904350	M32 x 1,5	13,5	8,0	34,0	25	o. r.	o. r.	o. r.
904351	M32 x 1,5	16	8,0	34,0	25	o. r.	o. r.	o. r.
904352	M32 x 1,5	21	8,0	34,0	25	o. r.	o. r.	o. r.
904353	M40 x 1,5	16	8,0	43,0	10	o. r.	o. r.	o. r.
904354	M40 x 1,5	21	8,0	43,0	10	o. r.	o. r.	o. r.
904355	M50 x 1,5	21	9,0	53,0	10	o. r.	o. r.	o. r.
904356	M50 x 1,5	29	9,0	53,0	10	o. r.	o. r.	o. r.
904357	M63 x 1,5	29	10,0	66,0	5	o. r.	o. r.	o. r.
904358	M63 x 1,5	36	10,0	66,0	5	o. r.	o. r.	o. r.
904359	M63 x 1,5	42	10,0	66,0	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

Adapter round

from metric to PG - high-profile design

Part no.	Size metr. outside	Size PG inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904360	M12 x 1,5	7	5,0	14,0	100	o. r.	o. r.	o. r.
904361	M12 x 1,5	9	6,0	18,0	100	o. r.	o. r.	o. r.
904362	M16 x 1,5	9	5,0	18,0	100	o. r.	o. r.	o. r.
904363	M16 x 1,5	11	5,0	20,0	100	o. r.	o. r.	o. r.
904364	M20 x 1,5	11	6,0	22,0	100	o. r.	o. r.	o. r.
904365	M20 x 1,5	13,5	6,0	22,0	100	o. r.	o. r.	o. r.
904366	M20 x 1,5	16	6,0	24,0	100	o. r.	o. r.	o. r.
904367	M25 x 1,5	21	7,0	30,0	50	o. r.	o. r.	o. r.
904368	M32 x 1,5	29	8,0	39,0	50	o. r.	o. r.	o. r.
904369	M40 x 1,5	29	8,0	43,0	10	o. r.	o. r.	o. r.
904370	M40 x 1,5	36	8,0	50,0	25	o. r.	o. r.	o. r.
904371	M50 x 1,5	36	9,0	53,0	0	o. r.	o. r.	o. r.
904372	M50 x 1,5	42	9,0	57,0	25	o. r.	o. r.	o. r.
904373	M63 x 1,5	48	10,0	68,0	10	o. r.	o. r.	o. r.

from PG to metric

Part no.	Size PG outside	Size metr. inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904374	11	M20 x 1,5	6,0	22,0	100	o. r.	o. r.	o. r.
904375	13,5	M20 x 1,5	6,5	24,0	50	o. r.	o. r.	o. r.
94098	16	M20 x 1,5	6,5	24,0	50	o. r.	o. r.	o. r.
94102	21	M25 x 1,5	7,0	30,0	100	o. r.	o. r.	o. r.

from PG to metric - high-profile design

Part no.	Size PG outside	Size metr. inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904376	9	M16 x 1,5	6,0	20,0	100	o. r.	o. r.	o. r.
904377	11	M20 x 1,5	6,5	22,0	100	o. r.	o. r.	o. r.
904378	13,5	M20 x 1,5	6,5	22,0	100	o. r.	o. r.	o. r.
904379	16	M25 x 1,5	6,5	27,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

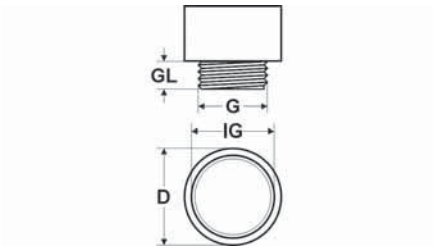
EW round extender

EW
The extender made of brass. Transition from small to large thread.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size outside
IG	Thread size inside
GL	Thread length
D	Outer diameter

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94064	M12 x 1,5	M16 x 1,5	5,0	18,0	100	o. r.	o. r.	o. r.
94066	M16 x 1,5	M20 x 1,5	5,0	22,0	100	o. r.	o. r.	o. r.
94069	M20 x 1,5	M25 x 1,5	6,0	27,0	50	o. r.	o. r.	o. r.
94072	M25 x 1,5	M32 x 1,5	7,0	34,0	50	o. r.	o. r.	o. r.
94075	M32 x 1,5	M40 x 1,5	8,0	42,0	50	o. r.	o. r.	o. r.
94078	M40 x 1,5	M50 x 1,5	8,0	52,0	25	o. r.	o. r.	o. r.
94081	M50 x 1,5	M63 x 1,5	9,0	66,0	10	o. r.	o. r.	o. r.

from PG to PG

Part no.	Size PG outside	Size PG inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90630	7	9	5,0	17,0	100	o. r.	o. r.	o. r.
90631	9	11	6,0	20,0	100	o. r.	o. r.	o. r.
90632	9	13,5	6,0	22,0	100	o. r.	o. r.	o. r.
90633	11	13,5	6,0	22,0	100	o. r.	o. r.	o. r.
90634	11	16	6,0	24,0	50	o. r.	o. r.	o. r.
90635	13,5	16	6,5	24,0	50	o. r.	o. r.	o. r.
90636	13,5	21	6,5	30,0	25	o. r.	o. r.	o. r.
90637	16	21	6,5	30,0	25	o. r.	o. r.	o. r.
90638	21	29	7,0	39,0	100	o. r.	o. r.	o. r.
90639	29	36	8,0	50,0	50	o. r.	o. r.	o. r.
90640	36	42	9,0	57,0	25	o. r.	o. r.	o. r.
90641	42	48	10,0	64,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

RE hexagonal reducer

RE reducer hexagonal brass
The reducer made of brass. Transition from large to small thread.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology

Abmessungen

G	Größe des Außengewindes
IG	Größe des Innengewindes
GL	Gewindelänge
SW	Schlüsselweite

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904380	M16 x 1,5	M12 x 1,5	6,5	17	100	o. r.	o. r.	o. r.
904381	M20 x 1,5	M12 x 1,5	7,0	22	50	o. r.	o. r.	o. r.
904382	M20 x 1,5	M16 x 1,5	7,0	22	50	o. r.	o. r.	o. r.
904383	M25 x 1,5	M16 x 1,5	7,5	27	50	o. r.	o. r.	o. r.
904384	M25 x 1,5	M20 x 1,5	7,5	27	50	o. r.	o. r.	o. r.
94073	M32 x 1,5	M20 x 1,5	8,0	35	25	o. r.	o. r.	o. r.
94946	M32 x 1,5	M25 x 1,5	8,0	35	25	o. r.	o. r.	o. r.
94076	M40 x 1,5	M25 x 1,5	8,0	43	10	o. r.	o. r.	o. r.
90909	M40 x 1,5	M32 x 1,5	8,0	43	10	o. r.	o. r.	o. r.
904385	M50 x 1,5	M32 x 1,5	10,0	54	10	o. r.	o. r.	o. r.
90865	M50 x 1,5	M40 x 1,5	10,0	54	10	o. r.	o. r.	o. r.
94947	M63 x 1,5	M40 x 1,5	10,0	65	5	o. r.	o. r.	o. r.
904386	M63 x 1,5	M50 x 1,5	10,0	65	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

RE hexagonal reducer

from PG to PG

Part no.	Size PG outside	Size PG inside	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904387	9	7	6,0	17	100	o. r.	o. r.	o. r.
904388	11	7	6,0	20	100	o. r.	o. r.	o. r.
904389	11	9	6,0	20	100	o. r.	o. r.	o. r.
904390	13,5	7	6,0	22	50	o. r.	o. r.	o. r.
904391	13,5	9	6,5	22	100	o. r.	o. r.	o. r.
904392	13,5	11	6,5	22	100	o. r.	o. r.	o. r.
904393	16	7	6,5	24	50	o. r.	o. r.	o. r.
904394	16	9	6,5	24	100	o. r.	o. r.	o. r.
904395	16	11	6,5	24	100	o. r.	o. r.	o. r.
904396	16	13,5	6,5	24	100	o. r.	o. r.	o. r.
904397	21	11	7,0	30	100	o. r.	o. r.	o. r.
904398	21	13,5	7,0	30	50	o. r.	o. r.	o. r.
904399	21	16	7,0	30	50	o. r.	o. r.	o. r.
92888	29	16	8,0	40	50	o. r.	o. r.	o. r.
904400	29	21	8,0	40	50	o. r.	o. r.	o. r.
904401	36	21	9,0	50	25	o. r.	o. r.	o. r.
904402	36	29	9,0	50	25	o. r.	o. r.	o. r.
904403	42	29	10,0	57	25	o. r.	o. r.	o. r.
904404	42	36	10,0	57	25	o. r.	o. r.	o. r.
904405	48	36	10,0	64	25	o. r.	o. r.	o. r.
904406	48	42	10,0	64	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

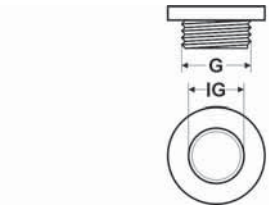
RE round reducer

RE
The reducer made of brass. Transition from large to small thread.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size outside
IG	Thread size inside
GL	Thread length
D	Outer diameter

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94065	M16 x 1,5	M12 x 1,5	5,0	18,0	100	o. r.	o. r.	o. r.
94067	M20 x 1,5	M12 x 1,5	6,0	22,0	100	o. r.	o. r.	o. r.
94068	M20 x 1,5	M16 x 1,5	6,0	22,0	100	o. r.	o. r.	o. r.
94070	M25 x 1,5	M16 x 1,5	7,0	27,0	50	o. r.	o. r.	o. r.
904407	M25 x 1,5	M20 x 1,5	7,0	27,0	100	o. r.	o. r.	o. r.
904408	M32 x 1,5	M20 x 1,5	8,0	34,0	25	o. r.	o. r.	o. r.
94074	M32 x 1,5	M25 x 1,5	8,0	34,0	50	o. r.	o. r.	o. r.
904409	M40 x 1,5	M25 x 1,5	8,0	43,0	25	o. r.	o. r.	o. r.
94077	M40 x 1,5	M32 x 1,5	8,0	43,0	25	o. r.	o. r.	o. r.
94079	M50 x 1,5	M32 x 1,5	9,0	53,0	10	o. r.	o. r.	o. r.
94080	M50 x 1,5	M40 x 1,5	9,0	53,0	25	o. r.	o. r.	o. r.
94082	M63 x 1,5	M40 x 1,5	10,0	66,0	10	o. r.	o. r.	o. r.
94083	M63 x 1,5	M50 x 1,5	10,0	66,0	10	o. r.	o. r.	o. r.

from PG to PG

Part no.	Size PG outside	Size PG inside	Thread length mm	Outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904410	9	7	6,0	17,0	100	o. r.	o. r.	o. r.
904411	11	7	6,0	20,0	100	o. r.	o. r.	o. r.
904412	11	9	6,0	20,0	100	o. r.	o. r.	o. r.
904413	13,5	9	6,5	22,0	100	o. r.	o. r.	o. r.
904414	16	7	6,5	24,0	50	o. r.	o. r.	o. r.
904415	16	13,5	6,5	24,0	100	o. r.	o. r.	o. r.
904416	21	13,5	7,0	30,0	50	o. r.	o. r.	o. r.
904417	21	16	7,0	30,0	50	o. r.	o. r.	o. r.
904418	29	16	8,0	39,0	25	o. r.	o. r.	o. r.
904419	29	21	8,0	39,0	25	o. r.	o. r.	o. r.
904420	42	29	10,0	57,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

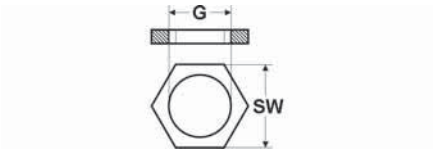
o. r. = on request

KM counternut

KM
The counternut from galvanic nickel-coated brass.

Material
Brass, nickel plated

Technical data
Temperature range: up to +200°C



Dimensions
G Thread size inside
SW Spanner size

metric thread

Part no.	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90175	M12 x 1,5	15,0	100	o. r.	o. r.	o. r.
90176	M16 x 1,5	19,0	100	o. r.	o. r.	o. r.
90177	M20 x 1,5	24,0	100	o. r.	o. r.	o. r.
90178	M25 x 1,5	30,0	100	o. r.	o. r.	o. r.
90179	M32 x 1,5	36,0	100	o. r.	o. r.	o. r.
90180	M40 x 1,5	46,0	50	o. r.	o. r.	o. r.
90181	M50 x 1,5	60,0	25	o. r.	o. r.	o. r.
90182	M63 x 1,5	70,0	25	o. r.	o. r.	o. r.

metric thread - KM-XXL - for large cable diameters

Part no.	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98314	M72 x 2,0	80,0	1	o. r.	o. r.	o. r.
90067	M75 x 1,5	80,0	1	o. r.	o. r.	o. r.
90489	M80 x 2,0	95,0	1	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90610	7	15,0	100	o. r.	o. r.	o. r.
90611	9	18,0	100	o. r.	o. r.	o. r.
90612	11	21,0	100	o. r.	o. r.	o. r.
90613	13,5	23,0	100	o. r.	o. r.	o. r.
90614	16	26,0	100	o. r.	o. r.	o. r.
90615	21	32,0	100	o. r.	o. r.	o. r.
90616	29	41,0	100	o. r.	o. r.	o. r.
90617	36	51,0	50	o. r.	o. r.	o. r.
90618	42	60,0	50	o. r.	o. r.	o. r.
90619	48	64,0	50	o. r.	o. r.	o. r.

NPT thread

Part no.	Size Inches	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905870	1/2"	27,0	50	o. r.	o. r.	o. r.
905871	3/4"	32,0	50	o. r.	o. r.	o. r.
905872	1"	36,0	25	o. r.	o. r.	o. r.
905873	1 1/4"	46,0	25	o. r.	o. r.	o. r.
905874	1 1/2"	54,0	10	o. r.	o. r.	o. r.
905875	2"	70,0	10	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

KM counternut

BSP thread

Part no.	Size Inches	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90186		19,0	100	o. r.	o. r.	o. r.
90187		24,0	100	o. r.	o. r.	o. r.
90189		30,0	100	o. r.	o. r.	o. r.
90190		38,0	100	o. r.	o. r.	o. r.
90193		51,0	50	o. r.	o. r.	o. r.
90195		66,0	50	o. r.	o. r.	o. r.

BSP thread - KM-XXL - for large cable diameters

Part no.	Size Inches	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90197		80,0	1	o. r.	o. r.	o. r.
90198		95,0	1	o. r.	o. r.	o. r.
90199		125,0	1	o. r.	o. r.	o. r.
97785		150,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

VS screw plug

VS
The screwed plug made of brass.

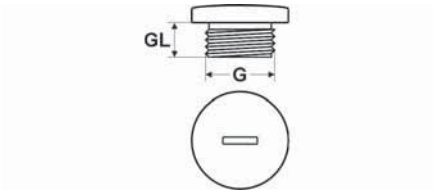
Material
Brass, nickel plated

Technical data
Protection class: IP 54

Temperature range: up to +200°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Note
Screw plugs for metric threads larger than M63x1,5 on request.



Dimensions

G	Thread size
GL	Thread length

metric thread

Part no.	Size Metr.	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98128	M12 x 1,5	5,0	100	o. r.	o. r.	o. r.
98129	M16 x 1,5	5,0	100	o. r.	o. r.	o. r.
98130	M20 x 1,5	6,5	100	o. r.	o. r.	o. r.
98131	M25 x 1,5	7,0	100	o. r.	o. r.	o. r.
98132	M32 x 1,5	8,0	50	o. r.	o. r.	o. r.
98133	M40 x 1,5	8,5	50	o. r.	o. r.	o. r.
98134	M50 x 1,5	9,0	25	o. r.	o. r.	o. r.
98135	M63 x 1,5	10,0	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90620	7	5,0	100	o. r.	o. r.	o. r.
90621	9	6,0	100	o. r.	o. r.	o. r.
90622	11	6,0	100	o. r.	o. r.	o. r.
90623	13,5	6,5	100	o. r.	o. r.	o. r.
90624	16	6,5	100	o. r.	o. r.	o. r.
90625	21	7,0	50	o. r.	o. r.	o. r.
90626	29	8,0	25	o. r.	o. r.	o. r.
90627	36	9,0	50	o. r.	o. r.	o. r.
90628	42	10,0	25	o. r.	o. r.	o. r.
90629	48	10,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

VS-O screw plug with O-ring

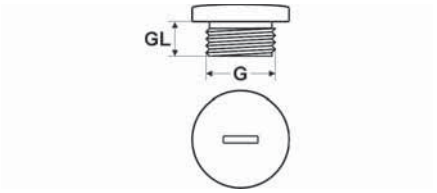
VS-O
The screwed plug made of brass with an O-ring.

Material
Brass, nickel plated
O-ring: NBR

Technical data
Protection class: IP 68

Temperature range: -40°C up to +80°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions
G Thread size
GL Thread length

metric thread

Part no.	Size Metr.	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92600	M12 x 1,5	5,0	100	o. r.	o. r.	o. r.
92601	M16 x 1,5	5,0	100	o. r.	o. r.	o. r.
92602	M20 x 1,5	6,0	100	o. r.	o. r.	o. r.
92603	M25 x 1,5	7,0	100	o. r.	o. r.	o. r.
92604	M32 x 1,5	8,0	50	o. r.	o. r.	o. r.
92605	M40 x 1,5	8,0	50	o. r.	o. r.	o. r.
92606	M50 x 1,5	9,0	25	o. r.	o. r.	o. r.
92607	M63 x 1,5	10,0	10	o. r.	o. r.	o. r.

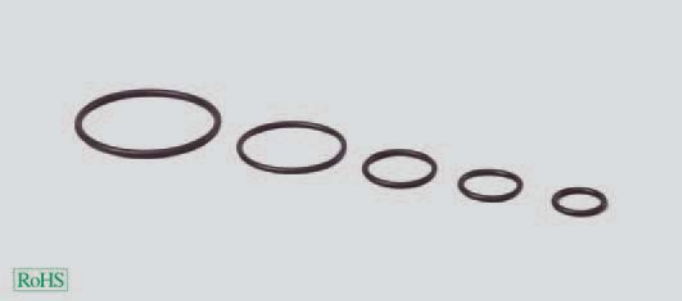
PG thread

Part no.	Size PG	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96763	7	5,0	100	o. r.	o. r.	o. r.
96169	9	5,0	100	o. r.	o. r.	o. r.
96889	11	5,0	100	o. r.	o. r.	o. r.
96654	13,5	6,0	100	o. r.	o. r.	o. r.
96170	16	6,0	100	o. r.	o. r.	o. r.
96171	21	6,0	100	o. r.	o. r.	o. r.
96650	29	8,0	50	o. r.	o. r.	o. r.
96649	36	9,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Wall sealing, dust protection, sealing inserts



O-ring
O-rings for sealing against water, dust and oil.

confer page 74

AGDR-PE
Threaded connection rings for sealing against water and dust.

confer page 75

Blind plug BL-H
Blind plates as dust cap for HSK cable glands.

confer page 76

Blind plug BL-W
Blind plates as dust cap for HSK cable glands.

confer page 77

Incision sealing ring
Incision sealing rings for universal cable inlet through large cable clamping areas.

confer page 78

WV elbow

WV
Profile for simple cable insertion.

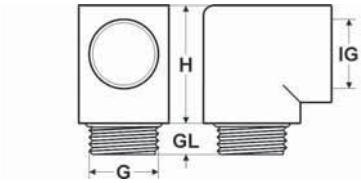
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Die-cast zinc
O-ring: chloroprene-rubber (CR)

Technical data
Protection class: IP 65

Temperature range: -20°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size outside
GL	Thread length
IG	Thread size inside
H	Height without thread

from metric to metric

Part no.	Size Metr. outside	Thread length mm	Size Metr. inside	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98561	M16 x 1,5	7,0	M16 x 1,5	25,0	25	o. r.	o. r.	o. r.
98562	M20 x 1,5	7,0	M20 x 1,5	30,0	25	o. r.	o. r.	o. r.
98563	M25 x 1,5	7,0	M25 x 1,5	35,0	25	o. r.	o. r.	o. r.
98564	M32 x 1,5	10,0	M32 x 1,5	45,0	10	o. r.	o. r.	o. r.

from PG to PG

Part no.	Size PG outside	Thread length mm	Size PG inside	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99020	9	7,0	9	23,0	25	o. r.	o. r.	o. r.
99021	11	7,0	11	28,0	25	o. r.	o. r.	o. r.
99022	13,5	7,0	13,5	32,0	25	o. r.	o. r.	o. r.
99023	16	7,0	16	27,0	25	o. r.	o. r.	o. r.
99024	21	10,0	21	38,0	10	o. r.	o. r.	o. r.
99025	29	11,0	29	46,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

WVF elbow flange

WVF
Profile for simple cable insertion.

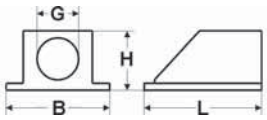
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Die-cast zinc
O-ring: chloroprene-rubber (CR)

Technical data
Protection class: IP 68 - 10 bar

Temperature range: -20°C up to +100°C

Test standard: EN50262



Abmessungen

G	Thread size inside
H	Height
B	Width
L	Length

metric female thread

Part no.	Size Metr. innen	Height mm	Width mm	Length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91730	M20 x 1,5	35,0	53,0	56,0	10	o. r.	o. r.	o. r.
91731	M25 x 1,5	42,0	63,0	65,0	10	o. r.	o. r.	o. r.
91732	M32 x 1,5	52,0	70,0	75,0	5	o. r.	o. r.	o. r.
91733	M40 x 1,5	52,0	71,0	75,0	5	o. r.	o. r.	o. r.
91734	M50 x 1,5	69,0	89,0	93,0	2	o. r.	o. r.	o. r.
91735	M63 x 1,5	74,0	96,0	114,0	1	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG innen	Height mm	Width mm	Length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92930	9	30,0	45,0	48,0	10	o. r.	o. r.	o. r.
92931	11	30,0	45,0	48,0	10	o. r.	o. r.	o. r.
92932	13,5	35,0	53,0	56,0	10	o. r.	o. r.	o. r.
92933	16	35,0	53,0	56,0	10	o. r.	o. r.	o. r.
92934	21	42,0	63,0	65,0	5	o. r.	o. r.	o. r.
92935	29	52,0	71,0	75,0	5	o. r.	o. r.	o. r.
92936	36	69,0	89,0	94,0	2	o. r.	o. r.	o. r.
92937	42	74,0	96,0	114,0	1	o. r.	o. r.	o. r.
92938	48	74,0	96,0	114,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

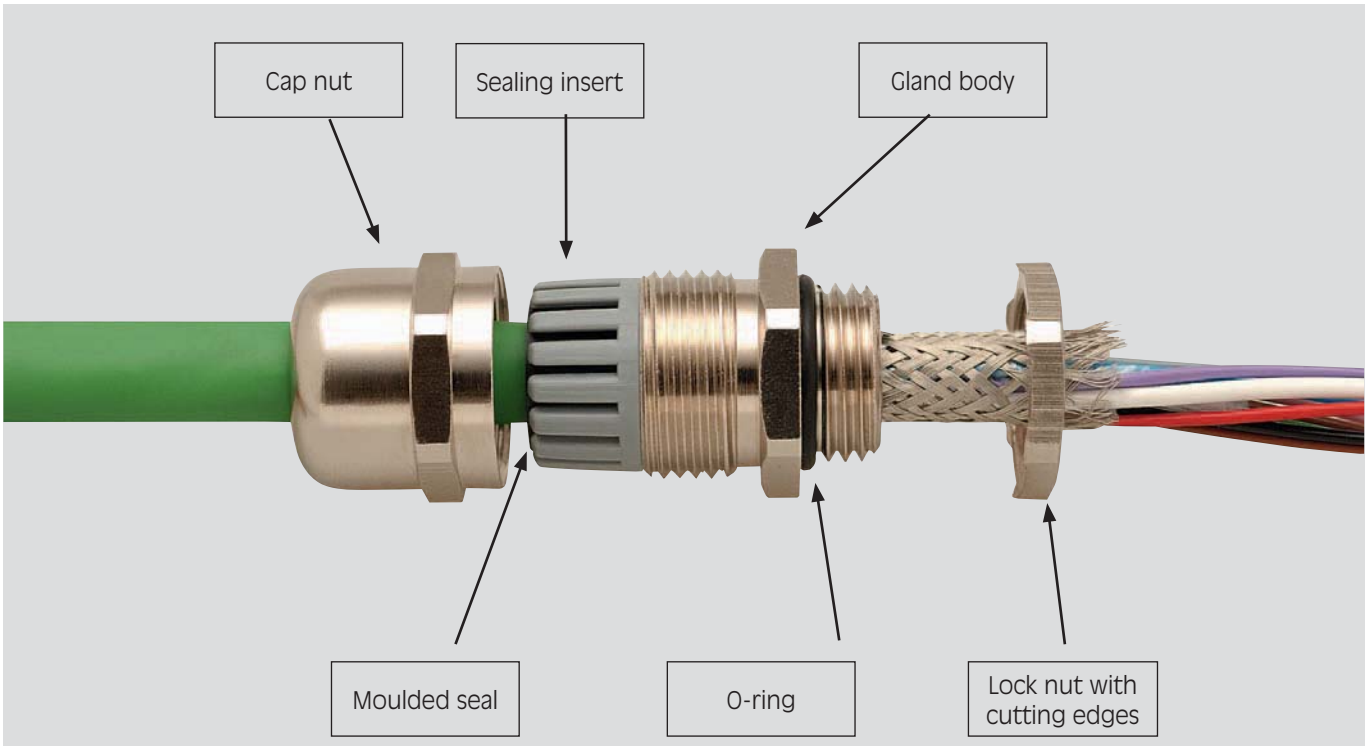
o. r. = on request

Fastening elbow

BW
Mounting bracket with penetration and two fastening bores.
For mounting in a door or door elements, as earthing connection and also to equalise potentials in metallic glands.

confer page 81

Cable glands for electromagnetic compatibility (EMC)



Cable gland

These cable glands are used in high-quality EMC applications.

Cap nut and gland body are made from nickel-plated brass.

The contact springs form a safe and reliable contact with the screened braiding of the cable. They are made from copper-beryllium – this material ensures a good conductivity and a strong spring force in the long term. The spring ring is movable prior to the cap nut being tightened – damage to the screened braiding during assembly is thus prevented.

The terminal insert is made from polyamide PA6.

The moulded seal is made from CBR.

The O-ring is made from NBR.

Lock nut

The lock nuts are made from nickel-plated brass. They have cutting edges for cutting through coated surfaces.

Accessories

Accessories suitable for use with the brass cable glands:
- Lock nuts

Accessories suitable for use with all cable glands:
- Sealing plugs
- O-rings
- Connection thread gaskets
- Blind plates

Cable glands for electromagnetic compatibility (EMC)

Contact: Clamp springs

Series HELUTOP® HT
- **HELUTOP® MS-EP4** 147
- **HELUTOP® MS-EP** 148
- **HELUTOP® MS-E** 149

Series HSK
- **HSK-MS-E-D** 150

Contact: Wound screen

Series HSK
- **HSK-MS-E** 151
- **HSK-MZ-E** 152

Contact: Circlips

Series KVA-XXL
- **KVA-XXL·MS-E** 153

Accessories / Parts

Counter nut
- **KM-EMV** 154

Tool
- **Electricians scissors** 155

Accessories
- **Copper band** 156

Electromagnetic compatibility

The subject of electromagnetic compatibility covers everything connected with intentional and unintentional malfunctions in electrical operating materials caused by electrical, magnetic or electromagnetic fields and processes.

Technically, a distinction is made between “conducted” and “non-conducted” faults:
Conducted interference are transferred directly from the source of the fault to the sink via power or signal lines.
Radiative interference is coupled with the sink by means of an electromagnetic field, i.e. as electromagnetic radiation, and is received there by a wire functioning as an antenna.

Faults should not occur

In the European **EMC Directive,** electromagnetic compatibility is defined as follows:
The ability of a device, unit of equipment or system to function satisfactorily in its electromagnetic environment without introducing intolerable electromagnetic disturbances to any device, unit of equipment or system in that environment.

The power companies and the EU legislator require that manufacturers of electrical devices adhere to appropriate “protection requirements”.
The EMC Directive is generally applied in conjunction with the Low Voltage Directive.

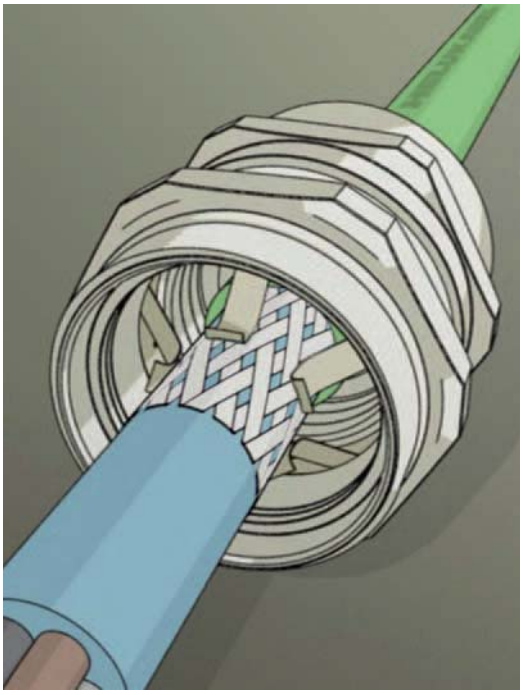
Important components for preventing faults

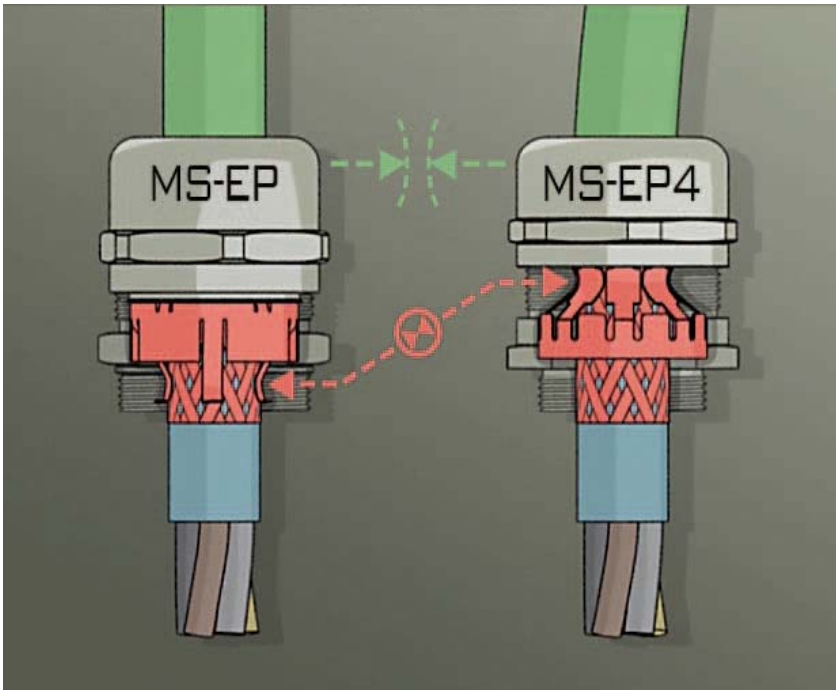
Screened cables:
The screen over the inner sheath of the cable is designed to keep out external disturbances and keep in internally-generated disturbances.

Sheet shielding or
Screened braiding – a coverage of more than 85% is considered necessary.

Electromagnetic compatibility

EMC glands:
The screen of the cable is contacted with the housing of the control / motor via appropriate cable glands.





If the screen is applied at both ends, then one has the additional benefit of potential equalisation at both ends, and effective screening. Here it should be ensured that the two grounds are not different, otherwise a flow of disturbing equalising currents could occur.

The contact in the gland is generally created by means of a contact spring. This gives a good contact but also allows rapid assembly. Our HELUTOP® MS-EP4 and HELUTOP® MS-EP have a simultaneously-rotating spring ring. Provided that the cable is not yet fixed, it is still possible to turn the cable in the gland. Only when it is fixed by turning the cap nut is the screen contact also finally fixed.

The particularly simple cable assembly and disassembly conditions, the gentle spring contact on the cable shield and the EMC shield's excellent resistance to vibrations are also outstanding characteristics that distinguish the new HELUTOP® MS-EP4.

Most important accessories: Lock nut with cutting edges. Painted, anodised or contaminated surfaces are cut through by the cutting edges and the contact between the cable gland and the housing is thereby securely made.

HELUTOP® MS-EP4 EMC cable gland

EMV

new

HELUTOP® MS-EP4

The EMC- cable gland with integrated contact system.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Contact system: Copper-Beryllium
Clamp: Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
O-ring: NBR

Properties

- Easy installation
- Secure contact
- High vibration resistance

Note

Details on the individual tests appear in section "Technical Information".

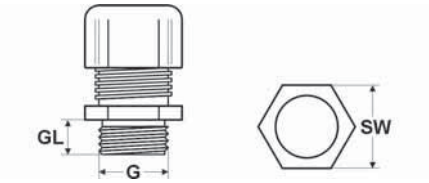
Technical data

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C

Test standard: EN50262

Contact system: patented



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905181	M12 x 1,5	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
905182	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
905183	M20 x 1,5	6,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
905184	M20 x 1,5	7,5 - 14,0	8,0	24	50	o. r.	o. r.	o. r.
905185	M25 x 1,5	10,0 - 18,0	8,0	30	25	o. r.	o. r.	o. r.
905186	M32 x 1,5	16,0 - 25,0	9,0	40	25	o. r.	o. r.	o. r.
905187	M40 x 1,5	22,0 - 32,0	9,0	50	20	o. r.	o. r.	o. r.
905188	M50 x 1,5	30,0 - 38,0	9,0	60 / 58	10	o. r.	o. r.	o. r.
905189	M63 x 1,5	34,0 - 44,0	14,0	64 / 68	5	o. r.	o. r.	o. r.
905248	M63 x 1,5	37,0 - 53,0	10,0	75	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® MS-EP EMC cable gland

HELUTOP® MS-EP

The EMC- and earthing gland with integrated contact system for safe, quick assembly and contacting.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Contact system: Copper-Beryllium
Clamp: Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
O-ring: NBR

Properties

- Optimum strain relief through clamping plates
- No damage of shield during assembly or disassembly by moving contact ring.
- Contact made automatically when the gland is closed
- Excellent shield damping and current deflection
- High savings achieved in time and assembly costs

Note

Details on the individual tests appear in section "Technical Information".

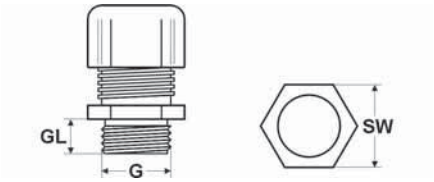
Technical data

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C

Test standard: EN50262

Contact system: patented



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99950	M12 x 1,5	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
99951	M16 x 1,5	5,0 - 10,0	7,0	20	50	o. r.	o. r.	o. r.
99952	M20 x 1,5	6,0 - 12,0	8,0	22	50	o. r.	o. r.	o. r.
99953	M25 x 1,5	11,0 - 17,0	8,0	27	25	o. r.	o. r.	o. r.
99954	M32 x 1,5	15,0 - 21,0	8,0	34	25	o. r.	o. r.	o. r.
99955	M40 x 1,5	19,0 - 28,0	9,0	43	20	o. r.	o. r.	o. r.
99956	M50 x 1,5	27,0 - 38,0	9,0	58	5	o. r.	o. r.	o. r.
99957	M63 x 1,5	34,0 - 44,0	14,0	64 / 68	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOP® MS-E EMC cable gland

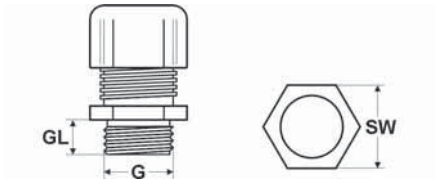
HELUTOP® MS-E
The EMC cable gland with clamping fingers from spring steel for quick assembly and contacting.

Material
Brass, nickel plated
Contact system: Copper-Beryllium
Clamp: Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
O-ring: NBR

Note
Details on the individual tests appear in section "Technical Information".

Technical data
Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90770	7	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
90771	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
90772	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90773	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
90774	16	10,0 - 14,0	6,5	24	25	o. r.	o. r.	o. r.
90775	21	13,0 - 18,0	7,2	30	25	o. r.	o. r.	o. r.
90776	29	18,0 - 25,0	8,0	40	20	o. r.	o. r.	o. r.
90777	36	22,0 - 32,0	9,0	50	5	o. r.	o. r.	o. r.
90778	42	30,0 - 38,0	12,0	58	5	o. r.	o. r.	o. r.
90779	48	34,0 - 44,0	14,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99808	3/8"	5,0 - 10,0	11,5	20	50	o. r.	o. r.	o. r.
99809	1/2"	6,0 - 12,0	13,0	22	50	o. r.	o. r.	o. r.
99810	3/4"	13,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.
99811	1"	18,0 - 25,0	13,0	40	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-E-D EMC cable gland

HSK-MS-E-D

The EMC cable gland to meet stringent requirements in technology.
Time-saving and simple handling through metallised terminal insert, which is automatically contacted when the gland is closed.

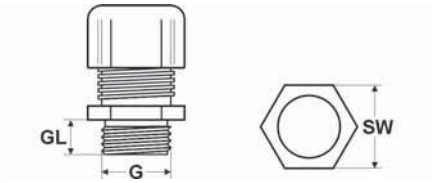
Material

Brass, nickel plated
Clamp: PA, metal-plated
Moulded seal: NBR
O-ring: NBR

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98055	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
98056	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
98057	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
98058	M25 x 1,5	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
98059	M32 x 1,5	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
98060	M40 x 1,5	24,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90160	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90161	M63 x 1,5	37,0 - 44,0	10,0	68	5	o. r.	o. r.	o. r.

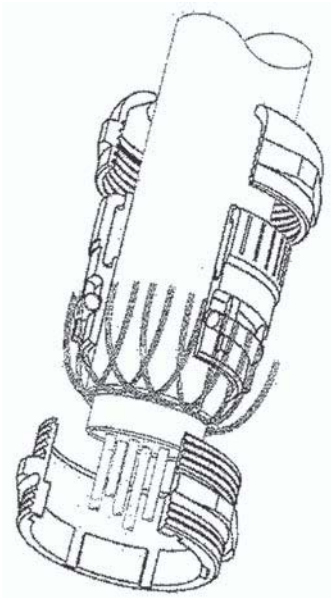
PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97655	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
97656	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
97657	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
97658	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
97659	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
97660	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
97752	29	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
97788	36	24,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-E EMC cable gland



HSK-MS-E

The EMC cable gland for sheathed lines

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology

Material

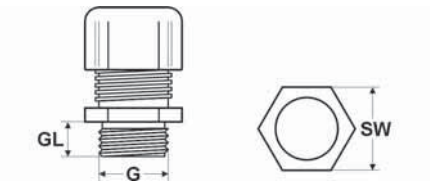
Brass, nickel plated
Clamp: Polyamide PA 6
Moulded seal: NBR
O-ring: NBR

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97335	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
97336	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
97337	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
97338	M25 x 1,5	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
97339	M32 x 1,5	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
97340	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90397	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90398	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90423	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
90424	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
90425	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90426	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
90427	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
90428	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90429	29	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
90430	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90431	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90432	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

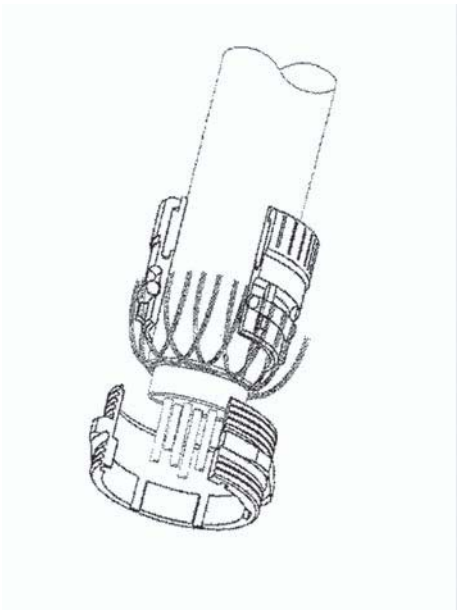
Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92905	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
92906	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
92907	3/4"	13,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MZ-E EMC - cable gland

with strain relief



HSK-MZ-E

The EMC cable gland with double bracket strain relief

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Material

Brass, nickel plated
Clamp: Polyamide
Moulded seal: NBR
O-ring: NBR

Technical data

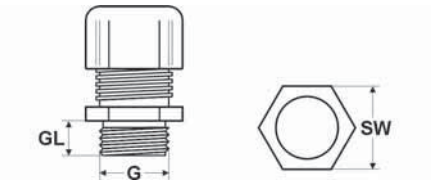
Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98070	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
98071	M16 x 1,5	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
98072	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
98073	M25 x 1,5	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
98074	M32 x 1,5	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
98075	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90162	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90163	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98061	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
98062	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
98063	11	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
98064	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
98065	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
98201	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
98066	29	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
98067	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
98068	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
98069	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92908	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
92909	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
92910	3/4"	13,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KVA-XXL-MS-E EMC cable gland

for particularly large diameters

KVA-XXL-MS-E

EMC and sealing cable gland made by brass for particularly large cable diameters.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Contact system: stainless steel 1.4310

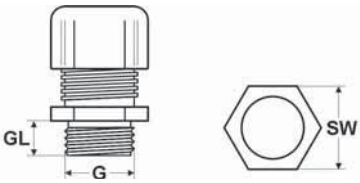
Properties

- Large-area cable sealing
- Easy to assemble
- Large clamping range

Technical data

Protection class: IP 68 - 10 bar

Temperature range: -40°C up to +135°C



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Outer Ø Shielding from / up to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98257	M63 x 1,5	40,0 - 45,0	36,0 - 41,0	10,0	65	1	o. r.	o. r.	o. r.
96560	M63 x 1,5	45,0 - 51,0	36,0 - 45,0	10,0	70	1	o. r.	o. r.	o. r.
94218	M63 x 1,5	45,0 - 51,0	40,0 - 48,0	10,0	70	1	o. r.	o. r.	o. r.
98725	M63 x 1,5	51,0 - 55,0	40,0 - 48,0	10,0	80	1	o. r.	o. r.	o. r.
94189	M72 x 2,0	40,0 - 45,0	36,0 - 41,0	15,0	70	1	o. r.	o. r.	o. r.
94847	M72 x 2,0	45,0 - 51,0	40,0 - 48,0	15,0	70	1	o. r.	o. r.	o. r.
905498	M72 x 2,0	51,0 - 55,0	40,0 - 48,5	15,0	80	1	o. r.	o. r.	o. r.
94208	M72 x 2,0	51,0 - 55,0	46,0 - 54,0	15,0	80	1	o. r.	o. r.	o. r.
94188	M72 x 2,0	54,0 - 58,0	40,0 - 48,0	15,0	80	1	o. r.	o. r.	o. r.
93728	M75 x 1,5	42,0 - 48,0	40,0 - 48,0	15,0	70	1	o. r.	o. r.	o. r.
91600	M75 x 1,5	45,0 - 51,0	40,0 - 48,0	15,0	70	1	o. r.	o. r.	o. r.
90068	M75 x 1,5	54,0 - 58,0	46,0 - 54,0	15,0	80	1	o. r.	o. r.	o. r.
97066	M80 x 2,0	58,0 - 64,0	46,0 - 54,0	15,0	95	1	o. r.	o. r.	o. r.
98908	M80 x 2,0	63,0 - 70,0	46,0 - 54,0	15,0	95	1	o. r.	o. r.	o. r.
905303	M80 x 2,0	63,0 - 70,0	46,0 - 58,0	15,0	95	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KM-EMV EMC-counternut

KM-EMV

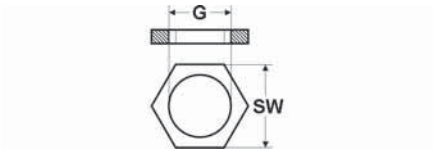
- The counternut with cutting edges for secure fixing of EMC cable glands
- for cutting through painted surfaces to ensure optimum contact with equipotential bonding
- increased vibration resistance.

Material

Brass, nickel plated

Technical data

Temperature range: up to +200°C



Dimensions

G Thread size inside
SW Spanner size

metric thread

Part no.	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90165	M12 x 1,5	15,0	100	o. r.	o. r.	o. r.
90166	M16 x 1,5	19,0	100	o. r.	o. r.	o. r.
90167	M20 x 1,5	24,0	100	o. r.	o. r.	o. r.
90168	M25 x 1,5	30,0	100	o. r.	o. r.	o. r.
90169	M32 x 1,5	36,0	100	o. r.	o. r.	o. r.
90170	M40 x 1,5	46,0	50	o. r.	o. r.	o. r.
90171	M50 x 1,5	60,0	50	o. r.	o. r.	o. r.
90172	M63 x 1,5	70,0	25	o. r.	o. r.	o. r.

metric thread - KM-EMV-XXL - for large cable diameteres

Part no.	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99875	M72 x 2,0	80,0	1	o. r.	o. r.	o. r.
93209	M75 x 1,5	80,0	1	o. r.	o. r.	o. r.
98698	M80 x 2,0	95,0	1	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97243	7	15,0	100	o. r.	o. r.	o. r.
97244	9	18,0	100	o. r.	o. r.	o. r.
97166	11	21,0	100	o. r.	o. r.	o. r.
97167	13,5	23,0	100	o. r.	o. r.	o. r.
97168	16	26,0	100	o. r.	o. r.	o. r.
97169	21	32,0	100	o. r.	o. r.	o. r.
97170	29	41,0	50	o. r.	o. r.	o. r.
97171	36	51,0	25	o. r.	o. r.	o. r.
97245	42	60,0	25	o. r.	o. r.	o. r.
97246	48	64,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Electricians scissors for screened cables and wires

EMV

new

RoHS

Electricians scissors

- cuts copper braid shielded cables and wires
- clean cut with serrated edge
- with round wire cutter
- very stable version
- cut from special stainless steel, nickel plated
- handy
- Length 125 mm
- Weight 65 g

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
905120	Geflechtschere	1	o. r.	o. r.	o. r.

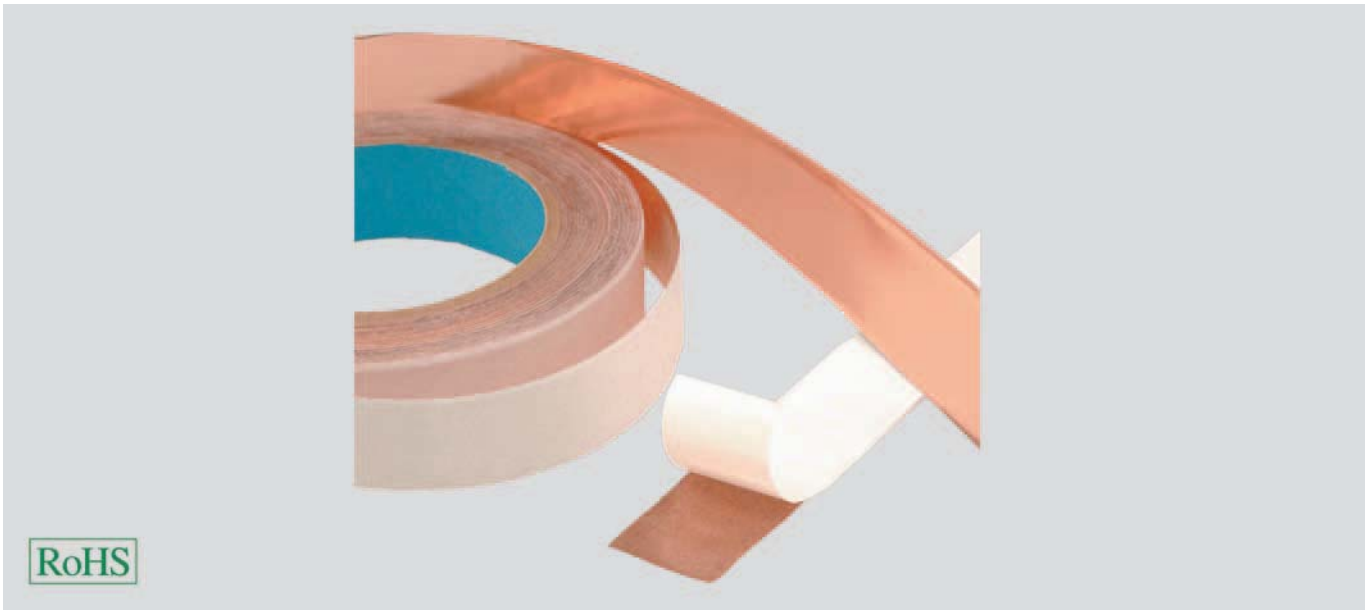
Dimensions and specifications may be changed without prior notice.

o. r. = on request

Copper band suitable for EMC

EMV

new



Copper band
Stabilizes the braided ends of shielded cables and wires.

Material
rolled copper foil

Properties
- self-adhesive
- with protective cover for the adhesive
- electrically conductive adhesive
- adhesive strength 900g/inch (according to KS A 1107)
- thickness approx 40µm
- thickness incl. adhesive approx 70µm

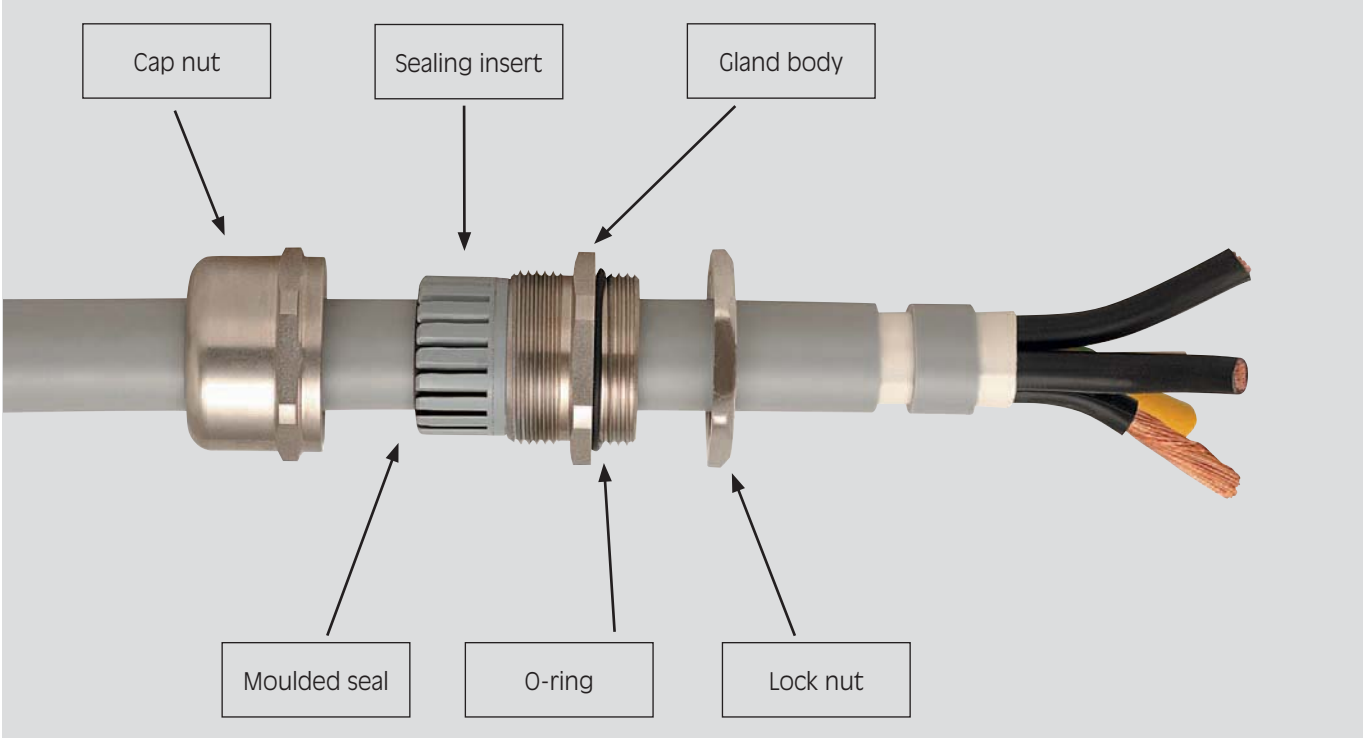
Note
Other dimensions on request.

Part no.	Width mm	Length m	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
905122	10	33	1	o. r.	o. r.	o. r.
905116	15	33	1	o. r.	o. r.	o. r.
905117	20	33	1	o. r.	o. r.	o. r.
905118	25	33	1	o. r.	o. r.	o. r.
905119	50	33	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Stainless steel cable glands



Cable gland

Cap nut and gland body are made from stainless steel.
Due to their high degree of corrosion resistance and longevity, these glands are suitable for tough conditions:
- Heavy chemical loads
- Cleaning agents (e.g. in the food industry)
- Weather-resistant when used outdoors.

The terminal insert is made from polyamide PA6.

The moulded seal is made from CR.

The O-ring is made from NBR

Lock nut

The lock nuts are made from stainless steel.

Accessories

Accessories suitable for use with the stainless steel cable glands:
- Lock nuts

Accessories suitable for use with all cable glands:
- Sealing plugs
- Multiple sealing inserts / lock bolts
- O-rings
- Connection thread gaskets
- Blind plates

Cable glands
for robust applications and special chemical resistance

Cable glands

Series HELUTOP® HT
- Stainless steel
  - **HELUTOP® HT-E** 160

Series HSK
- PVDF (polyvinylidene fluoride)
  - **HSK-PVDF** 161
- Brass with PVDF-insert
  - **HSK-MS-PVDF** 163
- Stainless steel
  - **HSK-INOX** 164

Series UNI-DICHT
- PVDF-gland body
  - **UNI-DICHT-VK-PVDF** 166
- Stainless steel gland body
  - **UNI-DICHT-VK-stainless steel** 167
- Silicone sealing insert
  - **UNI-DICHT sealing insert, silicone** 168

Accessories / Parts

- Counter nut
  - **KM-INOX** 169
- Screw plug
  - **VS-O stainless steel** 170
- Reinforced wall sealing
  - **O-ring FKM** 171

HELUTOP® HT-E cable gland

stainless steel

HELUTOP® HT-E

The stainless steel cable gland for heavy load

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Stainless steel 1.4305 / AISI 303
Clamp: Polyamide PA 6
Moulded seal: chloroprene-rubber (CR)
O-ring: NBR

Properties

- Optimum strain relief through clamping plates
- Highly corrosion-resistant
- Highly durable
- Easy to assemble
- Large clamping areas

Note

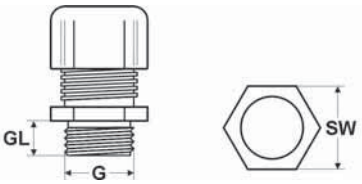
Details on the individual tests appear in section "Technical Information".

Technical data

Protection class: IP 68 - 5 bar

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99980	M12 x 1,5	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
99981	M16 x 1,5	5,0 - 10,0	7,0	22	50	o. r.	o. r.	o. r.
99982	M20 x 1,5	6,0 - 12,0	8,0	22	50	o. r.	o. r.	o. r.
99983	M25 x 1,5	11,0 - 17,0	8,0	27	25	o. r.	o. r.	o. r.
99984	M32 x 1,5	15,0 - 21,0	8,0	36	25	o. r.	o. r.	o. r.
99985	M40 x 1,5	19,0 - 28,0	9,0	46	20	o. r.	o. r.	o. r.
99986	M50 x 1,5	30,0 - 38,0	9,0	60	12	o. r.	o. r.	o. r.
99987	M63 x 1,5	34,0 - 44,0	14,0	65 / 68	12	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99970	7	3,0 - 6,5	6,0	14	50	o. r.	o. r.	o. r.
99971	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
99972	11	5,0 - 10,0	6,0	22	50	o. r.	o. r.	o. r.
99973	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
99974	16	10,0 - 14,0	6,5	24	25	o. r.	o. r.	o. r.
99975	21	13,0 - 18,0	7,2	30	25	o. r.	o. r.	o. r.
99976	29	18,0 - 25,0	8,0	41	20	o. r.	o. r.	o. r.
99977	36	22,0 - 32,0	9,0	50	15	o. r.	o. r.	o. r.
99978	42	30,0 - 38,0	12,0	60	12	o. r.	o. r.	o. r.
99979	48	34,0 - 44,0	14,0	65	12	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99800	3/8"	5,0 - 10,0	11,5	20	50	o. r.	o. r.	o. r.
99801	1/2"	6,0 - 12,0	13,0	22	50	o. r.	o. r.	o. r.
99802	3/4"	13,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.
99803	1"	18,0 - 25,0	13,0	40 / 43	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-PVDF cable gland

Polyvinylidene fluoride

HSK-PVDF

Polyvinylidene fluoride for use in the chemical industry, at high temperatures, under long-term UV exposure.
The cable gland to meet stringent requirements in technology

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Material

PVDF
Clamp: PVDF
Moulded seal: FKM

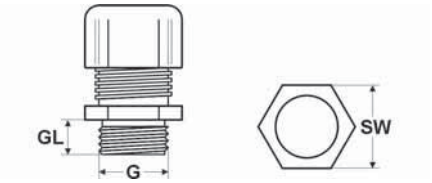
- phosphor-free
- silicone-free
- cadmium-free

Technical data

Protection class: IP 68 - 10 bar / IP 69K (within the specific clamping range with additional o-ring)

Temperature range: -35°C up to +150°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. natural	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97527	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
97528	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97529	M20 x 1,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97530	M25 x 1,5	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
97531	M32 x 1,5	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no. natural	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99630	M12 x 1,5	2,0 - 5,0	8,0	15	50	o. r.	o. r.	o. r.
99631	M16 x 1,5	2,0 - 6,0	8,0	19	50	o. r.	o. r.	o. r.
99632	M20 x 1,5	5,0 - 9,0	9,0	24	50	o. r.	o. r.	o. r.
99633	M25 x 1,5	9,0 - 16,0	11,0	33	50	o. r.	o. r.	o. r.
99634	M32 x 1,5	13,0 - 20,0	11,0	42	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK-PVDF cable gland

Polyvinylidene fluoride

PG thread

Part no. natural	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97184	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
96748	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97185	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
97186	13,5	6,0 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97187	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
97188	21	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
97189	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
97190	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
97191	42	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
97192	48	37,0 - 44,0	14,0	65	5	o. r.	o. r.	o. r.

NPT thread

Part no. natural	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91675	3/8"	4,0 - 8,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
91676	1/2"	6,0 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
91677	1/2"	10,0 - 14,0	13,0	27	50	o. r.	o. r.	o. r.
91678	3/4"	13,0 - 18,0	14,0	33	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-PVDF cable gland

brass and polyvinylidene fluoride

HSK-MS-PVDF

Polyvinylidene fluoride for use in the chemical industry, at high temperatures, under long-term UV exposure.
The cable gland to meet stringent requirements in technology

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Material

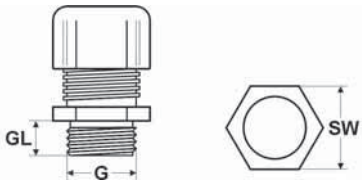
Brass, nickel plated
Clamp: PVDF
Moulded seal: FKM
O-ring: FKM

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -35°C up to +150°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97571	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
97572	M16 x 1,5	4,0 - 8,0	6,0	17 / 19	50	o. r.	o. r.	o. r.
905084	M16 x 1,5	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
97573	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
97574	M25 x 1,5	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
97575	M32 x 1,5	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
97576	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97565	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
97500	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
97445	11	5,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
97446	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
97447	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
97566	21	13,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
97567	29	18,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
97568	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
97569	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
97570	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97663	3/8"	4,0 - 8,0	15,0	17 / 19	25	o. r.	o. r.	o. r.
97664	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-INOX cable gland

stainless steel

HSK-INOX

The stainless steel cable gland
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Automation technology
- Installation technology

Material

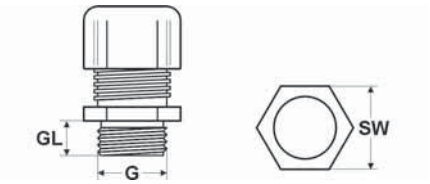
Stainless steel 1.4305 / AISI 303
Clamp: Polyamide
Moulded seal: NBR
O-ring: NBR

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -40°C up to +100°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98076	M12 x 1,5	3,0 - 6,5	6,5	14	10	o. r.	o. r.	o. r.
98078	M16 x 1,5	5,0 - 10,0	6,0	22	10	o. r.	o. r.	o. r.
98080	M20 x 1,5	10,0 - 14,0	6,0	24	10	o. r.	o. r.	o. r.
98082	M25 x 1,5	13,0 - 18,0	7,0	30	10	o. r.	o. r.	o. r.
98084	M32 x 1,5	18,0 - 25,0	8,0	41	5	o. r.	o. r.	o. r.
98086	M40 x 1,5	22,0 - 32,0	8,0	50	5	o. r.	o. r.	o. r.
905734	M50 x 1,5	32,0 - 38,0	9,0	60	5	o. r.	o. r.	o. r.
905736	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

metric thread - with reducing seal

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98077	M12 x 1,5	2,0 - 5,0	6,5	14	10	o. r.	o. r.	o. r.
98079	M16 x 1,5	3,0 - 7,0	6,0	22	10	o. r.	o. r.	o. r.
98081	M20 x 1,5	7,0 - 12,0	6,0	24	10	o. r.	o. r.	o. r.
98083	M25 x 1,5	9,0 - 16,0	7,0	30	10	o. r.	o. r.	o. r.
98085	M32 x 1,5	13,0 - 20,0	8,0	41	5	o. r.	o. r.	o. r.
98087	M40 x 1,5	20,0 - 26,0	8,0	50	5	o. r.	o. r.	o. r.
905733	M50 x 1,5	25,0 - 31,0	9,0	60	5	o. r.	o. r.	o. r.
905735	M63 x 1,5	29,0 - 35,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK-INOX cable gland

stainless steel

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90210	7	3,0 - 6,5	5,0	14	10	o. r.	o. r.	o. r.
90212	9	4,0 - 8,0	6,0	17	10	o. r.	o. r.	o. r.
90214	11	5,0 - 10,0	6,0	22	10	o. r.	o. r.	o. r.
90216	13,5	6,0 - 12,0	6,5	22	10	o. r.	o. r.	o. r.
90218	16	10,0 - 14,0	6,5	24	10	o. r.	o. r.	o. r.
90377	21	13,0 - 18,0	7,0	30	10	o. r.	o. r.	o. r.
98286	29	18,0 - 25,0	8,0	41	5	o. r.	o. r.	o. r.
98288	36	22,0 - 32,0	8,0	50	5	o. r.	o. r.	o. r.
905738	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
905740	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

PG thread - with reducing seal

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90211	7	2,0 - 5,0	5,0	14	10	o. r.	o. r.	o. r.
90213	9	2,0 - 6,0	6,0	17	10	o. r.	o. r.	o. r.
90215	11	3,0 - 7,0	6,0	22	10	o. r.	o. r.	o. r.
90217	13,5	5,0 - 9,0	6,5	22	10	o. r.	o. r.	o. r.
90219	16	7,0 - 12,0	6,5	24	10	o. r.	o. r.	o. r.
90378	21	9,0 - 16,0	7,0	30	10	o. r.	o. r.	o. r.
98287	29	13,0 - 20,0	8,0	41	5	o. r.	o. r.	o. r.
98289	36	20,0 - 26,0	8,0	50	5	o. r.	o. r.	o. r.
905737	42	25,0 - 31,0	9,0	57	5	o. r.	o. r.	o. r.
905739	48	29,0 - 35,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905742	3/8"	4,0 - 8,0	15,0	17 / 19	5	o. r.	o. r.	o. r.
905744	1/2"	6,0 - 12,0	13,0	22 / 24	10	o. r.	o. r.	o. r.
905746	3/4"	13,0 - 18,0	13,0	30	5	o. r.	o. r.	o. r.
905748	1"	18,0 - 25,0	19,0	41	10	o. r.	o. r.	o. r.

NPT thread - with reducing seal

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905741	3/8"	2,0 - 6,0	15,0	17 / 19	5	o. r.	o. r.	o. r.
905743	1/2"	5,0 - 9,0	13,0	22 / 24	5	o. r.	o. r.	o. r.
905745	3/4"	9,0 - 16,0	13,0	30	5	o. r.	o. r.	o. r.
905747	1"	13,0 - 20,0	19,0	41	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-VK-PVDF body gland

Polyvinylidene fluoride

UNI-DICHT-VK gland body PVDF

Gland body made of PVDF for populating with inserts made by TPE or silicone. For use in chemical industry, at high temperatures, or long lasting UV-stress.

Application

- Chemical industry
- Food industry
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material

PVDF

- phosphor-free
- cadmium-free

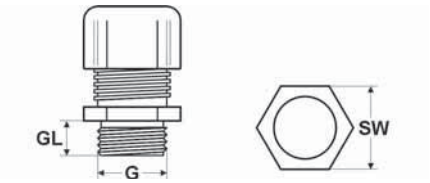
Note

Use short-sized inserts when using gland bodies of size M12x1.5 or M20x1.5.

Technical data

Temperature range: -40°C up to +150°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904240	M12 x 1,5	8,0	15	50	o. r.	o. r.	o. r.
904241	M16 x 1,5	9,0	19	50	o. r.	o. r.	o. r.
904242	M20 x 1,5	9,0	24	50	o. r.	o. r.	o. r.
904243	M25 x 1,5	9,0	29	50	o. r.	o. r.	o. r.
904244	M32 x 1,5	11,0	38	25	o. r.	o. r.	o. r.
904245	M40 x 1,5	11,5	46	10	o. r.	o. r.	o. r.
904246	M50 x 1,5	13,0	56	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT-VK-stainless steel body gland

stainless steel

UNI-DICHT-VK gland body stainless steel

Gland body made of stainless steel for populating with inserts made by TPE. For use in chemical industry, at high temperatures, or long lasting UV-stress.

Material

Stainless steel 1.4305 / AISI 303

Note

When using inserts made by silicone temperature range: -60°C to +200°C.

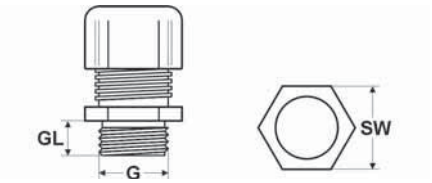
Technical data

Temperature range: up to +200°C

Test standard: EN50262

Application

- Chemical industry
- Food industry
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904247	M12 x 1,5	5,0	14	50	o. r.	o. r.	o. r.
904248	M16 x 1,5	6,0	19	50	o. r.	o. r.	o. r.
904249	M20 x 1,5	6,5	22	50	o. r.	o. r.	o. r.
904250	M25 x 1,5	7,5	27	50	o. r.	o. r.	o. r.
904251	M32 x 1,5	8,0	36	25	o. r.	o. r.	o. r.
904252	M40 x 1,5	8,0	46	10	o. r.	o. r.	o. r.
904253	M50 x 1,5	10,0	55	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UNI-DICHT sealing insert

standard, silicone

UNI-DICHT sealing insert silicone

Sealing inserts made by silicone for populating of UNI-DICHT gland bodies. For use in chemical industry and at high temperatures.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Silicone

- halogen-free
- phosphor-free
- cadmium-free

Note

Short-size inserts are used with gland bodies made of PVDF. Standard size inserts are used with gland bodies made of stainless steel.

Technical data

Temperature range: -60°C up to +200°C

Part no.	Size metric	Sealing insert colour	Cable Ø from / to mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904254	M12 x 1,5	transparent/short	4,0 - 6,5	100	o. r.	o. r.	o. r.
904255	M12 x 1,5	transparent	4,0 - 6,5	100	o. r.	o. r.	o. r.
904256	M16 x 1,5	transparent	4,0 - 6,5	100	o. r.	o. r.	o. r.
904257	M16 x 1,5	transparent	6,5 - 9,5	100	o. r.	o. r.	o. r.
904258	M20 x 1,5	transparent/short	4,0 - 6,5	100	o. r.	o. r.	o. r.
904259	M20 x 1,5	transparent	4,0 - 6,5	100	o. r.	o. r.	o. r.
904260	M20 x 1,5	transparent/short	6,5 - 9,5	100	o. r.	o. r.	o. r.
904261	M20 x 1,5	transparent	6,5 - 9,5	100	o. r.	o. r.	o. r.
904262	M20 x 1,5	transparent/short	7,0 - 10,5	100	o. r.	o. r.	o. r.
904263	M20 x 1,5	transparent	7,0 - 10,5	100	o. r.	o. r.	o. r.
904264	M20 x 1,5	transparent	9,0 - 13,0	100	o. r.	o. r.	o. r.
904265	M25 x 1,5	transparent	7,0 - 10,5	100	o. r.	o. r.	o. r.
904266	M25 x 1,5	transparent	9,0 - 13,0	100	o. r.	o. r.	o. r.
904267	M25 x 1,5	transparent	11,5 - 15,5	100	o. r.	o. r.	o. r.
904268	M32 x 1,5	transparent	9,0 - 13,0	50	o. r.	o. r.	o. r.
904269	M32 x 1,5	transparent	11,5 - 15,5	50	o. r.	o. r.	o. r.
904270	M32 x 1,5	transparent	14,0 - 18,0	50	o. r.	o. r.	o. r.
904271	M40 x 1,5	transparent	14,0 - 18,0	25	o. r.	o. r.	o. r.
904272	M40 x 1,5	transparent	17,0 - 20,5	25	o. r.	o. r.	o. r.
904273	M40 x 1,5	transparent	20,0 - 25,0	25	o. r.	o. r.	o. r.
904274	M40 x 1,5	transparent	24,0 - 28,0	25	o. r.	o. r.	o. r.
904275	M50 x 1,5	transparent	27,0 - 32,0	10	o. r.	o. r.	o. r.
904276	M50 x 1,5	transparent	29,0 - 34,0	10	o. r.	o. r.	o. r.
904277	M50 x 1,5	transparent	32,0 - 36,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KM-INOX counternut

stainless steel

KM INOX

The counternut made of stainless steel.

Material

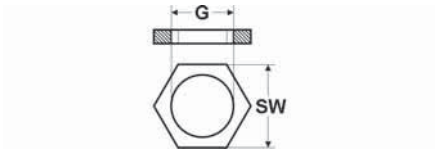
Stainless steel 1.4305 / AISI 303

Technical data

Temperature range: up to +200°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G Thread size inside
SW Spanner size

metric thread

Part no.	Size Metr.	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920605	M12 x 1,5	15,0	100	o. r.	o. r.	o. r.
920606	M16 x 1,5	19,0	100	o. r.	o. r.	o. r.
920607	M20 x 1,5	24,0	100	o. r.	o. r.	o. r.
920608	M25 x 1,5	30,0	100	o. r.	o. r.	o. r.
920609	M32 x 1,5	36,0	50	o. r.	o. r.	o. r.
920610	M40 x 1,5	46,0	50	o. r.	o. r.	o. r.
920611	M50 x 1,5	60,0	10	o. r.	o. r.	o. r.
920612	M63 x 1,5	70,0	10	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92970	7	17,0	100	o. r.	o. r.	o. r.
92971	9	19,0	100	o. r.	o. r.	o. r.
92972	11	22,0	100	o. r.	o. r.	o. r.
92973	13,5	24,0	100	o. r.	o. r.	o. r.
92974	16	27,0	100	o. r.	o. r.	o. r.
92975	21	32,0	100	o. r.	o. r.	o. r.
92976	29	41,0	50	o. r.	o. r.	o. r.
92977	36	60,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

VS-O stainless steel screw plug

VS-O Stainless Steel

The screw plug made of stainless steel with an O-ring made by FKM.

Material

Stainless steel 1.4305 / AISI 303
O-ring: FKM

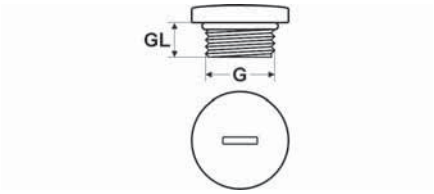
Technical data

Protection class: IP 68

Temperature range: -15°C up to +200°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
D	Outer diameter
H	Height

metric thread

Part no.	Size Metr.	Thread length mm	Outer Ø ca. mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905946	M12 x 1,5	5,0	14,0	7,5	10	o. r.	o. r.	o. r.
905947	M16 x 1,5	5,0	18,0	8,0	10	o. r.	o. r.	o. r.
905948	M20 x 1,5	6,5	22,0	9,5	10	o. r.	o. r.	o. r.
905949	M25 x 1,5	7,0	28,0	11,0	10	o. r.	o. r.	o. r.
905950	M32 x 1,5	8,0	35,0	12,0	5	o. r.	o. r.	o. r.
905951	M40 x 1,5	8,5	44,0	13,0	5	o. r.	o. r.	o. r.
905952	M50 x 1,5	9,0	54,0	15,0	2	o. r.	o. r.	o. r.
905953	M63 x 1,5	10,0	67,0	16,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

O-ring FKM

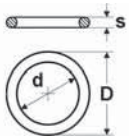
O-ring FKM
O-rings for sealing against water, dust, and oil. Made by FKM for large temperature range.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
FKM

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Technical data
Temperature range: -40°C up to +200°C



Dimensions

D	Outer diameter
d	Inner diameter
s	Thickness

for metric thread

Part no.	Size metr.	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98594	M12 x 1,5	10,0	13,0	1,5	100	o. r.	o. r.	o. r.
98595	M16 x 1,5	12,0	15,0	1,5	100	o. r.	o. r.	o. r.
98596	M20 x 1,5	17,0	20,6	1,8	100	o. r.	o. r.	o. r.
904282	M25 x 1,5	22,0	26,0	2,0	100	o. r.	o. r.	o. r.
904283	M32 x 1,5	29,0	33,0	2,0	100	o. r.	o. r.	o. r.
904284	M40 x 1,5	35,0	39,0	2,0	50	o. r.	o. r.	o. r.
904285	M50 x 1,5	43,0	47,0	2,0	50	o. r.	o. r.	o. r.
904286	M63 x 1,5	55,0	59,0	2,0	50	o. r.	o. r.	o. r.

for PG thread

Part no.	Size PG	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97753	7	10,0	13,0	1,5	100	o. r.	o. r.	o. r.
904287	9	12,0	15,0	1,5	100	o. r.	o. r.	o. r.
904288	11	16,0	19,6	1,8	100	o. r.	o. r.	o. r.
904289	13,5	17,0	20,6	1,8	100	o. r.	o. r.	o. r.
96662	16	18,0	21,0	1,5	100	o. r.	o. r.	o. r.
904290	21	26,0	30,0	2,0	100	o. r.	o. r.	o. r.
904291	29	33,0	37,0	2,0	50	o. r.	o. r.	o. r.
904292	36	43,0	47,0	2,0	50	o. r.	o. r.	o. r.
904293	42	50,0	54,0	2,0	25	o. r.	o. r.	o. r.
904294	48	55,0	59,0	2,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Product information

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Photo: HELUKABEL®

Cable glands for increased usage temperature

Cable glands for increased usage temperature

Cable glands

Series HELUTOP® HT
Brass
HELUTOP® HT-MS Plus ... 120 °C ... 93
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Series HSK
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Series SD
Brass
SD ... 120 °C ... 117

Cable gland EMC

Series KVA-XXL
KVA-XXL-MS-E ... 135 °C ... 153
Counter nut
KM-EMV ... 200 °C ... 154

Cable glands for increased usage temperature

Accessories / Parts

Strain relief
- **ZE** ..... 200 °C 123
- **ZEI** ..... 200 °C 125

Thread adaption

Adapter
- **Adapter** hexagonal ..... 200 °C 126
- **Adapter** round ..... 200 °C 128

Extension
- **EW** round ..... 200 °C 130

Reduction
- **RE** hexagonal ..... 200 °C 131
- **RE** round ..... 200 °C 133

Counter nut
- **KM** ..... 200 °C 134
- **KM-INOX** ..... 200 °C 169

Screw plug
- **VS-O stainless steel** ..... 200 °C 170

Sealing ring
- **Incision sealing ring** ..... 120 °C 78

Reinforced wall sealing
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Photo: HELUKABEL®

Cable glands for potentially explosive atmospheres

Cable glands for potentially explosive atmospheres

Cable glands

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Thread adapter

- Adapter
  - **Adapter PA-ATEX** 182
- Extension
  - **EW PA-ATEX** 184
- Reducer
  - **RE PA-ATEX** 185

Accessories / Parts

- Screw plug
  - **VSK-EX** 186

HSK-EX cable gland

explosive area

HSK-EX

Use in explosive areas
- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

PA 6, V0 acc. to UL 94
Moulded seal: NBR
O-ring: NBR

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

Note

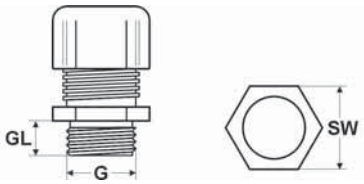
Certificate of Conformity:
EExell DMT 02 ATEX E 047 X

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -20°C up to +95°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97995	97986	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
97996	97987	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97997	97988	M16 x 1,5	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
97998	97156	M20 x 1,5	6,5 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97999	97989	M20 x 1,5	10,0 - 14,0	9,0	27	50	o. r.	o. r.	o. r.
98000	97990	M25 x 1,5	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
98001	97991	M32 x 1,5	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
98002	97992	M40 x 1,5	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
98003	97993	M50 x 1,5	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
98004	97994	M63 x 1,5	37,0 - 44,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

metric thread - for intrinsically safe application

Part no. blue RAL 5012	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97962	M12 x 1,5	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
97559	M16 x 1,5	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
97963	M16 x 1,5	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
96805	M20 x 1,5	6,5 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
97964	M20 x 1,5	10,0 - 14,0	9,0	27	50	o. r.	o. r.	o. r.
97560	M25 x 1,5	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
97561	M32 x 1,5	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
97562	M40 x 1,5	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
97563	M50 x 1,5	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
97564	M63 x 1,5	37,0 - 44,0	14,0	65 / 68	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

HSK-EX cable gland

explosive area

PG thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96110	96116	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
96111	96117	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
96112	96225	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
96113	96226	13,5	6,5 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
96114	96119	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
96115	96120	21	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
96597	96121	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
96598	96122	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
96599	96601	42	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
96600	96602	48	37,0 - 44,0	14,0	65	5	o. r.	o. r.	o. r.

PG thread - for intrinsically safe application

Part no. blue RAL 5012	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90030	7	3,0 - 6,5	8,0	15	50	o. r.	o. r.	o. r.
90031	9	4,0 - 8,0	8,0	19	50	o. r.	o. r.	o. r.
90032	11	5,0 - 10,0	8,0	22	50	o. r.	o. r.	o. r.
90033	13,5	6,5 - 12,0	9,0	24	50	o. r.	o. r.	o. r.
90034	16	10,0 - 14,0	10,0	27	50	o. r.	o. r.	o. r.
90035	21	13,0 - 18,0	11,0	33	50	o. r.	o. r.	o. r.
90036	29	18,0 - 25,0	11,0	42	25	o. r.	o. r.	o. r.
90037	36	22,0 - 32,0	13,0	53	10	o. r.	o. r.	o. r.
90038	42	32,0 - 38,0	13,0	60	5	o. r.	o. r.	o. r.
90039	48	37,0 - 44,0	14,0	65	5	o. r.	o. r.	o. r.

NPT thread

Part no. light grey RAL 7035	Artikel-Nr. black RAL 9005	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92640	92650	3/8"	4,0 - 8,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
92641	92651	1/2"	6,5 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
92642	92652	1/2"	10,0 - 14,0	13,0	27	50	o. r.	o. r.	o. r.
92643	92653	3/4"	13,0 - 18,0	14,0	33	50	o. r.	o. r.	o. r.
92644	92654	1"	18,0 - 25,0	19,0	42	25	o. r.	o. r.	o. r.
92645	92655	1,25"	18,0 - 25,0	16,0	42 / 46	25	o. r.	o. r.	o. r.
92646	92656	1,5"	22,0 - 32,0	20,0	53	10	o. r.	o. r.	o. r.

NPT thread - for intrinsically safe application

Part no. blue RAL 5012	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92660	3/8"	4,0 - 8,0	15,0	19 / 22	50	o. r.	o. r.	o. r.
92661	1/2"	6,5 - 12,0	13,0	24	50	o. r.	o. r.	o. r.
92662	1/2"	10,0 - 14,0	13,0	27	50	o. r.	o. r.	o. r.
92663	3/4"	13,0 - 18,0	14,0	33	50	o. r.	o. r.	o. r.
92664	1"	18,0 - 25,0	19,0	42	25	o. r.	o. r.	o. r.
92665	1,25"	18,0 - 25,0	16,0	42 / 46	25	o. r.	o. r.	o. r.
92666	1,5"	22,0 - 32,0	20,0	53	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-EX cable gland

brass - explosive area

HSK-MS-EX

Use in explosive areas

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Automation technology
- Control cabinet construction
- Installation technology

Material

Brass, nickel plated
Clamp: Polyamide PA 6
Moulded seal: NBR
O-ring: NBR

Note

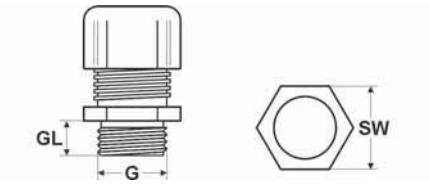
Certificate of Conformity:
EExeII DMT 03 ATEX E 051 X

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -20°C up to +95°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98045	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
98046	M16 x 1,5	4,0 - 8,0	6,0	17 / 19	50	o. r.	o. r.	o. r.
98047	M16 x 1,5	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
98048	M20 x 1,5	6,0 - 12,0	6,0	22	50	o. r.	o. r.	o. r.
98049	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
98050	M25 x 1,5	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
98051	M32 x 1,5	20,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
98052	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
98053	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
98054	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90200	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
90201	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
90202	11	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
90203	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
90204	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
90205	21	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
90206	29	20,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
90207	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
90208	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
90209	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

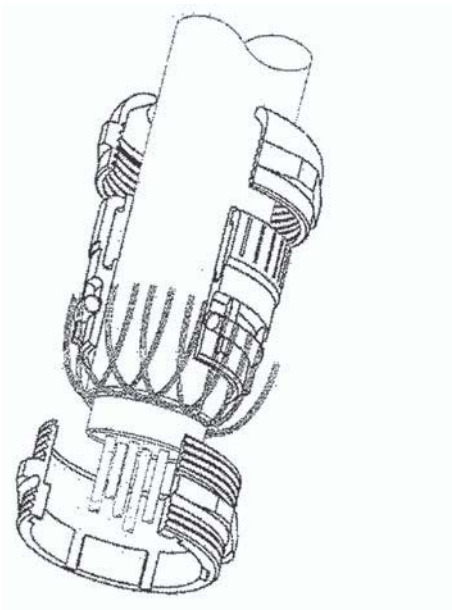
Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92900	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
92901	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
92902	3/4"	14,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.
92903	1"	20,0 - 25,0	19,0	40	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSK-MS-EX-E cable gland

brass - explosive area - EMC



HSK-MS-EX-E

The EMC cable gland for use in explosive areas

- Easy to assemble
- Completely water-tight
- Optimum strain relief
- Large clamping areas

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology

Material

Brass, nickel plated
Clamp: Polyamide PA 6
Moulded seal: NBR
O-ring: NBR

Note

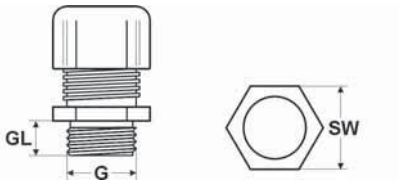
Certificate of Conformity:
EExell DMT 03 ATEX E 051 X

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -20°C up to +95°C

Test standard: EN50262



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Size Metr.	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92880	M12 x 1,5	3,0 - 6,5	6,5	14	50	o. r.	o. r.	o. r.
92881	M16 x 1,5	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
92882	M20 x 1,5	10,0 - 14,0	6,0	24	50	o. r.	o. r.	o. r.
92883	M25 x 1,5	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
92884	M32 x 1,5	20,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
92885	M40 x 1,5	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
92886	M50 x 1,5	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
92887	M63 x 1,5	37,0 - 44,0	10,0	64 / 68	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size PG	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92870	7	3,0 - 6,5	5,0	14	50	o. r.	o. r.	o. r.
92871	9	4,0 - 8,0	6,0	17	50	o. r.	o. r.	o. r.
92872	11	6,0 - 10,0	6,0	20	50	o. r.	o. r.	o. r.
92873	13,5	6,0 - 12,0	6,5	22	50	o. r.	o. r.	o. r.
92874	16	10,0 - 14,0	6,5	24	50	o. r.	o. r.	o. r.
92875	21	14,0 - 18,0	7,0	30	25	o. r.	o. r.	o. r.
92876	29	20,0 - 25,0	8,0	40	25	o. r.	o. r.	o. r.
92877	36	22,0 - 32,0	8,0	50	10	o. r.	o. r.	o. r.
92878	42	32,0 - 38,0	9,0	57	5	o. r.	o. r.	o. r.
92879	48	37,0 - 44,0	10,0	64	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size NPT	Cable Ø from / to mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92890	3/8"	4,0 - 8,0	15,0	17 / 19	50	o. r.	o. r.	o. r.
92891	1/2"	6,0 - 12,0	13,0	22 / 24	50	o. r.	o. r.	o. r.
92892	3/4"	14,0 - 18,0	13,0	30	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Adapter PA-ATEX

explosive area

ATEX

Adapter PA-ATEX

For use in explosive areas.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Polyamide

Colours: black
RAL: 9005

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

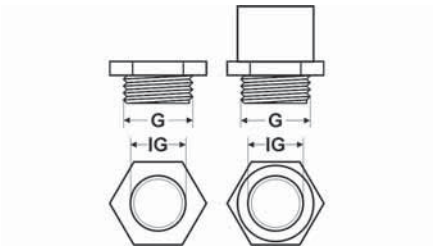
Note

Approval: PTB 04 ATEX 1040 X

Technical data

Protection class: IP 66

Temperature range: -20°C up to +70°C



Dimensions

G Thread size outside
IG Thread size inside

from PG to metric

Part no.	Size PG outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904449	21	M20 x 1,5	10	o. r.	o. r.	o. r.
904450	29	M20 x 1,5	10	o. r.	o. r.	o. r.
904451	29	M25 x 1,5	10	o. r.	o. r.	o. r.
904452	29	M32 x 1,5	10	o. r.	o. r.	o. r.
904454	36	M25 x 1,5	10	o. r.	o. r.	o. r.
904455	36	M32 x 1,5	10	o. r.	o. r.	o. r.
904456	36	M40 x 1,5	10	o. r.	o. r.	o. r.
904457	42	M20 x 1,5	5	o. r.	o. r.	o. r.
904458	42	M25 x 1,5	5	o. r.	o. r.	o. r.
904459	42	M32 x 1,5	5	o. r.	o. r.	o. r.
904460	42	M40 x 1,5	5	o. r.	o. r.	o. r.
904461	48	M20 x 1,5	5	o. r.	o. r.	o. r.
904462	48	M25 x 1,5	5	o. r.	o. r.	o. r.
904463	48	M32 x 1,5	5	o. r.	o. r.	o. r.
904464	48	M40 x 1,5	5	o. r.	o. r.	o. r.
904465	48	M50 x 1,5	5	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

Adapter PA-ATEX

ATEX

explosive area

from PG to metric - high-profile design

Part no.	Size PG outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904466	7	M12 x 1,5	25	o. r.	o. r.	o. r.
904467	7	M16 x 1,5	25	o. r.	o. r.	o. r.
904468	9	M12 x 1,5	25	o. r.	o. r.	o. r.
904469	9	M16 x 1,5	25	o. r.	o. r.	o. r.
904470	9	M20 x 1,5	25	o. r.	o. r.	o. r.
904471	11	M16 x 1,5	25	o. r.	o. r.	o. r.
904472	11	M20 x 1,5	25	o. r.	o. r.	o. r.
904473	11	M25 x 1,5	25	o. r.	o. r.	o. r.
904474	13,5	M16 x 1,5	25	o. r.	o. r.	o. r.
904475	13,5	M20 x 1,5	25	o. r.	o. r.	o. r.
904476	13,5	M25 x 1,5	25	o. r.	o. r.	o. r.
904477	16	M20 x 1,5	25	o. r.	o. r.	o. r.
904478	16	M25 x 1,5	25	o. r.	o. r.	o. r.
904479	16	M32 x 1,5	25	o. r.	o. r.	o. r.
904480	21	M25 x 1,5	10	o. r.	o. r.	o. r.
904481	21	M32 x 1,5	10	o. r.	o. r.	o. r.
904482	21	M40 x 1,5	10	o. r.	o. r.	o. r.
904483	29	M40 x 1,5	10	o. r.	o. r.	o. r.
904484	29	M50 x 1,5	10	o. r.	o. r.	o. r.
904485	36	M50 x 1,5	10	o. r.	o. r.	o. r.
904486	36	M63 x 1,5	10	o. r.	o. r.	o. r.
904487	42	M50 x 1,5	5	o. r.	o. r.	o. r.
904488	42	M63 x 1,5	5	o. r.	o. r.	o. r.
904489	48	M63 x 1,5	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EW PA-ATEX extender

explosive area

ATEX

Extender EW-PA-ATEX

For use in explosive areas.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Polyamide

Colours: black
RAL: 9005

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

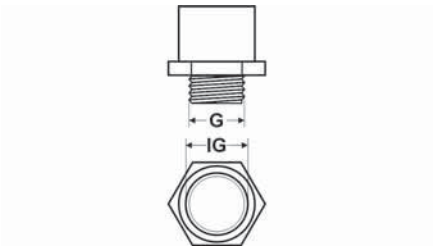
Note

Approval: PTB 04 ATEX 1040X

Technical data

Protection class: IP 66

Temperature range: -20°C up to +70°C



Dimensions

G Thread size outside
IG Thread size inside

from metric to metric

Part no.	Size metr. outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904421	M12 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.
904422	M16 x 1,5	M20 x 1,5	100	o. r.	o. r.	o. r.
904423	M20 x 1,5	M25 x 1,5	100	o. r.	o. r.	o. r.
904424	M25 x 1,5	M32 x 1,5	100	o. r.	o. r.	o. r.
904425	M32 x 1,5	M40 x 1,5	50	o. r.	o. r.	o. r.
904426	M40 x 1,5	M50 x 1,5	25	o. r.	o. r.	o. r.
904427	M50 x 1,5	M63 x 1,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

RE PA-ATEX reducer

explosive area

ATEX

RoHS

Reducer RE-PA-ATEX

For use in explosive areas.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Polyamide

Colours: black
RAL: 9005

- halogen-free
- phosphor-free
- silicone-free
- cadmium-free

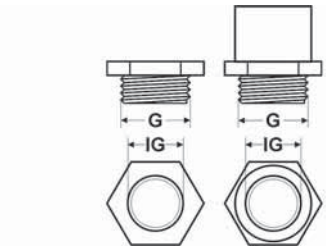
Note

Approval: PTB 04 ATEX 1040X

Technical data

Protection class: IP 66

Temperature range: -20°C up to +70°C



from metric to metric

Part no.	Size metr. outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904428	M25 x 1,5	M12 x 1,5	100	o. r.	o. r.	o. r.
904429	M25 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.
904430	M25 x 1,5	M20 x 1,5	100	o. r.	o. r.	o. r.
904431	M32 x 1,5	M16 x 1,5	50	o. r.	o. r.	o. r.
904432	M32 x 1,5	M20 x 1,5	50	o. r.	o. r.	o. r.
904433	M32 x 1,5	M25 x 1,5	50	o. r.	o. r.	o. r.
904434	M40 x 1,5	M20 x 1,5	25	o. r.	o. r.	o. r.
904435	M40 x 1,5	M25 x 1,5	25	o. r.	o. r.	o. r.
904436	M40 x 1,5	M32 x 1,5	25	o. r.	o. r.	o. r.
904437	M50 x 1,5	M20 x 1,5	5	o. r.	o. r.	o. r.
904438	M50 x 1,5	M25 x 1,5	5	o. r.	o. r.	o. r.
904439	M50 x 1,5	M32 x 1,5	5	o. r.	o. r.	o. r.
904440	M50 x 1,5	M40 x 1,5	5	o. r.	o. r.	o. r.
904441	M63 x 1,5	M20 x 1,5	5	o. r.	o. r.	o. r.
904442	M63 x 1,5	M25 x 1,5	5	o. r.	o. r.	o. r.
904443	M63 x 1,5	M32 x 1,5	5	o. r.	o. r.	o. r.
904444	M63 x 1,5	M40 x 1,5	5	o. r.	o. r.	o. r.
904445	M63 x 1,5	M50 x 1,5	5	o. r.	o. r.	o. r.

from metric to metric - high-profile design

Part no.	Size metr. outside	Size metr. inside	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904446	M16 x 1,5	M12 x 1,5	100	o. r.	o. r.	o. r.
904448	M20 x 1,5	M16 x 1,5	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

VSK-EX screw plug

explosive area

VSK-EX

The screwed plug for explosive area to DIN EN 50014 and DIN EN 50019.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide
O-ring: NBR

Colours: black
RAL: 9005

- halogen-free
- phosphor-free

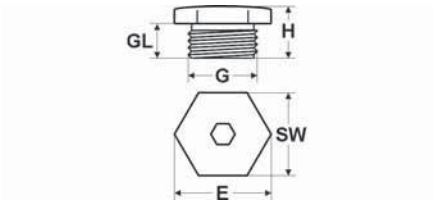
Note

Approval: DMT 03 ATEX E 049

Technical data

Protection class: IP 68 - 10 bar / IP 69K

Temperature range: -20°C up to +90°C



Dimensions

G	Thread size
GL	Thread length
H	Height
SW	Spanner size
E	Angle size

metric thread

Part no. black RAL 9005	Size Metr.	Thread length mm	Height mm	Spanner size mm	Angle size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98114	M12 x 1,5	8,5	13,0	15	16,5	100	o. r.	o. r.	o. r.
98115	M16 x 1,5	8,5	13,0	19	20,5	100	o. r.	o. r.	o. r.
96793	M20 x 1,5	9,0	14,5	24	25,5	100	o. r.	o. r.	o. r.
98116	M25 x 1,5	10,5	16,0	28	30,5	100	o. r.	o. r.	o. r.
97763	M32 x 1,5	11,5	17,5	36	38,0	50	o. r.	o. r.	o. r.
98117	M40 x 1,5	11,5	18,0	46	48,0	25	o. r.	o. r.	o. r.
98118	M50 x 1,5	13,5	20,0	55	60,0	20	o. r.	o. r.	o. r.
98119	M63 x 1,5	14,5	21,0	70	75,0	20	o. r.	o. r.	o. r.

PG thread

Part no. black RAL 9005	Size PG	Thread length mm	Height mm	Spanner size mm	Angle size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91447	7	8,5	13,0	15	16,5	100	o. r.	o. r.	o. r.
91448	9	8,5	13,0	19	20,5	100	o. r.	o. r.	o. r.
91449	11	9,0	14,5	24	25,5	100	o. r.	o. r.	o. r.
91450	13,5	9,0	14,5	24	25,5	100	o. r.	o. r.	o. r.
91451	16	10,5	16,0	28	30,5	100	o. r.	o. r.	o. r.
91452	21	11,5	17,5	36	38,0	100	o. r.	o. r.	o. r.
91453	29	11,5	18,0	46	48,0	50	o. r.	o. r.	o. r.
91454	36	13,5	20,0	55	60,0	25	o. r.	o. r.	o. r.
91455	42	13,5	20,0	60	65,0	20	o. r.	o. r.	o. r.
91456	48	14,5	21,0	70	75,0	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Photo: HELUKABEL®

Cable glands for special installation conditions

Cable glands for special installation conditions

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HELUTOP® HT-MS Plus 93
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Elbow
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Photo: HELUKABEL®

Cable glands for special pressure conditions

Cable glands for special pressure conditions

Pressure balance elements

Plastic
PBE-K 191

High pressure

Cable glands
Series HELUTOP® HT
HELUTOP® HT-MS Plus 93
HELUTOP® HT-MS c Plus 94

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SD 117
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PBE-K pressure balance element

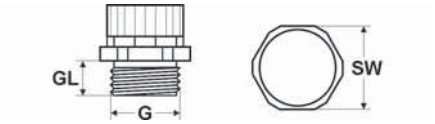
PBE-K
Pressure balance element made by polyamide. With semi permeable membrane that allows air flow but blocks moisture.

Material
Polyamide PA 6

Technical data
Protection class: IP 68 / IP 69K

Temperature range: -20°C up to +105°C

Application
- Plant and machine construction
- Installation technology
- Control cabinet construction



Dimensions

G	Thread size
GL	Thread length
SW	Spanner size

metric thread

Part no.	Part no.	Size Metr.	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904492	904494	M12 x 1,5	17,0	6,6	100	o. r.	o. r.	o. r.
904493	904495	M12 x 1,5	17,0	10,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Media technology

The partner for cables and wires in media technology

Photo: Helukabel®

For years, our cables have ensured perfect performances on Europe's leading musical and theatrical stages. They are also used in professional television, radio and studio equipment and at large-scale events such as the football world championships.
Our product range for media equipment encompasses cables for both indoor and outdoor use. It guarantees high transmission quality for fixed installations or for mobile use.
Our comprehensive range of products includes:

- AES/EBU audio cables
- DMX cables
- Round und multicore loudspeaker cables
- Instrument cables
- Microphone cables
- Video cables
- Connection equipment
- Special cables as per your requirements

Our activities are highlighted

HELUSOUND HELULIGHT

Photo: HELUKABEL®

Cable protection tubes

Overview cable protection tube systems

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HELUcond PE corrugated tubes, polyethylene

weak stress

HELUcond PE-F / PE-B

Cable protection tube for weak stress applications.

Application

- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material

Mod. Polyethylene

Flammability acc. to UL 94: HB

- halogen-free

Properties

- Resistant to bases.

Note

Suitable connection glands: HELUquick.

Technical data

Temperature range: -40°C up to +70°C
Temperature range temporary up to +90°C

Capacity/100mm NW 17: approx. 200 N

fine profile / PE-F

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91621	90448	10,0	9,8	12,7	50	o. r.	o. r.	o. r.
90433	90449	12,0	11,6	15,6	50	o. r.	o. r.	o. r.
90435	90451	17,0	16,3	20,8	50	o. r.	o. r.	o. r.
90436	90452	23,0	22,9	27,9	50	o. r.	o. r.	o. r.
90437	90453	29,0	28,9	34,0	25	o. r.	o. r.	o. r.
90438	90454	37,0	33,5	41,5	25	o. r.	o. r.	o. r.
90439	90455	50,0	45,2	53,4	25	o. r.	o. r.	o. r.

coarse profile / PE-B

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
93781	93786	21,0	21,7	28,0	50	o. r.	o. r.	o. r.
93782	93787	29,0	28,5	34,5	25	o. r.	o. r.	o. r.
93783	93788	36,0	36,0	42,4	25	o. r.	o. r.	o. r.
93784	93789	48,0	47,7	54,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PA6-L corrugated tubes, polyamide

weak stress

HELUcond PA6-L

Cable protection tube for weak to medium stress applications.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Mod. Polyamide PA 6

Flammability acc. to UL 94: V2

- halogen-free
- phosphor-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands: HELUquick, HSSV.

Technical data

Temperature range: -40°C up to +120°C
Temperature range temporary up to +150°C

Capacity/100mm NW 17: approx. 250 N

fine profile

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
99610	99620	7,5	6,8	10,0	50	o. r.	o. r.	o. r.
99611	99621	10,0	10,0	12,8	50	o. r.	o. r.	o. r.
99612	99622	12,0	12,5	15,7	50	o. r.	o. r.	o. r.
99613	99623	14,0	14,4	18,5	50	o. r.	o. r.	o. r.
99614	99624	17,0	16,8	21,1	50	o. r.	o. r.	o. r.
99615	99625	23,0	23,4	28,4	50	o. r.	o. r.	o. r.
99616	99626	29,0	29,2	34,5	25	o. r.	o. r.	o. r.
99617	99627	37,0	34,0	41,8	25	o. r.	o. r.	o. r.
99618	99628	50,0	46,0	53,8	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PA6-S corrugated tubes, polyamide

medium stress

HELUcond PA6-S

Cable protection tube for medium to heavy-duty applications.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Mod. Polyamide PA 6

Flammability acc. to UL 94: V2

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands: HELUquick, HSSV.

Technical data

Temperature range: -40°C up to +120°C
Temperature range temporary up to +150°C

Capacity/100mm NW 17: approx. 350 N

fine profile

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920154	920155	4,5	4,5	7,1	100	o. r.	o. r.	o. r.
92724	92723	7,5	6,6	10,0	50	o. r.	o. r.	o. r.
92676	92713	10,0	9,8	12,8	50	o. r.	o. r.	o. r.
92677	92714	12,0	12,3	15,7	50	o. r.	o. r.	o. r.
92678	92715	17,0	16,6	21,1	50	o. r.	o. r.	o. r.
92679	92716	23,0	23,1	28,4	50	o. r.	o. r.	o. r.
92685	92717	29,0	28,9	34,5	25	o. r.	o. r.	o. r.
92686	92718	37,0	34,0	42,2	25	o. r.	o. r.	o. r.
92687	92719	50,0	45,6	53,8	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PA6 corrugated tubes, polyamide

medium stress

HELUcond PA6-F / PA6-B

Cable protection tube for medium to heavy-duty applications.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Mod. Polyamide PA 6

Flammability acc. to UL 94: HB

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

UL recognized / UR
Suitable connection glands:
HELUquick, HSSV.

Technical data

Temperature range: -40°C up to +120°C
Temperature range temporary up to +150°C

Capacity/100mm NW 16/17: approx. 350 N

fine profile / PA6-F

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
92675	96806	7,5	6,7	10,0	50	o. r.	o. r.	o. r.
90440	90456	10,0	9,9	13,0	50	o. r.	o. r.	o. r.
90441	90457	12,0	12,2	15,7	50	o. r.	o. r.	o. r.
90443	90459	17,0	16,6	21,2	50	o. r.	o. r.	o. r.
90444	90460	23,0	23,2	28,3	50	o. r.	o. r.	o. r.
90445	90461	29,0	29,0	34,5	25	o. r.	o. r.	o. r.
90446	90462	37,0	36,0	42,4	25	o. r.	o. r.	o. r.
90447	90463	50,0	48,1	53,8	25	o. r.	o. r.	o. r.

coarse profile / PA6-B

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
93790	93795	16,0	15,8	21,0	50	o. r.	o. r.	o. r.
93791	93796	21,0	22,4	28,5	50	o. r.	o. r.	o. r.
93792	93797	29,0	28,5	34,5	25	o. r.	o. r.	o. r.
93793	93798	36,0	36,0	42,5	25	o. r.	o. r.	o. r.
93794	93799	48,0	46,5	54,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PA6 UL corrugated tubes, polyamide

heavy duty

HELUcond PA6-UL-F/B

Heavy-duty cable protection tube for heavy-duty mechanical applications.

- high load rating

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Mod. Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

UL recognized / UR
Suitable connection glands:
HELUquick, HSSV.

Technical data

Temperature range: -40°C up to +140°C
Temperature range temporary up to +160°C

Capacity/100mm NW 16/17: approx. 750 N

fine profile / PA6-UL-F

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920384	920394	7,5	6,4	10,0	50	o. r.	o. r.	o. r.
920385	920395	10,0	9,0	13,0	50	o. r.	o. r.	o. r.
920386	920396	12,0	11,0	15,8	50	o. r.	o. r.	o. r.
920387	920397	17,0	16,6	21,0	50	o. r.	o. r.	o. r.
920388	920398	23,0	21,6	28,5	50	o. r.	o. r.	o. r.

coarse profile / PA6-UL-B

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920389	920399	16,0	15,3	21,0	50	o. r.	o. r.	o. r.
920390	920400	21,0	21,6	28,5	50	o. r.	o. r.	o. r.
920391	920401	29,0	27,5	34,5	25	o. r.	o. r.	o. r.
920392	920402	36,0	35,0	42,5	25	o. r.	o. r.	o. r.
920393	920403	48,0	45,5	54,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PA12 corrugated tubes, ployamide PA12

high flexible and high load rating

HELUcond PA12-F / PA12-B

Cable protection tube for heavy-duty applications.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Rail technology
- Installation technology

Material

Mod. Polyamide 12

Flammability acc. to UL 94: HB

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands: HELUquick, HSSV.

Technical data

Temperature range: -50°C up to +120°C
Temperature range temporary up to +150°C

Capacity/100mm NW 17: approx. 350 N

fine profile / PA12-F

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920156	920163	10,0	9,9	13,0	50	o. r.	o. r.	o. r.
920157	920164	12,0	12,2	15,7	50	o. r.	o. r.	o. r.
920158	920165	17,0	16,6	21,2	50	o. r.	o. r.	o. r.

coarse profile / PA12-B

Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920159	920166	21,0	22,4	28,3	50	o. r.	o. r.	o. r.
920160	920167	29,0	28,0	34,3	25	o. r.	o. r.	o. r.
920161	920168	36,0	35,5	42,3	25	o. r.	o. r.	o. r.
920162	905796	48,0	46,5	54,2	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PP corrugated tubes, polypropylene

medium stress

HELUcond PP

Cable protection tube for medium stress applications.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Chemical plants
- Heating and air-conditioning technology

Material

Polypropylene
UV-resistant

Flammability acc. to UL 94: HB

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
HELUquick, HSSV.

Technical data

Temperature range: -40°C up to +130°C
Temperature range temporary up to +150°C

Capacity/100mm NW 17: approx. 350 N

fine profile

Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920170	7,5	6,7	10,0	100	o. r.	o. r.	o. r.
920171	10,0	9,7	12,8	50	o. r.	o. r.	o. r.
920172	12,0	11,6	15,7	50	o. r.	o. r.	o. r.
920173	14,0	14,1	18,4	50	o. r.	o. r.	o. r.
920174	17,0	16,5	21,0	50	o. r.	o. r.	o. r.
920175	23,0	23,0	28,0	50	o. r.	o. r.	o. r.
920176	29,0	28,8	34,0	50	o. r.	o. r.	o. r.
920177	37,0	33,5	41,6	25	o. r.	o. r.	o. r.
920178	50,0	44,8	53,4	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond PFA corrugated tubes, PFA

high temperature

new

HELUcond PFA

Excellent thermal, electrical and chemical properties; abrasion resistance and dimensionally stable.

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Chemical plants
- Heating and air-conditioning technology

Material

PFA
UV-resistant

Flammability acc. to UL 94: V0

Properties

resistant to a multitude of

- fuels
- cleaning agents
- lubricants
- acids and alkalis

Note

Suitable connection glands:
HELUquick, HSSV

Technical data

Temperature range: -200°C up to +260°C

fine profile

Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
905584	4,5	4,4	6,8	100	o. r.	o. r.	o. r.
905585	7,5	7,6	10,7	50	o. r.	o. r.	o. r.
905586	10,0	9,8	13,0	50	o. r.	o. r.	o. r.
905587	13,0	12,4	16,0	50	o. r.	o. r.	o. r.
905588	14,0	13,8	17,8	50	o. r.	o. r.	o. r.
905589	17,0	16,6	21,1	50	o. r.	o. r.	o. r.
905590	23,0	23,0	28,6	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUquick corrugated tubes conduit gland - straight

plastic male thread

new

HELUquick gland straight

Quick-insert glands with metallic female thread for a reliable, quick connection. Suitable for parallel-coiled HELUcond protection tubes.

Material

Polyamide PA 6

- halogen-free
- silicone-free
- cadmium-free

Properties

resistant to a multitude of

- oil
- gasoline
- weak bases
- weak acids

Note

UR-tested.
Disassembly without additional opener.
Also available angled (45° and 90°).

Technical data

Protection class: IP 68

Temperature range: -40°C up to +115°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904797	904820	M12 x 1,5	7,5	11,5	16,0	50	o. r.	o. r.	o. r.
904798	904821	M12 x 1,5	10,0	12,0	18,0	50	o. r.	o. r.	o. r.
904799	904822	M16 x 1,5	10,0	11,5	18,0	50	o. r.	o. r.	o. r.
904800	904823	M16 x 1,5	12,0	11,5	21,0	50	o. r.	o. r.	o. r.
904801	904824	M20 x 1,5	12,0	13,0	21,0	50	o. r.	o. r.	o. r.
904802	904825	M20 x 1,5	17,0	13,0	27,0	50	o. r.	o. r.	o. r.
904803	904826	M25 x 1,5	17,0	13,0	27,0	50	o. r.	o. r.	o. r.
904804	904827	M25 x 1,5	23,0	13,0	34,0	25	o. r.	o. r.	o. r.
904861	904828	M32 x 1,5	23,0	15,0	34,0	25	o. r.	o. r.	o. r.
904862	904829	M32 x 1,5	29,0	15,0	40,0	25	o. r.	o. r.	o. r.
904863	904830	M40 x 1,5	29,0	15,0	40,0	25	o. r.	o. r.	o. r.
904864	904831	M40 x 1,5	37,0	17,0	55,0	25	o. r.	o. r.	o. r.
904865	904832	M50 x 1,5	37,0	17,0	60,0	25	o. r.	o. r.	o. r.
904866	904833	M50 x 1,5	50,0	17,0	65,0	10	o. r.	o. r.	o. r.
904867	904834	M63 x 1,5	50,0	17,0	70,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUquick corrugated tubes conduit gland - elbow 90°

male thread, plastic

RoHS

new

HELUquick gland elbow 90°

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

- halogen-free
- silicone-free
- cadmium-free

Properties

resistant to a multitude of

- oil
- gasoline
- weak bases
- weak acids

Note

- UR-tested

Disassembly without additional opener.
Also available straight and angled 45°.

Technical data

Protection class: IP 68

Temperature range: -40°C up to +115°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904805	904835	M10 x 1,0	7,5	12,0	-	50	o. r.	o. r.	o. r.
904806	904836	M12 x 1,5	10,0	10,0	-	50	o. r.	o. r.	o. r.
904807	904837	M16 x 1,5	10,0	12,0	-	50	o. r.	o. r.	o. r.
904808	904838	M16 x 1,5	12,0	12,0	-	50	o. r.	o. r.	o. r.
904809	904839	M20 x 1,5	12,0	13,0	-	50	o. r.	o. r.	o. r.
904810	904840	M20 x 1,5	17,0	13,0	-	50	o. r.	o. r.	o. r.
904811	904841	M25 x 1,5	17,0	13,0	-	50	o. r.	o. r.	o. r.
904812	904842	M25 x 1,5	23,0	13,0	-	50	o. r.	o. r.	o. r.
904813	904843	M32 x 1,5	23,0	15,0	-	25	o. r.	o. r.	o. r.
904814	904844	M32 x 1,5	29,0	15,0	-	10	o. r.	o. r.	o. r.
904815	904845	M40 x 1,5	29,0	15,0	-	10	o. r.	o. r.	o. r.
904816	904846	M40 x 1,5	37,0	15,0	-	10	o. r.	o. r.	o. r.
904817	904847	M50 x 1,5	37,0	15,5	-	10	o. r.	o. r.	o. r.
904818	904848	M50 x 1,5	50,0	15,0	-	5	o. r.	o. r.	o. r.
904819	904849	M63 x 1,5	50,0	16,0	-	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV HELUcond quick insert glands

Insert tube - assembly is complete

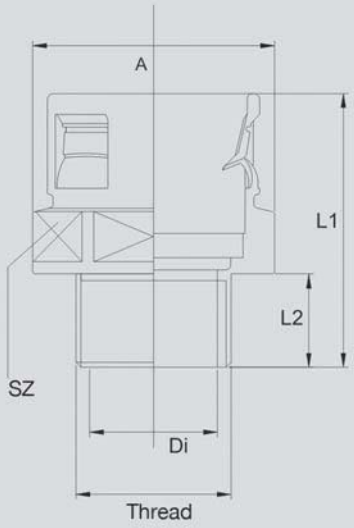
These quick, simple and single-handed assembly and disassembly operations are efficient time-savers. Insert the corrugated conduit into the gland and assembly is complete. The connection is released by sliding a special opener over the corrugated conduit until the raster unit is pushed outwards from the recesses in the conduit. Pull out the corrugated conduit. This operation is completed by hand in just a few seconds.

The BENEFITS of this system

- Captive components from one piece
- Insert system enables quick, simple, single-handed assembly
  – even in constrained locations
- Compact gland design enables adjacent installation
  – extremely high packing density
- Yellow safety opener enables simple disassembly from the front
- Universal installation applications
  – universal gland installation for a number of different shaft profiles
- Protection classification: IP 65 to IP 68
  – Seating surface in gland (corrugated conduit seat) is cylindrical, improving tightness
- Extremely reliable, especially in robot construction
  – vibrations do not cause connection to self-release
  – High extraction forces
  – corrugated conduit can be released only using the Yellow safety opener
  – cannot be opened accidentally
  – corrugated conduit can rotate in the gland, thus preventing torsion
- Environmentally-friendly
  – halogen-free polyamide PA 6, combustibility to UL 94: V0
  – material is UL and CSA-listed
  – gland is 100% recyclable
- Very cost-effective
  – optimum price/performance ratio thanks to one gland providing entire function

HSSV corrugated tubes conduit gland - straight

male thread, plastic



RoHS

HSSV gland straight

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

- UR-tested

Protection classification:

- IP 66 with outer seal

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905858	905859	M10 x 1,0	7,5	8,5	14,0	50	o. r.	o. r.	o. r.
94180	94190	M12 x 1,5	10,0	8,9	19,0	50	o. r.	o. r.	o. r.
920183	920184	M16 x 1,5	10,0	9,3	19,0	50	o. r.	o. r.	o. r.
94181	94191	M16 x 1,5	12,0	8,6	21,0	50	o. r.	o. r.	o. r.
94182	94192	M20 x 1,5	16,0 / 17,0	13,0	27,0	50	o. r.	o. r.	o. r.
94183	94193	M25 x 1,5	21,0 / 23,0	14,3	36,0	50	o. r.	o. r.	o. r.
94184	94194	M32 x 1,5	29,0	14,2	40,0	25	o. r.	o. r.	o. r.
94185	94195	M40 x 1,5	36,0 / 37,0	15,0	50,0	25	o. r.	o. r.	o. r.
94186	94196	M50 x 1,5	48,0 / 50,0	15,5	65,0	10	o. r.	o. r.	o. r.
920185	920186	M63 x 1,5	48,0 / 50,0	15,5	65,0	10	o. r.	o. r.	o. r.

PG thread

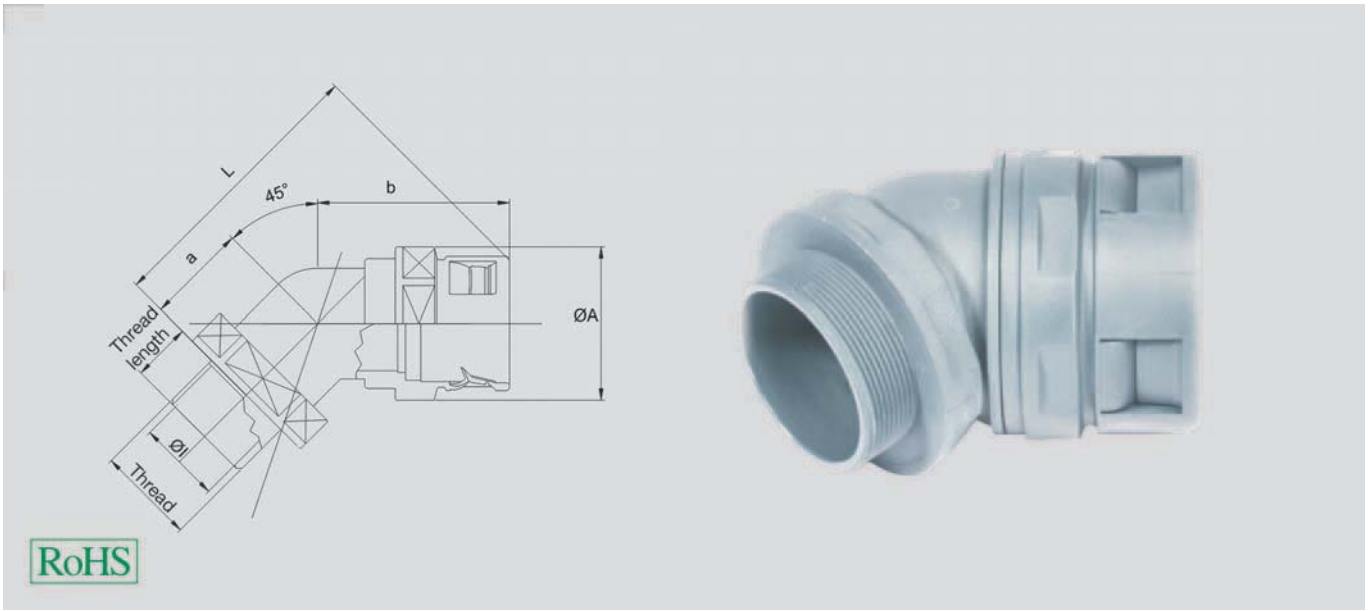
Part no. grey	Part no. black	Size PG	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90480	90490	7	7,5	7,0	14,0	50	o. r.	o. r.	o. r.
90481	90491	9	10,0	7,6	19,0	50	o. r.	o. r.	o. r.
90482	90492	11	12,0	8,5	21,0	50	o. r.	o. r.	o. r.
90483	90493	13,5	16,0 / 17,0	9,8	27,0	50	o. r.	o. r.	o. r.
90484	90494	16	16,0 / 17,0	9,9	27,0	50	o. r.	o. r.	o. r.
90485	90495	21	21,0 / 23,0	11,7	36,0	50	o. r.	o. r.	o. r.
90486	90496	29	29,0	11,7	40,0	25	o. r.	o. r.	o. r.
90487	90497	36	36,0 / 37,0	15,0	50,0	25	o. r.	o. r.	o. r.
90488	90498	48	48,0 / 50,0	15,0	65,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - elbow 45°

male thread, plastic



HSSV gland 45°

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

- halogen-free
- cadmium-free

Properties

resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

- UR-tested

Protection classification:
- IP 66 with outer seal

Threaded connection:
metric to EN 60423

Each unit includes 1 safety opener.
With PG thread on request.

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

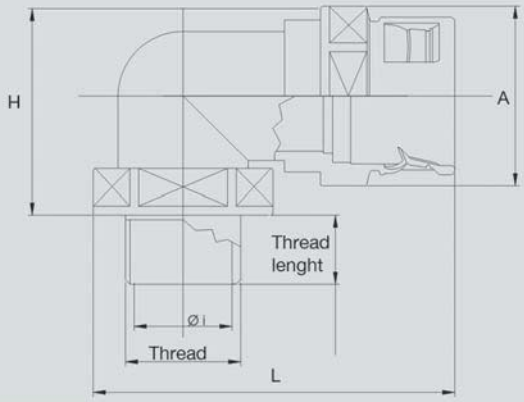
Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920196	920204	M25 x 1,5	21,0 / 23,0	15,5	50	o. r.	o. r.	o. r.
920197	920205	M32 x 1,5	29,0	13,6	25	o. r.	o. r.	o. r.
920198	920206	M40 x 1,5	36,0 / 37,0	15,8	25	o. r.	o. r.	o. r.
920199	920207	M50 x 1,5	48,0 / 50,0	16,3	10	o. r.	o. r.	o. r.
920200	920208	M63 x 1,5	48,0 / 50,0	15,4	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - elbow 90°

male thread, plastic



RoHS

HSSV gland 90°

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

- UR-tested

Protection classification:

- IP 66 with outer seal

Threaded connection:
metric to EN 60423

Each unit includes 1 safety opener.

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94200	94210	M12 x 1,5	10,0	9,5	50	o. r.	o. r.	o. r.
98983	920190	M16 x 1,5	10,0	9,0	50	o. r.	o. r.	o. r.
94201	94211	M16 x 1,5	12,0	8,0	50	o. r.	o. r.	o. r.
94202	94212	M20 x 1,5	16,0 / 17,0	10,5	50	o. r.	o. r.	o. r.
94203	94213	M25 x 1,5	21,0 / 23,0	14,8	50	o. r.	o. r.	o. r.
94204	94214	M32 x 1,5	29,0	13,8	25	o. r.	o. r.	o. r.
94205	94215	M40 x 1,5	36,0 / 37,0	15,6	25	o. r.	o. r.	o. r.
94206	94216	M50 x 1,5	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.
920191	920192	M63 x 1,5	48,0 / 50,0	15,5	5	o. r.	o. r.	o. r.

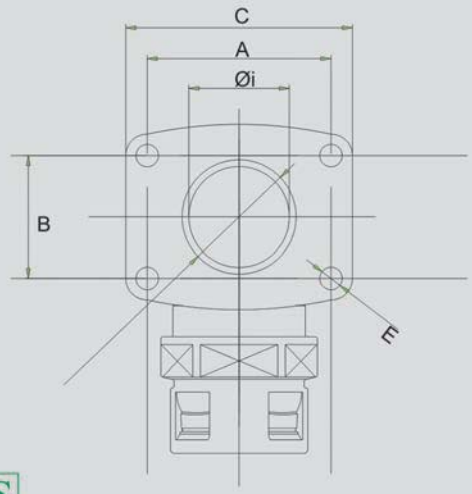
PG-thread

Part no. grey	Part no. black	Size PG	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98440	98363	9	10,0	9,0	50	o. r.	o. r.	o. r.
98441	97382	11	12,0	7,7	50	o. r.	o. r.	o. r.
98442	98435	13,5	16,0 / 17,0	10,0	50	o. r.	o. r.	o. r.
98443	97944	16	16,0 / 17,0	10,0	50	o. r.	o. r.	o. r.
98444	98436	21	21,0 / 23,0	11,8	50	o. r.	o. r.	o. r.
98445	98437	29	29,0	11,5	25	o. r.	o. r.	o. r.
98446	98438	36	36,0 / 37,0	15,5	25	o. r.	o. r.	o. r.
98447	98439	48	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - elbow 90°
flange



RoHS

HSSV gland 90° flange
Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties
resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note
- UR-tested

Protection classification:
- IP 66 with outer seal

Each unit includes 1 safety opener

Technical data
Protection class: IP 65

Temperature range: -40°C up to +110°C

flange

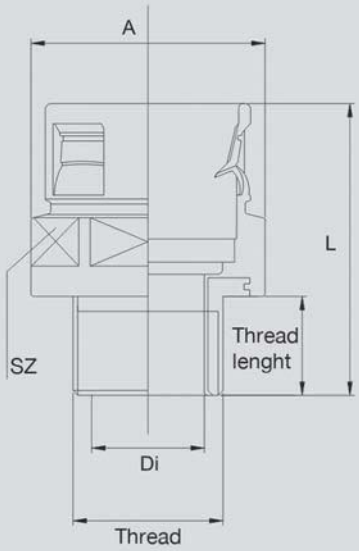
Part no. grey	Part no. black	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920209	920214	17,0	50	o. r.	o. r.	o. r.
920210	920215	21,0 / 23,0	50	o. r.	o. r.	o. r.
920211	920216	29,0	25	o. r.	o. r.	o. r.
920212	920217	36,0 / 37,0	25	o. r.	o. r.	o. r.
920213	920218	48,0 / 50,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - straight

metal male thread



RoHS

HSSV gland straight

Quick-insert glands with metallic male thread for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Protection classification:

- IP 66 with outer seal

Threaded connection:
metric to EN 60423

Each unit includes 1 safety opener

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920229	920238	M12 x 1,5	10,0	10,0	19,0	50	o. r.	o. r.	o. r.
920230	920239	M16 x 1,5	10,0	10,5	19,0	50	o. r.	o. r.	o. r.
920231	920240	M16 x 1,5	12,0	10,5	21,0	50	o. r.	o. r.	o. r.
920232	920241	M20 x 1,5	16,0 / 17,0	12,0	27,0	50	o. r.	o. r.	o. r.
920233	920242	M25 x 1,5	21,0 / 23,0	15,0	36,0	50	o. r.	o. r.	o. r.
920234	920243	M32 x 1,5	29,0	15,0	40,0	25	o. r.	o. r.	o. r.
920235	920244	M40 x 1,5	36,0 / 37,0	16,0	50,0	25	o. r.	o. r.	o. r.
920236	920245	M50 x 1,5	48,0 / 50,0	16,0	65,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - elbow 45°

metal male thread

HSSV gland 45°

Quick-insert glands with metallic male thread for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

- halogen-free

Properties

resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

- UR-tested

Protection classification:
- IP 66 with outer seal

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920265	920269	M25 x 1,5	21,0 / 23,0	15,0	50	o. r.	o. r.	o. r.
920266	920270	M32 x 1,5	29,0	15,0	25	o. r.	o. r.	o. r.
920267	920271	M40 x 1,5	36,0 / 37,0	16,0	25	o. r.	o. r.	o. r.
920268	920272	M50 x 1,5	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - elbow 90°

metal male thread

HSSV gland 90° with metallic male thread

Quick-insert glands with metallic male thread for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free

Properties

resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

- UR-tested

Protection classification:
- IP 66 with outer seal

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener.

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

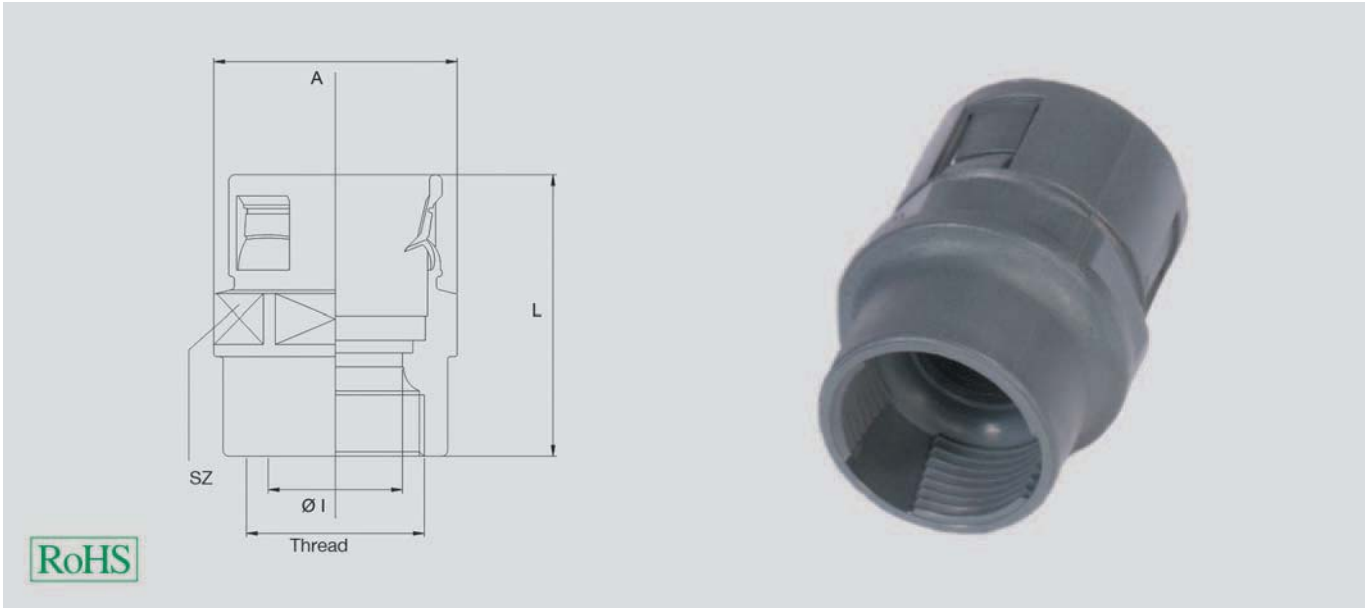
Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920247	920256	M12 x 1,5	10,0	10,0	50	o. r.	o. r.	o. r.
920248	920257	M16 x 1,5	10,0	10,5	50	o. r.	o. r.	o. r.
920249	920258	M16 x 1,5	12,0	10,5	50	o. r.	o. r.	o. r.
920250	920259	M20 x 1,5	17,0	12,0	50	o. r.	o. r.	o. r.
920251	920260	M25 x 1,5	21,0 / 23,0	15,0	50	o. r.	o. r.	o. r.
920252	920261	M32 x 1,5	29,0	15,0	25	o. r.	o. r.	o. r.
920253	920262	M40 x 1,5	36,0 / 37,0	16,0	25	o. r.	o. r.	o. r.
920254	920263	M50 x 1,5	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.
920255	920264	M63 x 1,5	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - straight

plastic female thread



HSSV gland straight

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Protection classification:

- IP 66 with outer seal

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920220	920225	M16 x 1,5	12,0	10,5	21,0	50	o. r.	o. r.	o. r.
920221	920226	M20 x 1,5	17,0	12,6	27,0	50	o. r.	o. r.	o. r.
920222	920227	M25 x 1,5	23,0	12,6	36,0	50	o. r.	o. r.	o. r.
920223	920228	M32 x 1,5	29,0	12,0	40,0 / 34,5	25	o. r.	o. r.	o. r.

PG female thread

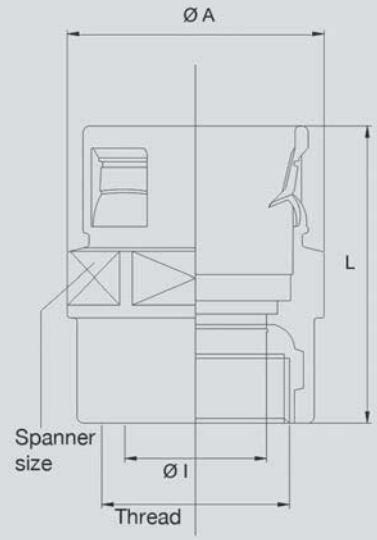
Part no. grey	Part no. black	Size PG	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94220	94230	9	10,0	10,2	19,0	50	o. r.	o. r.	o. r.
94221	94231	11	12,0	10,5	21,0	50	o. r.	o. r.	o. r.
94222	94232	13,5	17,0	11,0	27,0	50	o. r.	o. r.	o. r.
94223	94233	16	17,0	10,2	27,0	50	o. r.	o. r.	o. r.
94224	94234	21	23,0	13,5	36,0	50	o. r.	o. r.	o. r.
94225	94235	29	29,0	12,2	40,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV corrugated tubes conduit gland - straight

metal female thread



RoHS

HSSV gland straight

Quick-insert glands with metallic female thread for a reliable, quick connection. Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Protection classification:

- IP 66 with outer seal

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C

metric female thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920273	920281	M12 x 1,5	10,0	8,0	19,0	50	o. r.	o. r.	o. r.
920274	920282	M16 x 1,5	10,0	9,0	19,0	50	o. r.	o. r.	o. r.
920275	920283	M16 x 1,5	12,0	9,0	21,0	50	o. r.	o. r.	o. r.
920276	920284	M20 x 1,5	16,0 / 17,0	11,0	27,0	50	o. r.	o. r.	o. r.
920277	920285	M25 x 1,5	21,0 / 23,0	11,5	36,0	50	o. r.	o. r.	o. r.
920278	920286	M32 x 1,5	29,0	11,5	40,0	25	o. r.	o. r.	o. r.
920279	920287	M40 x 1,5	36,0 / 37,0	13,0	50,0	25	o. r.	o. r.	o. r.
920280	920288	M50 x 1,5	48,0 / 50,0	14,0	65,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV-ZE corrugated tubes cable gland with strain relief

plastic male thread

Conduit gland HSSV with strain relief

Combined quick-insert cable glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Threaded connection:
metric to EN 60423
Each unit includes 1 safety opener

Technical data

Protection class by tube: IP 65

Temperature range: -25°C up to +100°C

metric thread

Part no. grey	Part no. black	Size	Suitable for tube ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
903459	903466	M16 x 1,5	10,0	7,5	50	o. r.	o. r.	o. r.
903460	903467	M16 x 1,5	12,0	7,5	50	o. r.	o. r.	o. r.
903461	903468	M20 x 1,5	17,0	8,5	50	o. r.	o. r.	o. r.
903462	903469	M25 x 1,5	23,0	10,5	50	o. r.	o. r.	o. r.
903463	903470	M32 x 1,5	29,0	10,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV combination corrugated tubes cable gland

Conduit gland HSSV, combined

Combined with brass cable gland.

Combined quick-insert cable glands without sealing insert for a reliable, quick connection. Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Flammability acc. to UL 94: V0
- halogen-free
- cadmium-free

Properties

resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Protection classification on cable with UNI-DICHT sealing insert:
- with colour-coded sealing insert: IP 68 -10 bar in indicated clamping area

with multiple sealing inserts to IP 65 and/or IP 68, when bore diameter in seal insert and cable diameter are identical

Threaded connection:
metric to EN 60423

Each unit includes 1 safety opener
Gland also available with PG thread on request.
Suitable UNI-DICHT sealing inserts are detailed in Section "Cable glands".

Technical data

Protection class by tube: IP 65

Temperature range: -40°C up to +110°C

metric thread

Part no. grey	Part no. black	Size	Suitable for tube ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920289	920294	M16 x 1,5	10,0	6,0	50	o. r.	o. r.	o. r.
920290	920295	M20 x 1,5	16,0 / 17,0	6,0	50	o. r.	o. r.	o. r.
920291	920296	M25 x 1,5	16,0 / 17,0	6,5	50	o. r.	o. r.	o. r.
920292	920297	M32 x 1,5	21,0 / 23,0	7,0	25	o. r.	o. r.	o. r.
920293	920298	M40 x 1,5	29,0	8,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV IP68 corrugated tubes conduit gland - straight

plastic male thread

HSSV gland straight IP 68

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot and control cabinet construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

- halogen-free
- cadmium-free

Properties

resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Interior seal made of PUR.
Threaded connection:
- metric to EN 60423
- with flat seal made by NBR

Each unit includes 1 safety opener

Technical data

Protection class: IP 68

Temperature range: -40°C up to +110°C

metric thread

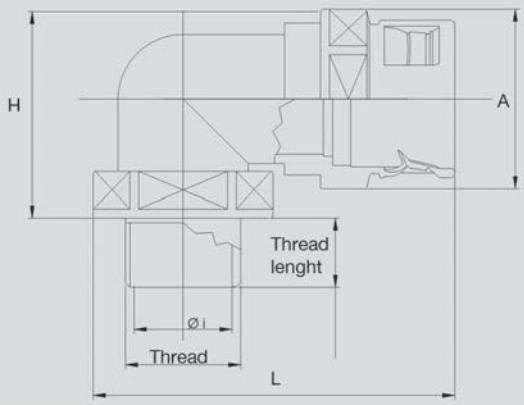
Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920404	920413	M12 x 1,5	10,0	8,9	19,0	50	o. r.	o. r.	o. r.
920405	920414	M16 x 1,5	10,0	9,3	19,0	50	o. r.	o. r.	o. r.
920406	920415	M16 x 1,5	12,0	8,6	21,0	50	o. r.	o. r.	o. r.
920407	920416	M20 x 1,5	16,0 / 17,0	13,0	27,0	50	o. r.	o. r.	o. r.
920408	920417	M25 x 1,5	21,0 / 23,0	14,3	36,0	50	o. r.	o. r.	o. r.
920409	920418	M32 x 1,5	29,0	14,2	40,0	25	o. r.	o. r.	o. r.
920410	920419	M40 x 1,5	36,0 / 37,0	15,0	50,0	25	o. r.	o. r.	o. r.
920411	920420	M50 x 1,5	48,0 / 50,0	15,5	65,0	10	o. r.	o. r.	o. r.
920412	920421	M63 x 1,5	48,0 / 50,0	15,5	65,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV IP68 corrugated tubes conduit gland - elbow 90°

plastic male thread



RoHS

Conduit gland HSSV 90° angle IP 68

Quick-insert glands for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Interior seal made of PUR.
Threaded connection:

- metric to EN 60423
- with flat seal made by NBR

Each item includes 1 safety opener

Technical data

Protection class: IP 68

Temperature range: -40°C up to +110°C

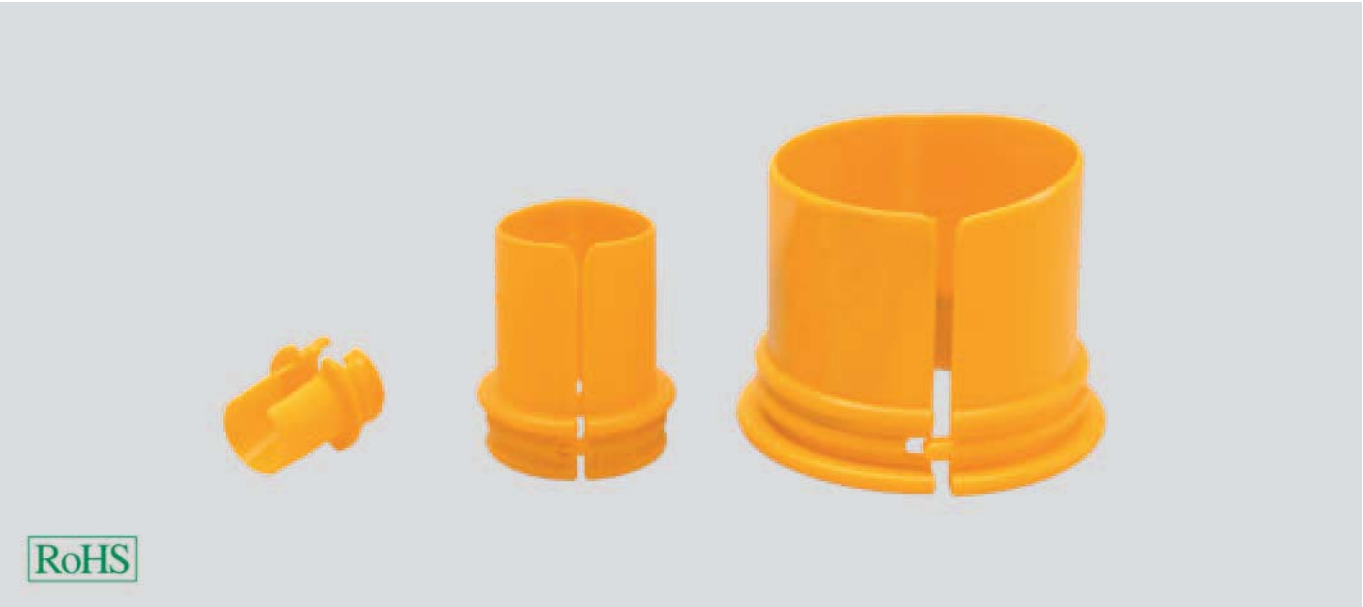
metric thread

Part no. grey	Part no. black	Size Metric	Suitable for ND	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920422	920431	M12 x 1,5	10,0	9,5	50	o. r.	o. r.	o. r.
920423	920432	M16 x 1,5	10,0	9,0	50	o. r.	o. r.	o. r.
920424	920433	M16 x 1,5	12,0	8,0	50	o. r.	o. r.	o. r.
920425	920434	M20 x 1,5	17,0	10,5	50	o. r.	o. r.	o. r.
920426	920435	M25 x 1,5	21,0 / 23,0	14,8	50	o. r.	o. r.	o. r.
920427	920436	M32 x 1,5	29,0	13,8	25	o. r.	o. r.	o. r.
920428	920437	M40 x 1,5	36,0 / 37,0	15,6	25	o. r.	o. r.	o. r.
920429	920438	M50 x 1,5	48,0 / 50,0	16,0	10	o. r.	o. r.	o. r.
920430	920439	M63 x 1,5	48,0 / 50,0	15,5	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV opener



HSSV opener
To open HSSV conduit glands. Simply slip over the conduit - press against the gland - open detent.

Material
Polyamide PA 6

Note
Colour: yellow

Technical data
Temperature range: -20°C up to +100°C

Part no.	Suitable for ND	Unit	Net EUR/100 items at a purchase of 1	2 - 5	6 - 10
99891	7,5	10	o. r.	o. r.	o. r.
99892	10,0	10	o. r.	o. r.	o. r.
99893	12,0	10	o. r.	o. r.	o. r.
98744	17,0	10	o. r.	o. r.	o. r.
98745	23,0	5	o. r.	o. r.	o. r.
99894	29,0	5	o. r.	o. r.	o. r.
99895	37,0	5	o. r.	o. r.	o. r.
99896	50,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV outer seal

HSSV outer seals
Outer seal for quick-insert glands. Suitable for HSSV glands.

Material
TPE-V

Properties
resistant to a multitude of
- oils
- solvents
- chemicals

Technical data
Temperature range: -40°C up to +110°C

Note
- HSSV + outer seal: IP 66

Part no. grey	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920307	7,5	50	o. r.	o. r.	o. r.
920308	10,0	50	o. r.	o. r.	o. r.
920309	12,0	50	o. r.	o. r.	o. r.
920310	17,0	50	o. r.	o. r.	o. r.
920311	23,0	50	o. r.	o. r.	o. r.
920312	29,0	25	o. r.	o. r.	o. r.
920313	37,0	25	o. r.	o. r.	o. r.
920314	50,0	10	o. r.	o. r.	o. r.

Part no. black	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920315	7,5	50	o. r.	o. r.	o. r.
920316	10,0	50	o. r.	o. r.	o. r.
920317	12,0	50	o. r.	o. r.	o. r.
920318	17,0	50	o. r.	o. r.	o. r.
920319	23,0	50	o. r.	o. r.	o. r.
920320	29,0	25	o. r.	o. r.	o. r.
920321	37,0	25	o. r.	o. r.	o. r.
920322	50,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSSV-KF collapsible flange gland

HSSV-KF folding flange

Opening flange angle for connection glands or cable glands.

- Flange angle opened to enable simple insertion of pre-assembled cables
- Simple assembly
- Highly stable

Material

Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

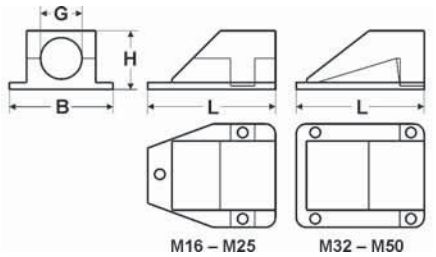
- UR-tested

Threaded connection:
metric to EN 60423

Technical data

Protection class: IP 65

Temperature range: -40°C up to +110°C
Temperature range temporary up to +140°C



Dimensions

G	Thread size inside
H	Height
B	Width
L	Length

metric thread - female

Part no. grey	Part no. black	Size metr. inside	Height mm	Width mm	Length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920507	920513	M16 x 1,5	35	47	49	10	o. r.	o. r.	o. r.
920508	920514	M20 x 1,5	35	47	49	10	o. r.	o. r.	o. r.
920509	920515	M25 x 1,5	44	65	69	10	o. r.	o. r.	o. r.
920510	920516	M32 x 1,5	55	78	90	10	o. r.	o. r.	o. r.
920511	920517	M40 x 1,5	66	94	99	10	o. r.	o. r.	o. r.
920512	920518	M50 x 1,5	76	101	116	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SH, SHV corrugated tube holder

system holder

SH, SHV- system holder

System holder for HELUcond protection tubes.
Universal system holder with optional clips for extreme loads.
Quick assembly through single-hole fastening.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94

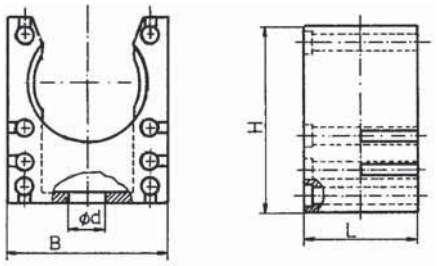
- halogen-free

Properties

- Resistant to fuels, mineral oils, greases, weak bases, weak acids

Technical data

Temperature range: -40°C up to +110°C



SH holder

Part no. grey	Part no. black	Suitable for tube ND mm	Width mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94663	99270	7,0	20,0	18,0	100	o. r.	o. r.	o. r.
94664	99271	10,0	20,0	23,0	100	o. r.	o. r.	o. r.
94665	99272	12,0	22,0	26,0	50	o. r.	o. r.	o. r.
920323	920324	14,0	28,0	33,0	50	o. r.	o. r.	o. r.
94666	99273	17,0	28,0	33,0	50	o. r.	o. r.	o. r.
94667	99274	23,0	35,0	40,0	50	o. r.	o. r.	o. r.
94668	99275	29,0	43,0	45,0	30	o. r.	o. r.	o. r.
94669	99276	36,0	54,0	53,0	20	o. r.	o. r.	o. r.
94670	99277	48,0	68,0	66,0	20	o. r.	o. r.	o. r.

SHV holder with rotary protection

Part no. grey	Part no. black	Suitable for tube ND mm	Width mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920325	920330	16/17	28,0	33,0	50	o. r.	o. r.	o. r.
920326	920331	21/23	35,0	40,0	50	o. r.	o. r.	o. r.
920327	920332	29,0	43,0	45,0	30	o. r.	o. r.	o. r.
920328	920333	36/37	54,0	53,0	20	o. r.	o. r.	o. r.
920329	920334	48/50	68,0	66,0	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SD, VS, HT corrugated tube holder

system holder accessories

SD/ VS/ HT

Accessories for system holder SH/SHV

Material

Polyamide PA 6

- halogen-free

Technical data

Temperature range: -40°C up to +110°C

Properties

Resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

SD cap for holder

Part no. grey	Part no. black	Suitable for tube ND mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94671	99278	7,5/10	100	o. r.	o. r.	o. r.
94672	99279	12,0	50	o. r.	o. r.	o. r.
94673	99280	14/16/17	50	o. r.	o. r.	o. r.
94674	99281	21/23	50	o. r.	o. r.	o. r.
94675	99282	29,0	30	o. r.	o. r.	o. r.
94676	99283	36/37	20	o. r.	o. r.	o. r.
94677	99284	48/50	20	o. r.	o. r.	o. r.

VS bond bridge for holder

Part no. grey	Part no. black	Suitable for tube ND mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94679	99286	any	100	o. r.	o. r.	o. r.

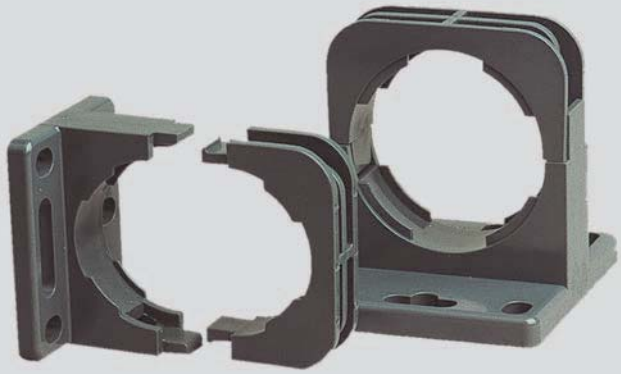
HT hut-rail clip for holder

Part no. grey	Part no. black	Suitable for tube ND mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94678	99285	any	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

USH corrugated tube holder
with flange pipe holder



RoHS

USH
Tube holder for HELUcond protection tube.
Universal, high-strength tube holder with double struts.
Fastening bores suitable for horizontal and vertical rail systems in control cabinet.

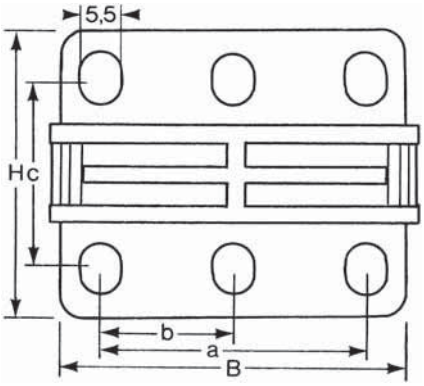
Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polycarbonate

Flammability acc. to UL 94

- halogen-free
- phosphor-free
- cadmium-free

Technical data
Temperature range: -30°C up to +100°C



USH with flange pipe holder

Part no. grey	Part no. black	Suitable for tube with outer Ø	Width mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91200	93497	21,0	38,0	40,0	50	o. r.	o. r.	o. r.
91201	93498	28,5	38,0	40,0	50	o. r.	o. r.	o. r.
91202	93499	34,5	46,0	48,0	50	o. r.	o. r.	o. r.
91203	93507	42,5	52,0	59,0	50	o. r.	o. r.	o. r.
91204	93508	54,5	68,0	77,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond protective tube distributors

Protective tube distributors

Protective tube distributors
for a reliable, quick connection.
Suitable for parallel-coiled
HELUcond protection tubes.

Areas of application:

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material properties

Material:

- Polyamide PA6
- Halogen-free, cadmium-free
- UV-resistant in black

Property:

- Resistant to a multitude of:
  Fuels, mineral oils, greases,
  weak bases, weak acids

Technical data

Protection classification:

- IP 54

Application temperature:

- -40°C to +110°C

Recommended storage:

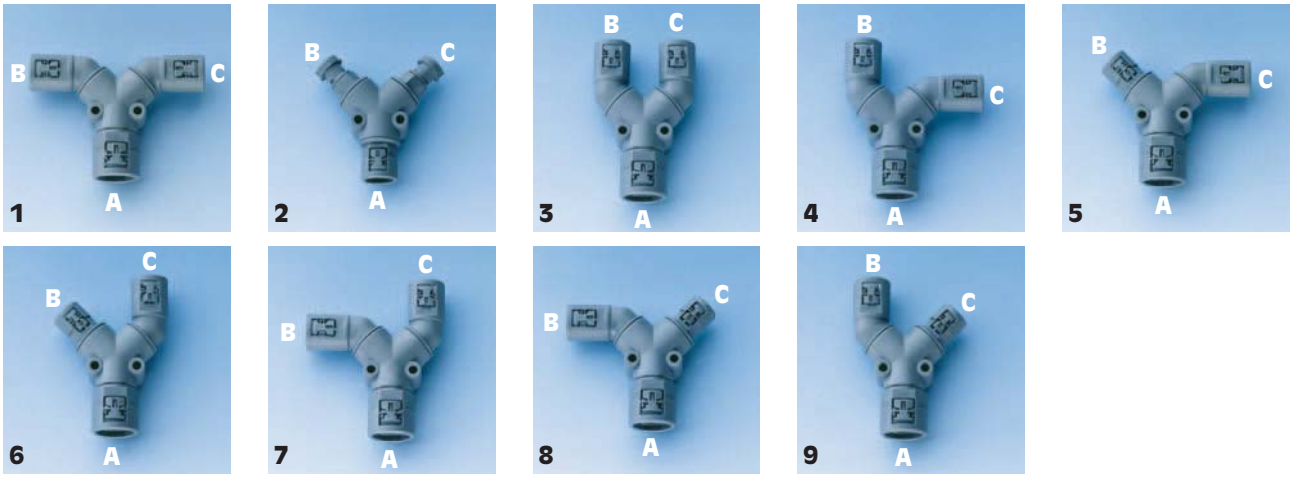
- Storage temperature +20°C ±5°C
- Humidity from 55% to 75%

The variable HELUcond protective tube distributor for nominal sizes 17 reduced to 7.5

1 basic model = 9 variation options

The different variations are numbered from 1 to 9. Select the version you require and indicate the corresponding corrugated conduit widths for connections A, B and C.
The corrugated conduit connections will be factory-mounted to the basic model in line with your requirements after the order is placed. This ensures you receive a customised distributor.

Bore interval: 24 mm / bore diameter: 5.2 mm



HELUcond protective tube distributors

Protective tube distributors

Protective tube distributors for a reliable, quick connection.
Suitable for parallel-coiled HELUcond protection tubes.

Areas of application:

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material properties

Material:

- Polyamide PA6
- Halogen-free, cadmium-free
- UV-resistant in black

Property:

- Resistant to a multitude of: Fuels, mineral oils, greases, weak bases, weak acids

Technical data

Protection classification:

- IP 54

Application temperature:

- -40°C to +110°C

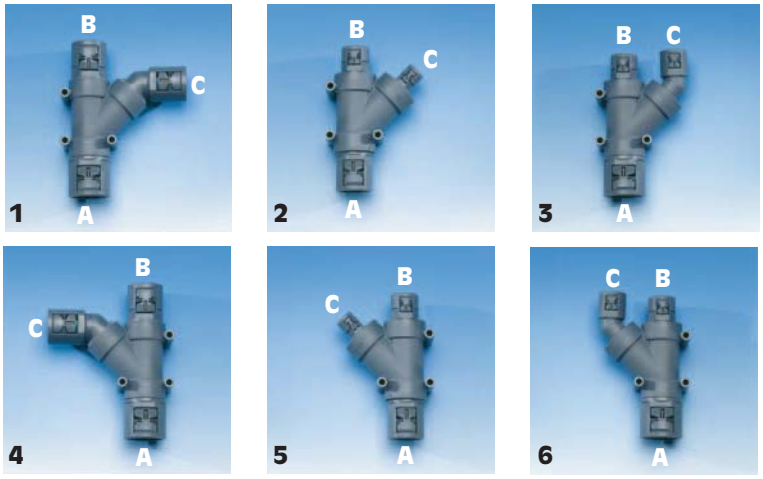
Recommended storage:

- Storage temperature +20°C ±5°C
- Humidity from 55% to 75%

The variable HELUcond protective tube distributor for nominal sizes from 29 reduced to 7.5

1 basic model = 2 x 3 variation options
The basic model is the same on both sides and enables 2 x 3 variations.
The different variation options are numbered from 1 to 6.
Select the version you require and indicate the corresponding corrugated conduit widths for connections A, B and C.
The corrugated conduit connections will be factory-mounted to the basic model in line with your requirements after the order is placed.
This ensures you receive a customised distributor.

Bore interval: 47 mm / bore diameter: 6.2 mm



JUMBO assembly instructions

JUMBO

One-piece flange connection.
Suitable for parallel-coiled **JUMBO** protection tubes.

Saves time and money when having to install lines and cables to machines and systems.

There are often many lines and cables to be installed around machines or systems. These lines are for compressed air or hydraulic liquids or used for power supply or control purposes and should be installed as bundles in cable bunchers for protection safety reasons. So far it has been difficult to replace a damaged cable or to add a new one as the connecting parts – especially those with an angle profile – made it almost impossible to assemble or disassemble the particular cable.
This problem has now been solved by the Multi-Cable-Buncher from the **JUMBO** series. It features straight and angle single-part profiles.

The **JUMBO** Multi-tubing is pushed by pressure into the threaded joint at an angle of 30° until it clicks in and is now already pre-fixed. This can be done with and without tools, and you will then benefit from a safe, flexible, and optically appealing cable protection system.

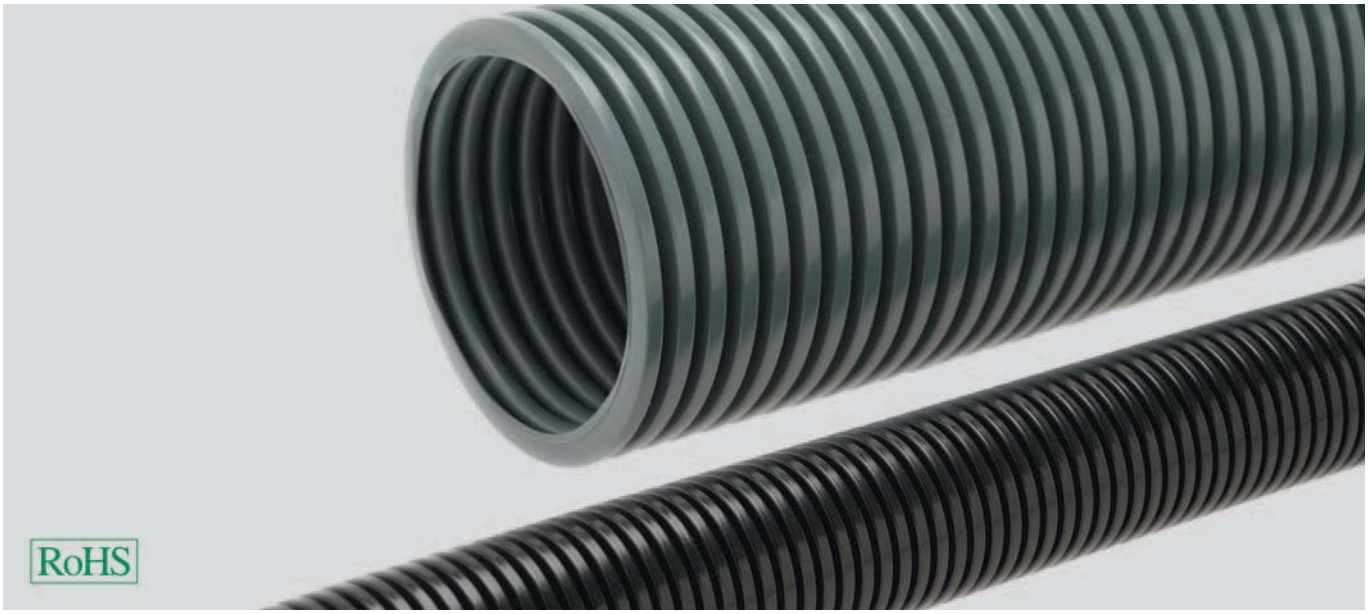
Another advantage of the **JUMBO** Systems is that **additional cables can be added and damaged cables can be replaced quite easily** and without any problems.

You just need customary tools to disengage the notch opposite the film flange. The tube is still held. The tubing is dismantled from the joint by pulling the safety fish at the lever extension of the safety notch.

Easy mounting with pre-locking mechanism

JUMBO PA6 oversize corrugated tubes, polyamide

for heavy-duty mechanical applications



JUMBO PA6

Cable protection tube for medium to heavy-duty applications.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Mod. Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
JUMBO gland
Bending behaviour: very good

Technical data

Temperature range: -40°C up to +140°C
Temperature range temporary up to +160°C

Capacity/100mm: approx. 1200 N / 800 N

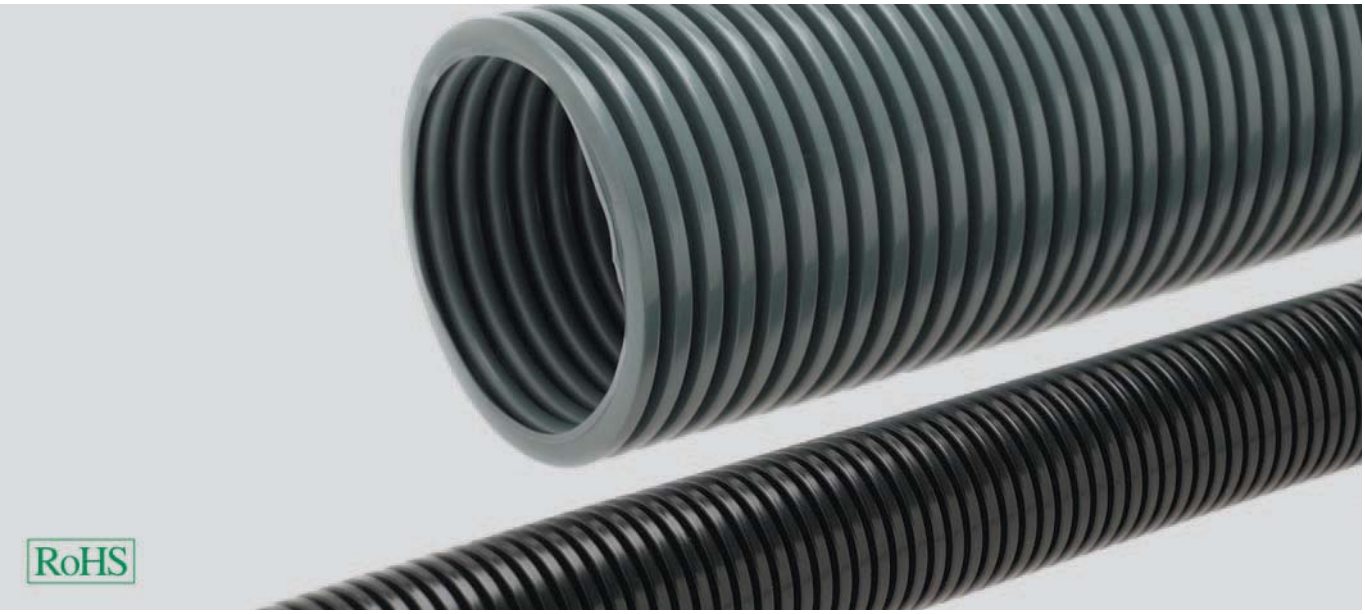
Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Bending radius mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
90408	91362	70	66,2	79,0	160,0	10	o. r.	o. r.	o. r.
90409	91363	95	88,5	105,2	200,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

JUMBO PA12 oversize corrugated tubes, polyamide PA12

for heavy-duty mechanical applications



JUMBO PA12

Cable protection tube for heavy-duty applications.

Application

- Robots
- Handling systems
- Vehicle construction
- Drag chains

Material

Mod. Polyamide 12

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
JUMBO gland
Bending behaviour: very good

Technical data

Temperature range: -50°C up to +120°C
Temperature range temporary up to +150°C

Capacity/100mm: approx. 700 N / 800 N

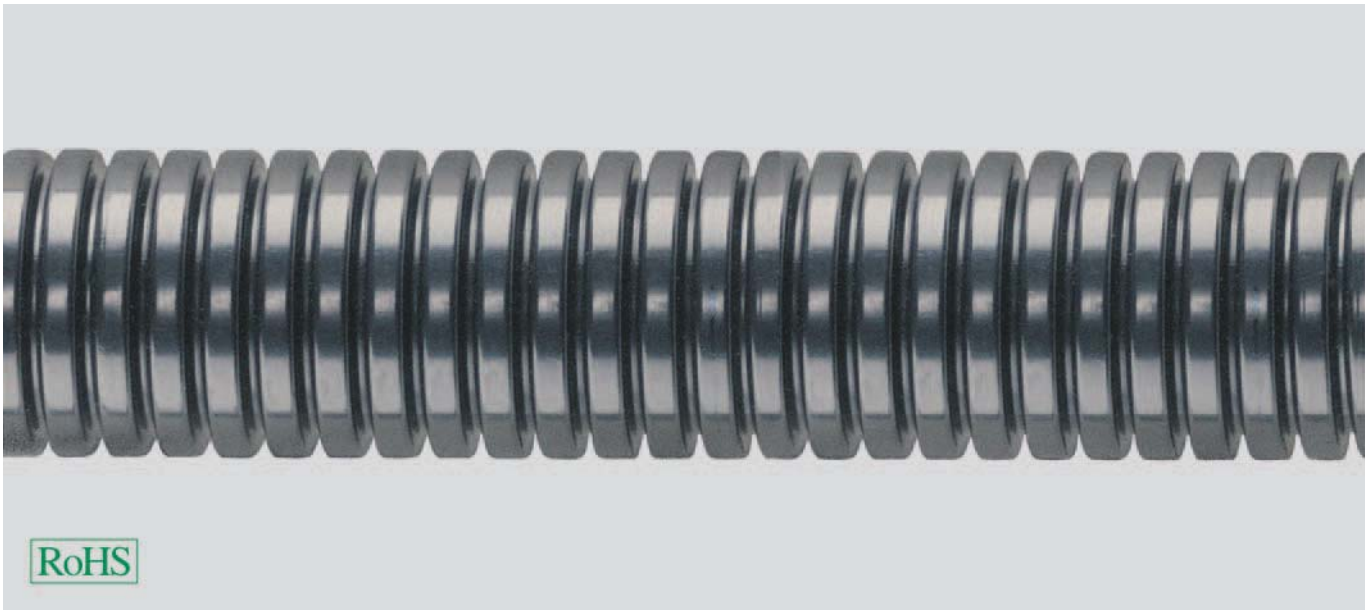
Part no. grey	Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Bending radius mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920378	920380	70	66,6	80,0	200,0	10	o. r.	o. r.	o. r.
920379	920381	95	91,0	106,0	265,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

JUMBO PUR oversize corrugated tubes, polyurethane

for maximum mechanical applications



JUMBO PUR

Cable protection tube for maximum duty robot applications.

- Lowest reset quality
- High abrasion resistance

Application

- Robots
- Handling systems
- Vehicle construction
- Drag chains

Material

Mod. Polyurethane PUR

Flammability acc. to UL 94: HB

- halogen-free
- cadmium-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
JUMBO gland
Bending behaviour: very good

Technical data

Temperature range: -40°C up to +125°C
Temperature range temporary up to +140°C

Capacity/100mm: approx. 500 N / 800 N

Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Bending radius mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
920382	70	66,5	79,9	160,0	10	o. r.	o. r.	o. r.
920383	95	91,0	105,9	210,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

JUMBO-FP flange connection

JUMBO-FP
One-piece straight flange connection.
Suitable for parallel-coiled JUMBO protection tubes.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties
resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note
Additional seal increases protection classification to IP 65
JUMBO sealing set:
Set contains 1 x O-ring and 1x cellular rubber seal

Technical data
Protection class: IP 54

Temperature range: -40°C up to +115°C

flange connection

Part no. grey	Part no. black	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90402	920368	70,0	1	o. r.	o. r.	o. r.
90403	920369	95,0	1	o. r.	o. r.	o. r.

seal inserts

Part no.	Colour	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90406	black	70,0	1	o. r.	o. r.	o. r.
90407	black	95,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

JUMBO-WFP flange connection angled 90°

RoHS

JUMBO-WFP
One-piece flange connection, 90° angle.
Suitable for parallel-coiled HELUcond Jumbo protection tubes.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA 6

Flammability acc. to UL 94: V0

- halogen-free
- cadmium-free

Properties
resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note
Additional seal increases protection classification to IP 65.
JUMBO sealing set:
Set contains 1 x O-ring and 1 x cellular rubber seal.

Technical data
Protection class: IP 54

Temperature range: -40°C up to +115°C

flange connection - angle 90°

Part no. grey	Part no. black	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90404	920372	70,0	1	o. r.	o. r.	o. r.
90405	920373	95,0	1	o. r.	o. r.	o. r.

sealing set

Part no.	Colour	Suitable for ND	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90406	black	70,0	1	o. r.	o. r.	o. r.
90407	black	95,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Split protection tubes

Split protection tubes are very well suited for subsequent protection.

Cables and wires are often already wired with their connectors. If protection then becomes necessary later, HELUcond CO-PA and HELUcond CO-PP are the right solution.

The wires are cleanly inserted into the inner protection tube using the KE cable puller. The second protection tube closes and finally protects.
The split COV connector with the split lock nut secures the case connection. COS tube holders and the USH flanged tube holder are used for fastening the protection tube.

HELUcond CO-PA corrugated tubes, polyamide

dividable

HELUcond CO-PA

The dividable and reclosable cable protection tube for subsequent mechanical protection of the cables.

- Trouble-free retrofitting
- High mechanical strength
- Simple installation of pre-fabricated lines
- Repair of existing systems

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide 6
UV-resistant

Flammability acc. to UL 94: V2

- halogen-free

Properties

Resistant to a multitude of:

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
COV

Technical data

Temperature range: -40°C up to +120°C
Temperature range temporary up to +150°C

Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
90061	10,0	8,8	13,5	50	o. r.	o. r.	o. r.
90062	14,0	13,2	18,7	50	o. r.	o. r.	o. r.
90063	20,0	20,2	25,7	50	o. r.	o. r.	o. r.
90064	23,0	23,9	31,3	50	o. r.	o. r.	o. r.
90065	37,0	32,5	43,2	25	o. r.	o. r.	o. r.
90066	45,0	43,1	54,2	25	o. r.	o. r.	o. r.
920179	70,0	67,0	79,8	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUcond CO-PP corrugated tubes, polypropylene

dividable

HELUcond CO-PP

The dividable and reclosable cable protection tube for subsequent mechanical protection of the cables.

- Trouble-free retrofitting
- High mechanical strength
- Simple installation of pre-fabricated lines
- Repair of existing systems

Application

- Plant and machine construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polypropylene

Flammability acc. to UL 94: HB

- halogen-free

Properties

resistant to a multitude of

- fuels
- mineral oils
- greases
- weak bases
- weak acids

Note

Suitable connection glands:
COV

Technical data

Temperature range: -40°C up to +135°C
Temperature range temporary up to +150°C

Part no. black	trade size mm	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97496	10,0	8,4	13,4	50	o. r.	o. r.	o. r.
97134	14,0	12,5	18,5	50	o. r.	o. r.	o. r.
97135	20,0	19,2	25,3	50	o. r.	o. r.	o. r.
97205	23,0	23,4	30,8	50	o. r.	o. r.	o. r.
96732	37,0	31,0	41,4	25	o. r.	o. r.	o. r.
90054	45,0	42,7	54,0	25	o. r.	o. r.	o. r.
920180	70,0	67,5	79,8	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

COV corrugated tubes-conduit gland
dividable

COV tube gland
Tube gland for HELUcond CO protection tubes.

Axial fold-up and reclosable connection gland with shaped locking rods. Split nut with safety lock to prevent accidental opening.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide PA 6

Flammability acc. to UL 94: HB

- halogen-free

Properties
Resistant to a multitude of
- fuels
- mineral oils
- greases
- weak bases
- weak acids

Technical data
Protection class: IP 43 ohne Dichtung

Temperature range: -40°C up to +125°C
Temperature range temporary up to +150°C

metric thread - dividable conduit gland

Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905031	M16 x 1,5	10,0	11,0	19,0	100	o. r.	o. r.	o. r.
905032	M20 x 1,5	14,0	11,0	27,0	100	o. r.	o. r.	o. r.
905033	M25 x 1,5	20,0	12,0	30,0	50	o. r.	o. r.	o. r.
905034	M32 x 1,5	23,0	15,0	36,0	50	o. r.	o. r.	o. r.
905035	M40 x 1,5	37,0	19,0	46,0	25	o. r.	o. r.	o. r.
905036	M50 x 1,5	45,0	19,0	55,0	25	o. r.	o. r.	o. r.

metric thread - dividable counternut

Part no. black	Size Metric	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905037	M16 x 1,5	10,0	8,0	19,0	100	o. r.	o. r.	o. r.
905038	M20 x 1,5	14,0	8,0	27,0	100	o. r.	o. r.	o. r.
905039	M25 x 1,5	20,0	9,0	30,0	50	o. r.	o. r.	o. r.
905040	M32 x 1,5	23,0	12,0	36,0	50	o. r.	o. r.	o. r.
905041	M40 x 1,5	37,0	15,0	46,0	25	o. r.	o. r.	o. r.
905042	M50 x 1,5	45,0	15,0	55,0	25	o. r.	o. r.	o. r.

PG thread - dividable conduit gland wit counternut

Part no. black	Size PG	Suitable for ND	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93514	9	10,0	12,0	22,0	100	o. r.	o. r.	o. r.
93515	13,5	14,0	17,0	30,0	100	o. r.	o. r.	o. r.
93516	21	20,0	17,0	36,0	50	o. r.	o. r.	o. r.
93517	29	23,0	21,0	46,0	50	o. r.	o. r.	o. r.
93518	29	37,0	22,0	55,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

COS corrugated tubes holder

for dividable corugated tubes

Tubing clamp COS

Tube holder for dividible HELUcond CO protection tube

- Quick fastening with integrated rib, which also fixes the protection tube in an axial direction

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Polyamide PA 6

Flammability acc. to UL 94

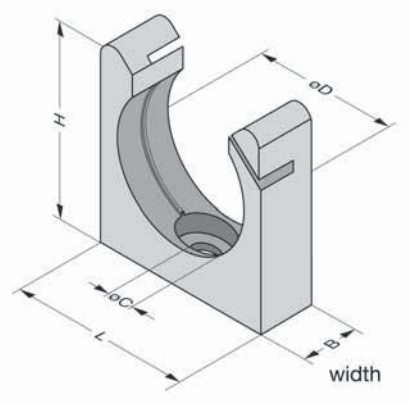
- halogen-free
- cadmium-free

Properties

- Resistant to a multitude of fuels, mineral oils, greases, weak bases, weak acids

Technical data

Temperature range: -40°C up to +120°C
Temperature range temporary up to +140°C

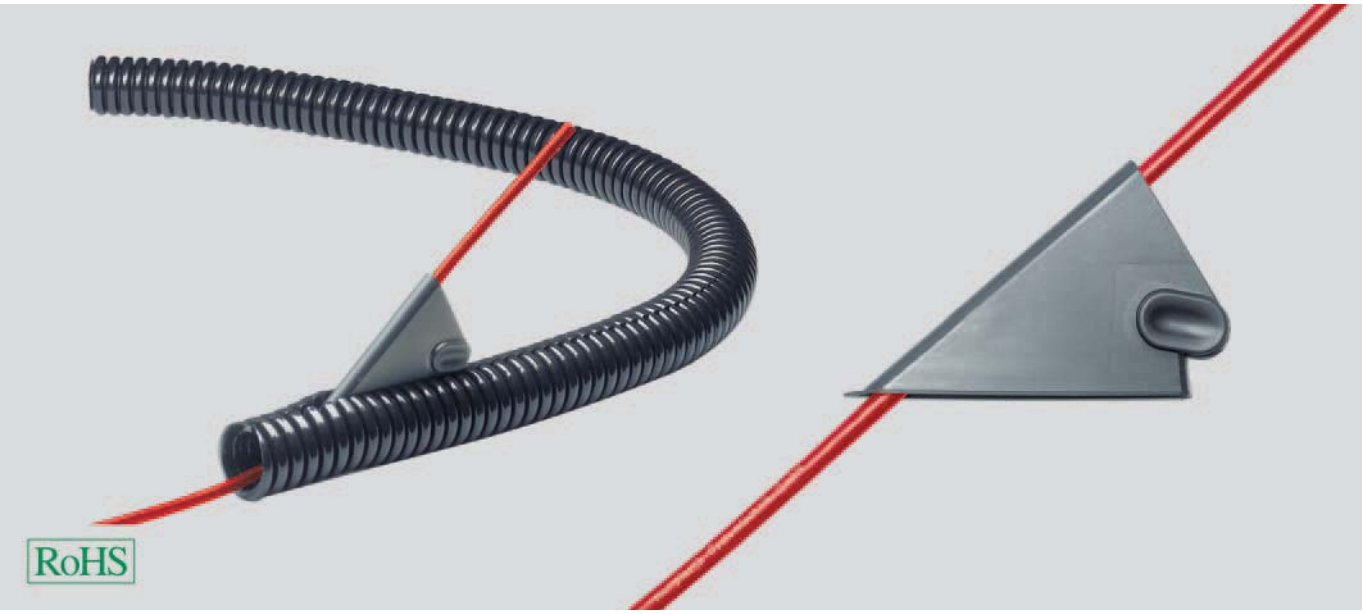


Part no. black	Suitable for tube ND mm	Width mm	Height mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
920375	10,0	20,0	23,0	100	o. r.	o. r.	o. r.
920357	14,0	20,0	27,0	100	o. r.	o. r.	o. r.
920358	20,0	20,0	40,0	50	o. r.	o. r.	o. r.
920359	23,0	20,0	45,0	50	o. r.	o. r.	o. r.
920360	37,0	20,0	52,0	20	o. r.	o. r.	o. r.
920361	45,0	20,0	66,0	20	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KE insertion aid



KE insertion aid

Quick and simple insertion of lines into
splitted conduits, resp. cable chain openings

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
901006	KE	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Highly flexible cable protection tubes

High flexible protection tubes

Cable protection tubes

Plastic with spiral spring
- Steel spring with PVC sheath
  - **S** ... 244
- Steel spring with PUR sheath
  - **S-PU** ... 245
- Plastic spring with PVC sheath
  - **K** ... 246

Metal, spiral wound
- with agraff profile
  - **M** ... 247
- with latched profile
  - **SPR-AS** ... 248
- with plastic sheath
  - **SPR-PVC-AS** ... 249
  - **SPR-PU-AS** ... 250
- with steel wire braiding
  - **SPR-EDU-AS** ... 251
- stainless steel with agraff profile
  - **UI** ... 252

Assignment flexible protection tube / conduit gland ... 253

Tube connectors

for plastic cable protection tubes
- with high protection class
  - **USK** ... 257
- for flexible installation
  - **LK-I** ... 259

for metal and plastic cable protection tubes
- with high protection class
  - **US** ... 261
- with retaining ring
  - **LI** ... 263
- for stainless steel protection tubes
  - **LT-E-UI** straight ... 265
  - **LT-E-UI** elbow 90° ... 266

Accessories / Parts

Interior sockets
- made by PVC
  - **EEK** ... 267
- made by brass
  - **EEM** ... 268

S spiral spring by steel with outer sheath by PVC

Type S
Cable protection tube type S with integrated spring steel wire, extremely flexible, expandable and compressible.

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
PVC

- silicone-free
- cadmium-free

Note
Suitable connection glands:
USK, LK-I, US and LI

Technical data
Temperature range: -25°C up to +80°C
Temperature range temporary up to +100°C

Part no. grey	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91219	7,0	10,0	50	o. r.	o. r.	o. r.
91220	10,0	14,0	50	o. r.	o. r.	o. r.
91221	13,0	17,0	50	o. r.	o. r.	o. r.
91222	15,0	19,0	50	o. r.	o. r.	o. r.
91223	16,0	21,0	50	o. r.	o. r.	o. r.
91224	22,0	27,0	50	o. r.	o. r.	o. r.
91225	29,0	36,0	25	o. r.	o. r.	o. r.
91226	38,0	45,0	25	o. r.	o. r.	o. r.
91228	48,0	56,0	25	o. r.	o. r.	o. r.

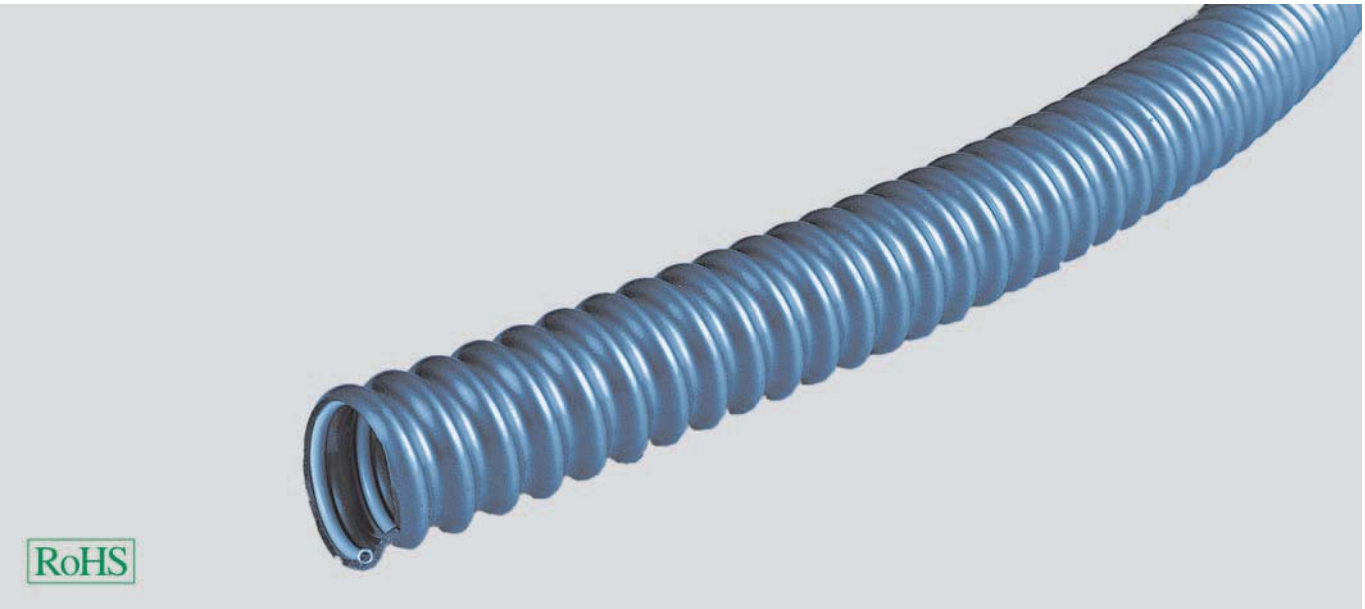
small package

Part no. grey	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91270	7,0	10,0	10	o. r.	o. r.	o. r.
91271	10,0	14,0	10	o. r.	o. r.	o. r.
91272	13,0	17,0	10	o. r.	o. r.	o. r.
91273	15,0	19,0	10	o. r.	o. r.	o. r.
91274	16,0	21,0	10	o. r.	o. r.	o. r.
91275	22,0	27,0	10	o. r.	o. r.	o. r.
91276	29,0	36,0	10	o. r.	o. r.	o. r.
91277	38,0	45,0	10	o. r.	o. r.	o. r.
91279	48,0	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

S-PU spiral spring by steel with outer sheath by PUR



Type S-PU
Cable protection tube type S-PU with PUR outer sheath and integrated spring steel wire, extremely flexible, expandable and compressible.

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
Polyurethane
UV-resistant

- halogen-free
- silicone-free
- cadmium-free

Properties
Resistant to
- Oil
- Gasoline
- Microbial attack
- UV-radiation
- Weathering
- Extensively to acids and alkalis

Technical data
Temperature range: -40°C up to +80°C

Part no. blue	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
90464	7,0	10,0	50	o. r.	o. r.	o. r.
90465	10,0	14,0	50	o. r.	o. r.	o. r.
90466	13,0	17,0	50	o. r.	o. r.	o. r.
90467	15,0	19,0	50	o. r.	o. r.	o. r.
90468	16,0	21,0	50	o. r.	o. r.	o. r.
90469	21,0	27,0	50	o. r.	o. r.	o. r.
90470	29,0	36,0	25	o. r.	o. r.	o. r.
90471	38,0	45,0	25	o. r.	o. r.	o. r.
90473	48,0	56,0	25	o. r.	o. r.	o. r.

small pack

Part no. blue	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94870	7,0	10,0	10	o. r.	o. r.	o. r.
94871	10,0	14,0	10	o. r.	o. r.	o. r.
94872	13,0	17,0	10	o. r.	o. r.	o. r.
94873	15,0	19,0	10	o. r.	o. r.	o. r.
94874	16,0	21,0	10	o. r.	o. r.	o. r.
94875	22,0	27,0	10	o. r.	o. r.	o. r.
94876	29,0	36,0	10	o. r.	o. r.	o. r.
94877	38,0	45,0	10	o. r.	o. r.	o. r.
94879	48,0	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K plastic spring with PVC sheath

Type K
Type K cable protection tube with integrated hard plastic winding.

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
PVC

- silicone-free
- cadmium-free

Note
Suitable conection glands:
USK, LK-I, US and LI

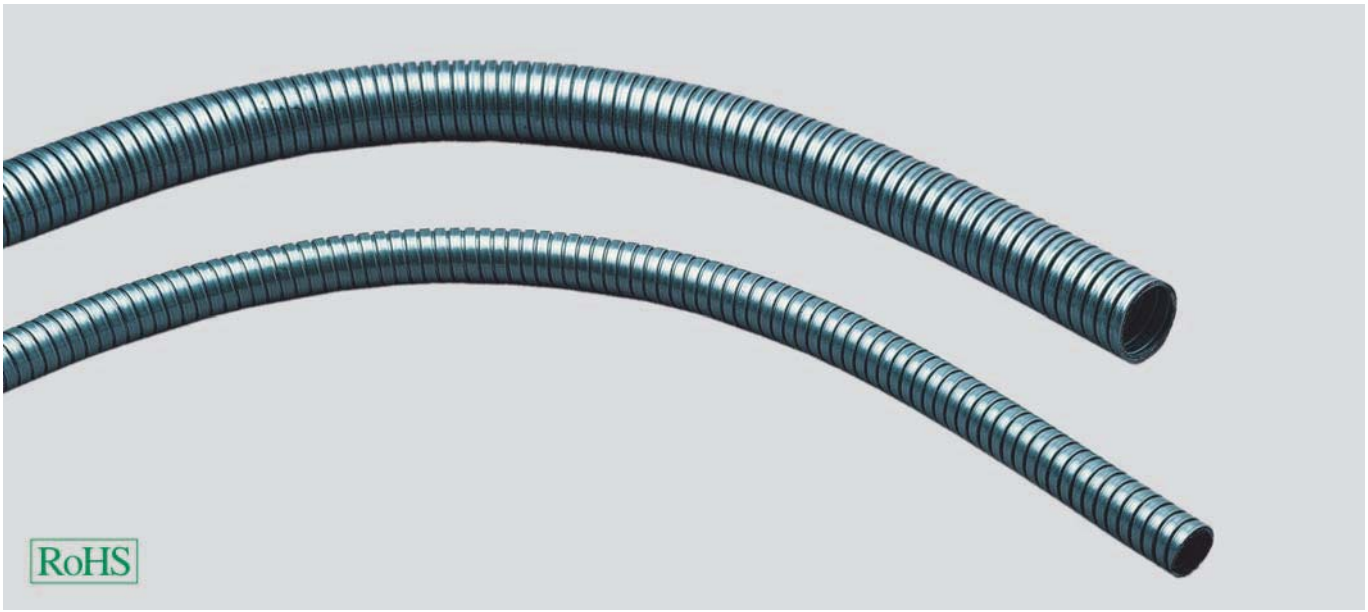
Technical data
Temperature range: -20°C up to +70°C
Temperature range temporary up to +80°C

Part no. grey	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91209	10,0	14,0	50	o. r.	o. r.	o. r.
91210	13,0	17,0	50	o. r.	o. r.	o. r.
91211	15,0	19,0	50	o. r.	o. r.	o. r.
91212	16,0	21,0	50	o. r.	o. r.	o. r.
91213	22,0	27,0	50	o. r.	o. r.	o. r.
91214	30,0	36,0	25	o. r.	o. r.	o. r.
91215	38,0	45,0	25	o. r.	o. r.	o. r.
91216	45,0	52,0	25	o. r.	o. r.	o. r.
91217	49,0	56,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

M metal cable tubes
fully inter-locked



Type M
Spiral wound metallic tube with double-folded profile (Agraff profile). High tensile and torsional strength.

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Material
Cold strip DC 03 acc. to EN10139, galvanised, Fe/Zn 3 or rustproof steel

Note
Suitable connection glands:
US, LI

Technical data
Temperature range: up to +220°C

Part no.	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97014	8,0	10,0	50	o. r.	o. r.	o. r.
97015	12,0	14,0	50	o. r.	o. r.	o. r.
97016	14,0	17,0	50	o. r.	o. r.	o. r.
97017	16,0	19,0	50	o. r.	o. r.	o. r.
97018	18,0	21,0	50	o. r.	o. r.	o. r.
97019	24,0	27,0	50	o. r.	o. r.	o. r.
97020	31,0	36,0	25	o. r.	o. r.	o. r.
97021	40,0	45,0	25	o. r.	o. r.	o. r.
97022	51,0	56,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPR-AS metal cable tubes

with latched profile

Type SPR-AS

Spiral wound metal sleeve with hooked profile.
High tensile and transverse pressure load rating.

Application

- Plant- and machine construction
- Automation and installation technology
- control cabinet construction

Material

Galvanised steel

Note

Suitable connection glands:
US, LI

Technical data

Temperature range: up to +220°C

Part no.	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97023	8,0	10,0	50	o. r.	o. r.	o. r.
97024	11,0	14,0	50	o. r.	o. r.	o. r.
97025	14,0	17,0	50	o. r.	o. r.	o. r.
97026	16,0	19,0	50	o. r.	o. r.	o. r.
97027	18,0	21,0	50	o. r.	o. r.	o. r.
97028	23,0	27,0	50	o. r.	o. r.	o. r.
97029	31,0	36,0	25	o. r.	o. r.	o. r.
97030	40,0	45,0	25	o. r.	o. r.	o. r.
97031	51,0	56,0	25	o. r.	o. r.	o. r.

small package

Part no.	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94880	8,0	10,0	10	o. r.	o. r.	o. r.
94881	11,0	14,0	10	o. r.	o. r.	o. r.
94882	14,0	17,0	10	o. r.	o. r.	o. r.
94883	16,0	19,0	10	o. r.	o. r.	o. r.
94884	18,0	21,0	10	o. r.	o. r.	o. r.
94885	23,0	27,0	10	o. r.	o. r.	o. r.
94886	31,0	36,0	10	o. r.	o. r.	o. r.
94887	40,0	45,0	10	o. r.	o. r.	o. r.
94888	51,0	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPR-PVC-AS metal cable tubes with plastic sheath

with latches profile

Type SPR-PVC-AS

Spiral wound metallic tube with latched profile and PVC sheath.
Weather-resistant, high tensile and transverse pressure load rating.

Material

Cold strip DC 03 acc. to EN 10139, galvanised, Fe/Zn 3

Outer sheath material: PVC

Technical data

Temperature range: -25°C up to +80°C
Temperature range temporary up to +100°C

Application

- Plant and machine construction
- Automation technology
- Control cabinet construction

Note

Suitable connection glands:
US, LI

Part no. grey	Part no. black	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97032	97702	7,0	10,0	50	o. r.	o. r.	o. r.
97033	97685	10,0	14,0	50	o. r.	o. r.	o. r.
97034	97703	13,0	17,0	50	o. r.	o. r.	o. r.
97035	97704	15,0	19,0	50	o. r.	o. r.	o. r.
97036	97705	17,0	21,0	50	o. r.	o. r.	o. r.
97037	97706	22,0	27,0	50	o. r.	o. r.	o. r.
97038	97707	29,0	36,0	25	o. r.	o. r.	o. r.
97039	97708	38,0	45,0	25	o. r.	o. r.	o. r.
97040	97709	49,0	56,0	25	o. r.	o. r.	o. r.

small package

Part no. grey	Part no. black	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94890	94934	7,0	10,0	10	o. r.	o. r.	o. r.
94891	94935	10,0	14,0	10	o. r.	o. r.	o. r.
94892	94936	13,0	17,0	10	o. r.	o. r.	o. r.
94893	94937	15,0	19,0	10	o. r.	o. r.	o. r.
94894	94938	17,0	21,0	10	o. r.	o. r.	o. r.
94895	94939	22,0	27,0	10	o. r.	o. r.	o. r.
94896	94940	29,0	36,0	10	o. r.	o. r.	o. r.
94897	94941	38,0	45,0	10	o. r.	o. r.	o. r.
94898	94942	49,0	56,0	10	o. r.	o. r.	o. r.

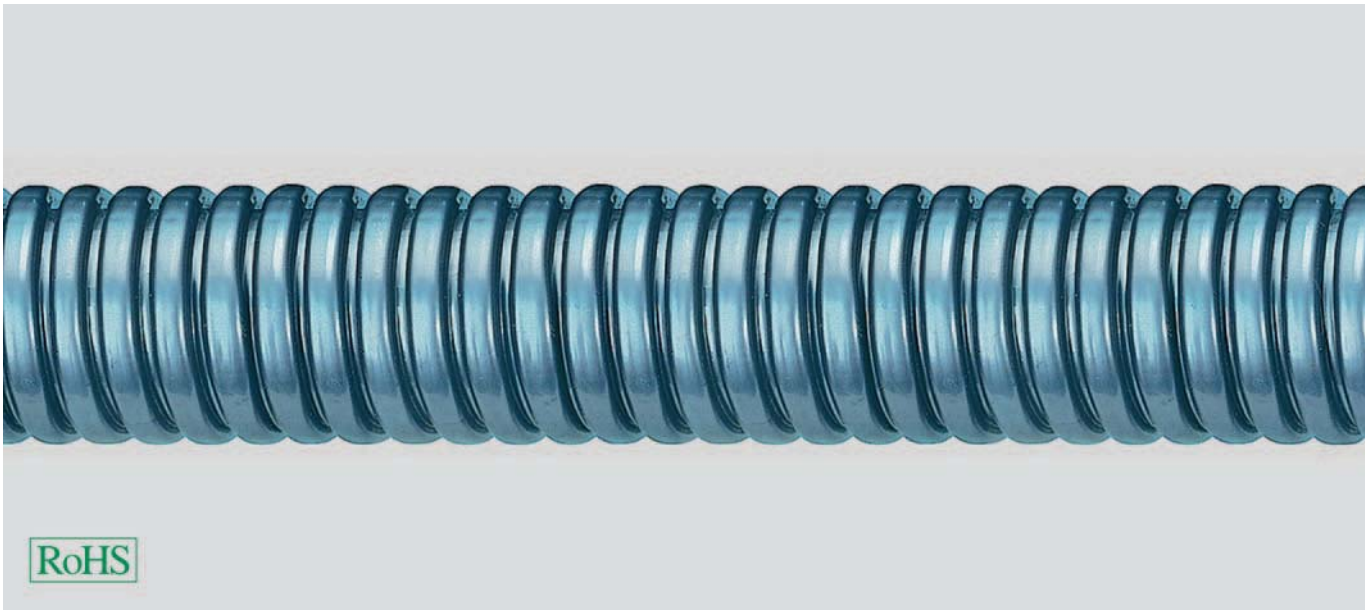
Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPR-PU-AS metal cable tube with PUR sheath

with latched profile

new



Type SPR-PU-AS

Spiral wound metallic tube with latched profile and steel wire braiding.
High tensile and transverse pressure load rating.

Material

Cold strip DC 03 acc. to EN 10139, galvanised, Fe/Zn 3

Outer sheath material: Polyurethane

Technical data

Temperature range: -40°C up to +80°C

Application

- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Note

Suitable connection glands:
US, LI

blue

Part no. blue	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97793	7,0	10,0	50	o. r.	o. r.	o. r.
97794	10,0	14,0	50	o. r.	o. r.	o. r.
91131	13,0	17,0	50	o. r.	o. r.	o. r.
905912	15,0	19,0	50	o. r.	o. r.	o. r.
94738	17,0	21,0	50	o. r.	o. r.	o. r.
97941	22,0	27,0	50	o. r.	o. r.	o. r.
94739	29,0	36,0	25	o. r.	o. r.	o. r.
94714	38,0	45,0	25	o. r.	o. r.	o. r.
90399	49,0	56,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPR-EDU-AS metal cable tubes with steel wire braiding

with latched profile

Type SPR-EDU-AS

Spiral wound metallic tube with latched profile and steel wire braiding.
High tensile and transverse pressure load rating.

Material

Cold strip DC 03 acc. to EN10139, galvanised, Fe/Zn 3 or rustproof steel

With steel wire braiding

Technical data

Temperature range: up to +220°C

Application

- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Note

Suitable connection glands:
US, LI

Part no.	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97584	7,0	10,0	50	o. r.	o. r.	o. r.
97585	10,0	14,0	50	o. r.	o. r.	o. r.
97586	13,0	17,0	50	o. r.	o. r.	o. r.
97510	15,0	19,0	50	o. r.	o. r.	o. r.
97377	17,0	21,0	50	o. r.	o. r.	o. r.
97378	22,0	27,0	50	o. r.	o. r.	o. r.
97379	29,0	36,0	25	o. r.	o. r.	o. r.
96784	38,0	45,0	25	o. r.	o. r.	o. r.
97587	49,0	56,0	25	o. r.	o. r.	o. r.

small package

Part no.	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94920	7,0	10,0	10	o. r.	o. r.	o. r.
94921	10,0	14,0	10	o. r.	o. r.	o. r.
94922	13,0	17,0	10	o. r.	o. r.	o. r.
94923	15,0	19,0	10	o. r.	o. r.	o. r.
94924	17,0	21,0	10	o. r.	o. r.	o. r.
94925	22,0	27,0	10	o. r.	o. r.	o. r.
94926	29,0	36,0	10	o. r.	o. r.	o. r.
94927	38,0	45,0	10	o. r.	o. r.	o. r.
94928	49,0	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

UI metal cable tube, stainless steel
with agraff-profil

ME01

new

Type UI
Spiral wound tube made by stainless steel with double-folded profile (Agraff profile). High tensile and torsional strength.

Application
- Robot construction
- Steel and aluminium foundry industry
- Maschine and apparatus building
- Off-shore-industry
- Security
- Metal, glass and ceramics industry

Material
Stainless steel

Note
Suitable connection glands:
LT-E-UI

Technical data
Temperature range: -100°C up to +600°C

Part no.	Trade size inch	Size PG	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
905804	5/16"	-	9,5	12,5	30	o. r.	o. r.	o. r.
905805	3/8"	-	13,0	16,0	30	o. r.	o. r.	o. r.
905806	1/2"	-	17,0	21,0	30	o. r.	o. r.	o. r.
905807	3/4"	-	22,0	26,0	30	o. r.	o. r.	o. r.
905808	1"	-	26,0	30,0	30	o. r.	o. r.	o. r.
905809	1 1/4"	-	34,0	39,0	30	o. r.	o. r.	o. r.
905810	1 1/2"	-	40,3	44,4	15	o. r.	o. r.	o. r.
905811	2"	-	51,6	55,7	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Selection table
Flexible protection tube/conduit gland

Flexible protection tube

Conduit gland

USK, plastic, high protection class

S	small package	S-PU	small package	K	tube outher-Ø mm	size metric		small package	size PG		small package
91219	91270	90464	94870		10	M10 x 1,0	97594	93460	7	90664	93450
91220	91271	90465	94871	91209	14	M12 x 1,5	97595	93461	9	90665	93451
91221	91272	90466	94872	91210	17	M16 x 1,5	97596	93462	11	90666	93452
91222	91273	90467	94873	91211	19				13,5	90667	93453
91223	91274	90468	94874	91212	21	M20 x 1,5	97597	93463	16	90668	93454
91224	91275	90469	94875	91213	27	M25 x 1,5	97598	93464	21	90669	93455
91225	91276	90470	94876	91214	36	M32 x 1,5	97599	93465	29	90670	93456
91226	91277	90471	94877	91215	45	M40 x 1,5	97600	93466	36	90671	93457
				91216	52						
91228	91279	90473	94879	91217	56	M50 x 1,5	97601	93467	48	90673	93458

LK-I, plastic

S	small package	S-PU	small package	K	tube outher-Ø mm	size metric		small package	size PG		small package
91219	91270	90464	94870		10	M10 x 1,0	97602	93480	7	90720	93470
91220	91271	90465	94871	91209	14	M12 x 1,5	97603	93481	9	90721	93471
91221	91272	90466	94872	91210	17	M16 x 1,5	97604	93482	11	90722	93472
91222	91273	90467	94873	91211	19				13,5	90723	93473
91223	91274	90468	94874	91212	21	M20 x 1,5	97605	93483	16	90724	93474
91224	91275	90469	94875	91213	27	M25 x 1,5	97606	93484	21	90725	93475
91225	91276	90470	94876	91214	36	M32 x 1,5	97607	93485	29	90726	93476
91226	91277	90471	94877	91215	45	M40 x 1,5	97608	93486	36	90727	93477
				91216	52						
91228	91279	90473	94879	91217	56	M50 x 1,5	97609	93487	48	90729	93478

US, brass, high protection class

S	small package	S-PU	small package	K	tube outher-Ø mm	size metric		small package	size PG		small package	suitable interior sockets EEK
91219	91270	90464	94870		10	M10 x 1,0	98331	93530	7	98322	93520	96342
91220	91271	90465	94871	91209	14	M12 x 1,5	98332	93531	9	98323	93521	96449
91221	91272	90466	94872	91210	17	M16 x 1,5	98333	93532	11	98324	93522	96343
91222	91273	90467	94873	91211	19				13,5	98325	93523	96450
91223	91274	90468	94874	91212	21	M20 x 1,5	98334	93533	16	98326	93524	96451
91224	91275	90469	94875	91213	27	M25 x 1,5	98335	93534	21	98327	93525	96344
91225	91276	90470	94876	91214	36	M32 x 1,5	98336	93535	29	98328	93526	96447
91226	91277	90471	94877	91215	45	M40 x 1,5	98337	93536	36	98329	93527	96345
				91216	52							
91228	91279	90473	94879	91217	56	M50 x 1,5	98338	93537	48	98330	93528	96347

LI, brass, with retaining ring

S	small package	S-PU	small package	K	tube outher-Ø mm	size metric		small package	size PG		small package
91219	91270	90464	94870		10	M10 x 1,0	97619	93610	7	90730	93600
91220	91271	90465	94871	91209	14	M12 x 1,5	97620	93611	9	90731	93601
91221	91272	90466	94872	91210	17	M16 x 1,5	97621	93612	11	90732	93602
91222	91273	90467	94873	91211	19				13,5	90733	93603
91223	91274	90468	94874	91212	21	M20 x 1,5	97622	93613	16	90734	93604
91224	91275	90469	94875	91213	27	M25 x 1,5	97623	93614	21	90735	93605
91225	91276	90470	94876	91214	36	M32 x 1,5	97624	93615	29	90736	93606
91226	91277	90471	94877	91215	45	M40 x 1,5	97625	93616	36	90737	93607
				91216	52						
91228	91279	90473	94879	91217	56	M50 x 1,5	97626	93617	48	90738	93608

Selection table
Flexible protection tube/conduit gland

Flexible protection tube

Conduit gland

US, brass, high protection class

M			tube outher-Ø mm	size metric		size PG		suitable interior sockets EEM
97014			10	M10 x 1,0	98233	7	98206	906006
97015			14	M12 x 1,5	98234	9	98207	906007
97016			17	M16 x 1,5	98235	11	98208	906008
97017			19			13,5	98209	906009
97018			21	M20 x 1,5	98236	16	98210	906010
97019			27	M25 x 1,5	98237	21	98211	906011
97020			36	M32 x 1,5	98238	29	98212	906012
97021			45	M40 x 1,5	98239	36	98213	906013
			52					
97022			56	M50 x 1,5	98240	48	98214	906014

LI, brass, with retaining ring

M			tube outher-Ø mm	size metric		small package	size PG		small package	
97014			10	M10 x 1,0	97619	93610	7	90730	93600	
97015			14	M12 x 1,5	97620	93611	9	90731	93601	
97016			17	M16 x 1,5	97621	93612	11	90732	93602	
97017			19				13,5	90733	93603	
97018			21	M20 x 1,5	97622	93613	16	90734	93604	
97019			27	M25 x 1,5	97623	93614	21	90735	93605	
97020			36	M32 x 1,5	97624	93615	29	90736	93606	
97021			45	M40 x 1,5	97625	93616	36	90737	93607	
			52							
97022			56	M50 x 1,5	97626	93617	48	90738	93608	

US, brass, high protection class

SPR-AS	small package			tube outher-Ø mm	size metric		small package	size PG		small package	suitable interior sockets EEM
97023	94880			10	M10 x 1,0	98241	93570	7	98215	93560	99510
97024	94881			14	M12 x 1,5	98242	93571	9	98216	93561	99511
97025	94882			17	M16 x 1,5	98243	93572	11	98217	93562	99512
97026	94883			19				13,5	98218	93563	99513
97027	94884			21	M20 x 1,5	98244	93573	16	98219	93564	99514
97028	94885			27	M25 x 1,5	98245	93574	21	98220	93565	99515
97029	94886			36	M32 x 1,5	98246	93575	29	98221	93566	99516
97030	94887			45	M40 x 1,5	98247	93576	36	98222	93567	99517
				52							
97031	94888			56	M50 x 1,5	98248	93577	48	98223	93568	99518

LI, brass, with retaining ring

SPR-AS	small package			tube outher-Ø mm	size metric		small package	size PG		small package	
97023	94880			10	M10 x 1,0	97619	93610	7	90730	93600	
97024	94881			14	M12 x 1,5	97620	93611	9	90731	93601	
97025	94882			17	M16 x 1,5	97621	93612	11	90732	93602	
97026	94883			19				13,5	90733	93603	
97027	94884			21	M20 x 1,5	97622	93613	16	90734	93604	
97028	94885			27	M25 x 1,5	97623	93614	21	90735	93605	
97029	94886			36	M32 x 1,5	97624	93615	29	90736	93606	
97030	94887			45	M40 x 1,5	97625	93616	36	90737	93607	
				52							
97031	94888			56	M50 x 1,5	97626	93617	48	90738	93608	

Selection table
Flexible protection tube/conduit gland

Flexible protection tube

Conduit gland

US, brass, high protection class

SPR-PVC-AS		small package		S-PU-AS	tube outher-Ø mm	size metric		small package	size PG		small package	suitable interior sockets EEK
grey	black	grey	black									
97032	97702	94890	94934	97793	10	M10 x 1,0	98249	93590	7	98224	93580	97580
97033	97685	94935	94891	97794	14	M12 x 1,5	98250	93591	9	98225	93581	97680
97034	97703	94892	94936	91131	17	M16 x 1,5	98251	93592	11	98226	93582	97691
97035	97704	94893	94937		19				13,5	98227	93583	97692
97036	97705	94938	94894	94738	21	M20 x 1,5	98252	93593	16	98228	93584	97693
97037	97706	94895	94939	97941	27	M25 x 1,5	98253	93594	21	98229	93585	97681
97038	97707	94896	94940	94714	36	M32 x 1,5	98254	93595	29	98230	93586	97682
97039	97708	94941	94897	90399	45	M40 x 1,5	98255	93596	36	98231	93587	97694
					52							
97040	97709	94898	94942	94739	56	M50 x 1,5	98256	93597	48	98232	93588	97684

LI, brass, with retaining ring

SPR-PVC-AS		small package		S-PU-AS	tube outher-Ø mm	size metric		small package	size PG		small package	
grey	black	grey	black									
97032	97702	94890	94934	97793	10	M10 x 1,0	97619	93610	7	90730	93600	
97033	97685	94935	94891	97794	14	M12 x 1,5	97620	93611	9	90731	93601	
97034	97703	94892	94936	91131	17	M16 x 1,5	97621	93612	11	90732	93602	
97035	97704	94893	94937		19				13,5	90733	93603	
97036	97705	94938	94894	94738	21	M20 x 1,5	97622	93613	16	90734	93604	
97037	97706	94895	94939	97941	27	M25 x 1,5	97623	93614	21	90735	93605	
97038	97707	94896	94940	94714	36	M32 x 1,5	97624	93615	29	90736	93606	
97039	97708	94941	94897	90399	45	M40 x 1,5	97625	93616	36	90737	93607	
					52							
97040	97709	94898	94942	94739	56	M50 x 1,5	97626	93617	48	90738	93608	

US, brass, high protection class

SPR-EDU-AS	small package		tube outher-Ø mm	size metric		size PG		suitable interior sockets EEK
97584	94920		10	M10 x 1,0	905989	7	905997	97580
97585	94921		14	M12 x 1,5	905990	9	905998	97680
97586	94922		17	M16 x 1,5	905991	11	905999	97691
97510	94923		19			13,5	906000	97692
97377	94924		21	M20 x 1,5	905992	16	906001	97693
97378	94925		27	M25 x 1,5	905993	21	906002	97681
97379	94926		36	M32 x 1,5	905994	29	906003	97682
96784	94927		45	M40 x 1,5	905995	36	906004	97694
			52					
97587	94928		56	M50 x 1,5	905996	48	906005	97684

LI, brass, with retaining ring

SPR-EDU-AS	small package		tube outher-Ø mm	size metric		small package	size PG		small package	
97584	94920		10	M10 x 1,0	97619	93610	7	90730	93600	
97585	94921		14	M12 x 1,5	97620	93611	9	90731	93601	
97586	94922		17	M16 x 1,5	97621	93612	11	90732	93602	
97510	94923		19				13,5	90733	93603	
97377	94924		21	M20 x 1,5	97622	93613	16	90734	93604	
97378	94925		27	M25 x 1,5	97623	93614	21	90735	93605	
97379	94926		36	M32 x 1,5	97624	93615	29	90736	93606	
96784	94927		45	M40 x 1,5	97625	93616	36	90737	93607	
			52							
97587	94928		56	M50 x 1,5	97626	93617	48	90738	93608	

Selection table
Flexible protection tube/conduit gland

Flexible protection tube

Conduit gland

LT-E-UI straight, stainless steel

UI	tube outher-Ø mm	size metric				size PG		size NPT	
905804	12,5	M16 x 1,5	905812	M20 x 1,5	905814	11	905820	1/2"	905826
905805	16	M16 x 1,5	905813	M20 x 1,5	905815	11	905821	1/2"	905827
905806	21	M20 x 1,5	905816			16	905822	1/2"	905828
905807	26	M25 x 1,5	905817			21	905823	3/4"	905829
905808	30	M32 x 1,5	905818			29	905824	1"	905830
905809	39	M40 x 1,5	905819			36	905825	1 1/4"	905831
905810	44,4								
905811	55,7								

LT-E-UI angled 90°, stainless steel

UI	tube outher-Ø mm	size metric				size PG		size NPT	
905804	12,5	M16 x 1,5	905832	M20 x 1,5	905834	11	905838	1/2"	905843
905805	16	M16 x 1,5	905833	M20 x 1,5	905835	11	905839	1/2"	905844
905806	21	M20 x 1,5	905836			16	905840	1/2"	905845
905807	26	M25 x 1,5	905837			21	905841	3/4"	905846
905808	30					29	905842	1"	905847
905809	39								
905810	44,4								
905811	55,7								

USK tube connectors, plastic
with high degree of protection

USK
Tube gland for type S, S-PU and K protection tubes.

Material
polypropylene

Technical data
Protection class: IP 65

Temperature range: -10°C up to +110°C

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

metric thread

Part no. grey	Size Metric	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97594	M10 x 1,0	10,0	10,0	50	o. r.	o. r.	o. r.
97595	M12 x 1,5	14,0	12,0	50	o. r.	o. r.	o. r.
97596	M16 x 1,5	17,0	12,0	50	o. r.	o. r.	o. r.
97597	M20 x 1,5	21,0	13,0	50	o. r.	o. r.	o. r.
97598	M25 x 1,5	27,0	13,0	25	o. r.	o. r.	o. r.
97599	M32 x 1,5	36,0	15,0	25	o. r.	o. r.	o. r.
97600	M40 x 1,5	45,0	15,0	25	o. r.	o. r.	o. r.
97601	M50 x 1,5	56,0	16,0	10	o. r.	o. r.	o. r.

metric thread - small package

Part no. grey	Size Metric	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93460	M10 x 1,0	10,0	10,0	10	o. r.	o. r.	o. r.
93461	M12 x 1,5	14,0	12,0	10	o. r.	o. r.	o. r.
93462	M16 x 1,5	17,0	12,0	10	o. r.	o. r.	o. r.
93463	M20 x 1,5	21,0	13,0	10	o. r.	o. r.	o. r.
93464	M25 x 1,5	27,0	13,0	10	o. r.	o. r.	o. r.
93465	M32 x 1,5	36,0	15,0	2	o. r.	o. r.	o. r.
93466	M40 x 1,5	45,0	15,0	2	o. r.	o. r.	o. r.
93467	M50 x 1,5	56,0	16,0	2	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

USK tube connectors, plastic

with high degree of protection

PG thread

Part no. grey	Size PG	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90664	7	10,0	10,0	50	o. r.	o. r.	o. r.
90665	9	14,0	10,0	50	o. r.	o. r.	o. r.
90666	11	17,0	10,0	50	o. r.	o. r.	o. r.
90667	13,5	19,0	10,0	50	o. r.	o. r.	o. r.
90668	16	21,0	11,0	50	o. r.	o. r.	o. r.
90669	21	27,0	11,0	25	o. r.	o. r.	o. r.
90670	29	36,0	12,0	25	o. r.	o. r.	o. r.
90671	36	45,0	12,0	25	o. r.	o. r.	o. r.
90673	48	56,0	15,0	10	o. r.	o. r.	o. r.

PG thread - small package

Part no. grey	Size PG	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93450	7	10,0	10,0	10	o. r.	o. r.	o. r.
93451	9	14,0	10,0	10	o. r.	o. r.	o. r.
93452	11	17,0	10,0	10	o. r.	o. r.	o. r.
93453	13,5	19,0	10,0	10	o. r.	o. r.	o. r.
93454	16	21,0	11,0	10	o. r.	o. r.	o. r.
93455	21	27,0	11,0	10	o. r.	o. r.	o. r.
93456	29	36,0	12,0	2	o. r.	o. r.	o. r.
93457	36	45,0	12,0	2	o. r.	o. r.	o. r.
93458	48	56,0	15,0	2	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LK-I tube connectors, plastic
for flexible use

LK-I
Tube gland for protection tubes type S, S-PU and K.

Material
polypropylene

Technical data
Protection class: IP 54

Temperature range: -10°C up to +110°C

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

metric thread

Part no. grey	Size Metric	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97602	M12 x 1,5	10,0	10,0	50	o. r.	o. r.	o. r.
97603	M16 x 1,5	14,0	10,0	50	o. r.	o. r.	o. r.
97604	M20 x 1,5	17,0	10,0	50	o. r.	o. r.	o. r.
97605	M25 x 1,5	21,0	11,0	50	o. r.	o. r.	o. r.
97606	M32 x 1,5	27,0	12,0	25	o. r.	o. r.	o. r.
97607	M40 x 1,5	36,0	12,0	25	o. r.	o. r.	o. r.
97608	M50 x 1,5	45,0	12,0	25	o. r.	o. r.	o. r.
97609	M63 x 1,5	56,0	15,0	10	o. r.	o. r.	o. r.

metric thread - small packages

Part no. grey	Size Metric	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93480	M12 x 1,5	10,0	10,0	10	o. r.	o. r.	o. r.
93481	M16 x 1,5	14,0	10,0	10	o. r.	o. r.	o. r.
93482	M20 x 1,5	17,0	10,0	10	o. r.	o. r.	o. r.
93483	M25 x 1,5	21,0	11,0	10	o. r.	o. r.	o. r.
93484	M32 x 1,5	27,0	12,0	10	o. r.	o. r.	o. r.
93485	M40 x 1,5	36,0	12,0	2	o. r.	o. r.	o. r.
93486	M50 x 1,5	45,0	12,0	2	o. r.	o. r.	o. r.
93487	M63 x 1,5	56,0	15,0	2	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

LK-I tube connectors, plastic

for flexible use

PG thread

Part no. grey	Size PG	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90720	7	10,0	10,0	50	o. r.	o. r.	o. r.
90721	9	14,0	10,0	50	o. r.	o. r.	o. r.
90722	11	17,0	10,0	50	o. r.	o. r.	o. r.
90723	13,5	19,0	10,0	50	o. r.	o. r.	o. r.
90724	16	21,0	11,0	50	o. r.	o. r.	o. r.
90725	21	27,0	11,0	25	o. r.	o. r.	o. r.
90726	29	36,0	12,0	25	o. r.	o. r.	o. r.
90727	36	45,0	12,0	25	o. r.	o. r.	o. r.
90729	48	56,0	15,0	10	o. r.	o. r.	o. r.

PG thread - small packages

Part no. grey	Size PG	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93470	7	10,0	10,0	10	o. r.	o. r.	o. r.
93471	9	14,0	10,0	10	o. r.	o. r.	o. r.
93472	11	17,0	10,0	10	o. r.	o. r.	o. r.
93473	13,5	19,0	10,0	10	o. r.	o. r.	o. r.
93474	16	21,0	11,0	10	o. r.	o. r.	o. r.
93475	21	27,0	11,0	10	o. r.	o. r.	o. r.
93476	29	36,0	12,0	2	o. r.	o. r.	o. r.
93477	36	45,0	12,0	2	o. r.	o. r.	o. r.
93478	48	56,0	15,0	2	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

US tube gland brass nickel plated
with high degree of protection

US
Tube gland for protection tubes type S, S-PU, M, SPR-AS, SPR-PVC-AS, SPR-PU-AS, SPR-EDU-AS.

Material
Brass, nickel plated
Grounding sleeve: Brass, bare
Seal: plastic

Technical data
Temperature range: -25°C up to +100°C

Application
- Plant and machine construction
- Automation technology
- Installation technology
- Control cabinet construction

Note
Protection classification:
IP 65 - type: SPR-PVC-AS, SPR-PU-AS
IP 54 - type: S, S-PU
IP 40 - type: M, SPR-AS, SPR-EDU-AS

metric thread

Part no. S S-PU	Part no. M	Part no. SPR-AS	Part no. SPR-PVC-AS SPR-PU-AS	Part no. SPR-EDU-AS	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98331	98233	98241	98249	905989	M10 x 1,0	10,0	10,0	50	o. r.	o. r.	o. r.
98332	98234	98242	98250	905990	M12 x 1,5	14,0	10,0	50	o. r.	o. r.	o. r.
98333	98235	98243	98251	905991	M16 x 1,5	17,0	10,0	50	o. r.	o. r.	o. r.
98334	98236	98244	98252	905992	M20 x 1,5	21,0	10,0	50	o. r.	o. r.	o. r.
98335	98237	98245	98253	905993	M25 x 1,5	27,0	11,0	25	o. r.	o. r.	o. r.
98336	98238	98246	98254	905994	M32 x 1,5	36,0	13,0	25	o. r.	o. r.	o. r.
98337	98239	98247	98255	905995	M40 x 1,5	45,0	13,0	20	o. r.	o. r.	o. r.
98338	98240	98248	98256	905996	M50 x 1,5	56,0	14,0	10	o. r.	o. r.	o. r.

metric thread - small package

Part no. S S-PU	Part no. M	Part no. SPR-AS	Part no. SPR-PVC-AS SPR-PU-AS	Part no. SPR-EDU-AS	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93530		93570	93590		M10 x 1,0	10,0	10,0	10	o. r.	o. r.	o. r.
93531		93571	93591		M12 x 1,5	14,0	10,0	10	o. r.	o. r.	o. r.
93532		93572	93592		M16 x 1,5	17,0	10,0	10	o. r.	o. r.	o. r.
93533		93573	93593		M20 x 1,5	21,0	10,0	10	o. r.	o. r.	o. r.
93534		93574	93594		M25 x 1,5	27,0	11,0	10	o. r.	o. r.	o. r.
93535		93575	93595		M32 x 1,5	36,0	13,0	2	o. r.	o. r.	o. r.
93536		93576	93596		M40 x 1,5	45,0	13,0	2	o. r.	o. r.	o. r.
93537		93577	93597		M50 x 1,5	56,0	14,0	2	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

US tube gland brass nickel plated

with high degree of protection

PG thread

Part no. S S-PU	Part no. M	Part no. SPR-AS	Part no. SPR-PVC-AS SPR-PU-AS	Part no. SPR-EDU-AS	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98322	98206	98215	98224	905997	7	10,0	7,0	50	o. r.	o. r.	o. r.
98323	98207	98216	98225	905998	9	14,0	7,0	50	o. r.	o. r.	o. r.
98324	98208	98217	98226	905999	11	17,0	7,0	50	o. r.	o. r.	o. r.
98325	98209	98218	98227	906000	13,5	19,0	7,0	50	o. r.	o. r.	o. r.
98326	98210	98219	98228	906001	16	21,0	7,0	50	o. r.	o. r.	o. r.
98327	98211	98220	98229	906002	21	27,0	10,0	25	o. r.	o. r.	o. r.
98328	98212	98221	98230	906003	29	36,0	10,0	25	o. r.	o. r.	o. r.
98329	98213	98222	98231	906004	36	45,0	10,0	20	o. r.	o. r.	o. r.
98330	98214	98223	98232	906005	48	56,0	10,0	10	o. r.	o. r.	o. r.

PG thread - small package

Part no. S S-PU	Part no. M	Part no. SPR-AS	Part no. SPR-PVC-AS SPR-PU-AS	Part no. SPR-EDU-AS	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93520		93560	93580		7	10,0	7,0	10	o. r.	o. r.	o. r.
93521		93561	93581		9	14,0	7,0	10	o. r.	o. r.	o. r.
93522		93562	93582		11	17,0	7,0	10	o. r.	o. r.	o. r.
93523		93563	93583		13,5	19,0	7,0	10	o. r.	o. r.	o. r.
93524		93564	93584		16	21,0	7,0	10	o. r.	o. r.	o. r.
93525		93565	93585		21	27,0	10,0	10	o. r.	o. r.	o. r.
93526		93566	93586		29	36,0	10,0	2	o. r.	o. r.	o. r.
93527		93567	93587		36	45,0	10,0	2	o. r.	o. r.	o. r.
93528		93568	93588		48	56,0	10,0	2	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LI tube gland, metal
with retaining ring

LI
Tube gland for protection tubes type S, S-PU, M, SPR-AS, SPR-EDU-AS, SPR-PVC-AS.
The rotating interior sockets with tube rotation lock is inserted into the gland and secured against tearing by the spring steel ring.

Material
Brass, nickel plated
Grounding sleeve: Brass, bare
Retaining ring: ex spring steel

Technical data
Protection class: IP 40

Temperature range: -40°C up to +250°C

metric thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97619	M10 x 1,0	10,0	10,0	50	o. r.	o. r.	o. r.
97620	M12 x 1,5	14,0	10,0	50	o. r.	o. r.	o. r.
97621	M16 x 1,5	17,0	10,0	50	o. r.	o. r.	o. r.
97622	M20 x 1,5	21,0	10,0	50	o. r.	o. r.	o. r.
97623	M25 x 1,5	27,0	11,0	25	o. r.	o. r.	o. r.
97624	M32 x 1,5	36,0	13,0	25	o. r.	o. r.	o. r.
97625	M40 x 1,5	45,0	13,0	25	o. r.	o. r.	o. r.
97626	M50 x 1,5	56,0	14,0	25	o. r.	o. r.	o. r.

metric thread - small packages

Part no.	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93610	M10 x 1,0	10,0	10,0	10	o. r.	o. r.	o. r.
93611	M12 x 1,5	14,0	10,0	10	o. r.	o. r.	o. r.
93612	M16 x 1,5	17,0	10,0	10	o. r.	o. r.	o. r.
93613	M20 x 1,5	21,0	10,0	10	o. r.	o. r.	o. r.
93614	M25 x 1,5	27,0	11,0	10	o. r.	o. r.	o. r.
93615	M32 x 1,5	36,0	13,0	2	o. r.	o. r.	o. r.
93616	M40 x 1,5	45,0	13,0	2	o. r.	o. r.	o. r.
93617	M50 x 1,5	56,0	14,0	2	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

LI tube gland, metal

with retaining ring

PG thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90730	7	10,0	7,0	50	o. r.	o. r.	o. r.
90731	9	14,0	7,0	50	o. r.	o. r.	o. r.
90732	11	17,0	7,0	50	o. r.	o. r.	o. r.
90733	13,5	19,0	7,0	50	o. r.	o. r.	o. r.
90734	16	21,0	7,0	50	o. r.	o. r.	o. r.
90735	21	27,0	10,0	25	o. r.	o. r.	o. r.
90736	29	36,0	10,0	25	o. r.	o. r.	o. r.
90737	36	45,0	10,0	25	o. r.	o. r.	o. r.
90738	48	56,0	10,0	10	o. r.	o. r.	o. r.

PG thread - small packages

Part no.	Size	Tube outer Ø mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93600	7	10,0	7,0	10	o. r.	o. r.	o. r.
93601	9	14,0	7,0	10	o. r.	o. r.	o. r.
93602	11	17,0	7,0	10	o. r.	o. r.	o. r.
93603	13,5	19,0	7,0	10	o. r.	o. r.	o. r.
93604	16	21,0	7,0	10	o. r.	o. r.	o. r.
93605	21	27,0	10,0	10	o. r.	o. r.	o. r.
93606	29	36,0	10,0	2	o. r.	o. r.	o. r.
93607	36	45,0	10,0	2	o. r.	o. r.	o. r.
93608	48	56,0	10,0	2	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT-E-UI conduit gland - straight

stainless steel

LT-E-UI straight

LIQUIDTIGHT gland for stainless steel protection tubes UI.
The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

Material

stainless steel
Grounding sleeve: Brass, nickel plated
Seal: Brass, nickel plated
Moulded seal: NBR

Technical data

Protection class: IP 40

Temperature range: -55°C up to +260°C

Application

- Robot construction
- Steel and aluminium foundry industry
- Machine and aparatus building
- Off-shore industry
- Security
- Metal, glass and ceramics industry

metric thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905812	M16 x 1,5	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905813	M16 x 1,5	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905814	M20 x 1,5	12,5	13,0	6,8	50	o. r.	o. r.	o. r.
905815	M20 x 1,5	16,0	13,0	9,8	50	o. r.	o. r.	o. r.
905816	M20 x 1,5	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905817	M25 x 1,5	26,0	15,0	18,5	25	o. r.	o. r.	o. r.
905818	M32 x 1,5	30,0	15,0	22,8	10	o. r.	o. r.	o. r.
905819	M40 x 1,5	39,0	16,0	30,8	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905820	11	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905821	11	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905822	16	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905823	21	26,0	15,0	18,5	25	o. r.	o. r.	o. r.
905824	29	30,0	15,0	22,8	10	o. r.	o. r.	o. r.
905825	36	39,0	16,0	30,8	5	o. r.	o. r.	o. r.

NPT thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905826	1/2"	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905827	1/2"	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905828	1/2"	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905829	3/4"	26,0	15,0	18,5	25	o. r.	o. r.	o. r.
905830	1"	30,0	15,0	22,8	10	o. r.	o. r.	o. r.
905831	1 1/4"	39,0	16,0	30,8	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT-E-UI conduit gland - 90°

stainless steel

ME01

new

RoHS

LT-E-UI 90°

LIQUIDTIGHT conduit gland for stainless steel protection tubes UI.
The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

Material

stainless steel
Grounding sleeve: Brass, nickel plated
Seal: Brass, nickel plated
Moulded seal: NBR

Technical data

Protection class: IP 40

Temperature range: -55°C up to +260°C

Application

- Robot construction
- Steel and aluminium foundry industry
- Machine and aparatus building
- Off-shore industry
- Security
- Metal, glass and ceramics industry

metric thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905832	M16 x 1,5	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905833	M16 x 1,5	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905834	M20 x 1,5	12,5	13,0	6,8	50	o. r.	o. r.	o. r.
905835	M20 x 1,5	16,0	13,0	9,8	50	o. r.	o. r.	o. r.
905836	M20 x 1,5	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905837	M25 x 1,5	26,0	15,0	18,5	25	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905838	11	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905839	11	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905840	16	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905841	21	26,0	15,0	18,5	25	o. r.	o. r.	o. r.
905842	29	30,0	15,0	22,8	10	o. r.	o. r.	o. r.

NPT thread

Part no.	Size	Tube outer Ø mm	Thread length mm	Min. inner Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905843	1/2"	12,5	12,0	6,8	50	o. r.	o. r.	o. r.
905844	1/2"	16,0	12,0	9,8	50	o. r.	o. r.	o. r.
905845	1/2"	21,0	13,0	13,9	50	o. r.	o. r.	o. r.
905846	3/4"	26,0	15,0	18,5	25	o. r.	o. r.	o. r.
905847	1"	30,0	15,0	22,8	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EEK interior protective sleeve

PVC

EEK

Interior sockets EEK made by PVC for plastic conduits type K, S and S-PU.

Material

PVC

Technical data

Temperature range: -25°C up to +100°C

EEK - PVC

Part no.	Tube outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96342	10,0	50	o. r.	o. r.	o. r.
96449	14,0	50	o. r.	o. r.	o. r.
96343	17,0	50	o. r.	o. r.	o. r.
96450	19,0	50	o. r.	o. r.	o. r.
96451	21,0	50	o. r.	o. r.	o. r.
96344	27,0	25	o. r.	o. r.	o. r.
96447	36,0	25	o. r.	o. r.	o. r.
96345	45,0	25	o. r.	o. r.	o. r.
96347	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EEM grounding sleeve

brass

EEM

Interior sockets EEM made by brass for metal conduits type M, SPR-AS, SPR-PVC-AS, SPR-PU-AS und SPR-EDU-AS.

Material

Brass

Technical data

Temperature range: -40°C up to +150°C

EEM - brass

Part no. M	Tube outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
906006	10,0	50	o. r.	o. r.	o. r.
906007	14,0	50	o. r.	o. r.	o. r.
906008	17,0	50	o. r.	o. r.	o. r.
906009	19,0	50	o. r.	o. r.	o. r.
906010	21,0	50	o. r.	o. r.	o. r.
906011	27,0	25	o. r.	o. r.	o. r.
906012	36,0	25	o. r.	o. r.	o. r.
906013	45,0	20	o. r.	o. r.	o. r.
906014	56,0	10	o. r.	o. r.	o. r.

Part no. SPR-AS	Tube outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99510	10,0	50	o. r.	o. r.	o. r.
99511	14,0	50	o. r.	o. r.	o. r.
99512	17,0	50	o. r.	o. r.	o. r.
99513	19,0	50	o. r.	o. r.	o. r.
99514	21,0	50	o. r.	o. r.	o. r.
99515	27,0	25	o. r.	o. r.	o. r.
99516	36,0	25	o. r.	o. r.	o. r.
99517	45,0	25	o. r.	o. r.	o. r.
99518	56,0	10	o. r.	o. r.	o. r.

Part no. SPR-PVC-AS SPR-PU-AS SPR-EDU-AS	Tube outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97580	10,0	50	o. r.	o. r.	o. r.
97680	14,0	50	o. r.	o. r.	o. r.
97691	17,0	50	o. r.	o. r.	o. r.
97692	19,0	50	o. r.	o. r.	o. r.
97693	21,0	50	o. r.	o. r.	o. r.
97681	27,0	25	o. r.	o. r.	o. r.
97682	36,0	25	o. r.	o. r.	o. r.
97694	45,0	25	o. r.	o. r.	o. r.
97684	56,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Protection tubes for heavy mechanical stress

Large cabling machine with backtwist at our Windsbach factory

Photo: Helukabel®

Heavy mechanical stress

Cable protection tubes

Metal protection tubes, with plastic sheath
- for standard applications
  - **Anaconda Sealtite® EF** ... 272
- for extensive chemical resistance
  - **Anaconda Sealtite® OR** ... 273
- high temperature
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- electromagnetic compatibility (EMC)
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Tube connectors

for metal protection tubes
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Anaconda Sealtite® EF for standard applications

ME01

EF

Universal applications.
Protection tube from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material

Galvanised steel

Outer sheath material: PVC

Note

Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled.

Dimensions 2 1/2", 3", 4", 5" and 6" available on request.

Technical data

Protection class: IP 67

Temperature range: -25°C up to +70°C
Temperature range temporary up to +90°C

Part no. grey	Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91229	96939	1/4"	6,4	11,5	50	o. r.	o. r.	o. r.
91230	96248	5/16"	10,1	14,4	50	o. r.	o. r.	o. r.
91231	96249	3/8"	12,6	17,8	75	o. r.	o. r.	o. r.
91232	97153	1/2"	16,0	21,1	60	o. r.	o. r.	o. r.
91233	96718	3/4"	21,0	26,4	50	o. r.	o. r.	o. r.
91234	96250	1"	26,5	33,1	30	o. r.	o. r.	o. r.
91235	96251	1 1/4"	35,1	41,8	30	o. r.	o. r.	o. r.
91236	97175	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.
91237	96252	2"	51,6	59,9	15	o. r.	o. r.	o. r.

small package

Part no. grey	Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94915	94930	5/16"	10,1	14,4	10	o. r.	o. r.	o. r.
94916	94931	3/8"	12,6	17,8	10	o. r.	o. r.	o. r.
94917	94932	1/2"	16,0	21,1	10	o. r.	o. r.	o. r.
94918	94933	3/4"	21,0	26,4	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® OR for extensive chemical resistance

ME01

OR

Resistant to oil, grease, alkalis and acids.
Protection tubes from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material

Galvanised steel
UV-resistant

Outer sheath material: Special PVC

Note

Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled.

Technical data

Protection class: IP 67

Temperature range: -15°C up to +100°C
Temperature range temporary up to +120°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91245	3/8"	12,6	17,8	75	o. r.	o. r.	o. r.
91246	1/2"	16,0	21,1	60	o. r.	o. r.	o. r.
91247	3/4"	21,0	26,4	50	o. r.	o. r.	o. r.
91248	1"	26,5	33,1	30	o. r.	o. r.	o. r.
91249	1 1/4"	35,1	41,8	30	o. r.	o. r.	o. r.
91250	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.
91251	2"	51,6	59,9	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® HTDL hot or cold

HTDL
UL/CSA approval, good EMC properties.

Protection tube from reinforced, galvanised steel band with spiral wound, latched profile, a continuous copper conductor and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material
Galvanised steel
UV-resistant

Outer sheath material: PVC

Note
Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled.
Up to 1 1/4" with copper conductor.

Technical data
Protection class: IP 67

Temperature range: -45°C up to +105°C
Temperature range temporary up to +120°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
98149	3/8"	12,6	17,8	60	o. r.	o. r.	o. r.
98150	1/2"	16,1	21,1	60	o. r.	o. r.	o. r.
98151	3/4"	21,1	26,4	45	o. r.	o. r.	o. r.
98152	1"	26,8	33,1	30	o. r.	o. r.	o. r.
98153	1 1/4"	35,4	41,8	15	o. r.	o. r.	o. r.
98154	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.
98155	2"	51,6	59,9	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® HC for extensive temperature ranges

ME01

HC

For extensive temperature ranges.
Protection tubes from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material

Galvanised steel
UV-resistant

Outer sheath material: PVC

Note

Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled.

Technical data

Protection class: IP 67

Temperature range: -45°C up to +105°C
Temperature range temporary up to +120°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91238	3/8"	12,6	17,8	75	o. r.	o. r.	o. r.
91239	1/2"	16,0	21,1	60	o. r.	o. r.	o. r.
91240	3/4"	21,0	26,4	50	o. r.	o. r.	o. r.
91241	1"	26,5	33,1	30	o. r.	o. r.	o. r.
91242	1 1/4"	35,1	41,8	30	o. r.	o. r.	o. r.
91243	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.
91244	2"	51,6	59,9	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® HCX thermal fluctuations

ME01

HCX

For extensive temperature ranges.
Protection tubes from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material

Galvanised steel
UV-resistant

Outer sheath material: Elastomer

Note

Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled

Technical data

Protection class: IP 67

Temperature range: -55°C up to +145°C
Temperature range temporary up to +160°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94735	3/8"	12,6	17,8	30	o. r.	o. r.	o. r.
96410	1/2"	16,0	21,1	30	o. r.	o. r.	o. r.
96954	3/4"	21,0	26,4	30	o. r.	o. r.	o. r.
97945	1"	26,5	33,1	30	o. r.	o. r.	o. r.
96247	1 1/4"	35,1	41,8	15	o. r.	o. r.	o. r.
97668	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.
97811	2"	51,6	59,9	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® ZHLS halogenfree

ZHLS
Halogen-free, low smoke generation.
Protection tube from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material
UV-resistant

Outer sheath material: Polyolefine

- halogen-free

Note
Suitable connection glands:
LT straight, LT angled, T&B straight, T&B angled

Technical data
Protection class: IP 67

Temperature range: -25°C up to +80°C
Temperature range temporary up to +100°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94988	5/16"	10,1	14,4	30	o. r.	o. r.	o. r.
94989	3/8"	12,6	17,8	30	o. r.	o. r.	o. r.
94990	1/2"	16,0	21,1	30	o. r.	o. r.	o. r.
94991	3/4"	21,0	26,4	30	o. r.	o. r.	o. r.
94992	1"	26,5	33,1	30	o. r.	o. r.	o. r.
94993	1 1/4"	35,1	41,8	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® HFX fire protection

ME01

HFX

Halogen-free, low smoke generation, UV-resistant, oil-resistant, weather-resistant. Protection tube from reinforced, galvanised steel band with spiral wound, latched profile, a continuous cord seal and extruded plastic sheath.
This complex construction method keeps the plastic sheath and the internal tube flush together.

Material

Galvanised steel
UV-resistant

Outer sheath material: Polyurethane

- halogen-free

Properties

Low toxicity in case of fire.
Flexible at low temperatures, very good UV-resistance and oil resistance.
EN standard approved tube, for the railways, tunnels, ships, public buildings.

Note

Suitable connection glands:
T&B straight, T&B angled, Anamet straight, Anamet angled

Technical data

Protection class: IP 67

Temperature range: -45°C up to +105°C
Temperature range temporary up to +125°C

Part no. black	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94994	5/16"	10,1	14,4	30	o. r.	o. r.	o. r.
94995	3/8"	12,6	17,8	30	o. r.	o. r.	o. r.
94996	1/2"	16,0	21,1	30	o. r.	o. r.	o. r.
94997	3/4"	21,0	26,4	30	o. r.	o. r.	o. r.
94998	1"	26,5	33,1	30	o. r.	o. r.	o. r.
94999	1 1/4"	35,1	41,8	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® EMP EMC

EMP
EMI / EMC screening
Protection tube from spiral wound bronze Agraff profile.
This provides very good screening from electromagnetic fields.

Material
Bronze
UV-resistant

Outer sheath material: PVC

Note
Suitable connection glands:
T&B straight, T&B angled, LT straight, LT angled

Technical data
Protection class: IP 67

Temperature range: -45°C up to +105°C
Temperature range temporary up to +120°C

Part no. grey	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
98156	3/8"	12,6	17,8	30	o. r.	o. r.	o. r.
98157	1/2"	16,0	21,1	30	o. r.	o. r.	o. r.
98158	3/4"	21,0	26,4	30	o. r.	o. r.	o. r.
98159	1"	26,5	33,1	30	o. r.	o. r.	o. r.
98160	1 1/4"	35,1	41,8	15	o. r.	o. r.	o. r.
98161	1 1/2"	40,3	47,8	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Anaconda Sealtite® CNP fully plastic

CNP
Fully plastic, UL/CSA approval.
Extremely abrasion-resistant plastic tube for heavy-duty applications.
A neoprene internal tube with nylon weave and abrasion-proof special PVC sheath.
Very good UV- and oil-resistance

Material
PVC
UV-resistant

Outer sheath material: PVC
With woven nylon insert

Note
Suitable connection glands:
LT-CNP and LT-CNP-E

Technical data
Protection class: IP 67

Temperature range: -20°C up to +60°C
Temperature range temporary up to +80°C

Part no. orange	Trade size inch	Inner Ø mm	Outer Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91259	3/8"	12,6	19,4	76	o. r.	o. r.	o. r.
91260	1/2"	16,1	23,4	60	o. r.	o. r.	o. r.
91261	3/4"	21,0	29,5	53	o. r.	o. r.	o. r.
91262	1"	26,5	36,3	30	o. r.	o. r.	o. r.
91263	1 1/4"	35,1	46,0	15	o. r.	o. r.	o. r.
91264	1 1/2"	40,7	52,4	15	o. r.	o. r.	o. r.
91265	2"	52,4	66,6	15	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT conduit gland - straight

Conduit gland LT straight

LIQUIDTIGHT gland for plastic-coated metallic protection tubes and high temperature protection tubes HTP (An additional clamping ring is required). UL/CSA approval.

The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Brass, nickel plated
Grounding sleeve: Steel
Seal: Polyamide

Properties

- halogen-free

Note

Suitable for metallic protection tubes:
EF, HTDL, OR, HC, HCX, ZHLS, HFX, EMP

Technical data

Protection class: IP 67

Temperature range: -45°C up to +105°C

metric thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94151	M16 x 1,5	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
94152	M20 x 1,5	1/2"	21,1	29,0	14,0	50	o. r.	o. r.	o. r.
94153	M25 x 1,5	3/4"	26,4	35,0	14,0	25	o. r.	o. r.	o. r.
94154	M32 x 1,5	1"	33,1	45,0	16,0	10	o. r.	o. r.	o. r.
94155	M40 x 1,5	1 1/4"	41,8	54,0	18,0	5	o. r.	o. r.	o. r.
94156	M50 x 1,5	1 1/2"	47,8	63,0	23,0	5	o. r.	o. r.	o. r.
920522	M63 x 1,5	2"	59,9	77,0	26,0	4	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91006	11	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
91007	13,5	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
91008	16	1/2"	21,1	29,0	14,0	50	o. r.	o. r.	o. r.
91009	21	3/4"	26,4	35,0	14,0	25	o. r.	o. r.	o. r.
91010	29	1"	33,1	45,0	16,0	10	o. r.	o. r.	o. r.
91011	36	1 1/4"	41,8	54,0	18,0	5	o. r.	o. r.	o. r.
91012	42	1 1/2"	47,8	63,0	23,0	5	o. r.	o. r.	o. r.
91013	48	2"	59,9	77,0	26,0	4	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

LT conduit gland - straight

NPT thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905749	1/2"	3/8"	17,8	26,0	12,0	50	o. r.	o. r.	o. r.
905750	1/2"	1/2"	21,1	29,0	13,0	50	o. r.	o. r.	o. r.
905751	3/4"	3/4"	26,4	35,0	15,0	25	o. r.	o. r.	o. r.
905752	1"	1"	33,1	45,0	15,0	10	o. r.	o. r.	o. r.
905753	1 1/4"	1 1/4"	49,0	54,0	16,0	5	o. r.	o. r.	o. r.
905754	1 1/2"	1 1/2"	61,0	63,0	18,0	5	o. r.	o. r.	o. r.
905755	2"	2"	66,0	77,0	20,0	4	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT conduit gland - 45°

Conduit gland LT 45°
LIQUIDTIGHT gland for plastic-coated metallic protection tubes and high temperature protection tubes HTP. (An additional clamping ring is required). UL/CSA approval.

The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Brass, nickel plated
Grounding sleeve: Steel
Seal: Polyamide

Properties
- halogen-free

Note
Suitable for metallic protection tubes:
EF, HTDL, OR, HC, HCX, ZHLS, HFX, EMP

Technical data
Protection class: IP 67

Temperature range: -45°C up to +105°C

metric thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94160	M16 x 1,5	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
94161	M20 x 1,5	1/2"	21,1	29,0	14,0	50	o. r.	o. r.	o. r.
94162	M25 x 1,5	3/4"	26,4	35,0	14,0	25	o. r.	o. r.	o. r.
94163	M32 x 1,5	1"	33,1	45,0	16,0	10	o. r.	o. r.	o. r.
920526	M40 x 1,5	1 1/4"	41,8	54,0	18,0	5	o. r.	o. r.	o. r.
920527	M50 x 1,5	1 1/2"	47,8	63,0	23,0	5	o. r.	o. r.	o. r.
920528	M63 x 1,5	2"	59,9	77,0	26,0	4	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91014	11	3/8"	17,8	26,0	16,0	50	o. r.	o. r.	o. r.
91015	13,5	3/8"	17,8	26,0	16,0	50	o. r.	o. r.	o. r.
91016	16	1/2"	21,1	29,0	16,0	50	o. r.	o. r.	o. r.
91017	21	3/4"	26,4	35,0	16,0	25	o. r.	o. r.	o. r.
91018	29	1"	33,1	45,0	19,0	10	o. r.	o. r.	o. r.
91019	36	1 1/4"	41,8	54,0	16,0	5	o. r.	o. r.	o. r.
91020	42	1 1/2"	47,8	63,0	16,0	5	o. r.	o. r.	o. r.
91021	48	2"	59,9	77,0	18,0	4	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

LT conduit gland - 45°

NPT thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905756	1/2"	3/8"	17,8	26,0	12,0	50	o. r.	o. r.	o. r.
905757	1/2"	1/2"	21,1	29,0	13,0	50	o. r.	o. r.	o. r.
905758	3/4"	3/4"	26,4	35,0	15,0	25	o. r.	o. r.	o. r.
905759	1"	1"	33,1	45,0	15,0	10	o. r.	o. r.	o. r.
905760	1 1/4"	1 1/4"	49,0	54,0	16,0	5	o. r.	o. r.	o. r.
905761	1 1/2"	1 1/2"	61,0	63,0	18,0	5	o. r.	o. r.	o. r.
905762	2"	2"	66,0	77,0	20,0	4	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT conduit gland - 90°

Conduit gland LT 90°
LIQUIDTIGHT gland for plastic-coated metallic protection tubes and high temperature protection tubes HTP. (An additional clamping ring ist required). UL/CSA approval.

The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Brass, nickel plated
Grounding sleeve: Steel
Seal: Polyamide

Properties
- halogen-free

Note
Suitable for metallic protection tubes:
EF, HTDL, OR, HC, HCX, ZHLS, HFX, EMP

Technical data
Protection class: IP 67

Temperature range: -45°C up to +105°C

metric thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
94170	M16 x 1,5	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
94171	M20 x 1,5	1/2"	21,1	29,0	14,0	50	o. r.	o. r.	o. r.
94172	M25 x 1,5	3/4"	26,4	35,0	14,0	25	o. r.	o. r.	o. r.
94173	M32 x 1,5	1"	33,1	45,0	16,0	10	o. r.	o. r.	o. r.
920523	M40 x 1,5	1 1/4"	41,8	54,0	18,0	5	o. r.	o. r.	o. r.
920524	M50 x 1,5	1 1/2"	47,8	63,0	23,0	5	o. r.	o. r.	o. r.
920525	M63 x 1,5	2"	59,9	77,0	26,0	4	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
91022	11	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
91023	13,5	3/8"	17,8	26,0	13,0	50	o. r.	o. r.	o. r.
91024	16	1/2"	21,1	29,0	14,0	50	o. r.	o. r.	o. r.
91025	21	3/4"	26,4	35,0	14,0	25	o. r.	o. r.	o. r.
91026	29	1"	33,1	45,0	16,0	10	o. r.	o. r.	o. r.
91027	36	1 1/4"	41,8	54,0	18,0	5	o. r.	o. r.	o. r.
91028	42	1 1/2"	47,8	63,0	23,0	5	o. r.	o. r.	o. r.
91029	48	2"	59,9	77,0	26,0	4	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

LT conduit gland - 90°

NPT thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905763	1/2"	3/8"	17,8	26,0	12,0	50	o. r.	o. r.	o. r.
905764	1/2"	1/2"	21,1	29,0	13,0	50	o. r.	o. r.	o. r.
905765	3/4"	3/4"	26,4	35,0	15,0	25	o. r.	o. r.	o. r.
905766	1"	1"	33,1	45,0	15,0	10	o. r.	o. r.	o. r.
905767	1 1/4"	1 1/4"	49,0	54,0	16,0	5	o. r.	o. r.	o. r.
905768	1 1/2"	1 1/2"	36,8	63,0	18,0	5	o. r.	o. r.	o. r.
905769	2"	2"	66,0	77,0	20,0	4	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T&B conduit gland - straight

T&B straight
Hose gland for Anaconda protection tubes. The specific construction prevents the tubes becoming deformed during assembly.

Material
Galvanised steel chromate finish
Grounding sleeve: Steel
Seal: Polyamide

Technical data
Protection class: IP 67

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

metric thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98173	M16 x 1,5	1/4"	11,5	22,0	12,0	25	o. r.	o. r.	o. r.
98174	M20 x 1,5	1/4"	11,5	22,0	12,0	25	o. r.	o. r.	o. r.
98171	M16 x 1,5	5/16"	14,4	22,0	12,0	25	o. r.	o. r.	o. r.
98172	M20 x 1,5	5/16"	14,4	22,0	12,0	25	o. r.	o. r.	o. r.
98175	M16 x 1,5	3/8"	17,8	29,0	16,0	25	o. r.	o. r.	o. r.
98176	M20 x 1,5	3/8"	17,8	29,0	16,0	25	o. r.	o. r.	o. r.
98177	M20 x 1,5	1/2"	21,1	35,0	16,0	25	o. r.	o. r.	o. r.
98178	M25 x 1,5	3/4"	26,4	42,0	16,0	25	o. r.	o. r.	o. r.
98179	M32 x 1,5	1"	33,1	47,0	15,0	5	o. r.	o. r.	o. r.

PG thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90684	9	5/16"	14,4	26,0	12,0	25	o. r.	o. r.	o. r.
90685	11	3/8"	17,8	29,0	14,0	25	o. r.	o. r.	o. r.
90686	13,5	3/8"	17,8	29,0	14,0	25	o. r.	o. r.	o. r.
90687	16	1/2"	21,1	35,0	14,0	25	o. r.	o. r.	o. r.
90688	21	3/4"	26,4	42,0	14,0	25	o. r.	o. r.	o. r.
90689	29	1"	33,1	47,0	19,0	5	o. r.	o. r.	o. r.
90690	36	1 1/4"	41,8	58,0	21,0	5	o. r.	o. r.	o. r.
90691	42	1 1/2"	47,8	69,0	21,0	2	o. r.	o. r.	o. r.
90692	48	2"	59,9	83,0	21,0	1	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

T&B conduit gland - straight

NPT thread

Part no.	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Spanner size mm	Thread length mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98190	1/4"	1/4"	11,5	21,0	12,0	25	o. r.	o. r.	o. r.
98191	3/8"	5/16"	14,4	25,0	12,0	25	o. r.	o. r.	o. r.
96737	1/2"	3/8"	17,8	29,0	14,0	25	o. r.	o. r.	o. r.
90810	1/2"	1/2"	21,1	35,0	14,0	25	o. r.	o. r.	o. r.
96465	3/4"	3/4"	26,4	42,0	14,0	25	o. r.	o. r.	o. r.
96205	1"	1"	33,1	48,0	19,0	10	o. r.	o. r.	o. r.
98192	1 1/4"	1 1/4"	41,8	58,0	21,0	5	o. r.	o. r.	o. r.
96206	1 1/2"	1 1/2"	47,8	69,0	21,0	2	o. r.	o. r.	o. r.
96207	2"	2"	59,9	83,0	22,0	1	o. r.	o. r.	o. r.
98193	2 1/2"	2 1/2"	72,6	95,0	25,0	1	o. r.	o. r.	o. r.
98194	3"	3"	88,4	114,0	25,0	1	o. r.	o. r.	o. r.
98195	4"	4"	-	140,0	29,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T&B conduit gland - 45°

T&B 45° angled
Hose gland for Anaconda protection tubes. The specific construction prevents the tubes becoming deformed during assembly.

Material
Galvanised steel chromate finish
Grounding sleeve: Steel
Seal: Polyamide

Technical data
Protection class: IP 67

Application
- Plant and machine construction, Automation and installation technology, Vehicle construction and shipbuilding

metric thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98180	9340	M16 x 1,5	3/8"	17,8	16,0	28,0	25	o. r.	o. r.	o. r.
98181	9341	M20 x 1,5	3/8"	17,8	16,0	28,0	25	o. r.	o. r.	o. r.
98182	9342	M20 x 1,5	1/2"	21,1	16,0	34,0	25	o. r.	o. r.	o. r.
98183	9343	M25 x 1,5	3/4"	26,4	16,0	42,0	10	o. r.	o. r.	o. r.
98184	9344	M32 x 1,5	1"	33,1	23,0	47,0	5	o. r.	o. r.	o. r.

PG thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90693	7341	11	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
90694	7342	13,5	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
90695	7343	16	1/2"	21,1	14,0	-	25	o. r.	o. r.	o. r.
90696	7344	21	3/4"	26,4	14,0	42,0	5	o. r.	o. r.	o. r.
90697	7345	29	1"	33,1	21,0	47,0	5	o. r.	o. r.	o. r.
90698	7346	36	1 1/4"	41,8	21,0	58,0	5	o. r.	o. r.	o. r.
90699	7347	42	1 1/2"	47,8	21,0	69,0	2	o. r.	o. r.	o. r.
90700	7348	48	2"	59,9	24,0	83,0	1	o. r.	o. r.	o. r.

NPT thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96739	5341	1/2"	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
96208	5342	1/2"	1/2"	21,1	14,0	35,0	25	o. r.	o. r.	o. r.
96209	5343	3/4"	3/4"	26,4	14,0	42,0	10	o. r.	o. r.	o. r.
96210	5344	1"	1"	33,1	19,0	48,0	5	o. r.	o. r.	o. r.
98196	5345	1 1/4"	1 1/4"	41,8	21,0	58,0	5	o. r.	o. r.	o. r.
98197	5346	1 1/2"	1 1/2"	47,8	21,0	69,0	2	o. r.	o. r.	o. r.
96211	5347	2"	2"	59,9	22,0	83,0	1	o. r.	o. r.	o. r.
98198	5348	2 1/2"	2 1/2"	72,6	25,0	95,0	1	o. r.	o. r.	o. r.
98199	5349	3"	3"	88,4	25,0	114,0	1	o. r.	o. r.	o. r.
98200	5350	4"	4"	-	29,0	140,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T&B conduit gland - 90°

T&B 90° angled

Hose gland for Anaconda protection tubes. The specific construction prevents the tubes becoming deformed during assembly.

Material

Galvanised steel chromate finish
Grounding sleeve: Steel
Seal: Polyamide

Technical data

Protection class: IP 67

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

metric thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98185	9350	M16 x 1,5	3/8"	17,8	16,0	28,0	25	o. r.	o. r.	o. r.
98186	9351	M20 x 1,5	3/8"	17,8	16,0	28,0	25	o. r.	o. r.	o. r.
98187	9352	M20 x 1,5	1/2"	21,1	16,0	34,0	25	o. r.	o. r.	o. r.
98188	9353	M25 x 1,5	3/4"	26,4	16,0	42,0	10	o. r.	o. r.	o. r.
98189	9354	M32 x 1,5	1"	33,1	23,0	47,0	5	o. r.	o. r.	o. r.

PG thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90701	7351	11	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
90702	7352	13,5	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
90703	7353	16	1/2"	21,1	14,0	35,0	25	o. r.	o. r.	o. r.
90704	7354	21	3/4"	26,4	14,0	42,0	5	o. r.	o. r.	o. r.
90705	7355	29	1"	33,1	21,0	47,0	5	o. r.	o. r.	o. r.
90706	7356	36	1 1/4"	41,8	21,0	58,0	5	o. r.	o. r.	o. r.
90707	7357	42	1 1/2"	47,8	21,0	69,0	2	o. r.	o. r.	o. r.
90708	7358	48	2"	59,9	24,0	83,0	1	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

T&B conduit gland - 90°

NPT thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97300	5351	1/2"	3/8"	17,8	14,0	29,0	25	o. r.	o. r.	o. r.
96212	5352	1/2"	1/2"	21,1	14,0	35,0	25	o. r.	o. r.	o. r.
96213	5353	3/4"	3/4"	26,4	14,0	42,0	10	o. r.	o. r.	o. r.
97671	5354	1"	1"	33,1	19,0	48,0	5	o. r.	o. r.	o. r.
98291	5355	1 1/4"	1 1/4"	41,8	21,0	58,0	5	o. r.	o. r.	o. r.
96214	5356	1 1/2"	1 1/2"	47,8	21,0	69,0	5	o. r.	o. r.	o. r.
96215	5357	2"	2"	59,9	22,0	83,0	2	o. r.	o. r.	o. r.
98292	5358	2 1/2"	2 1/2"	72,6	25,0	95,0	1	o. r.	o. r.	o. r.
98293	5359	3"	3"	88,4	25,0	114,0	1	o. r.	o. r.	o. r.
98294	5360	4"	4"	-	29,0	140,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT-CNP conduit gland

for Anaconda Sealtite® CNP

Conduit gland LT-CNP straight

LIQUIDTIGHT gland made of galvanised steel for plastic-coated metallic protection tubes CNP.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

Galvanised steel

Note

UL/CSA approval
The ferrule and insert are from PA 6

Technical data

Protection class: IP 67

Temperature range: -45°C up to +105°C

NPT thread

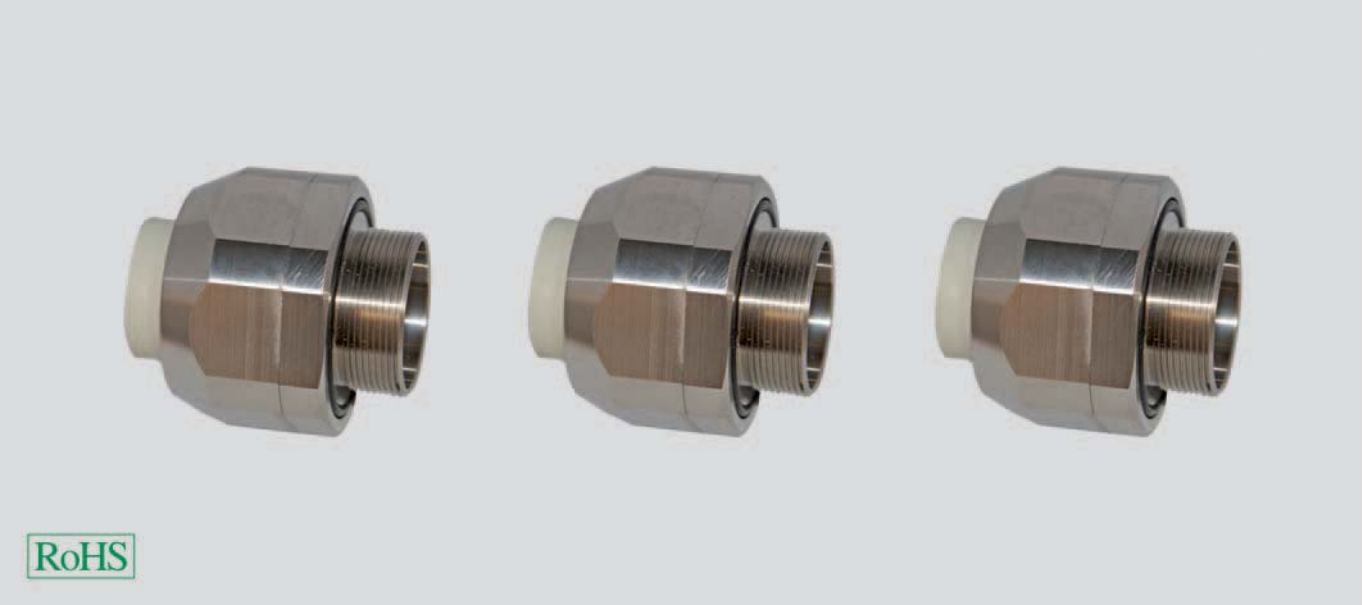
Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
904907	-	1/2"	3/8	19,4	15,0	27,0	25	o. r.	o. r.	o. r.
904908	-	1/2"	1/2	23,4	15,0	32,0	25	o. r.	o. r.	o. r.
904909	-	3/4"	3/4	29,5	15,0	39,0	25	o. r.	o. r.	o. r.
904910	-	1"	1	36,3	18,0	45,0	5	o. r.	o. r.	o. r.
904911	-	1 1/4"	1 1/4	46,0	19,0	59,0	5	o. r.	o. r.	o. r.
904912	-	1 1/2"	1 1/2	52,4	19,0	67,0	2	o. r.	o. r.	o. r.
904913	-	2"	2	66,6	19,0	82,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

LT-CNP-E conduit gland, stainless steel

for Anaconda Sealtite® CNP



new

Conduit gland LT-CNP-E straight

LIQUIDTIGHT gland made of stainless steel for plastic-coated metallic protection tubes CNP.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

stainless steel

Note

The ferrule and insert are from PA6.

Technical data

Protection class: IP 67

Temperature range: -45°C up to +105°C

metric thread

Part no.	Type	Size	Suitable for tube ND	Suitable for tube outer Ø mm	Thread length mm	Spanner size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905913	-	M16 x 1,5	3/8	19,4	13,0	30,0	50	o. r.	o. r.	o. r.
905914	-	M20 x 1,5	1/2	23,4	13,0	36,0	50	o. r.	o. r.	o. r.
905058	-	M25 x 1,5	3/4	29,5	15,0	41,0	25	o. r.	o. r.	o. r.
905059	-	M32 x 1,5	1	36,3	15,0	50,0	10	o. r.	o. r.	o. r.
905060	-	M40 x 1,5	1 1/4	46,0	16,0	60,0	5	o. r.	o. r.	o. r.
905061	-	M50 x 1,5	1 1/2	52,4	19,0	66,0	5	o. r.	o. r.	o. r.
905062	-	M63 x 1,5	1 1/2	52,4	19,0	81,0	4	o. r.	o. r.	o. r.
905063	-	M63 x 1,5	2	66,6	19,0	81,0	4	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EES grounding sleeve
galvanised steel

new

EES
Interior sockets EES made by galvanised steel for plastic-coated metal protection tubes type Anaconda.

Material
Galvanised steel

Note
Suitable to LT glands

Technical data
Well-fitting to protection tubes: Anaconda

EES - cold rolled strip St 2 acc.to DIN 1624, galvanised, Fe/Zn 3

Part no. Anaconda	Suitable for tube outer Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
96839	17,8	250	o. r.	o. r.	o. r.
97480	21,1	250	o. r.	o. r.	o. r.
96580	26,4	100	o. r.	o. r.	o. r.
96803	33,1	50	o. r.	o. r.	o. r.
96880	41,8	25	o. r.	o. r.	o. r.
98364	47,8	25	o. r.	o. r.	o. r.
905027	59,9	25	o. r.	o. r.	o. r.
905028	72,6	25	o. r.	o. r.	o. r.
905029	88,4	25	o. r.	o. r.	o. r.
905030	113,8	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Selection table
Anaconda Sealtite/conduit gland

Anaconda Sealtite

Conduit gland

LT straight

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	94151	11	91006	1/2"	905749	96839
														13,5	91007			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	94152	16	91008	1/2"	905750	97480
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	94153	21	91009	3/4"	905751	96580
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	94154	29	91010	1"	905752	96803
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4	M40 x 1,5	94155	36	91011	1 1/4"	905753	96880
91236	97175			91250	98154	91243	97668			98161	1 1/2	M50 x 1,5	94156	42	91012	1 1/2"	905754	98364
91237	96252			91251	98155	91244	97811				2	M63 x 1,5	920522	48	91013	2"	905755	905027
											2 1/2							905028
											3							905029
											4							905030

LT angled 45°

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	94160	11	91014	1/2"	905756	96839
														13,5	91015			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	94161	16	91016	1/2"	905757	97480
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	94162	21	91017	3/4"	905758	96580
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	94163	29	91018	1"	905759	96803
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4	M40 x 1,5	920526	36	91019	1 1/4"	905760	96880
91236	97175			91250	98154	91243	97668			98161	1 1/2	M50 x 1,5	920527	42	91020	1 1/2"	905761	98364
91237	96252			91251	98155	91244	97811				2	M63 x 1,5	920528	48	91021	2"	905762	905027
											2 1/2							905028
											3							905029
											4							905030

LT angled 90°

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	94170	11	91022	1/2"	905763	96839
														13,5	91023			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	94171	16	91024	1/2"	905764	97480
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	94172	21	91025	3/4"	905765	96580
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	94173	29	91026	1"	905766	96803
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4	M40 x 1,5	920523	36	91027	1 1/4"	905767	96880
91236	97175			91250	98154	91243	97668			98161	1 1/2	M50 x 1,5	920524	42	91028	1 1/2"	905768	98364
91237	96252			91251	98155	91244	97811				2	M63 x 1,5	920525	48	91029	2"	905769	905027
											2 1/2							905028
											3							905029
											4							905030

Selection table
Anaconda Sealtite/conduit gland

Anaconda Sealtite

Conduit gland

T&B conduit gland straight

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4	M16 x 1,5	98173					
												M20 x 1,5	98174			1/4"	98190	
91230	96248	94915	94930					94988	94994		5/16	M16 x 1,5	98171			3/8"	98191	
												M20 x 1,5	98172	9	90684			
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	98175	11	90685	1/2"	96737	
											3/8	M20 x 1,5	98176	13,5	90686	1/2"		
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	98177	16	90687	1/2"	90810	
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	98178	21	90688	3/4"	96465	
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	98179	29	90689	1"	96205	
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4			36	90690	1 1/4"	98192	
91236	97175			91250	98154	91243	97668			98161	1 1/2			42	90691	1 1/2"	96206	
91237	96252			91251	98155	91244	97811				2			48	90692	2"	96207	
											2 1/2					2 1/2"	98193	
											3					3"	98194	
											4					4"	98195	

T&B conduit gland angled 45°

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	98180	11	90693	1/2"	96739	
											3/8	M20 x 1,5	98181	13,5	90694			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	98182	16	90695	1/2"	96208	
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	98183	21	90696	3/4"	96209	
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	98184	29	90697	1"	96210	
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4			36	90698	1 1/4"	98196	
91236	97175			91250	98154	91243	97668			98161	1 1/2			42	90699	1 1/2"	98197	
91237	96252			91251	98155	91244	97811				2			48	90700	2"	96211	
											2 1/2					2 1/2"	98198	
											3					3"	98199	
											4					4"	98200	

T&B conduit gland angled 90°

EF grey	EF black	small package grey	small package black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	tube ND	size metric		size PG		size NPT		suitable interior socket EES
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	98185	11	90701	1/2"	97300	
											3/8	M20 x 1,5	98186	13,5	90702			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	98187	16	90703	1/2"	96212	
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	98188	21	90704	3/4"	96213	
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	98189	29	90705	1"	97671	
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4			36	90706	1 1/4"	98291	
91236	97175			91250	98154	91243	97668			98161	1 1/2			42	90707	1 1/2"	96214	
91237	96252			91251	98155	91244	97811				2			48	90708	2"	96215	
											2 1/2					2 1/2"	98292	
											3					3"	98293	
											4					4"	98294	

Selection table
Anaconda Sealtite/conduit gland

Anaconda Sealtite

Conduit gland

T&B conduit gland angled 90°

EF		small package									tube	size		size		size		suitable interior socket EES
grey	black	grey	black	OR	HTDL	HC	HCX	ZHLS	HFX	Shieldtite EMP	ND	metric		PG		NPT		
91229	96939										1/4							
91230	96248	94915	94930					94988	94994		5/16							
91231	96249	94916	94931	91245	98149	91238	94735	94989	94995	98156	3/8	M16 x 1,5	98185	11	90701	1/2"	97300	
											3/8	M20 x 1,5	98186	13,5	90702			
91232	97153	94917	94932	91246	98150	91239	96410	94990	94996	98157	1/2	M20 x 1,5	98187	16	90703	1/2"	96212	
91233	96718	94918	94933	91247	98151	91240	96954	94991	94997	98158	3/4	M25 x 1,5	98188	21	90704	3/4"	96213	
91234	96250			91248	98152	91241	97945	94992	94998	98159	1	M32 x 1,5	98189	29	90705	1"	97671	
91235	96251			91249	98153	91242	96247	94993	94999	98160	1 1/4			36	90706	1 1/4"	98291	
91236	97175			91250	98154	91243	97668			98161	1 1/2			42	90707	1 1/2"	96214	
91237	96252			91251	98155	91244	97811				2			48	90708	2"	96215	
											2 1/2					2 1/2"	98292	
											3					3"	98293	
											4					4"	98294	

LT-CNP

CNP	tube ND		size NPT		
91259	3/8		1/2"	904907	
91260	1/2		1/2"	904908	
91261	3/4		3/4w	904909	
91262	1		1"	904910	
91263	1 1/4		1 1/4"	904911	
91264	1 1/2		1 1/2"	904912	
91265	2		2"	904913	

LT-CNP-E

CNP	tube ND	size metric		
91259	3/8	M16 x 1,5	905913	
91260	1/2	M20 x 1,5	905914	
91261	3/4	M25 x 1,5	905058	
91262	1	M32 x 1,5	905059	
91263	1 1/4	M40 x 1,5	905060	
91264	1 1/2	M50 x 1,5	905061	
	1 1/2	M63 x 1,5	905062	
91265	2	M63 x 1,5	905063	

Data, Network & Bus Technology

The complete program, from delivery advice to installation

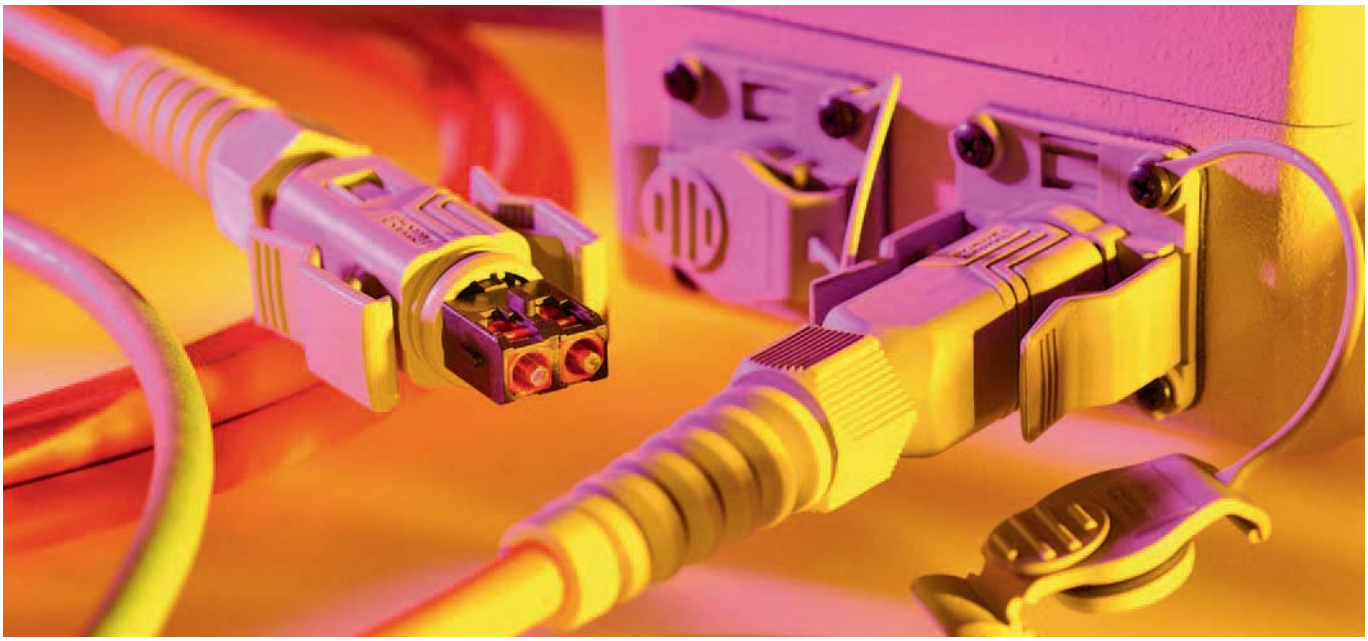


Photo: HELUKABEL®

LAN and WAN Networks have steadily increased in importance in the last few years, and have become the backbone of company communication.
HELUKABEL® can offer an extensive range of equipment for networking heterogenous systems using Fibre Optic and Copper techniques Products developed by us for passive applications, and active components from well-known manufacturers form the basis of our portfolio.
Our activities can be recognized by the tradenames HELUCOM®, HELUKAT®, HELUCOM CONNECTING SYSTEMS and HELUKAT CONNECTING SYSTEMS.
HELUKABEL® offers the complete spectrum of professional consultation from supply to installation – all from one source.

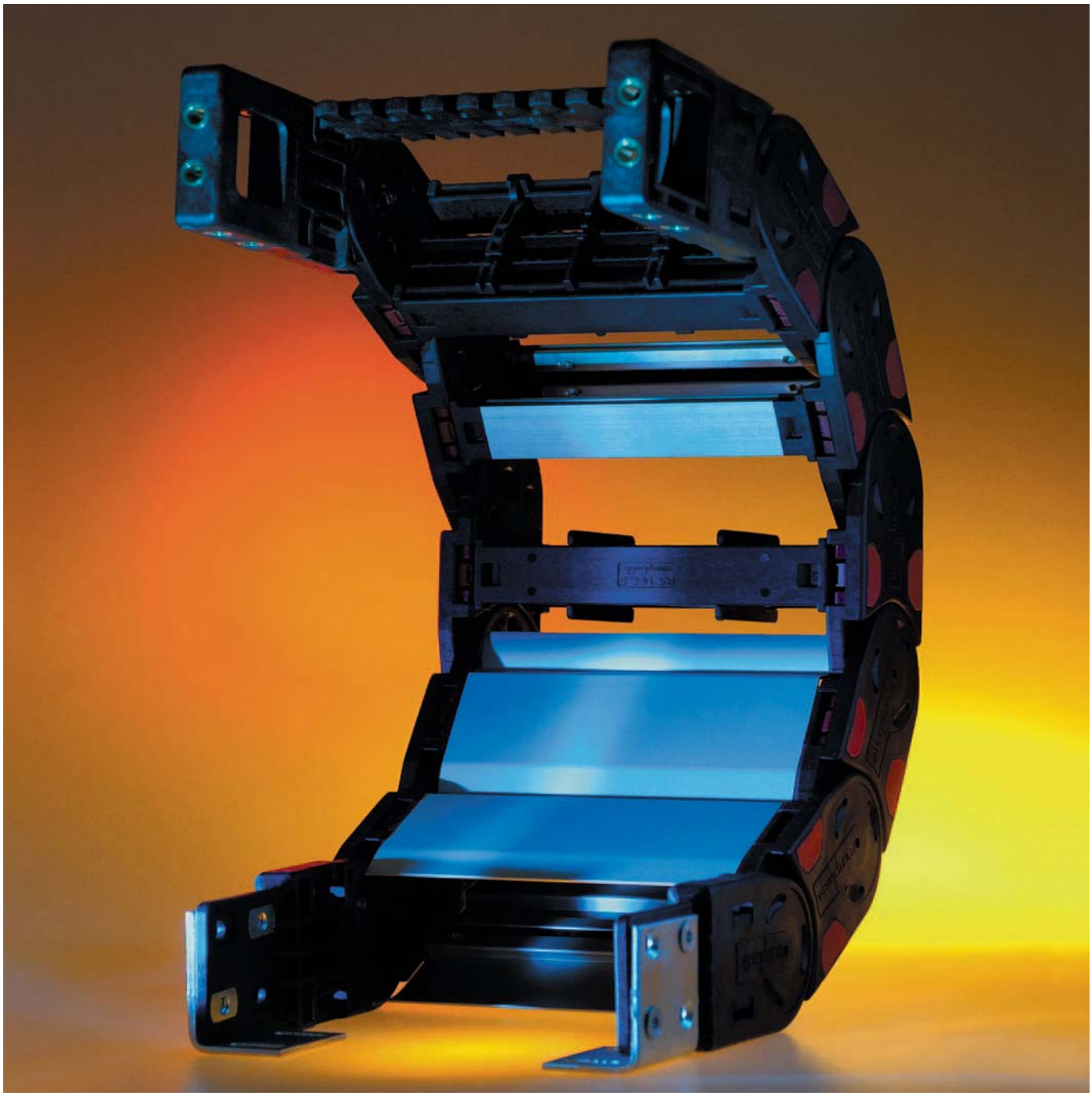
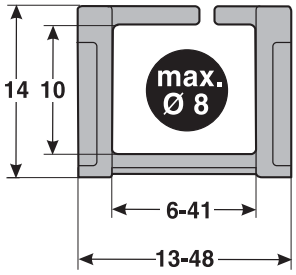


Photo: HELUKABEL®

Cable drag chains

HELUCHAIN® – Contents

Cable drag chain systems open



EasyLine EFK 10.1

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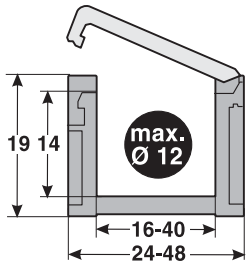

MultiLine EFK 14

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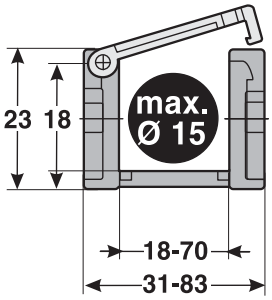

MultiLine EFK 18.1

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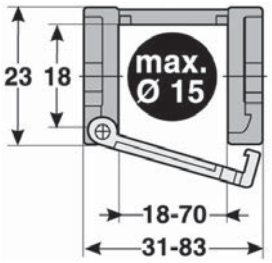

MultiLine EFK 18.2

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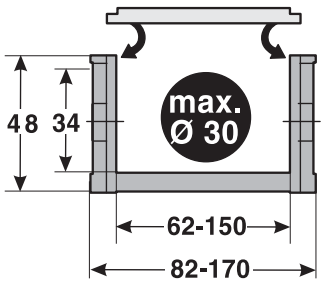

MultiLine EFK 35

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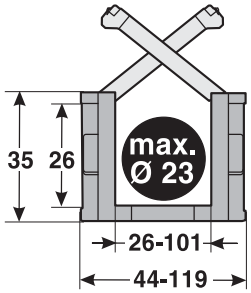

MultiLine EFK 3000

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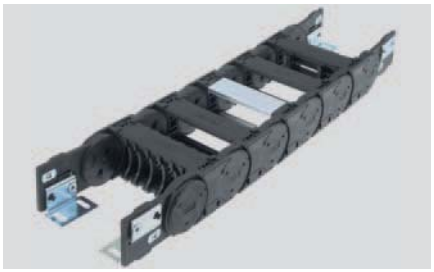
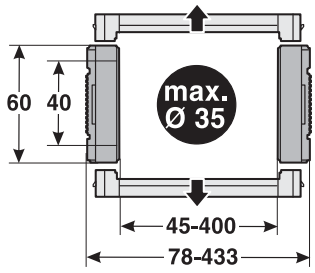
HELUCHAIN® – Contents





MultiLine EFK 44

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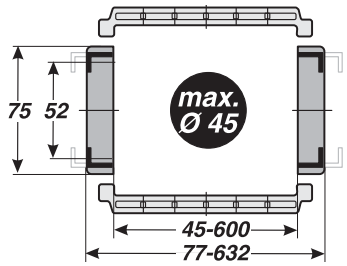

PowerLine EFK 52.2

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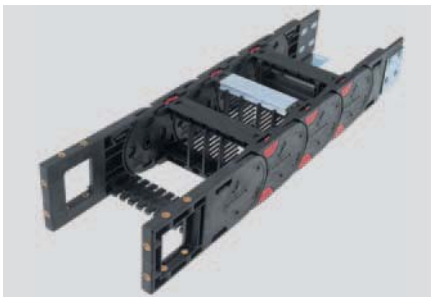

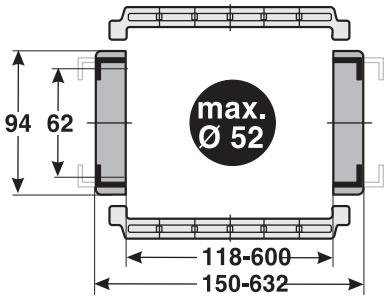

HeavyLine EFK 62.2

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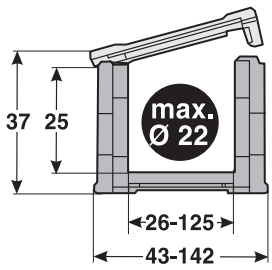
Cable drag chain systems closed



SafeLine EFK 25G

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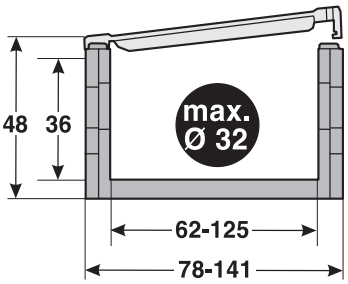

SafeLine EFK 36G

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Please use our selection table
Cables for cable drag chains
which follows after the cable drag chains.

a) Control cables, screened and unscreened

b) Elektronic data bus cables, screened and unscreened

c) Servo and motor connection cables, screened and unscreened

d) Environmentally-compatible cables, screened and unscreened

All cables are also in our main catalogue
"Cables and Wires"

Advantages:

- **Subsequent laying of cables or changing the assignment:**
  The chain must be opened from the inside and outside curve.
  Pre-assembled cables can then be inserted easily.

- **High stability:**
  Due to multiple and large stops. Large connecting bolts ensure better force absorbing capacity.

- **Easy handling:**
  Only a screwdriver is needed to open the cable carrier.

- **Quick adjustment of the chain lengths:**
  A simple length modification is also possible at any time in the installed condition.

- **Fastening secured using metal inserts:**
  The cold flow characteristics are prevented in this way.

- **Strain relief in the chain connector:**
  The strain relief is integrated in the chain connector. The cables are fixed using cable binders.

- **Fastening variant using rotating chain connector:**
  Many variants are made possible using this option.

- **Dividers:**
  Guarantee optimum cable routing.

- **Can be recycled:**
  The plastic of the chain is completely recyclable.

Drag Chain Systems

to

HELUKABEL® GmbH
Sales department
Dieselstraße 8 – 12
D-71282 Hemmingen/Germany

Phone +49 7150 9209-393
Fax +49 7150 959225
E-Mail: vk_zubehoer@helukabel.de

www.helukabel.de

Sender

Contact _____

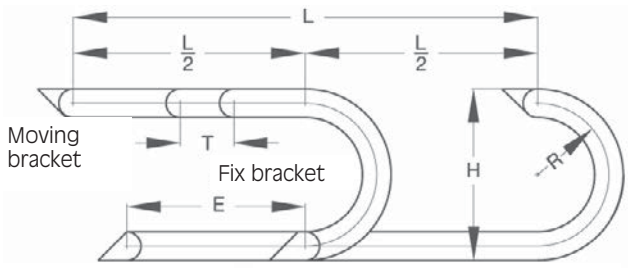
Phone _____ Fax _____

Inquiry No. _____

Date _____

Requirement ____ pieces

User parameters



L = Total travel, R = Radius, H = Installation hight, T = Separation, E = Distance of the conduit conveyance to the middle of the total travel

Internal height: _____ mm

Internal width: _____ mm

If the inner height or width are not known:

Filling

Cable type	Quantity	Outer diameter

Radius: _____ mm

If not known: Maximum overall height _____ mm

Incoming supply:: ❑ in the middle of the traverse path
or: _____ mm from the middle of the traverse path

Length _____ mm

If not known: Traverse path _____ mm

Installation variants (see right) _____

Total stroke speed _____ m/s

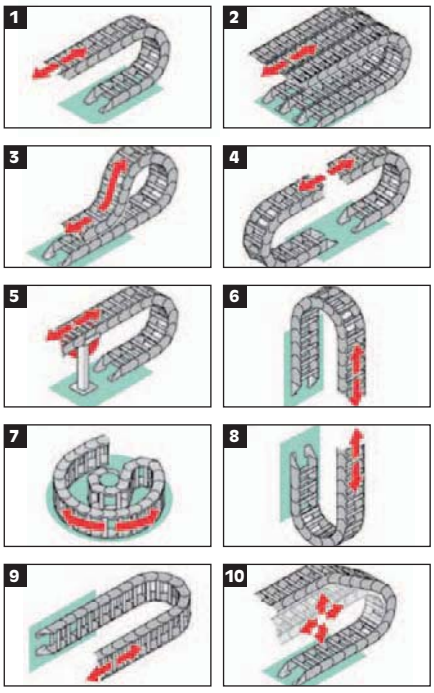
Speed up _____ m/s^2

Total stroke frequency _____ x/h

Environmental effects _____

Tub existing ❑ yes Internal width _____ mm
❑ no

Installation variants

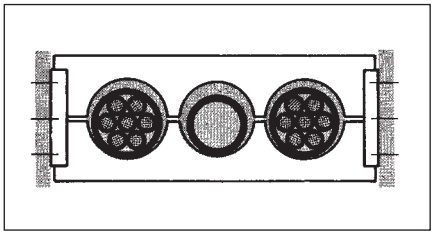


Installation manual

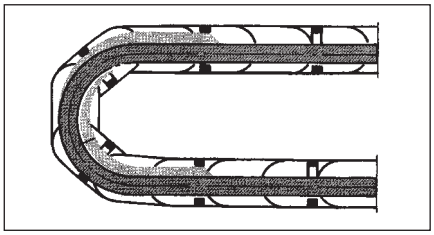
Cable installation in drag chains

The control cables in drag chains undertake an important task for the controlling and power technique, must be good synchronized with each other in the power chain systems. Further the installation of the cables and predection tubes in the power drag chains must be conducted with great care. An efficient usage upon accurate and exact cable installation. The following basic points should be noticed:

1. Where flat and round cables are mixed in one drag tray, then these should be installed loosely next to one another. The guide stays should be installed between the cables laid side by side. Try and avoid placing different sizes of round cables next to one another. Due to the limited space relationship cables arranged one above the other, frame stays are to be installed.

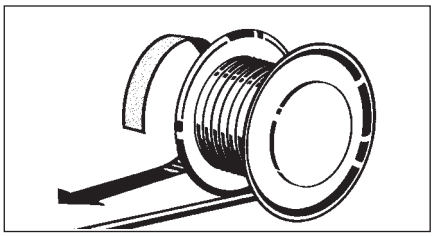


2. The cables must be installed with guide stays, dividers or in separate hole stays so as to move freely in the drag tray guides. As free space for the cables in the guide stay should be at least 10% of the cable Ø.



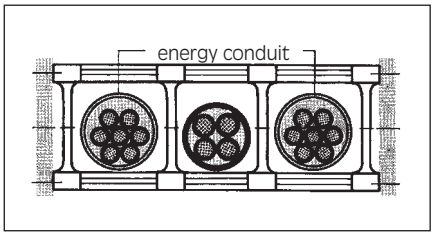
3. Always ensure that the cable can follow the drag trays motions without appearing to be forced.

4. If the cables are to be installed in the drag tray in layers then it is important to check upon installation that the cables are laid in such a way that they do not block eachother when the drag tray alters direction.



5. Cables should always be installed in nonkinking and nontwisting flat position into the dray trays. The cables must be reeled down tangential from the reels or drums; the cables should not be lifted up in twisted or looping form over head. Before the installation, the cables must be laid in straight and non-twisted form on plane surface. The cables must have an additional length of at least 10% of the whole length so that these can be laid freely without twisting in drag chains.

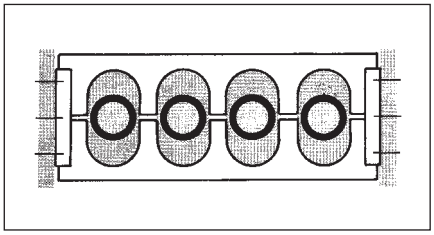
6. In case that is not possible to lay the cables as described under â, in order to lay several multi core high flexible cables with an outer diameter < 10 mm, we recommend the use of a guiding tube, in which these cables should losely laied. This tube is than integrated into the drag system.
The cross section of this tube has to be much larger as the sum of the cross sections of the cables. For the free movement of the flexible energy conduits, the guide or divider stays must be installed.



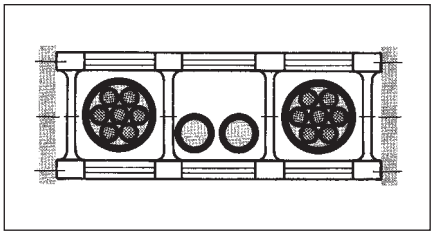
7. In case that pressure- or hydraulic tubes are integrated in a power drag system, those should be able to expand and to shrink under alternating charges without interrupting the functionability of the drag system.

8. In order to maintain a balanced running of the drag chain it is necessary to ensure that the weight of the cables inside is divided up evenly, with the heavier cables installed on the edges and the lighter types in the middle.
All cables must be securely fixed at one end of the drag chain. Thus assuring that the cores are securely fastened to one side with the other, open, side allow-ing enough slack to take up the drag chain's motion.

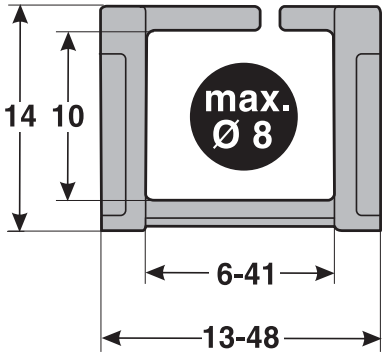
Generally it is recommended, if possible, not to use cables with a multi layer construction, e.g. >25 cores, but to split the necessary number of conductors over several cables.



If you have any further questions
please call our special cable department.



EasyLine EFK 10.1



Product range:

- **Internal height 10 mm**
- **Internal width 6-41 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 67**
- **Chain separation: 15 mm**
- **Maximum cable diameter: 8 mm**
- **Maximum procedure path: 10 m**
- **Material: modified polyamide**

Advantages:

- **Open cross bar:**
  The slit cross bars on the outer radius allow easy cable installation. Due to the diagonal slit configuration, cables falling out is avoided.

- **Wire insertion tool:**
  The wire insertion tool allows the easy insertion of cable, wires and hoses.

- **High stability:**
  Multiple large stops ensure high stability, while large diameter pins provide a high strenght connection between links.

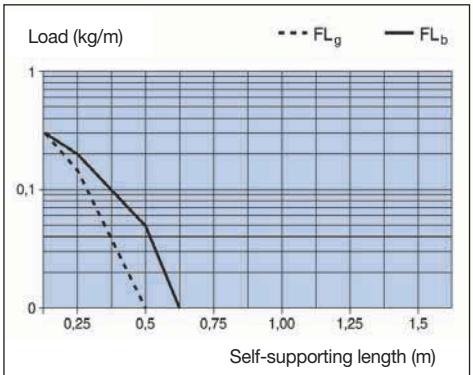
- **Quick adaptation of the chain length:**
  The chain can be easily modified in terms of length without the use of tools.

- **Subsequent strain relief:**
  Strain relief is integrated into the chain end brackets. Cable ties provide secure strain relief.

- **Integrated separators:**
  Integrated separators ensure optimal cable guiding.

- **Recyclable:**
  The plastic used in the chain is fully recyclable.

Unsupported length



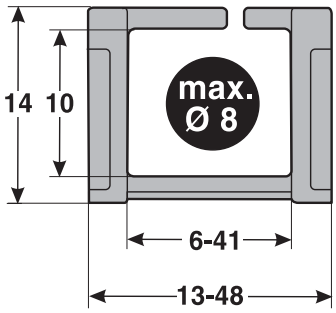
FL_g
Ideal installation situation for high stresses at the limit of the max. travel parameters. In this range the chain upper run is still biased, straight or has a max. sag of 10 – 50 mm depending on the type of chain.

FL_b
Satisfactory installation position for many applications working in the lower to middle range of the max. travel parameters. Depending on the chain type, the sag of the chain upper run is > 10 – 50 mm but less than the max. sag.

If the sag is greater than FL_b, the arrangement is unsuitable and should be avoided. Please choose a more stable murrplastik cable drag chain.

Technical modifications are subject to change without prior notice.

EasyLine EFK 10.1



Style (order code)

Configuration (order code)

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HS	HMA
mm	mm	mm
18	60	50
28	80	70
38	100	90
48	120	110
58	140	130

Open built-in height: HS = 2xR+HG+S

Connecting height bottom/top: HMA = 2xR + HG

External height of chain link: HG = 14 mm

Safety: S = 10 mm

Length of chain link: T = 15 mm

13	6	006				
16	9	009	18	018		
22	15	015	28	028		
28	21	021	38	038		0
38	31	031	48	048		7
48	41	041	58	058	0	9

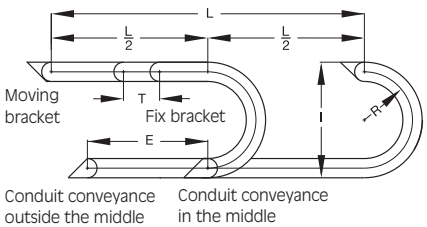
Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order Number: 0101 [ ] [ ] 0 [ ] [ ] 0

Sample order: Inside width = 6 mm, Radius = 18 mm, Configuration = 0, Style = 0

Order number: 0101 006 018 0000



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

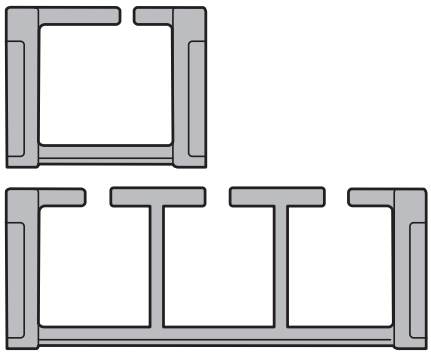
≈ 1 m chain = 67 x 15 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

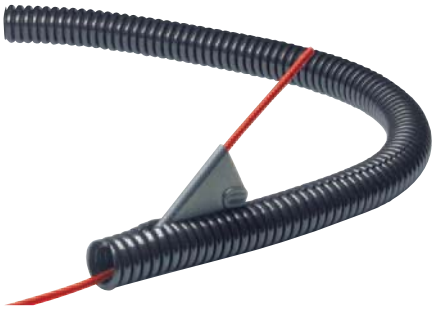
Technical modifications are subject to change without prior notice.

EasyLine EFK 10.1 / Accessories

Insertion aid



Chamber size Type	Order no.	Description	Pack
KE	901006	KE wire insertion aid	1



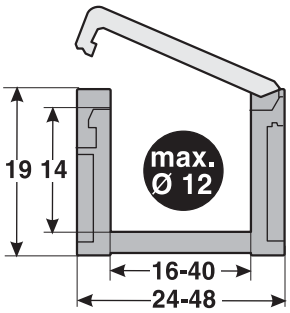
The wire insertion aid facilitates quick and simple installation of cables in the cable chain openings.

Technical modifications are subject to change without prior notice.

MultiLine EFK 14

Product range:

- **Internal height 14 mm**
- **Internal width 16-40 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 38**
- **Chain separation: 26 mm**
- **Maximum cable diameter: 12 mm**
- **Maximum procedure path: max. 20 m**
- **Material: modified polyamide**



Style (order code)

Configuration (order code)

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HS	HMA
mm	mm	mm
25	89	69
38	115	69
48	135	115
78	189	169

Open built-in height: HS = 2xR+HG+S
Connecting height bottom/top: HMA = 2xR+ HG
External height of chain link: HG = 19 mm
Safety: SK = 20 mm
Length of chain link: T = 26 mm

24 28 38 48	16 20 30 40	016 020 030 040	25 38 48 75	025 038 048 075	0	0 7 9

Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number:

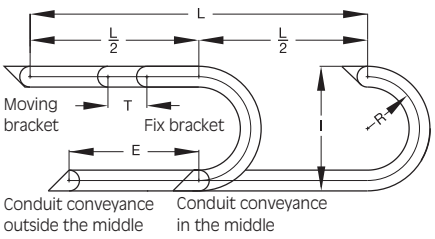
0140			0			0

Sample order: Inside width = 16 mm, Radius = 25 mm, Configuration = 0, Style = 0

Order number: 0140 016 025 0000

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Technical modifications are subject to change without prior notice.



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$

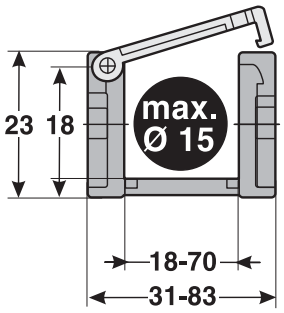
≈ 1 m chain = 38 x 26 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

MultiLine MP 18.1

Product range:

- **Internal height 18 mm**
- **Internal width 18-70 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 30**
- **Chain separation: 33 mm**
- **Maximum cable diameter: 15 mm**
- **Maximum procedure path: max. 30 m**
- **Material: modified polyamide**



Style (order code)
Configuration (order code)
Radius (order code) in mm
Internal width (order code) in mm
External width in mm

R	HS	HMA
mm	mm	mm
28	109	79
38	129	99
48	149	119
78	209	179

Open built-in height:	HS = 2xR+HG+S
Connecting height bottom/top:	HMA = 2xR + HG
External height of chain link:	HG = 23 mm
Safety:	S = 30 mm
Length of chain link:	T = 33 mm

31 38 50 63 83	18 25 37 50 70	018 025 037 050 070	25 38 48 78	028 038 048 078	0	0 7 9

Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number: **0181** ☐ ☐ **0** ☐ ☐ **0**

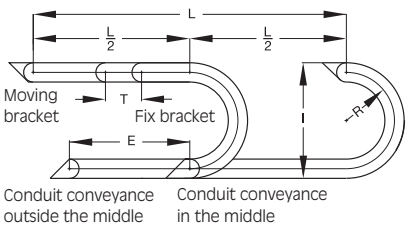
Sample order: Inside width = 18 mm, Radius = 28 mm, Configuration = 0, Style = 0

Order number: 0181 018 028 0000

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Prices on request

Technical modifications are subject to change without prior notice.



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

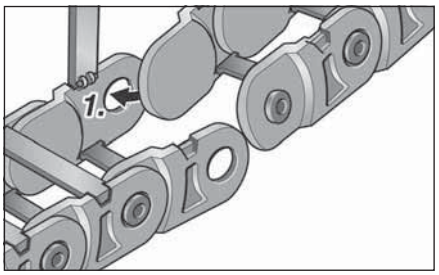
Length = $\frac{L}{2} + \pi \times R + 2 \times T + E$

≈ 1 m chain = 30 x 33 mm links

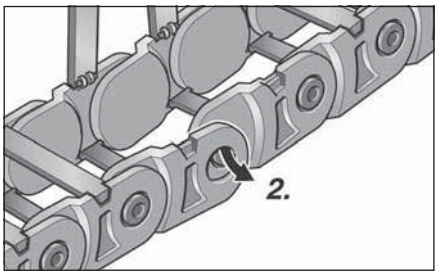
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

MultiLine MP 18.1

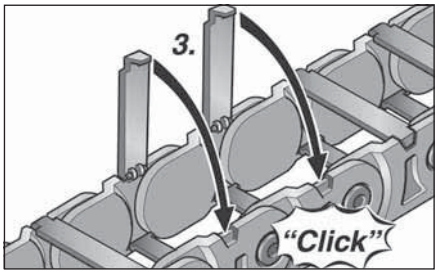
Assembly



Step 1

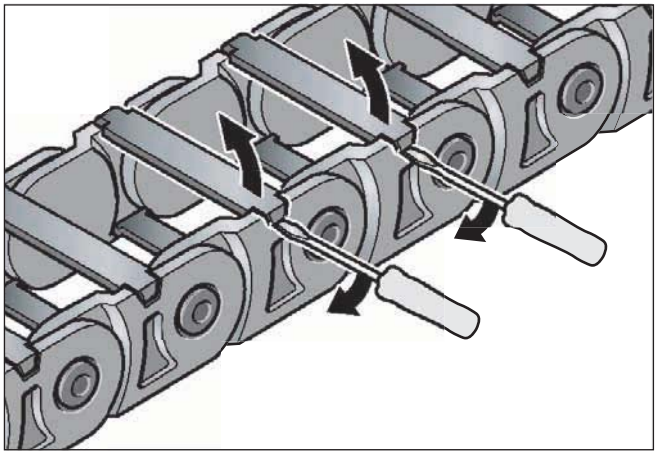


Step 2

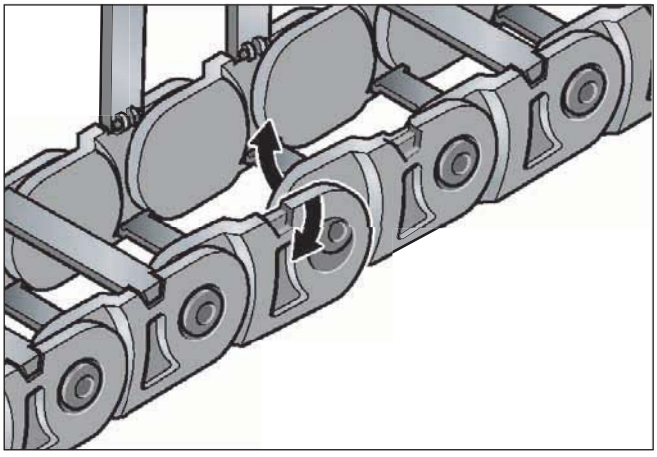


Step 3

Disassembly



Step 1



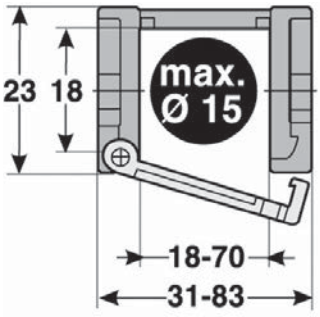
Step 2

Technical modifications are subject to change without prior notice.

MultiLine EFK 18.2

Product range:

- **Internal height 18 mm**
- **Internal width 18-70 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 30**
- **Chain separation: 33 mm**
- **Maximum cable diameter: 15 mm**
- **Maximum procedure path: max. 30 m**
- **Material: modified polyamide**



Style (order code)

Configuration (order code)

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HS	HMA
mm	mm	mm
28	109	79
38	129	99
48	149	119
78	209	179

Open built-in height: HS = 2xR+HG+S
Connecting height bottom/top: HMA = 2xR + HG
External height of chain link: HG = 23 mm
Safety: S = 30 mm
Length of chain link: T = 33 mm

31	18	018				
38	25	025	28	028		
50	37	037	38	038		
63	50	050	48	048		0
83	70	070	78	078	0	7
						9

Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number:

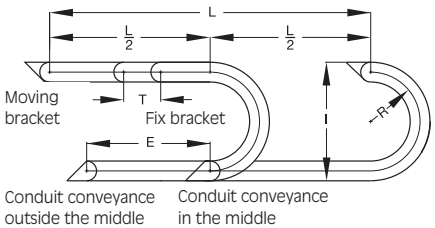
0182			0			0

Sample order: Inside width = 18 mm, Radius = 28 mm, Configuration = 0, Style = 0

Order number: 0182 018 028 0000

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Technical modifications are subject to change without prior notice.



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

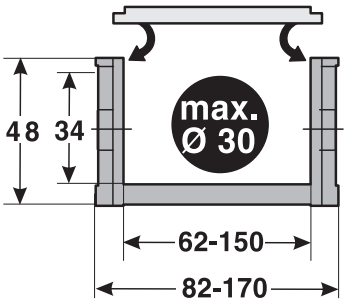
≈ 1 m chain = 30 x 33 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

MultiLine EFK 35

Product range:

- **Internal height 34 mm**
- **Internal width 62-150 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 17**
- **Chain separation: 58 mm**
- **Maximum cable diameter: 30 mm**
- **Maximum procedure path: max. 80 m**
- **Material: modified polyamide**



Style (order code)

Configuration (order code)

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HSK	HSV	HMA
mm	mm	mm	mm
70	203	228	188
100	263	288	248
150	363	388	348
200	463	488	448
300	663	688	648

Open built-in height without pre-tension: HSK = 2xR+HG+SK
Open built-in height with pre-tension: HSV = 2xR+HG+SV
Connecting height bottom/top: HMA = 2xR+ HG

External height of chain link: HG = 48 mm
Safety without pre-tension: SK = 15 mm
Safety with pre-tension: SV = 40 mm
Length of chain link: T = 58 mm

82	62	062	70	070		
106	86	086	100	100		
122	102	102	150	150		0
145	125	125	200	200	1	7
170	150	150	300	300	0	9

Configuration:
0 crossbar every link; w/bias
1 crossbar every link; w/o bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

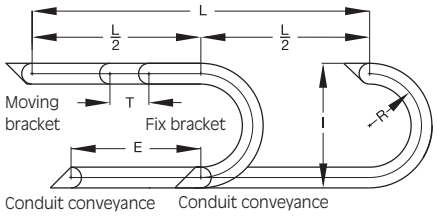
Order number: 0350 ____ ____ 0 ____ ____ 0

Sample order: Inside width = 62 mm, Radius = 70 mm, Configuration = 0, Style = 0

Order number: 0350 062 070 0000

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Technical modifications are subject to change without prior notice.



L = Travel distance, R = Radius
I = Installation height, T = Pitch
E = Distance between entry point and middle of travel distance

Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

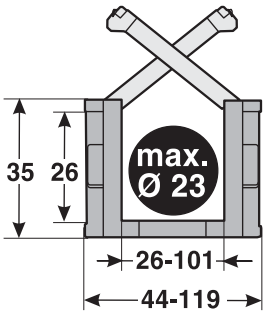
≈ 1 m chain = 17 x 58 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

MultiLine EFK 3000

Product range:

- **Internal height 26 mm**
- **Internal width 26-101 mm**
- **Loading side slotted on inside of radius**
- **Links per metre: 22**
- **Chain separation: 45 mm**
- **Maximum cable diameter: 23 mm**
- **Maximum procedure path: max. 60 m**
- **Material: modified polyamide**



R	HSK	HSV	HMA
mm	mm	mm	mm
50	145	180	135
70	185	220	175
95	235	270	225
120	285	320	275
150	345	380	335
200	445	480	435
300	645	680	635

Open built-in height without pre-tension: HSK = 2xR+HG+SK
Open built-in height with pre-tension: HSV = 2xR+HG+SV
Connecting height bottom/top: HMA = 2xR+ HG

External height of chain link: HG = 35 mm
Safety without pre-tension: SK = 10 mm
Safety with pre-tension: SV = 45 mm
Length of chain link: T = 45 mm

Style (order code)						
Configuration (order code)						
Radius (order code) in mm						
Internal width (order code) in mm						
External width in mm						
	44	26	026	50	050	
	55	37	037	70	070	
	74	56	056	95	095	
	80	62	062	120	120	
	94	76	076	150	150	
	105	87	087	200	200	1
	119	101	101	300	300	0
						7
						9

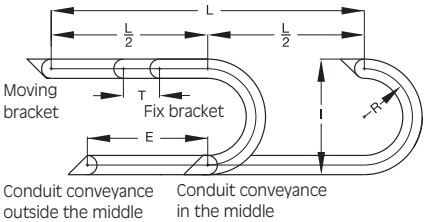
Configuration:
0 crossbar every link; w/bias
1 crossbar every link; w/o bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number: 0300 [ ] [ ] 0 [ ] [ ] 0

Sample order: Inside width = 26 mm, Radius = 50 mm, Configuration = 0, Style = 0

Order number: 0300 026 050 0000



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

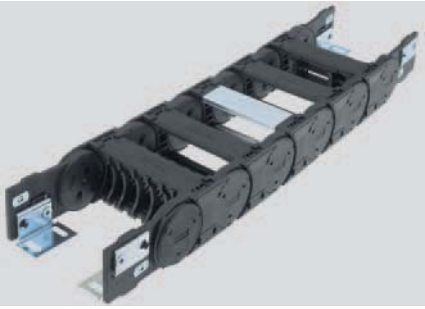
≈ 1 m chain = 22 x 45 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

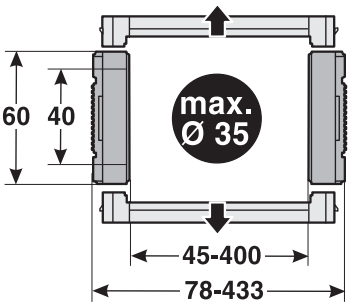
Technical modifications are subject to change without prior notice.

MultiLine EFK 44



Product range:

- **Internal height 40 mm**
- **Internal width 45-400 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 13**
- **Chain separation: 75,5 mm**
- **Maximum cable diameter: 35 mm**
- **Maximum procedure path: max. 50 m**
- **Material: modified polyamide**



Style (order code)
Configuration (order code)
Radius (order code) in mm
Internal width (order code) in mm
External width in mm

R	HSK	HSV	HMA
mm	mm	mm	mm
90	253	278	240
125	323	348	310
150	373	398	360
200	473	498	460
250	573	598	560

Open built-in height without pre-tension: HSK = 2xR+HG+SK
Open built-in height with pre-tension: HSV = 2xR+HG+SV
Connecting height bottom/top: HMA = 2xR+HG

External height of chain link: HG = 60 mm
Safety without pre-tension: SK = 13 mm
Safety with pre-tension: SV = 38 mm
Length of chain link: T = 75,5 mm

78	45	045			0	
95	62	062			1	
117	84	084			2	
138	105	105	90	090	3	
177	144	144	125	125	4	
215	182	182	150	150	5	
Innen	118-		200	200	6	0
+33	600	ALU	250	250	7	7
					9	9

Configuration:
0 crossbar every link; w/bias
1 crossbar every link; w/o bias
2 crossbar EOL; w/bias
3 crossbar EOL; w/o bias
4 AL crossbar every link; w/bias
5 AL crossbar every link; w/o bias
6 AL crossbar EOL; w/bias
7 AL crossbar EOL; w/o bias
9 Customer order

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

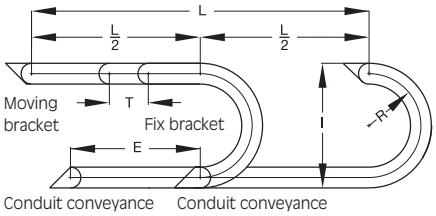
Technical modifications are subject to change without prior notice.

Order number:

0440			0			0

Sample order: Inside width = 45 mm, Radius = 90 mm, Configuration = 0, Style = 0

Order number: 0440 045 090 0000



L = Travel distance, R = Radius
I = Installation height, T = Pitch
E = Distance between entry point and middle of travel distance

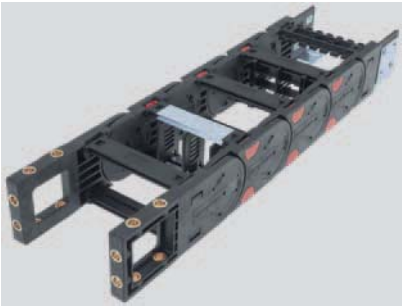
Determining the chain length

$$\text{Länge} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

≈ 1 m chain = 13 x 75.5 mm links

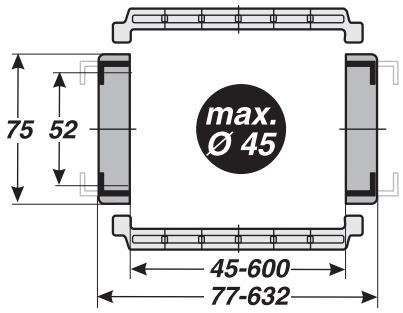
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

PowerLine EFK 52.2



Product range:

- **Internal height 52 mm**
- **Internal width 45-546 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 11**
- **Chain separation: 91 mm**
- **Maximum cable diameter: 45 mm**
- **Maximum procedure path: max. 150 m**
- **Material: modified polyamide**



Style (order code)
Configuration (order code)
Radius (order code) in mm
Internal width (order code) in mm
External width in mm

R	HSK	HSV	HMA
mm	mm	mm	mm
100	290	320	274
150	390	420	374
200	490	520	474
250	590	620	574
300	690	720	674
350	790	820	774

Open built-in height without pre-tension: HSK = 2xR+HG+SK
Open built-in height with pre-tension: HSV = 2xR+HG+SV
Connecting height bottom/top: HMA = 2xR+HG

External height of chain link: HG = 74 mm
Safety without pre-tension: SK = 16 mm
Safety with pre-tension: SV = 46 mm
Length of chain link: T = 91 mm

77	45	045				
94	62	062				
103	71	071				
116	84	084				
128	96	096				
139	107	107				
153	121	121				
176	144	144				
178	146	146				
203	171	171				
214	182	182				
228	196	196				
252	220	220				
278	246	246			0	
328	296	296			1	
378	346	346			2	
428	396	396	100	100	3	
478	446	446	150	150	4	
528	496	496	200	200	5	
578	546	546	250	250	6	0
Innen	80-		300	300	7	7
+32	600	ALU	350	350	9	9

Configuration:
0 crossbar every link; w/bias
1 crossbar every link; w/o bias
2 crossbar EOL; w/bias
3 crossbar EOL; w/o bias
4 AL crossbar every link; w/bias
5 AL crossbar every link; w/o bias
6 AL crossbar EOL; w/bias
7 AL crossbar EOL; w/o bias
9 Customer order

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

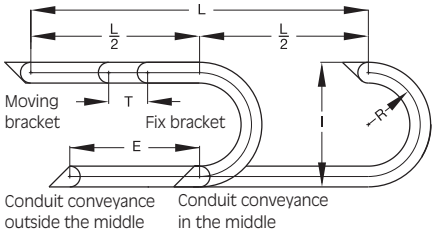
Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Technical modifications are subject to change without prior notice.

Order number: 0522 [ ] [ ] 0 [ ] [ ] 0

Sample order: Inside width = 45 mm, Radius = 100 mm, Configuration = 0, Style = 0

Order number: 0522 045 100 0000



L = Travel distance, R = Radius
I = Installation height, T = Pitch
E = Distance between entry point and middle of travel distance

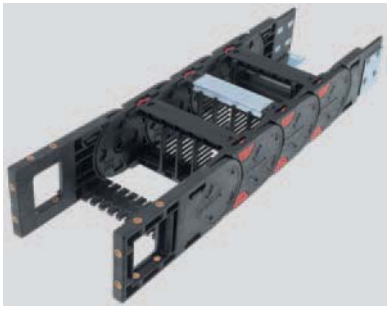
Determining the chain length

$$\text{Länge} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

≈ 1 m chain = 11 x 91 mm links

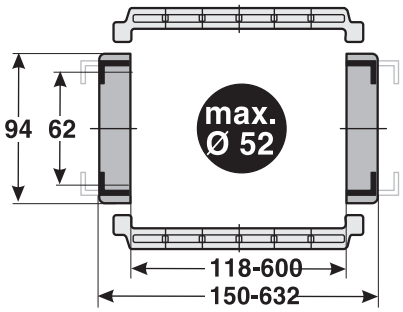
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

HeavyLine MP 62.2



Product range:

- **Internal height 62 mm**
- **Internal width 118-518 mm**
- **Loading side slotted on outside of radius**
- **Links per metre: 10**
- **Chain separation: 100 mm**
- **Maximum cable diameter: 52 mm**
- **Maximum procedure path: max. 180 m**
- **Material: modified polyamide**



Style (order code)

Configuration (order code)
***= standard**

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HSK	HSV	HMA
mm	mm	mm	mm
150	414	444	394
200	514	544	494
250	614	644	594
300	714	744	694
400	914	944	894
500	1114	1144	1094

Open built-in height without pre-tension:	HSK = 2xR+HG+SK
Open built-in height with pre-tension:	HSV = 2xR+HG+SV
Connecting height bottom/top:	HMA = 2xR+HG
External height of chain link:	HG = 94 mm
Safety without pre-tension:	SK = 20 mm
Safety with pre-tension:	SV = 50 mm
Length of chain link:	T = 100 mm

150	118	118				
175	143	143				
200	168	168				
225	193	193				
250	218	218				
275	243	243				
300	268	268				
325	293	293			0	
350	318	318			1	
375	343	343			2	
400	368	368	150	150	3	
450	418	418	200	200	4	
500	168	168	250	250	5	
550	518	518	300	300	6	0
inside	118-		400	400	7	7
+32	600	ALU	500	500	9	9

Configuration:
0 crossbar every link; w/bias
1 crossbar every link; w/o bias
2* crossbar EOL; w/bias
3* crossbar EOL; w/o bias
4 AL crossbar every link; w/bias
5 AL crossbar every link; w/o bias
6 AL crossbar EOL; w/bias
7 AL crossbar EOL; w/o bias
9 Customer order

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Please order (per chain) 2 chain connectors. You will automatically receive 1 with a drill-hole and 1 with a bolt.

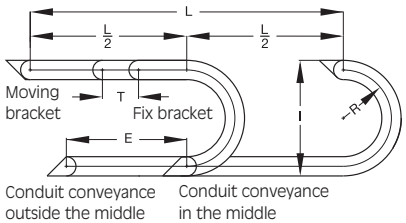
Technical modifications are subject to change without prior notice.

Order number:

0622			0			0

Inside width = 118 mm, Radius = 150 mm, Configuration = 0, Style = 0

Sample order 0622 118 150 0000



Conduit conveyance outside the middle

Conduit conveyance in the middle

L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

Length = $\frac{L}{2} + \pi \times R + 2 \times T + E$

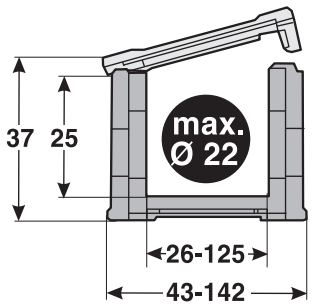
≈ 1 m chain = 10 x 100 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

SafeLine EFK 25G

Product range:

- **Internal height 25 mm**
- **Internal width 26-125 mm**
- **Loading inside**
- **Links per metre: 33**
- **Chain separation: 30 mm**
- **Maximum cable diameter: 22 mm**
- **Maximum procedure path: max. 40 m**
- **Material: modified polyamide**



Style (order code)

Configuration (order code)

Radius (order code) in mm

Internal width (order code) in mm

External width in mm

R	HS	HMA
mm	mm	mm
60	190	157
75	220	187
100	270	237
125	320	287
150	370	337
200	470	437
250	570	537

Open built-in height:	HS = 2xR+HG+S
Connecting height bottom/top:	HMA = 2xR + HG
External height of chain link:	HG = 37 mm
Safety:	S = 33 mm
Length of chain link:	T = 30 mm

			60	060		
44	26	026	75	075		
55	37	037	100	100		
80	62	062	125	125		
105	87	087	150	150		
119	101	101	200	200		
143	125	125	250	250		
					0	0
						9

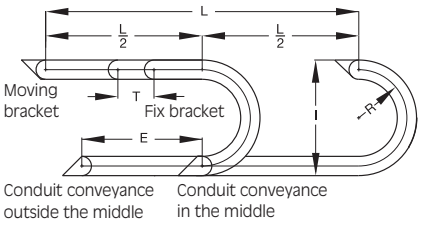
Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number: **0250** | | | **0** | | | **0**

Sample order: Inside width = 26 mm, Radius = 60 mm, Configuration = 0, Style = 0

Order number: 0250 026 060 0000



L = Travel distance, R = Radius,
I = Installation height, T = Pitch,
E = Distance between entry point and middle of travel distance

Determining the chain length

$$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$$

≈ 1 m chain = 33 x 30 mm links

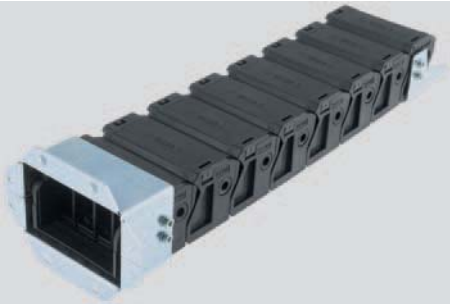
The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Prices on request

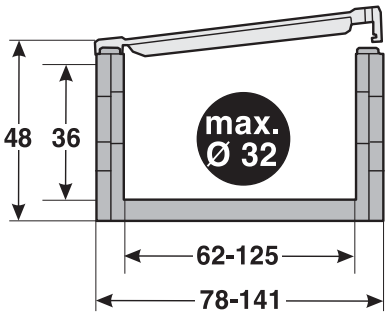
Technical modifications are subject to change without prior notice.

SafeLine EFK 36G



Product range:

- **Internal height 36 mm**
- **Internal width 62-125 mm**
- **Loading inside**
- **Links per metre: 25**
- **Chain separation: 40 mm**
- **Maximum cable diameter: 32 mm**
- **Maximum procedure path: max. 80 m**
- **Material: modified polyamide**



Style (order code)
Configuration (order code)
Radius (order code) in mm
Internal width (order code) in mm
External width in mm

R	HS	HMA
mm	mm	mm
80	240	208
100	280	248
125	330	298
200	380	348
200	480	448

Open built-in height: HS = 2xR+HG+S
Connecting height bottom/top: HMA = 2xR + HG
External height of chain link: HG = 48 mm
Safety: S = 32 mm
Length of chain link: T = 40 mm

			80	080		
82	62	062	100	100		
106	86	086	125	125		
122	102	102	150	150		
145	125	125	200	200	0	0 9

Configuration:
0 crossbar every link; w/bias

Style:
0 Standard (PA)
7 ESD (PA)
9 Special version

Order number: 0360 [ ] [ ] 0 [ ] [ ] 0

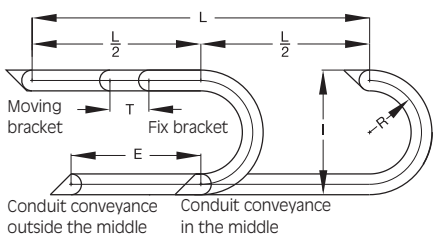
Sample order: Inside width = 62 mm, Radius = 80 mm, Configuration = 0, Style = 0

Order number: 0360 062 080 0000

Please order (per chain)
2 chain connectors.
You will automatically receive
1 with a drill-hole
and 1 with a bolt.

Prices on request

Technical modifications are subject to change without prior notice.



L = Travel distance, R = Radius
I = Installation height, T = Pitch
E = Distance between entry point and middle of travel distance

Determining the chain length

$\text{Length} = \frac{L}{2} + \pi \times R + 2 \times T + E$

≈ 1 m chain = 25 x 40 mm links

The fixed point of the cable drag chain should be connected in the middle of the travel distance. This arrangement gives the shortest connection between the fixed point and the moving consumer and thus the most efficient chain length.

Selection table Cables in drag chains

Other Technical Details can be found in the Product Pages of our Catalogue.

Control Cable, screened and unscreened

Application

Type	Movement Distance max. 5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	Min. Bending Radius D=Outerdiameter 5 x D	7,5 x D	10 x D	12,5 x D	15 x D	Speed max. 2 m/s	3 m/s	4 m/s	5 m/s	Accela-ration max. 10 m/s²	50 m/s²	Cycle min. 1 Mio	5 Mio	10 Mio
JZ-602 RC-C PUR	x	x	x						x			x	x			x		x		
Single 602-RC-J/-O single core	x							x				x				x		x		
Single 602-RC-J/-O +CY single core	x							x				x				x		x		
JZ-602 RC	x	x						x				x				x		x		
JZ-602 RC PUR	x	x	x					x				x	x			x		x		
JZ-602 RC-CY	x	x							x			x				x		x		
JZ-HF	x	x						x				x				x		x		
JZ-HF CY	x	x							x			x				x		x		
MULTIFLEX® 600	x	x						x				x				x		x		
MULTIFLEX® 600-C	x	x							x			x				x		x		
PURö-JZ-HF	x	x	x					x				x	x			x		x		
PURö-JZ-HF-YCP	x	x	x						x			x	x			x		x		
MULTIFLEX® 512-PUR	x	x	x	x	x		x					x	x	x		x		x	x	
MULTIFLEX® 512-C-PUR	x	x	x	x	x			x				x	x	x		x		x	x	
MULTIFLEX® 512-PUR UL/CSA	x	x	x	x	x		x					x	x	x		x		x	x	
MULTIFLEX® 512-C-PUR UL/CSA	x	x	x	x	x			x				x	x	x		x		x	x	

Cable Structure / Technical Data

Type	Core Insulation PVC special	TPE special	PUR special	Inner sheath	Cu-braid, Cu-layer	Outher Sheath PVC special	PUR special	TPE special	Nominal Voltage 300/300 V	300/500 V	600 V/UL-CSA	1000 V	Temperature Range in C° -40	-30	-20	-10	-5	70	80	90
JZ-602 RC-C PUR	x			x	x		x				x						*	*	*	
Single 602-RC-J/-O single core	x					x					x						*	*	*	*
Single 602-RC-J/-O +CY single core	x			x	x	x					x						*	*	*	*
JZ-602 RC	x					x					x						*	*	*	*
JZ-602 RC PUR	x						x				x						*	*	*	
JZ-602 RC-CY	x			x	x	x					x						*	*	*	*
JZ-HF	x					x				x							*	*	*	
JZ-HF CY	x			x	x	x				x							*	*	*	
MULTIFLEX® 600	x					x				x							*	*	*	
MULTIFLEX® 600-C	x			x	x	x				x							*	*	*	
PURö-JZ-HF	x						x			x							*	*	*	
PURö-JZ-HF-YCP	x			x	x		x			x							*	*	*	
MULTIFLEX® 512-PUR		x					x			x			*	*	*	*	*	*	*	
MULTIFLEX® 512-C-PUR		x		x	x		x			x			*	*	*	*	*	*	*	
MULTIFLEX® 512-PUR UL/CSA		x					x				x		*	*	*	*	*	*	*	
MULTIFLEX® 512-C-PUR UL/CSA		x		x	x		x				x		*	*	*	*	*	*	*	

Resistance / Standards

Type	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
JZ-602 RC-C PUR			x	x	x		x	x	x			x	
Single 602-RC-J/-O single core			x	x				x				x	
Single 602-RC-J/-O +CY single core			x	x				x				x	x
JZ-602 RC			x	x				x	x			x	
JZ-602 RC PUR			x	x	x		x	x	x			x	
JZ-602 RC-CY			x	x				x	x			x	
JZ-HF			x	x				x		x	x		
JZ-HF CY			x	x				x		x	x		
MULTIFLEX® 600		x		x				x		x	x		
MULTIFLEX® 600-C		x		x				x		x	x		
PURö-JZ-HF		x		x			x	x	x		x		
PURö-JZ-HF-YCP		x		x			x	x	x		x		
MULTIFLEX® 512-PUR	x	x		x			x	x	x		x		
MULTIFLEX® 512-C-PUR	x	x		x			x	x	x		x		
MULTIFLEX® 512-PUR UL/CSA	x			x			x	x	x			x	
MULTIFLEX® 512-C-PUR UL/CSA	x			x			x	x	x			x	

The table indicates the main application.
In case of moving cables at higher speeds, over longer distances or higher cycling rates please contact our Technical Support.
Phone +49 7150 9209-0 or techsupport@helukabel.de.
A cycle is a double lift: a representative sample has been tested and measurot in our Test Workshop.
The cycle count is only valid when appropriatel and professionally installed (see the installation advice; rules for connections, page 304, and under permitted environment conditions).

Continuation ▶

Other Technical Details can be found in the Product Pages of our Catalogue.

Control Cable, screened and unscreened

Type	Application																				Cable Structure								Technical Data														Resistance								Standards			
	Movement Distance max.						Min. Bending Radius D=Outerdiameter					Speed max.				Accela-ration max.		Cycle min.			Core Insulation					Outher Sheath			Nominal Voltage				Temperature Range in C°																				
	5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	5 x D	7,5 x D	10 x D	12,5 x D	15 x D	2 m/s	3 m/s	4 m/s	5 m/s	10 m/s²	50 m/s²	1 Mio	5 Mio	10 Mio	PVC special	TPE special	PUR special	Inner sheath	Cu-braid, Cu-layer	PVC special	PUR special	TPE special	300/300 V	300/500 V	600 V/UL-CSA	1000 V	-40	-30	-20	-10	-5	70	80	90	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
MULTISPEED® 600-PUR-J/-O	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x					x					x		*	*	*	*	*	*	*	x	x									x	x	
MULTISPEED® 600-C-PUR-J/-O	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x		x	x		x					x		*	*	*	*	*	*	*	x	x									x	x	
MULTISPEED® 500-PVC	x	x	x	x	x			x				x	x	x	x	x	x	x	x			x				x				x							*	*	*			x		x				x			x		
MULTISPEED® 500-PVC UL/CSA	x	x	x	x	x			x				x	x	x	x	x	x	x	x			x				x				x							*	*	*			x		x				x			x	x	
MULTISPEED® 500-PUR	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x		x					x			x				*	*	*	*	*	*		x	x		x			x	x	x		x		
MULTISPEED® 500-PUR UL/CSA	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x		x					x							*	*	*	*	*	*		x	x		x			x	x	x		x	x	
MULTISPEED® 500-TPE	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x						x		x				*	*	*	*	*	*		x	x			x			x	x		x		
MULTISPEED® 500-TPE UL/CSA	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x						x		x				*	*	*	*	*	*		x	x			x			x	x		x	x	
MULTISPEED® 500-C-PVC	x	x	x	x	x			x				x	x	x	x	x	x	x	x			x		x	x	x				x							*	*	*			x		x				x			x		
MULTISPEED® 500-C-PVC UL/CSA	x	x	x	x	x			x				x	x	x	x	x	x	x	x			x		x	x	x				x							*	*	*			x		x				x			x	x	
MULTISPEED® 500-C-PUR	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x		x		x	x		x			x				*	*	*	*	*	*	*	x	x		x			x	x	x		x		
MULTISPEED® 500-C-PUR UL/CSA	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x		x		x	x		x			x				*	*	*	*	*	*		x	x		x			x	x	x		x	x	
MULTISPEED® 500-C-TPE	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x		x	x			x		x				*	*	*	*	*	*		x	x			x			x	x		x		
MULTISPEED® 500-C-TPE UL/CSA	x	x	x	x	x	x	x					x	x	x	x	x	x	x	x	x		x		x	x			x		x				*	*	*	*	*	*		x	x			x			x	x		x	x	

The table indicates the main application.
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Phone +49 7150 9209-0 or techsupport@helukabel.de.
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Selection table Cables in drag chains

Other Technical Details can be found in the Product Pages of our Catalogue.

Elektronic-Data-BUS-Cables, screened and unscreened

Application

Type	Movement Distance max. 5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	Min. Bending Radius D=Outerdiameter 5 x D	7,5 x D	10 x D	12,5 x D	15 x D	Speed max. 2 m/s	3 m/s	4 m/s	5 m/s	Accela-ration max. 10 m/s²	50 m/s²	Cycle min. 1 Mio	5 Mio	10 Mio
SUPERTRONIC-PVC	x						x					x				x		x		
SUPERTRONIC-C-PVC	x							x				x				x		x		
SUPERTRONIC 310-PVC	x						x					x				x		x		
SUPERTRONIC 310 C-PVC	x							x				x				x		x		
SUPERTRONIC-PURö	x						x					x	x			x		x	x	
SUPERTRONIC-C-PURö	x	x	x					x				x	x	x		x		x	x	
SUPERTRONIC 330 PURö	x	x	x				x					x	x	x		x		x	x	
SUPERTRONIC 330 C PURö	x	x	x					x				x	x	x		x		x	x	
SUPER-PAAR-TRONIC-C-PUR	x	x	x	x					x			x	x	x		x	x	x	x	
SUPER-PAAR-TRONIC 340 C PUR	x	x	x	x					x			x	x	x		x	x	x	x	
MULTISPEED-TRONIC-PUR	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x
MULTISPEED-TRONIC-C-PUR	x	x	x	x	x	x		x				x	x	x	x	x	x	x	x	x
S FTP Drag chain 4x2xAWG 24 PUR	x	x	x	x					x			x	x	x		x	x	x	x	
PROFIBUS L21x20,64	x	x	x								x	x	x			x		x		
PROFIBUS CAN, high flexible	x	x	x							x		x	x			x		x		
I-BUS Drag chain	x	x	x								x	x	x			x		x		
POF mit PUR-Jacket, simplex duplex	x	x	x							x		x	x			x		x		
TOPGEBER 512 PUR	x	x	x	x					x			x	x	x		x	x	x	x	
Tachofeedback-Cable-C-Pur	x	x	x	x					x			x	x	x		x	x	x		

Cable Structure / Technical Data

Type	Core Insulation PVC special	TPE special	PE	PUR special	Inner sheath	Cu-braid, Cu-layer	Outher Sheath PVC special	PUR special	TPE special	Nominal Voltage 300/300 V	300/500 V	600 V/UL-CSA	1000 V	Temperature Range in C° -40	-30	-20	-10	-5	70	80	90
SUPERTRONIC-PVC	x						x			x								*	*		
SUPERTRONIC-C-PVC	x					x	x			x								*	*		
SUPERTRONIC 310-PVC	x						x			x								*	*	*	
SUPERTRONIC 310 C-PVC	x					x	x			x								*	*	*	
SUPERTRONIC-PURö	x							x		x	x							*	*		
SUPERTRONIC-C-PURö		x				x		x		x	x			*	*	*	*	*	*	*	
SUPERTRONIC 330 PURö		x						x		x				*	*	*	*	*	*	*	
SUPERTRONIC 330 C PURö		x				x		x		x				*	*	*	*	*	*	*	
SUPER-PAAR-TRONIC-C-PUR		x				x		x		x				*	*	*	*	*	*	*	*
SUPER-PAAR-TRONIC 340 C PUR		x				x		x		x				*	*	*	*	*	*	*	*
MULTISPEED-TRONIC-PUR		x						x		x						*	*	*	*	*	
MULTISPEED-TRONIC-C-PUR		x		x	x			x		x					*	*	*	*	*	*	
S FTP Drag chain 4x2xAWG 24 PUR				x	x	x		x							*	*	*	*	*		
PROFIBUS L21x20,64			x			x		x							*	*	*	*	*		
PROFIBUS CAN, high flexible			x			x		x								*	*	*	*		
I-BUS Drag chain			x			x		x								*	*	*	*		
POF mit PUR-Jacket, simplex duplex			x					x							*	*	*	*	*	*	
TOPGEBER 512 PUR		x				x		x		x	x					*	*	*	*	*	
Tachofeedback-Cable-C-Pur		x				x		x		x	x				*	*	*	*	*	*	

Resistance / Standards

Type	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
SUPERTRONIC-PVC		x									x		
SUPERTRONIC-C-PVC		x									x		
SUPERTRONIC 310-PVC		x										x	
SUPERTRONIC 310 C-PVC		x										x	
SUPERTRONIC-PURö		x					x		x		x		
SUPERTRONIC-C-PURö		x					x		x		x		
SUPERTRONIC 330 PURö		x					x		x			x	
SUPERTRONIC 330 C PURö	x	x					x		x			x	
SUPER-PAAR-TRONIC-C-PUR	x	x					x		x		x		
SUPER-PAAR-TRONIC 340 C PUR	x	x					x		x			x	
MULTISPEED-TRONIC-PUR	x	x		x			x	x	x		x	x	
MULTISPEED-TRONIC-C-PUR	x	x		x			x	x	x		x	x	
S FTP Drag chain 4x2xAWG 24 PUR		x		x					x				
PROFIBUS L21x20,64	x	x		x					x				
PROFIBUS CAN, high flexible	x	x		x					x				
I-BUS Drag chain	x	x		x					x				
POF mit PUR-Jacket, simplex duplex		x		x					x				x
TOPGEBER 512 PUR	x	x		x	x		x	x	x			x	x
Tachofeedback-Cable-C-Pur		x							x		x		

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Selection table Cables in drag chains

Other Technical Details can be found in the Product Pages of our Catalogue.

Servo Cables and Motor Cables, screened and unscreened

Application

Type	Movement Distance max.						Min. Bending Radius D=Outerdiameter					Speed max.				Accela-ration max.		Cycle min.		
	5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	5 x D	7,5 x D	10 x D	12,5 x D	15 x D	2 m/s	3 m/s	4 m/s	5 m/s	10 m/s²	50 m/s²	1 Mio	5 Mio	10 Mio
TOPSERV® 109 PUR	x		x	x				x				x	x	x		x		x	x	
TOPSERV® 113 PUR	x		x	x				x				x	x	x		x		x	x	
TOPSERV® 121 PUR	x		x	x				x				x	x	x		x		x	x	
TOPFLEX® 300	x							x				x				x		x		
TOPFLEX® 301	x							x				x				x		x		
TOPFLEX® 301 C	x							x				x				x		x		
TOPFLEX® 304	x						x					x				x		x		
TOPFLEX® 304 C	x						x					x				x		x		
TOPFLEX® 611 PUR	x		x	x				x				x	x	x		x	x	x	x	
TOPFLEX® 611-C-PUR	x		x	x					x			x	x	x		x	x	x	x	
TOPSERV® 110+120 w. Control pair. screened	x		x	x				x				x	x			x		x	x	

Cable Structure / Technical Data

Type	Core Insulation					Outher Sheath			Nominal Voltage				Temperature Range in C°							
	PVC special	TPE special	PUR special	Inner sheath	Cu-braid, Cu-layer	PVC special	PUR special	TPE special	300/300 V	300/500 V	600 V/UL-CSA	1000 V	-40	-30	-20	-10	-5	70	80	90
TOPSERV® 109 PUR		x			x		x				x	x	*	*	*	*	*	*	*	
TOPSERV® 113 PUR		x			x		x					x	*	*	*	*	*	*	*	
TOPSERV® 121 PUR		x			x		x					x	*	*	*	*	*	*	*	
TOPFLEX® 300	x					x						x					*	*	*	
TOPFLEX® 301	x			x			x					x				*	*	*	*	
TOPFLEX® 301 C	x			x	x		x					x				*	*	*	*	
TOPFLEX® 304	x			x		x						x					*	*	*	
TOPFLEX® 304 C	x			x	x	x						x					*	*	*	
TOPFLEX® 611 PUR		x					x					x			*	*	*	*		
TOPFLEX® 611-C-PUR		x		x	x		x					x			*	*	*	*		
TOPSERV® 110+120 w. Control pair. screened		x			x		x					x	*	*	*	*	*	*	*	*

Resistance / Standards

Type	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
TOPSERV® 109 PUR	x	x		x					x			x	x
TOPSERV® 113 PUR	x	x		x	x				x			x	x
TOPSERV® 121 PUR	x	x		x	x				x			x	x
TOPFLEX® 300			x		x							x	
TOPFLEX® 301			x									x	
TOPFLEX® 301 C			x									x	
TOPFLEX® 304		x											
TOPFLEX® 304 C		x											
TOPFLEX® 611 PUR	x								x		x		
TOPFLEX® 611-C-PUR	x								x		x		
TOPSERV® 110+120 w. Control pair. screened	x	x		x	x				x		x		

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Selection table Cables in drag chains

Other Technical Details can be found in the Product Pages of our Catalogue.

Environment friendly Cables, screened and unscreened

Type	Application																				Cable Structure								Technical Data													Resistance								Standards			
	Movement Distance max.						Min. Bending Radius D=Outerdiameter					Speed max.				Accela-ration max.		Cycle min.			Core Insulation					Outher Sheath			Nominal Voltage				Temperature Range in C°																				
	5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	5 x D	7,5 x D	10 x D	12,5 x D	15 x D	2 m/s	3 m/s	4 m/s	5 m/s	10 m/s²	50 m/s²	1 Mio	5 Mio	10 Mio	PVC special	TPE special	PUR special	Inner sheath	Cu-braid, Cu-layer	PVC special	PUR special	TPE special	300/300 V	300/500 V	600 V/UL-CSA	1000 V	-40	-30	-20	-10	-5	70	80	90	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
BIOFLEX® 500 JZ-HF	x	x	x	x	x				x					x		x		x	x	x		x						x		x					*	*	*	*	*						x	x		x	x		x		
BIOFLEX® 500 JZ-HF-C	x	x	x	x	x						x			x		x		x	x	x		x		x	x			x		x					*	*	*	*	*						x	x		x	x		x		
KOMPOSPEED® 600	x	x	x	x	x		x							x		x		x	x	x		x						x				x		*	*	*	*	*	*	*	x				x	x	x	x	x		x		
KOMPOSPEED® 600-C	x	x	x	x	x			x						x		x		x	x	x		x		x	x			x				x		*	*	*	*	*	*	*	x				x	x		x	x		x		
KOMPOSPEED® JZ-HF-500	x	x	x	x	x			x						x		x		x	x			x						x		x				*	*	*	*	*	*	*	x				x	x		x	x		x		
KOMPOSPEED® JZ-HF-C-500	x	x	x	x	x			x						x		x		x	x			x		x	x			x		x				*	*	*	*	*	*	*	x				x	x		x	x		x		

Ship Cables

Type	5 m	10 m (to 25 cores)	15 m	30 m	100 m	450 m	5 x D	7,5 x D	10 x D	12,5 x D	15 x D	2 m/s	3 m/s	4 m/s	5 m/s	10 m/s²	50 m/s²	1 Mio	5 Mio	10 Mio	PVC special	TPE special	PUR special	Inner sheath	Cu-braid, Cu-layer	PVC special	PUR special	TPE special	300/300 V	300/500 V	600 V/UL-CSA	1000 V	-40	-30	-20	-10	-5	70	80	90	halogen-free	extensively oil resistant	oil resistant	Jacket flame veterdant	microbes	lye	coolant	radiation resistantat 80/100 Mrad	uv-rays	VDE-Register-No.	adapted to V DE 0245/0281/0282	UL/CSA-approved	DESINA®
SHIPFLEX 512	x	x	x	x	x			x						x		x		x	x			x			x		x		x	x			*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 330	x	x	x	x	x			x						x		x		x	x			x			x		x		x	x			*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 340	x	x	x	x	x			x						x		x		x	x			x			x		x		x	x			*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 109	x	x	x	x	x			x						x		x		x	x			x			x		x				x	x	*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 109	x	x	x	x	x			x						x		x		x	x			x			x		x				x	x	*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 113	x	x	x	x	x			x						x		x		x	x			x			x		x				x	x	*	*	*	*	*	*	*		x		x					x	x			x	
SHIPFLEX 121	x	x	x	x	x			x						x		x		x	x			x			x		x				x	x	*	*	*	*	*	*	*		x		x					x	x			x	

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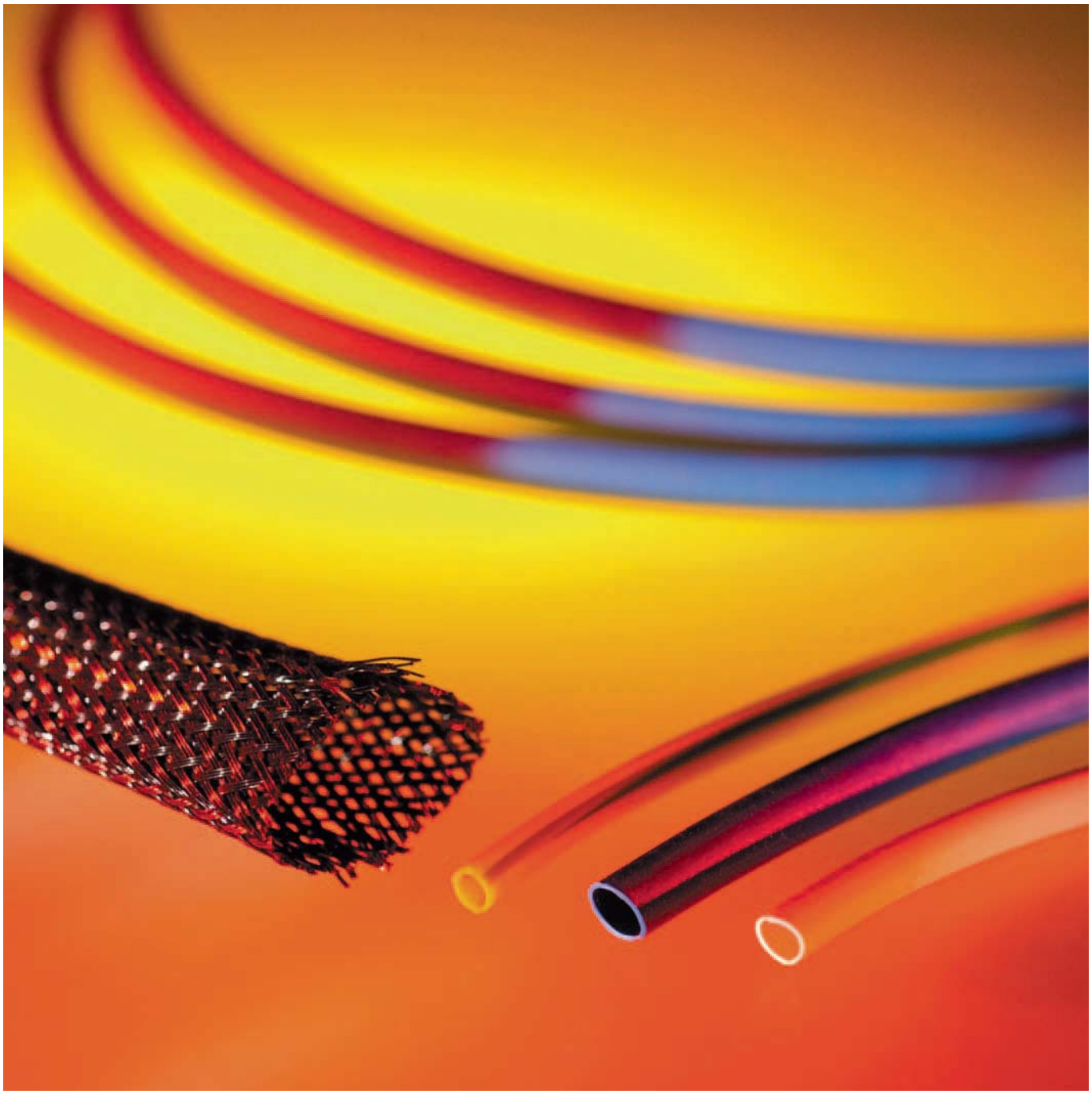

Photo: HELUKABEL®

Insulating, shrunk, braided and high temperature tubes

Insulating, shrunk, braided and high temperature tubes

Braided sleeves

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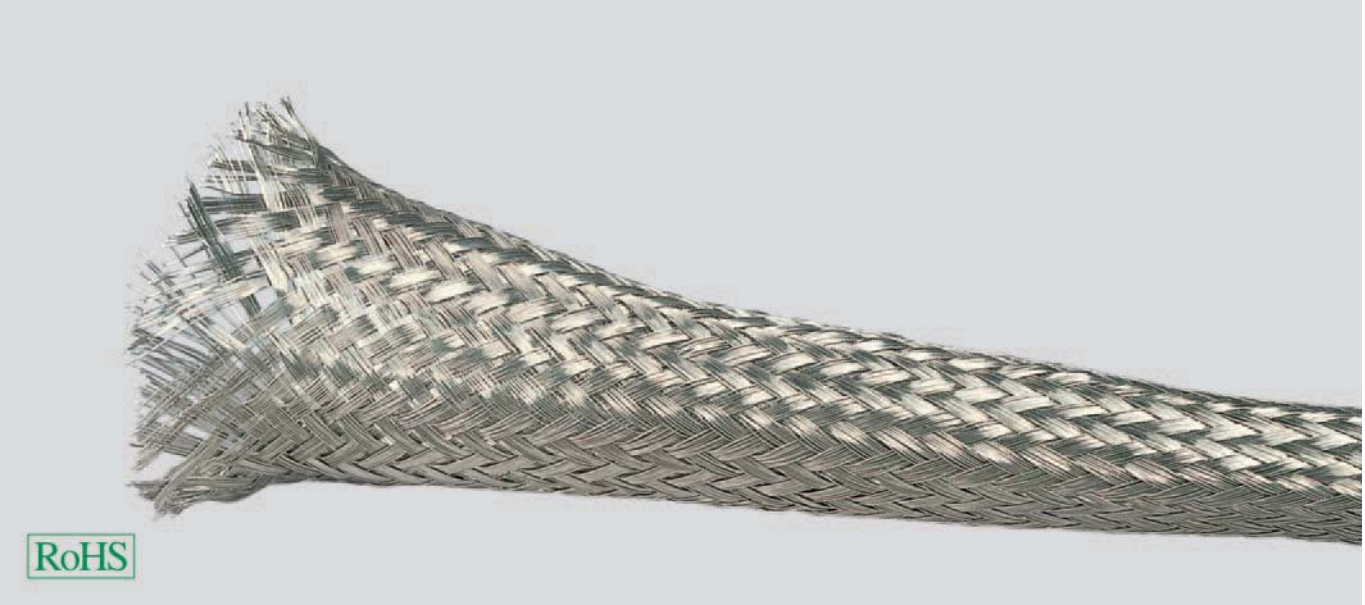
CU braided hose
copper, tinned



Braided hose CU
The screened and interference suppression braided sleeve for directionality and for the mechanical protection of electrical cables and lines.

Material
Copper, tinned

Properties
Axially compressible

Technical data
Temperature range: -75°C up to +150°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

copper, tinned

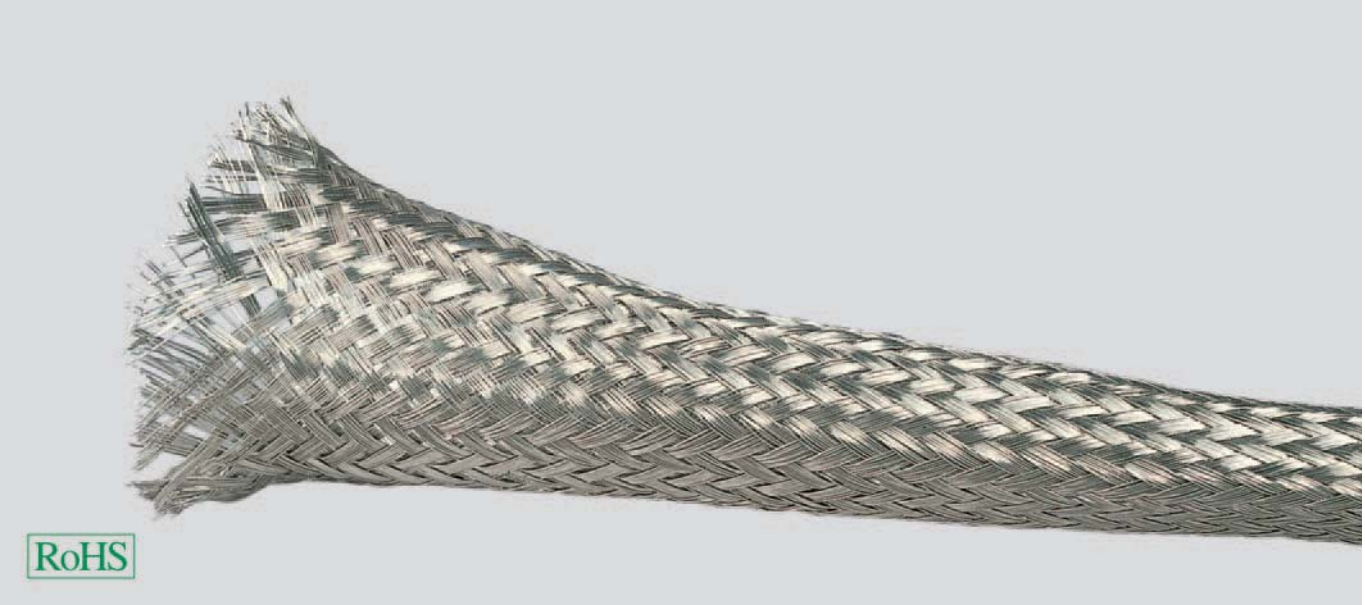
Part no.	Min. inner Ø mm	Max. inner Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97397	5,0	12,0	100,0	o. r.	o. r.	o. r.
97399	8,0	17,0	50,0	o. r.	o. r.	o. r.
97400	12,0	22,0	50,0	o. r.	o. r.	o. r.
97402	16,0	27,0	50,0	o. r.	o. r.	o. r.
97403	20,0	35,0	25,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Steel braided hose

galvanised steel



Braided hose steel

The screened braided sleeve for directionality and for the mechanical protection of electrical cables and lines.

Material

Galvanised steel

Technical data

Temperature range: -75°C up to +300°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

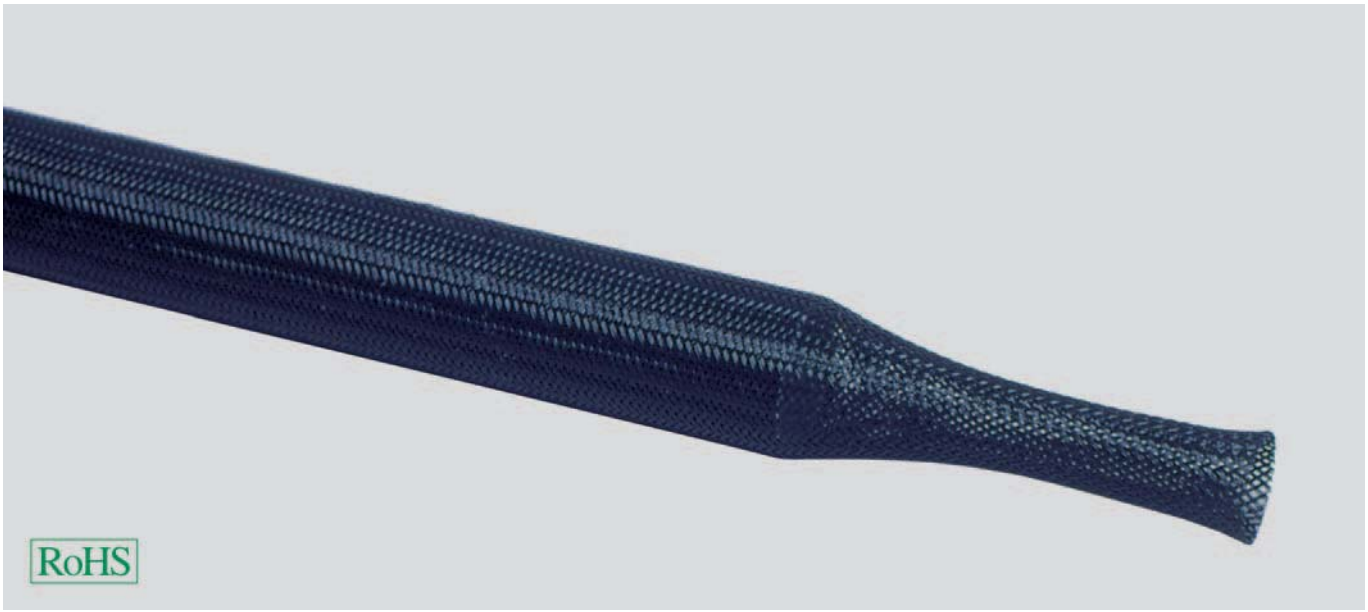
galvanised steel

Part no.	Min. inner Ø mm	Max. inner Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
97197	5,0	12,0	100,0	o. r.	o. r.	o. r.
97199	8,0	17,0	50,0	o. r.	o. r.	o. r.
97200	12,0	22,0	50,0	o. r.	o. r.	o. r.
97202	16,0	27,0	50,0	o. r.	o. r.	o. r.
96561	20,0	35,0	25,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HGP braided hose
polyester



HGP
The polyester braided sleeve for directionality and for the mechanical protection of electrical cables and lines.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyester

- halogen-free

Properties
Axially compressible

Technical data
Temperature range: -50°C up to +150°C
Temperature range temporary up to +220°C

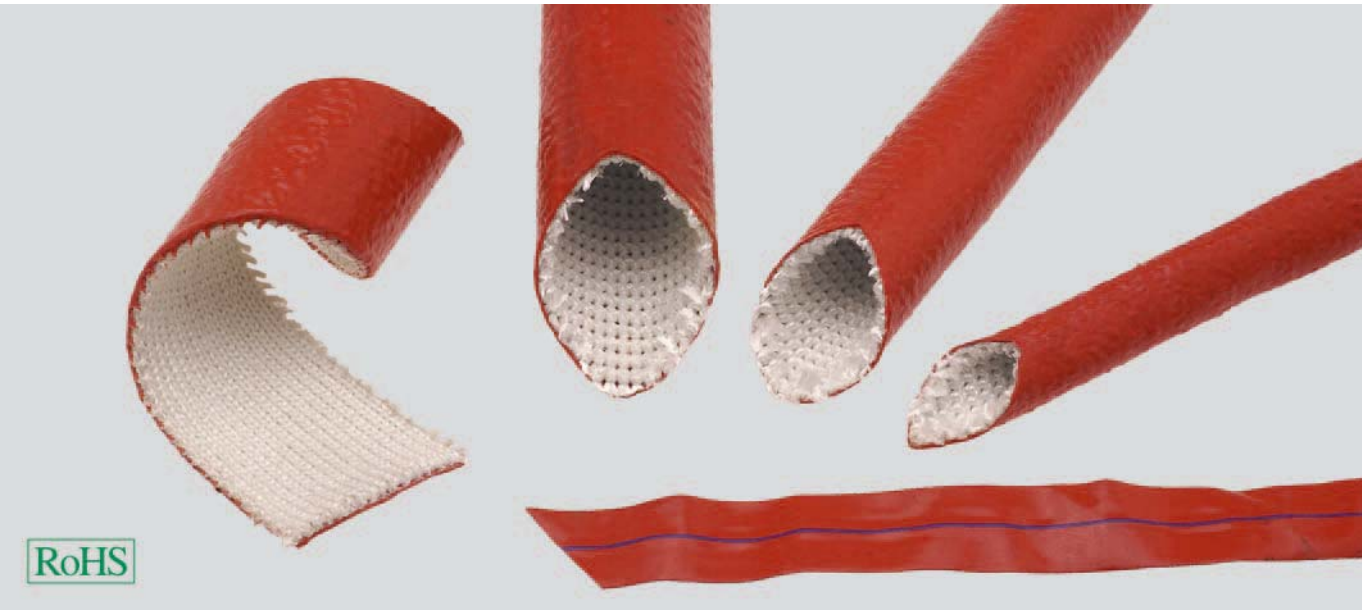
Polyester

Part no. grey	Part no. black	Min. inner Ø mm	Max. inner Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94900	98136	1,0	5,0	100,0	o. r.	o. r.	o. r.
94901	98137	2,0	7,0	100,0	o. r.	o. r.	o. r.
94902	98138	3,0	9,0	100,0	o. r.	o. r.	o. r.
94903	98139	4,0	11,0	100,0	o. r.	o. r.	o. r.
94904	98140	5,0	12,0	100,0	o. r.	o. r.	o. r.
94905	98141	7,0	15,0	100,0	o. r.	o. r.	o. r.
94906	98142	8,0	17,0	50,0	o. r.	o. r.	o. r.
94907	98143	10,0	20,0	50,0	o. r.	o. r.	o. r.
94908	98144	14,0	26,0	25,0	o. r.	o. r.	o. r.
94909	98145	18,0	34,0	25,0	o. r.	o. r.	o. r.
94910	98146	20,0	40,0	25,0	o. r.	o. r.	o. r.
94911	98147	30,0	50,0	25,0	o. r.	o. r.	o. r.
94912	98148	40,0	66,0	25,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HTP protection tube
high temperature protection



HTP
This product is extremely heat resistant. HTP has a high insulation factor and, due to the iron oxide containing silicone sheath, is resistant to small quantities of liquid steel. HTP also protects against burn injuries from steam tubes, hot air or hot water lines.

Material
Interior sheath of knitted glass-fibre braid

Silicone sheath (contains iron oxide)

Colour: orange

Technical data
Permanent load: +260°C
Short-time load: +1090°C
(up to approx. 20 minutes)
Loading moment: +1640°C
(approx. 15-30 seconds)

protection tube

Part no.	Inner Ø mm	Width mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
93630	6,0	-	15,0	o. r.	o. r.	o. r.
93632	10,0	-	15,0	o. r.	o. r.	o. r.
904924	13,0	-	15,0	o. r.	o. r.	o. r.
93634	19,0	-	15,0	o. r.	o. r.	o. r.
93635	22,0	-	15,0	o. r.	o. r.	o. r.
93636	25,0	-	15,0	o. r.	o. r.	o. r.
93637	32,0	-	15,0	o. r.	o. r.	o. r.
93638	38,0	-	15,0	o. r.	o. r.	o. r.
93639	44,0	-	15,0	o. r.	o. r.	o. r.
93640	57,0	-	15,0	o. r.	o. r.	o. r.
93641	64,0	-	15,0	o. r.	o. r.	o. r.
93642	76,0	-	15,0	o. r.	o. r.	o. r.
93643	89,0	-	15,0	o. r.	o. r.	o. r.
93644	102,0	-	15,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HTP wrapping tape

high temperature protection

RoHS

HTP

This product is extremely heat resistant. HTP has a high insulation factor and, due to the iron oxide containing silicone sheath, is resistant to small quantities of liquid steel. HTP also protects against burn injuries from steam tubes, hot air or hot water lines.

Material

Interior sheath of knitted glass-fibre braid

Silicone sheath (contains iron oxide)

Colour: orange

Technical data

Permanent load: +260°C
Short-time load: +1090°C
(up to approx. 20 minutes)
Loading moment: +1640°C
(approx. 15-30 seconds)

Wrapping tape

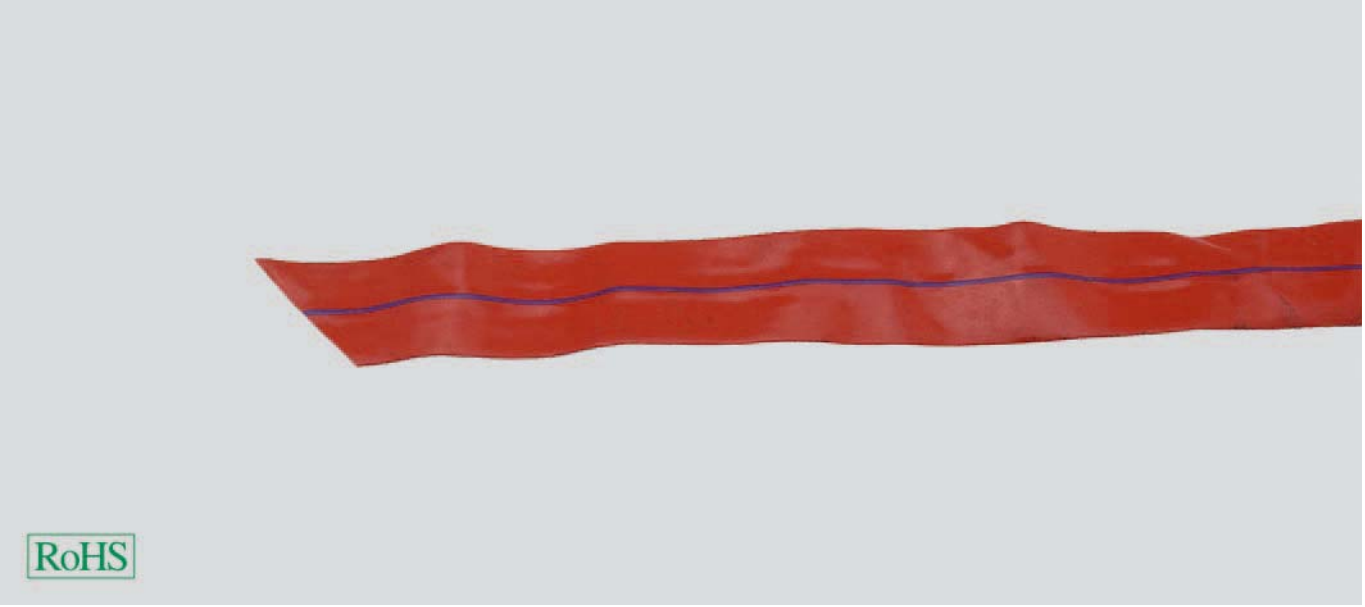
Part no.	Inner Ø mm	Width mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94721	-	25,0	15,0	o. r.	o. r.	o. r.
94722	-	51,0	15,0	o. r.	o. r.	o. r.
94723	-	76,0	15,0	o. r.	o. r.	o. r.
94724	-	102,0	15,0	o. r.	o. r.	o. r.
94758	-	127,0	15,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HTP adhesive tape

high temperature protection



HTP

This product is extremely heat resistant. HTP has a high insulation factor and, due to the iron oxide containing silicone sheath, is resistant to small quantities of liquid steel. HTP also protects against burn injuries from steam tubes, hot air or hot water lines.

Material

Interior sheath of knitted glass-fibre braid

Silicone sheath (contains iron oxide)

Colour: orange

Technical data

Permanent load: +260°C

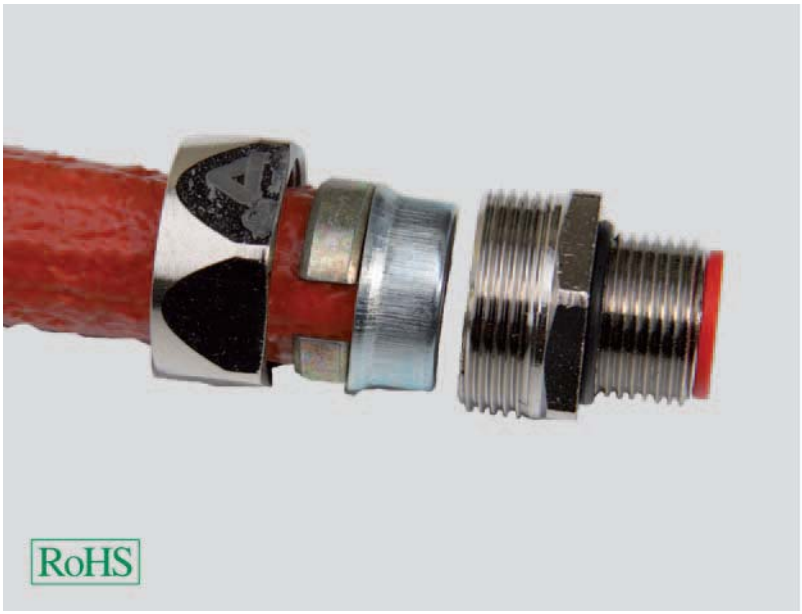
adhesive tape

Part no.	Inner Ø mm	Width mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
93645	-	25,0	11,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HTP clamp ring
high temperature protection



new

Clamping rings for braided sleeve HTP
To assemble the tube connectors LT to the high temperature protection tube HTP. The plastic clamp ring is replaced by the brass clamp ring.

Material
Brass, nickel plated

Note
In conjunction with the tube connectors LT: Protection classification IP 54

Technical data
Temperature range: -45°C up to +105°C

Clamp ring

Part no.	Size	trade size mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
905439	M16 x 1,5	13	50	o. r.	o. r.	o. r.
905555	M20 x 1,5	16	50	o. r.	o. r.	o. r.
905440	M25 x 1,5	22	25	o. r.	o. r.	o. r.
905557	M32 x 1,5	25	10	o. r.	o. r.	o. r.
905558	M40 x 1,5	35	5	o. r.	o. r.	o. r.
905559	M50 x 1,5	38	5	o. r.	o. r.	o. r.
905441	M63 x 1,5	51	4	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Matching conduit glands

Conduit gland LT straight
LIQUIDTIGHT gland for plastic-coated metallic protection tubes and high temperature protection tubes HTP (An additional clamping ring is required). UL/CSA approval.

The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

confer page 281

Conduit gland LT 45°
LIQUIDTIGHT gland for plastic-coated metallic protection tubes and high temperature protection tubes HTP. (An additional clamping ring is required). UL/CSA approval.

The conical earthing sleeve offers maximum surface contact for optimum sealing and earthing.

confer page 283

IB insulating tube

PVC

IB

PVC insulated tube for retrospective insulating and bundling wires and lines.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

PVC

Colour: black

Flammability acc. to UL 94: V0

- silicone-free

Technical data

DIN 40621

Temperature range: -20°C up to +85°C
Temperature range temporary up to +90°C

Part no.	Inner Ø mm	Wall thickness mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91310	1,0	0,3	200,0	o. r.	o. r.	o. r.
91311	2,0	0,4	200,0	o. r.	o. r.	o. r.
905179	3,5	0,4	200,0	o. r.	o. r.	o. r.
91312	3,0	0,4	200,0	o. r.	o. r.	o. r.
905180	4,5	0,5	200,0	o. r.	o. r.	o. r.
91313	4,0	0,5	200,0	o. r.	o. r.	o. r.
91314	5,0	0,6	200,0	o. r.	o. r.	o. r.
91315	6,0	0,6	200,0	o. r.	o. r.	o. r.
91316	7,0	0,7	100,0	o. r.	o. r.	o. r.
91317	8,0	0,7	100,0	o. r.	o. r.	o. r.
91318	9,0	0,7	100,0	o. r.	o. r.	o. r.
91319	10,0	0,7	100,0	o. r.	o. r.	o. r.
91320	12,0	0,8	100,0	o. r.	o. r.	o. r.
97228	14,0	1,0	100,0	o. r.	o. r.	o. r.
96795	16,0	1,0	100,0	o. r.	o. r.	o. r.
97281	18,0	1,0	25,0	o. r.	o. r.	o. r.
97162	20,0	1,2	25,0	o. r.	o. r.	o. r.
97282	22,0	1,2	25,0	o. r.	o. r.	o. r.
97283	26,0	1,0	25,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

IC insulating tube

PVC

IC

PVC insulating tube for insulating and bundling wires and lines.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

PVC

Flammability acc. to UL 94: V2

- silicone-free

Note

Colour code:

Replace the "x" in the table with the following figures to obtain the product number of your required colour.
0=white, 1=blue, 2=yellow, 3=red, 4=transparent
5=green, 6=orange, 7=violet, 8=grey, 9=brown

Technical data

DIN 40621

Temperature range: -20°C up to +90°C

green/yellow

Part no.	Inner Ø mm	Wall thickness mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
92280	1,0	0,4	250,0	o. r.	o. r.	o. r.
92281	1,5	0,4	250,0	o. r.	o. r.	o. r.
92282	2,0	0,4	50,0	o. r.	o. r.	o. r.
92286	4,0	0,5	50,0	o. r.	o. r.	o. r.
92289	6,0	0,55	25,0	o. r.	o. r.	o. r.
92291	8,0	0,62	25,0	o. r.	o. r.	o. r.
92292	10,0	0,75	25,0	o. r.	o. r.	o. r.
92293	14,0	0,8	25,0	o. r.	o. r.	o. r.
92294	16,0	0,8	25,0	o. r.	o. r.	o. r.

coloured

Part no.	Inner Ø mm	Wall thickness mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
9210x	1,0	0,4	50,0	o. r.	o. r.	o. r.
9211x	1,5	0,4	50,0	o. r.	o. r.	o. r.
9212x	2,0	0,4	50,0	o. r.	o. r.	o. r.
9213x	2,5	0,4	50,0	o. r.	o. r.	o. r.
9214x	3,0	0,4	50,0	o. r.	o. r.	o. r.
9215x	3,5	0,4	50,0	o. r.	o. r.	o. r.
9216x	4,0	0,5	50,0	o. r.	o. r.	o. r.
9217x	4,5	0,5	25,0	o. r.	o. r.	o. r.
9218x	5,0	0,52	25,0	o. r.	o. r.	o. r.
9219x	6,0	0,55	25,0	o. r.	o. r.	o. r.
9220x	7,0	0,6	25,0	o. r.	o. r.	o. r.
9221x	8,0	0,62	25,0	o. r.	o. r.	o. r.
9222x	10,0	0,7	25,0	o. r.	o. r.	o. r.
9223x	14,0	0,8	25,0	o. r.	o. r.	o. r.
9224x	16,0	0,8	25,0	o. r.	o. r.	o. r.
9225x	20,0	0,8	25,0	o. r.	o. r.	o. r.
9226x	26,0	1,0	25,0	o. r.	o. r.	o. r.
9227x	36,0	1,0	25,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SI insulating tube
silicone

SI
Silicone insulating tube for insulating and bundling wires and lines.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Properties
Softener and heavy metal free, physiologically and toxicologically safe with good chemical resistance.

Technical data
DIN 40628

Temperature range: -50°C up to +180°C

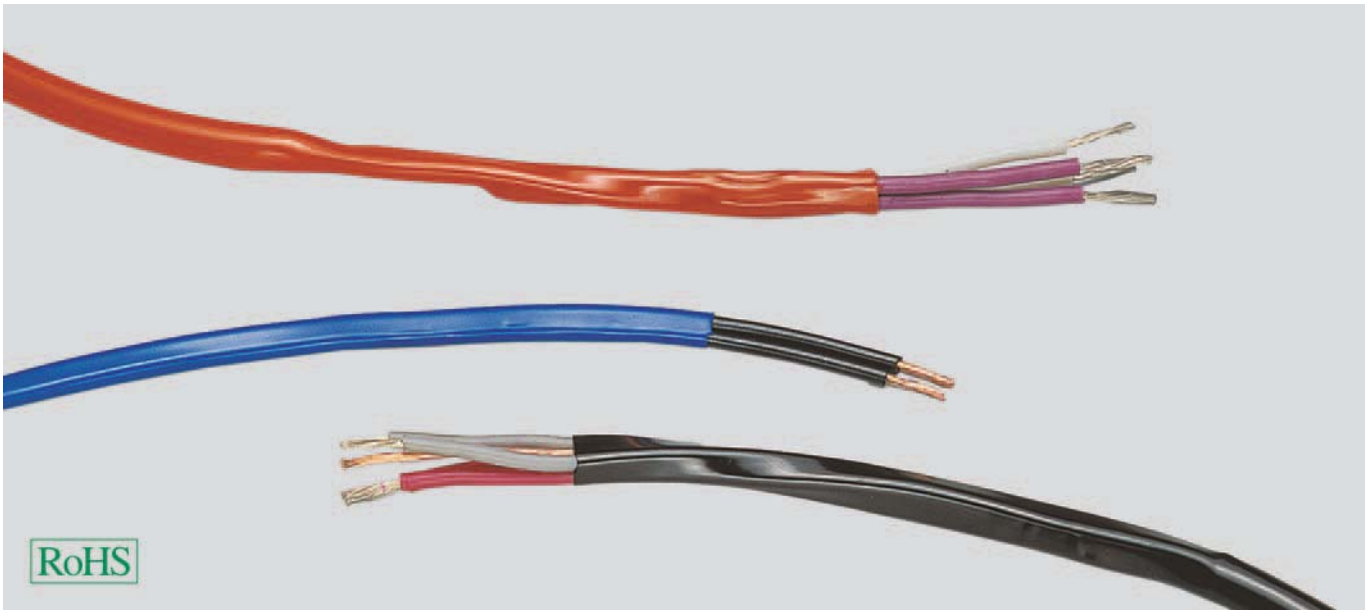
Part no.	Inner Ø mm	Wall thickness mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
94741	1,0	0,4	100,0	o. r.	o. r.	o. r.
94742	2,0	0,4	100,0	o. r.	o. r.	o. r.
97203	3,0	0,4	100,0	o. r.	o. r.	o. r.
97426	4,0	0,5	100,0	o. r.	o. r.	o. r.
97427	5,0	0,6	100,0	o. r.	o. r.	o. r.
97757	6,0	0,6	100,0	o. r.	o. r.	o. r.
94743	8,0	0,7	100,0	o. r.	o. r.	o. r.
94744	10,0	0,7	50,0	o. r.	o. r.	o. r.
94745	12,0	0,8	50,0	o. r.	o. r.	o. r.
94746	14,0	0,8	50,0	o. r.	o. r.	o. r.
94747	16,0	0,8	50,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SCH heat-shrink tubing

PVC



SCH

PVC shrunk tube for repairing insulation and sealing electrical components.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

PVC

Colour: black

Flammability acc. to UL 94: V0

- silicone-free

Note

Attention: Do not store tubes at over 18°C! Otherwise properties are changed!
Length shrinkage approx. 20-30%
The colours orange, yellow, white, blue, green, brown, red on request.

Technical data

Temperature range: -20°C up to +90°C

black

Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91300	2,5	0,2	1,2	100,0	o. r.	o. r.	o. r.
91301	4,0	0,25	2,0	100,0	o. r.	o. r.	o. r.
91302	6,0	0,25	3,0	100,0	o. r.	o. r.	o. r.
91303	7,0	0,25	4,0	100,0	o. r.	o. r.	o. r.
91304	11,0	0,3	6,0	100,0	o. r.	o. r.	o. r.
91305	14,0	0,3	8,0	100,0	o. r.	o. r.	o. r.
91306	17,0	0,4	10,0	100,0	o. r.	o. r.	o. r.
91307	20,0	0,5	13,0	100,0	o. r.	o. r.	o. r.
91308	25,0	0,5	16,0	50,0	o. r.	o. r.	o. r.
91309	31,0	0,5	20,0	50,0	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HSB - Boxes heat shrink 2:1

polyolefine

HSB boxes

Polyolefine shrunk tube for repairing insulation and sealing electrical components.
A Thomas & Betts product.

Material

PO (Polyolefine)

Note

Form of shipment: HSB box
Other colours on request.

Technical data

Temperature range: -55°C up to +125°C

black

Part no.	Type T & B	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/item at a purchase of up to 5	6 - 10	11 - 20
91321	HSB 46	1,2	0,4	0,6	12,0	1	o. r.	o. r.	o. r.
91322	HSB 63	1,6	0,4	0,8	12,0	1	o. r.	o. r.	o. r.
91323	HSB 93	2,4	0,5	1,2	11,5	1	o. r.	o. r.	o. r.
91324	HSB 125	3,2	0,5	1,6	11,5	1	o. r.	o. r.	o. r.
91325	HSB 187	4,7	0,5	2,4	9,5	1	o. r.	o. r.	o. r.
91326	HSB 250	6,4	0,6	3,2	7,5	1	o. r.	o. r.	o. r.
91327	HSB 375	9,5	0,6	4,7	6,5	1	o. r.	o. r.	o. r.
91328	HSB 500	12,7	0,7	6,4	6,0	1	o. r.	o. r.	o. r.
91329	HSB 750	19,1	0,7	9,5	5,0	1	o. r.	o. r.	o. r.
91330	HSB 1000	25,4	0,8	12,7	3,3	1	o. r.	o. r.	o. r.

transparent

Part no.	Type T & B	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/item at a purchase of up to 5	6 - 10	11 - 20
98519	HSB 46-C	1,2	0,4	0,6	12,0	1	o. r.	o. r.	o. r.
97085	HSB 63-C	1,6	0,4	0,8	12,0	1	o. r.	o. r.	o. r.
96277	HSB 93-C	2,4	0,5	1,2	11,5	1	o. r.	o. r.	o. r.
97485	HSB 125-C	3,2	0,5	1,6	11,5	1	o. r.	o. r.	o. r.
96687	HSB 187-C	4,7	0,5	2,4	9,5	1	o. r.	o. r.	o. r.
96830	HSB 250-C	6,4	0,6	3,2	7,5	1	o. r.	o. r.	o. r.
96761	HSB 375-C	9,5	0,6	4,7	6,5	1	o. r.	o. r.	o. r.
96752	HSB 500-C	12,7	0,7	6,4	6,0	1	o. r.	o. r.	o. r.
96751	HSB 750-C	19,1	0,7	9,5	5,0	1	o. r.	o. r.	o. r.
97107	HSB 1000-C	25,4	0,8	12,7	3,3	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

CMP heat shrink 2:1
polyolefine

CMP
Polyolefine shrunk tube for repairing insulation and sealing electrical components.
A Thomas & Betts product.

Material
PO (Polyolefine)

Colour: black

Technical data
Temperature range: -55°C up to +125°C

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Note
Form of shipment:
CMP box (1.2m sections) (25 sections = 30.5m;
10 sections = 12.2m)
CMP rolls

box

Part no.	Type T & B	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/unit at a purchase of up to 5	6 - 10	11 - 20
91290	CMP 46-0-A	1,2	0,2	0,6	30,5	1	o. r.	o. r.	o. r.
91291	CMP 63-0-A	1,6	0,2	0,8	30,5	1	o. r.	o. r.	o. r.
91292	CMP 93-0-A	2,4	0,25	1,2	30,5	1	o. r.	o. r.	o. r.
91293	CMP 125-0-A	3,2	0,25	1,6	30,5	1	o. r.	o. r.	o. r.
91294	CMP 187-0-A	4,7	0,25	2,4	30,5	1	o. r.	o. r.	o. r.
91295	CMP 250-0-A	6,4	0,3	3,2	30,5	1	o. r.	o. r.	o. r.
91296	CMP 375-0-A	9,5	0,3	4,8	30,5	1	o. r.	o. r.	o. r.
91297	CMP 500-0-A	12,7	0,3	6,4	30,5	1	o. r.	o. r.	o. r.
91298	CMP 750-0-A	19,1	0,4	9,5	12,2	1	o. r.	o. r.	o. r.
91299	CMP 1000-0-A	25,4	0,45	12,7	12,2	1	o. r.	o. r.	o. r.

coil

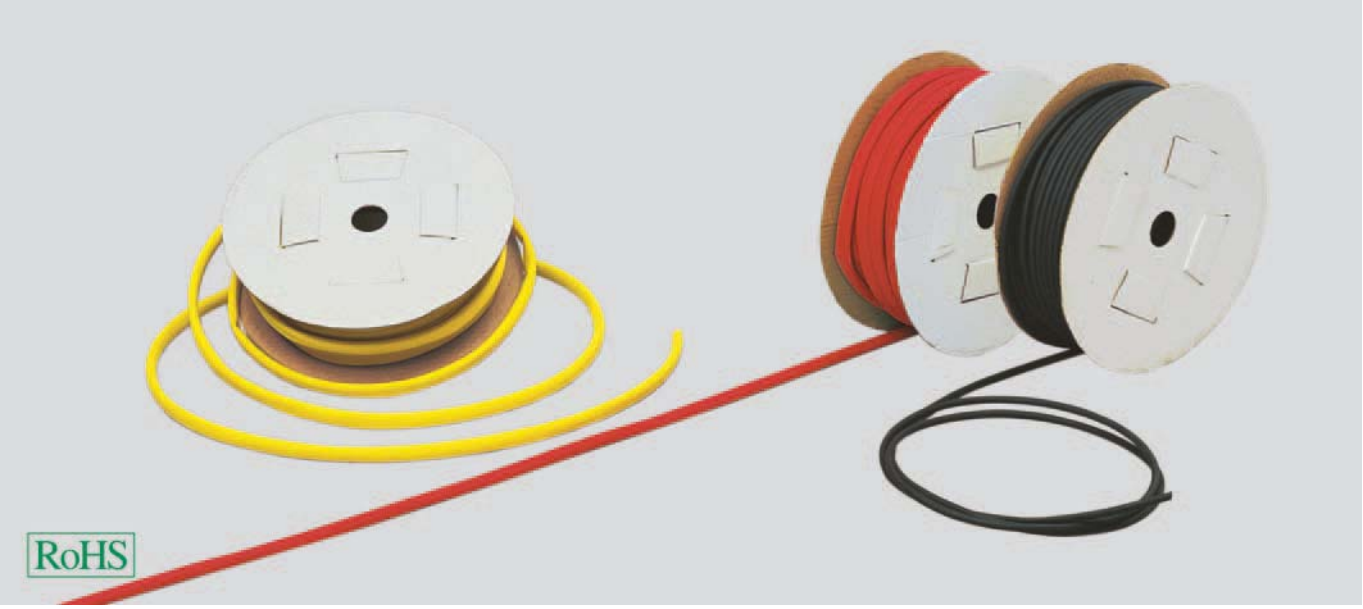
Part no.	Type T & B	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91331	CMP 46-0-BG	1,2	0,2	0,6	300,0	-	o. r.	o. r.	o. r.
91332	CMP 63-0-BG	1,6	0,2	0,8	300,0	-	o. r.	o. r.	o. r.
91333	CMP 93-0-BG	2,4	0,25	1,2	300,0	-	o. r.	o. r.	o. r.
91334	CMP 125-0-BG	3,2	0,25	1,6	300,0	-	o. r.	o. r.	o. r.
91335	CMP 187-0-BG	4,7	0,25	2,4	300,0	-	o. r.	o. r.	o. r.
91336	CMP 250-0-BG	6,4	0,3	3,2	300,0	-	o. r.	o. r.	o. r.
91337	CMP 375-0-BG	9,5	0,3	4,8	150,0	-	o. r.	o. r.	o. r.
91338	CMP 500-0-BG	12,7	0,3	6,4	100,0	-	o. r.	o. r.	o. r.
91339	CMP 750-0-BG	19,1	0,4	9,5	50,0	-	o. r.	o. r.	o. r.
91340	CMP 1000-0-BG	25,4	0,45	12,7	50,0	-	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPSP - spools heat shrink 2:1

polyolefine



SPSP spools

Polyolefine shrunk tube for repairing insulation and sealing electrical components.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

PO (Polyolefine)

Note

Replace the "x" in the table with the following figures to obtain the product number of your required colour.
Colour code:
0=white
1=blue
2=yellow
3=red
4=transparent
6=brown
7=orange
8=grey
9=green

Technical data

Temperature range: -55°C up to +135°C

black

Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 5	6 - 10	11 - 20
91777	1,2	0,4	0,6	20,0	1	o. r.	o. r.	o. r.
91778	1,6	0,4	0,8	20,0	1	o. r.	o. r.	o. r.
91779	2,4	0,5	1,2	20,0	1	o. r.	o. r.	o. r.
91780	3,2	0,5	1,6	20,0	1	o. r.	o. r.	o. r.
91781	4,8	0,5	2,4	20,0	1	o. r.	o. r.	o. r.
91782	6,4	0,6	3,2	10,0	1	o. r.	o. r.	o. r.
91783	9,5	0,6	4,7	10,0	1	o. r.	o. r.	o. r.
91784	12,7	0,6	6,4	10,0	1	o. r.	o. r.	o. r.
91785	19,1	0,8	9,5	10,0	1	o. r.	o. r.	o. r.
91786	25,4	0,9	12,7	10,0	1	o. r.	o. r.	o. r.

green/yellow

Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 5	6 - 10	11 - 20
92335	2,4	0,5	1,2	20,0	1	o. r.	o. r.	o. r.
92345	3,2	0,5	1,6	20,0	1	o. r.	o. r.	o. r.
92355	4,8	0,5	2,4	20,0	1	o. r.	o. r.	o. r.
92365	6,4	0,6	3,2	10,0	1	o. r.	o. r.	o. r.
92375	9,5	0,6	4,7	10,0	1	o. r.	o. r.	o. r.
92385	12,7	0,6	6,4	10,0	1	o. r.	o. r.	o. r.
92395	19,1	0,8	9,5	10,0	1	o. r.	o. r.	o. r.
92405	25,4	0,9	12,7	10,0	1	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

SPSP - spools heat shrink 2:1

polyolefine

coloured

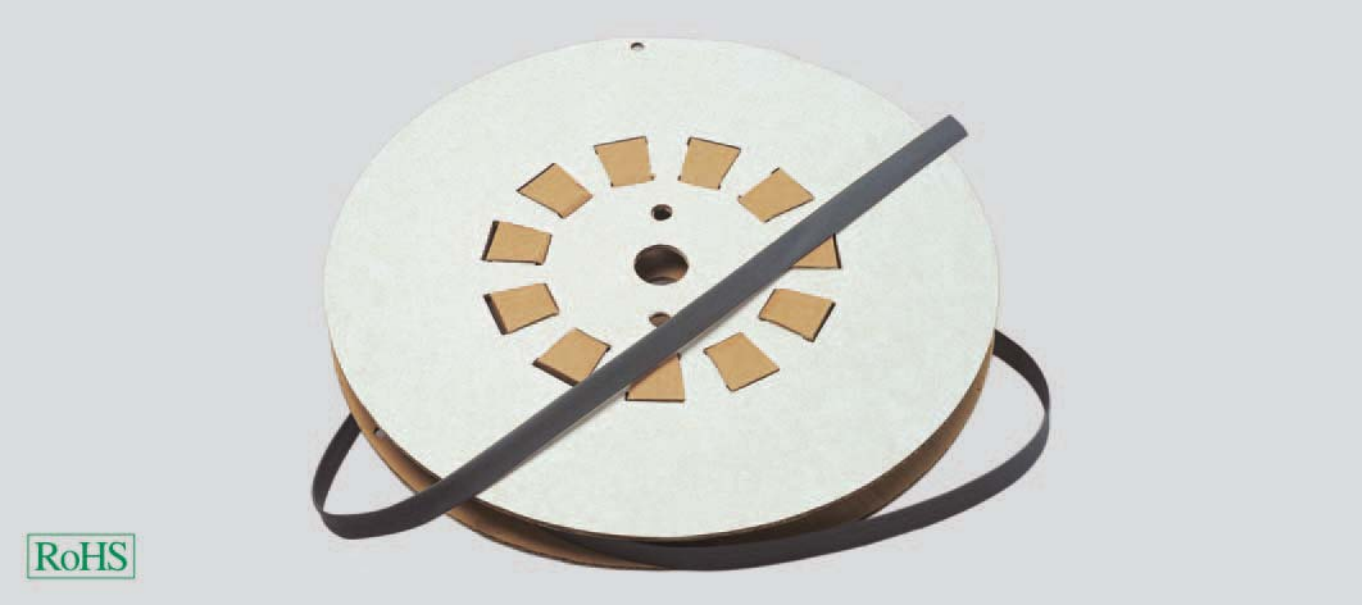
Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 5	6 - 10	11 - 20
9231x	1,2	0,4	0,6	20,0	1	o. r.	o. r.	o. r.
9232x	1,6	0,4	0,8	20,0	1	o. r.	o. r.	o. r.
9233x	2,4	0,5	1,2	20,0	1	o. r.	o. r.	o. r.
9234x	3,2	0,5	1,6	20,0	1	o. r.	o. r.	o. r.
9235x	4,8	0,5	2,4	20,0	1	o. r.	o. r.	o. r.
9236x	6,4	0,6	3,2	10,0	1	o. r.	o. r.	o. r.
9237x	9,5	0,6	4,7	10,0	1	o. r.	o. r.	o. r.
9238x	12,7	0,6	6,4	10,0	1	o. r.	o. r.	o. r.
9239x	19,1	0,8	9,5	10,0	1	o. r.	o. r.	o. r.
9240x	25,4	0,9	12,7	10,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPRO - rolls heat shrink 2:1

polyolefine



SPRO rolls 2:1

Polyolefine shrink tube for repairing insulation and sealing electrical components.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

PO (Polyolefine)

Note

Replace the "x" in the table with the following figures to obtain the product number of your required colour.
Colour code:
0=white
1=blue
2=yellow
3=red
4=transparent
6=brown
7=orange
8=grey
9=green

Technical data

Temperature range: -55°C up to +135°C

black

Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91788	1,2	0,4	0,6	150,0	-	o. r.	o. r.	o. r.
91789	1,6	0,4	0,8	150,0	-	o. r.	o. r.	o. r.
91790	2,4	0,5	1,2	150,0	-	o. r.	o. r.	o. r.
91791	3,2	0,5	1,6	150,0	-	o. r.	o. r.	o. r.
91792	4,8	0,5	2,4	75,0	-	o. r.	o. r.	o. r.
91793	6,4	0,6	3,2	75,0	-	o. r.	o. r.	o. r.
91794	9,5	0,6	4,7	75,0	-	o. r.	o. r.	o. r.
91795	12,7	0,6	6,4	50,0	-	o. r.	o. r.	o. r.
90058	16,0	0,6	8,0	50,0	-	o. r.	o. r.	o. r.
91796	19,1	0,8	9,5	30,0	-	o. r.	o. r.	o. r.
91797	25,4	0,9	12,7	30,0	-	o. r.	o. r.	o. r.
904771	32,0	0,9	16,0	30,0	-	o. r.	o. r.	o. r.
91798	38,1	1,0	19,0	30,0	-	o. r.	o. r.	o. r.
91799	50,8	1,1	25,4	30,0	-	o. r.	o. r.	o. r.
96828	76,2	1,3	38,1	15,0	-	o. r.	o. r.	o. r.
96929	101,0	1,4	50,8	15,0	-	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

SPRO - rolls heat shrink 2:1

polyolefine

green/yellow

Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
92435	2,4	0,5	1,2	150,0	-	o. r.	o. r.	o. r.
92445	3,2	0,5	1,6	150,0	-	o. r.	o. r.	o. r.
92455	4,8	0,5	2,4	75,0	-	o. r.	o. r.	o. r.
92465	6,4	0,6	3,2	75,0	-	o. r.	o. r.	o. r.
92475	9,5	0,6	4,7	75,0	-	o. r.	o. r.	o. r.
92485	12,7	0,6	6,4	100,0	-	o. r.	o. r.	o. r.
92495	19,1	0,8	9,5	30,0	-	o. r.	o. r.	o. r.
92505	25,4	0,9	12,7	30,0	-	o. r.	o. r.	o. r.
92515	38,1	1,0	19,0	30,0	-	o. r.	o. r.	o. r.
92425	50,8	1,0	25,4	30,0	-	o. r.	o. r.	o. r.

coloured

Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
9241x	1,2	0,4	0,6	150,0	-	o. r.	o. r.	o. r.
9242x	1,6	0,4	0,8	150,0	-	o. r.	o. r.	o. r.
9243x	2,4	0,5	1,2	150,0	-	o. r.	o. r.	o. r.
9244x	3,2	0,5	1,6	150,0	-	o. r.	o. r.	o. r.
9245x	4,8	0,5	2,4	75,0	-	o. r.	o. r.	o. r.
9246x	6,4	0,6	3,2	75,0	-	o. r.	o. r.	o. r.
9247x	9,5	0,6	4,7	75,0	-	o. r.	o. r.	o. r.
9248x	12,7	0,6	6,4	100,0	-	o. r.	o. r.	o. r.
9249x	19,1	0,8	9,5	30,0	-	o. r.	o. r.	o. r.
9250x	25,4	0,9	12,7	30,0	-	o. r.	o. r.	o. r.
9251x	38,1	1,0	19,0	30,0	-	o. r.	o. r.	o. r.

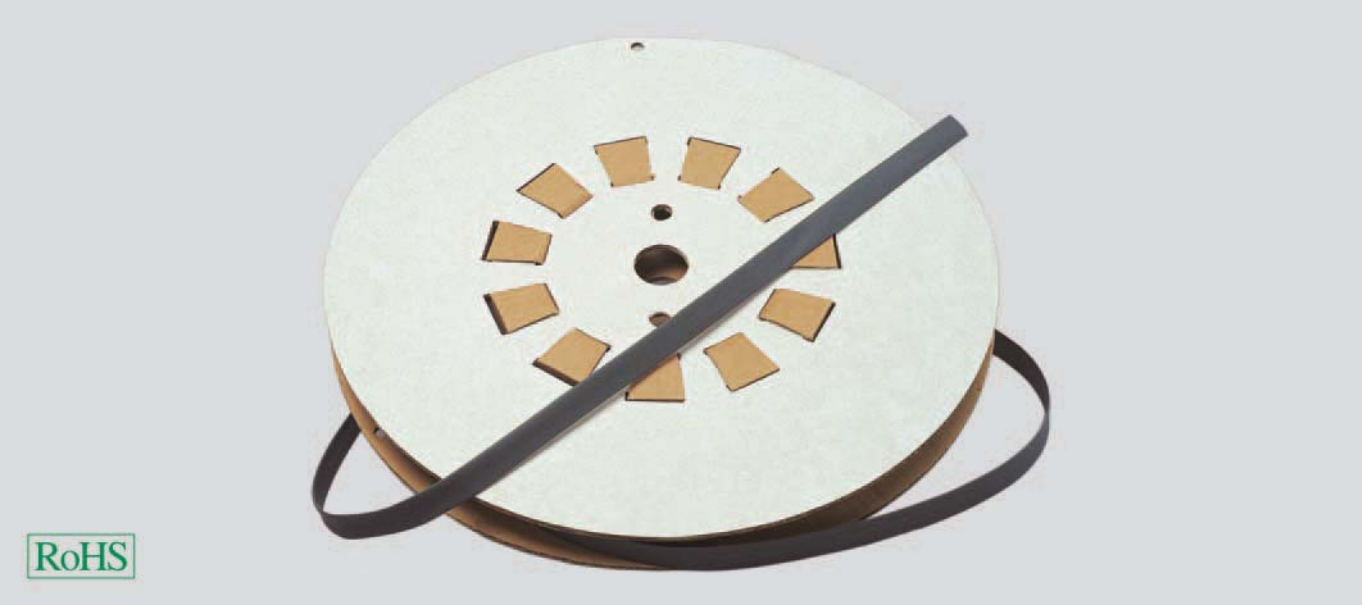
Dimensions and specifications may be changed without prior notice.

o. r. = on request

SPRO - rolls heat shrink 3:1

polyolefine

new



SPRO rolls 3:1

Polyolefine shrunk tube for repairing insulation and sealing electrical components.
Shrink rate 3:1

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material

PO (Polyolefine)

Note

Replace the "x" in the table with the following figures to obtain the product number of your required colour.
Colour code:
1=blue
2=yellow
3=red
9=green

Technical data

Temperature range: -55°C up to +135°C

black

Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
903035	6,4	0,65	2,0	75,0	-	o. r.	o. r.	o. r.
903045	9,5	0,75	3,0	75,0	-	o. r.	o. r.	o. r.
903055	12,7	0,75	4,0	50,0	-	o. r.	o. r.	o. r.
903065	19,0	0,85	6,0	30,0	-	o. r.	o. r.	o. r.
903075	25,4	1,0	8,0	30,0	-	o. r.	o. r.	o. r.
903085	39,0	1,15	13,0	30,0	-	o. r.	o. r.	o. r.

green/yellow

Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
903093	6,4	0,65	2,0	75,0	-	o. r.	o. r.	o. r.
903094	9,5	0,75	3,0	75,0	-	o. r.	o. r.	o. r.
903095	12,7	0,75	4,0	50,0	-	o. r.	o. r.	o. r.
903096	19,0	0,85	6,0	30,0	-	o. r.	o. r.	o. r.
903097	25,4	1,0	8,0	30,0	-	o. r.	o. r.	o. r.
903098	39,0	1,15	13,0	30,0	-	o. r.	o. r.	o. r.

coloured

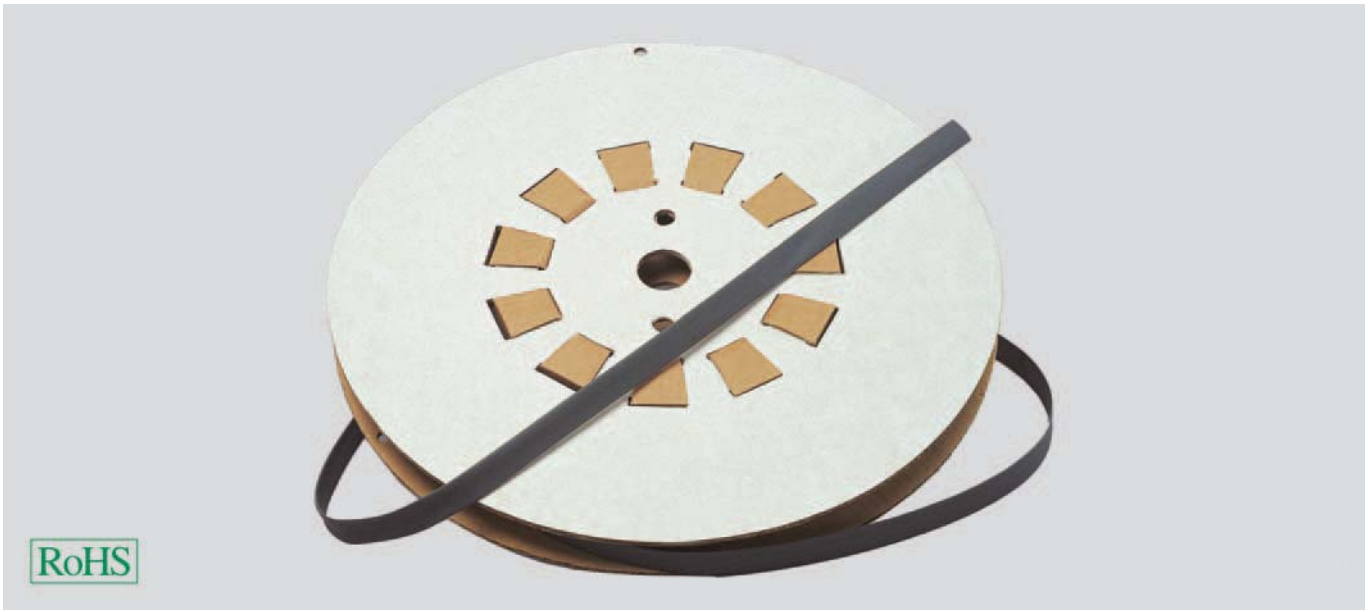
Part no. Roll	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
90303x	6,4	0,65	2,0	75,0	-	o. r.	o. r.	o. r.
90304x	9,5	0,75	3,0	75,0	-	o. r.	o. r.	o. r.
90305x	12,7	0,75	4,0	50,0	-	o. r.	o. r.	o. r.
90306x	19,0	0,85	6,0	30,0	-	o. r.	o. r.	o. r.
90307x	25,4	1,0	8,0	30,0	-	o. r.	o. r.	o. r.
90308x	39,0	1,15	13,0	30,0	-	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HFS heat-shrink 2:1 - halogen free

polyolefine



HFS rolls

Halogen-free polyolefine shrunk tube for repairing insulation and sealing electrical components.
Used in machine and plant construction, installation technology, control cabinet construction, automation technology.

Material

PO (Polyolefine)

Colour: black

- halogen-free

Technical data

Temperature range: -55°C up to +105°C

black

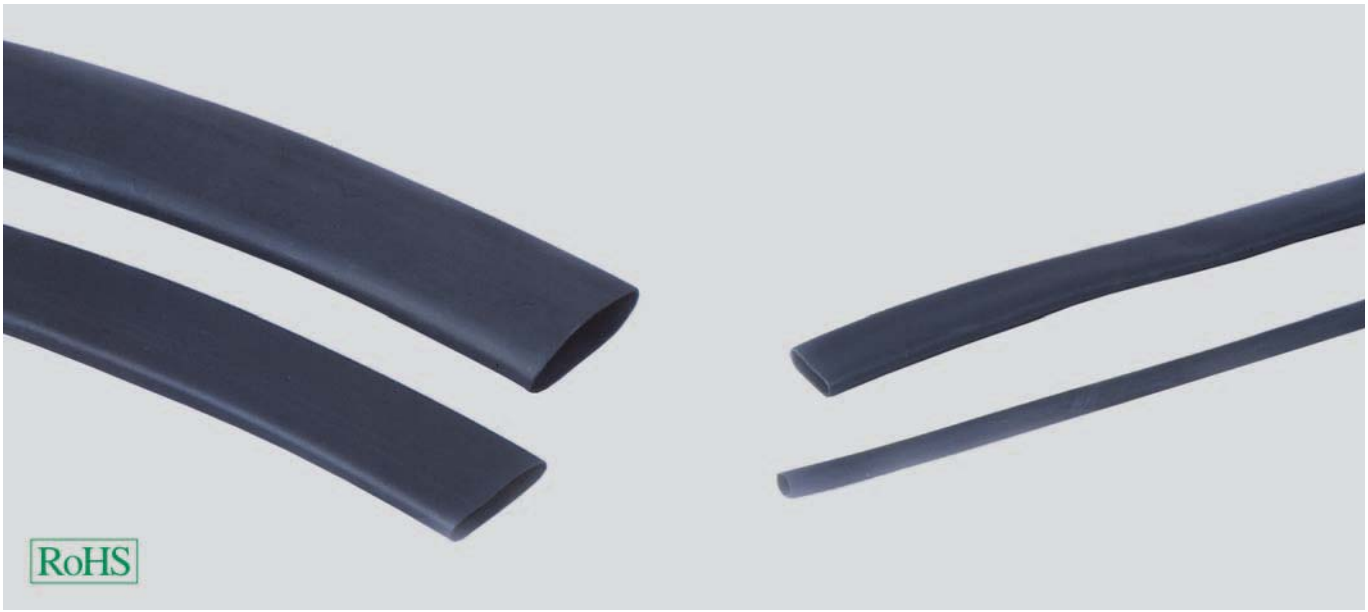
Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
99550	1,2	0,45	0,6	150,0	-	o. r.	o. r.	o. r.
99551	1,6	0,45	0,8	150,0	-	o. r.	o. r.	o. r.
99552	2,4	0,51	1,2	150,0	-	o. r.	o. r.	o. r.
99553	3,2	0,51	1,6	150,0	-	o. r.	o. r.	o. r.
99554	4,8	0,51	2,4	75,0	-	o. r.	o. r.	o. r.
99555	6,4	0,64	3,2	75,0	-	o. r.	o. r.	o. r.
99556	9,5	0,64	4,8	75,0	-	o. r.	o. r.	o. r.
99557	12,7	0,64	6,4	50,0	-	o. r.	o. r.	o. r.
99558	16,0	0,64	8,0	50,0	-	o. r.	o. r.	o. r.
99559	19,0	0,76	9,5	30,0	-	o. r.	o. r.	o. r.
99560	25,4	0,89	12,7	30,0	-	o. r.	o. r.	o. r.
99561	32,0	0,89	16,0	30,0	-	o. r.	o. r.	o. r.
99562	38,1	1,02	19,0	30,0	-	o. r.	o. r.	o. r.
99563	50,8	1,14	25,4	30,0	-	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SK heat-shrink 3:1 - with interior adhesive

polyolefine - thin - walled



SK

Polyolefine shrunk tube with internal adhesive for repairing insulation and sealing electrical components.

Material

PO (Polyolefine) with internal adhesive

Colour: black

Technical data

Temperature range: -55°C up to +110°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Note

Form of shipment:
Box

black

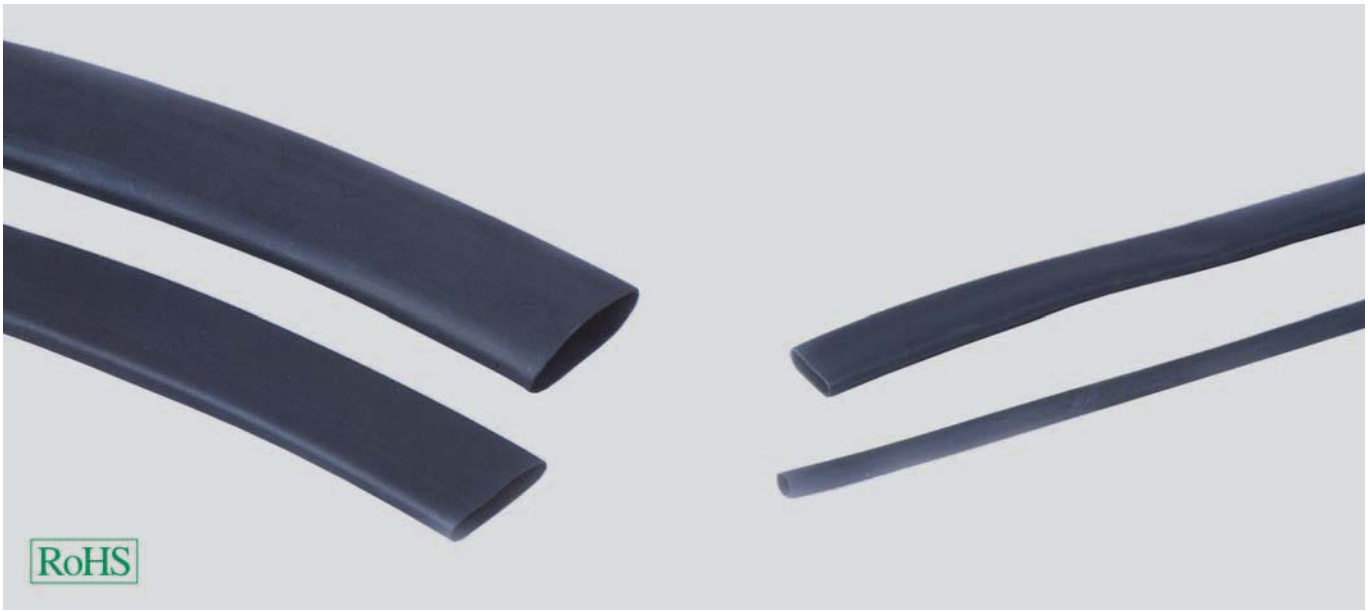
Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/item at a purchase of up to 5	6 - 10	11 - 20
98258	3,2	1,0	1,0	5,0	1	o. r.	o. r.	o. r.
98259	6,4	1,0	2,0	3,5	1	o. r.	o. r.	o. r.
98260	9,5	1,5	3,2	3,0	1	o. r.	o. r.	o. r.
98261	12,7	1,8	4,1	2,5	1	o. r.	o. r.	o. r.
98262	19,1	1,8	6,4	2,0	1	o. r.	o. r.	o. r.
98263	25,4	2,5	8,1	1,5	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SK-M shrink on tube 3:1 with interior adhesive

polyolefine - medium walled



SK-M

Polyolefine shrunk tube with internal adhesive for repairing insulation and sealing electrical components.

Material

PO (Polyolefine) with internal adhesive

Colour: black

Technical data

Temperature range: -55°C up to +110°C

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Note

Form of shipment:
1.2 m rods

black

Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 items at a purchase of up to 5	6 - 10	11 - 20
99788	10,2	2,0	3,8	rods of 1,22m	1	o. r.	o. r.	o. r.
99789	19,1	2,0	5,6	rods of 1,22m	1	o. r.	o. r.	o. r.
99790	27,9	2,0	10,2	rods of 1,22m	1	o. r.	o. r.	o. r.
99791	33,0	2,0	10,2	rods of 1,22m	1	o. r.	o. r.	o. r.
99792	38,1	2,0	12,7	rods of 1,22m	1	o. r.	o. r.	o. r.
99793	43,2	2,0	12,7	rods of 1,22m	1	o. r.	o. r.	o. r.
99794	52,1	2,0	19,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99795	69,9	2,0	25,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99796	88,9	2,4	30,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99797	119,4	2,7	40,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99798	152,0	2,8	48,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99799	170,2	2,8	58,0	rods of 1,22m	1	o. r.	o. r.	o. r.
99678	228,6	3,0	77,0	rods of 1,22m	1	o. r.	o. r.	o. r.

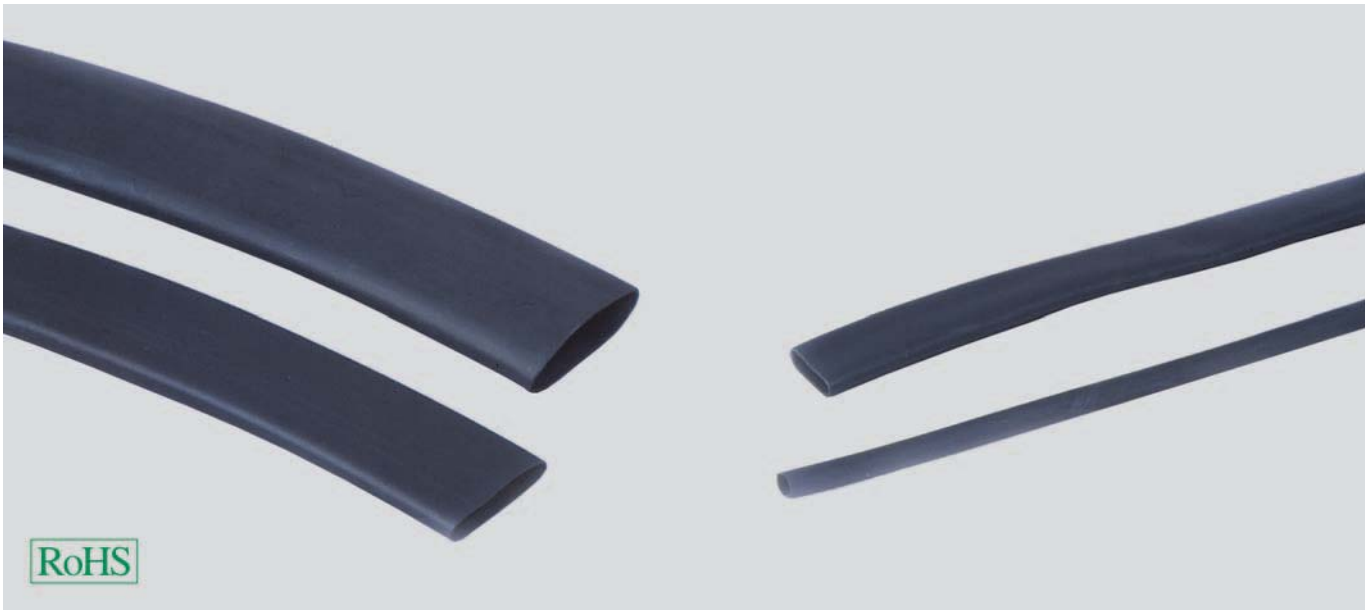
Dimensions and specifications may be changed without prior notice.

o. r. = on request

SK-D heat shrink 3:1 - with interior adhesive

polyolefine - thick walled

new



SK-D

Polyolefine shrunk tube with internal adhesive for repairing insulation and sealing electrical components.
For the protection of cable sleeves and terminations for low-voltage applications (600V).
Good protection against impact and abrasion.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

PO (Polyolefine) with internal adhesive

Colour: black

- halogen-free

Note

Form of shipment:
1.2 m rods
Aproval:
UR-listed up to size 68,1mm

Technical data

Temperature range: -55°C up to +110°C

black

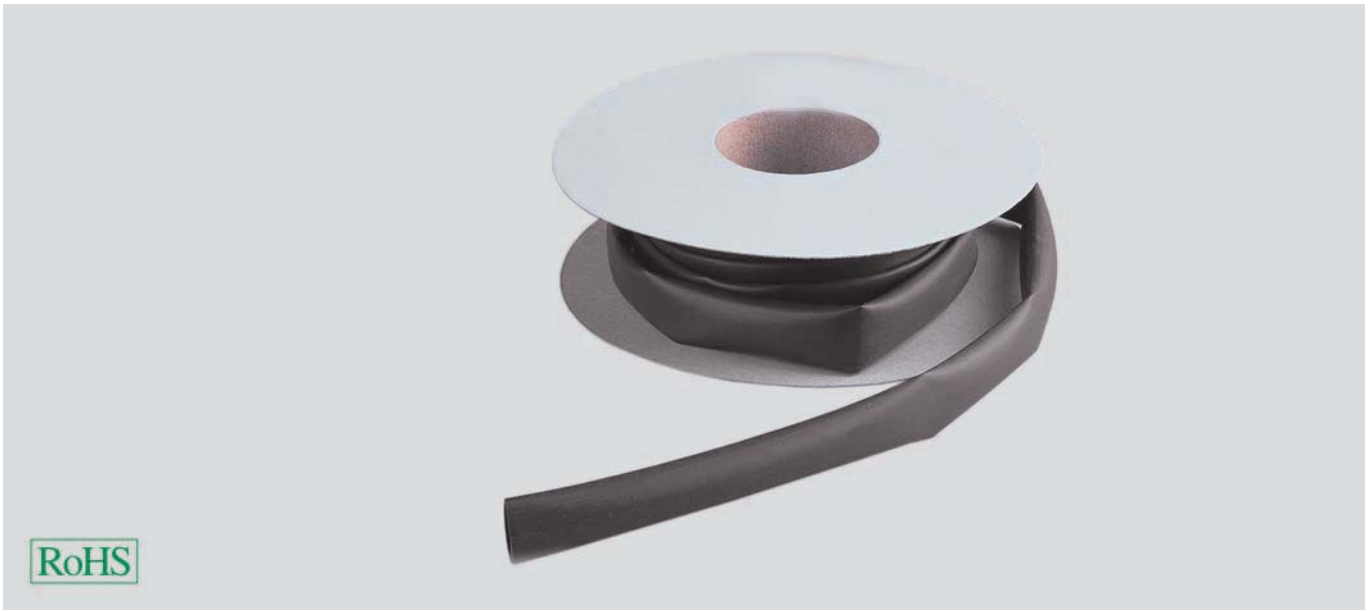
Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 items at a purchase of up to 5	6 - 10	11 - 20
905344	8,9	1,8	3,0	rods of 1,22m	1	o. r.	o. r.	o. r.
905335	13,0	2,4	4,1	rods of 1,22m	1	o. r.	o. r.	o. r.
905336	19,1	2,4	6,1	rods of 1,22m	1	o. r.	o. r.	o. r.
905337	27,9	3,0	8,9	rods of 1,22m	1	o. r.	o. r.	o. r.
905338	38,1	4,1	11,9	rods of 1,22m	1	o. r.	o. r.	o. r.
905339	50,8	4,1	16,0	rods of 1,22m	1	o. r.	o. r.	o. r.
905340	68,1	4,1	22,1	rods of 1,22m	1	o. r.	o. r.	o. r.
905731	89,9	4,1	30,0	rods of 1,22m	1	o. r.	o. r.	o. r.
905732	119,9	2,0	39,9	rods of 1,22m	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SVRO heat shrink 2:1 - high resistant

FKM



SVRO

FKM shrunk tube to protect against aggressive media.

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Installation technology
- Control cabinet construction

Material

FKM

Colour: black

Properties

Weather, flame and chemical resistant

Note

MIL-I-23053

Technical data

Temperature range: -55°C up to +220°C

black

Part no.	Inner Ø before shrinkage mm	Wall thickness mm	Inner Ø after shrinkage mm	Content m	Unit	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
96796	3,2	0,0	1,6	50,0	-	o. r.	o. r.	o. r.
97385	4,8	0,0	2,4	50,0	-	o. r.	o. r.	o. r.
97774	6,4	0,0	3,2	50,0	-	o. r.	o. r.	o. r.
91165	9,5	0,0	4,8	50,0	-	o. r.	o. r.	o. r.
91166	12,7	0,0	6,4	30,0	-	o. r.	o. r.	o. r.
93690	19,0	0,0	9,5	30,0	-	o. r.	o. r.	o. r.
93691	25,4	0,0	12,7	30,0	-	o. r.	o. r.	o. r.
93692	38,0	0,0	19,0	15,0	-	o. r.	o. r.	o. r.
93693	50,8	0,0	25,4	15,0	-	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EKI end caps 2:1
polyethylene

EKI
End caps with internal adhesive protect cable ends from the ingress of water.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyethylene

Colour: black

Properties
Weather-resistant

Technical data
Temperature range: -40°C up to +70°C

black

Part no.	Inner Ø before shrinkage mm	Length mm	Inner Ø after shrinkage mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
97642	12,0	35	4,0	10	o. r.	o. r.	o. r.
97782	13,0	30	6,5	10	o. r.	o. r.	o. r.
98264	22,0	60	8,0	10	o. r.	o. r.	o. r.
97643	20,0	65	10,0	10	o. r.	o. r.	o. r.
97644	20,0	125	9,0	10	o. r.	o. r.	o. r.
97783	40,0	85	15,0	10	o. r.	o. r.	o. r.
97645	35,0	90	17,5	5	o. r.	o. r.	o. r.
97812	50,0	125	25,0	5	o. r.	o. r.	o. r.
97648	55,0	125	22,0	2	o. r.	o. r.	o. r.
97784	75,0	120	43,0	2	o. r.	o. r.	o. r.
97649	75,0	120	34,0	2	o. r.	o. r.	o. r.
97650	75,0	200	34,0	2	o. r.	o. r.	o. r.
98265	100,0	120	42,0	2	o. r.	o. r.	o. r.
97652	100,0	130	59,0	1	o. r.	o. r.	o. r.
97651	100,0	225	59,0	1	o. r.	o. r.	o. r.
97653	115,0	140	59,0	1	o. r.	o. r.	o. r.
98266	125,0	130	70,0	1	o. r.	o. r.	o. r.
97654	145,0	155	71,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Photo: HELUKABEL®

Termination and connection sleeves

Termination and connection sleeves

Telecommunications cables

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MfF VASMI - straight-through joint for telephone cable

MfF

Connection and branch sleeve for telecommunication cables. For connecting telecommunication cables and producing cable branches for telecommunication cables.

Application

- Outdoors
- Indoors
- Underground
- Water

Properties

- high electrical insulation values
- water-tight and moisture-protected
- good mechanical strength
- highly resistant to UV rays, earth alkalis and chemical influences
- with temperature indicator colour
- suitable for cut and uncut cables
- dismountable
- unrestricted storage

Scope of delivery

- shielding connection conductor with special clamp
- desiccant
- protection inlay
- flame protection film
- shrink-on sleeve
- insulating band
- cleaning agent
- sanding
- assembly instruction

Part no.	Type	Length mm	Cable Ø from - to mm	Converter-fed with core connectors 0,4 mm no. of twin-cores	Converter-fed with core connectors 0,6 mm no. of twin-cores	Converter-fed with core connectors 0,8 mm no. of twin-cores	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94330	VASMI 1 SRT	330	8,0 - 35,0	30	20	10	o. r.	o. r.	o. r.
94331	VASMI 1/L SRT	390	8,0 - 35,0	70	40	20	o. r.	o. r.	o. r.
94332	VASMI 2 SRT	380	15,0 - 55,0	100	50	30	o. r.	o. r.	o. r.
94333	VASMI 2/L SRT	450	15,0 - 55,0	150	100	50	o. r.	o. r.	o. r.
94334	VASMI 3 SRT	400	25,0 - 68,0	150	100	70	o. r.	o. r.	o. r.
94335	VASMI 3/L SRT	500	25,0 - 68,0	200	200	100	o. r.	o. r.	o. r.
94336	VASMI 4 SRT	430	28,0 - 94,0	200	200	150	o. r.	o. r.	o. r.
94337	VASMI 5 SRT	600	28,0 - 94,0	400	300	200	o. r.	o. r.	o. r.
94338	VASMI 6 SRT	725	34,0 - 101,0	600	500	300	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

AV core connectors for communication and signal cables

AV core connectors

Core connectors type **AV** connect plastic-insulated telecommunication and signal cable cores. They are characterised by their space-saving and assembly-friendly structure.
Satisfy the requirements of DIN 47627 (solder-free core connections in sleeves for telecommunication cables).

When clamping with the **AVZ** tool, the vertical forces are transferred evenly to the core connectors, thus guaranteeing reliable contacting of the copper lines to be processed.

Properties

- high electrical insulation values
- high mechanical and thermal strength
- impact-proof plastic housing
- corrosion protection through grease charge
- improved contacting through U-contact principle
- core diameters up to 2.0 mm possible
- larger application range from 0.4 - 0.9 mm conductor diameter
- stripping, connection and insulation in one action

Note

The parallel-clamping core binding pliers or equivalent are suitable for flush clamping core connectors.
Use core connection pliers AVZ or equal tool.

Scope of delivery

Colour: transparent

AV core connector

Part no.	Type	No. cores	Conductor Ø from - to mm	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
93147	AV2	2	0,4 - 0,9	100	o. r.	o. r.	o. r.
93148	AV3	3	0,4 - 0,9	100	o. r.	o. r.	o. r.
93149	AVT3	3	0,4 - 0,9	100	o. r.	o. r.	o. r.

AVZ core connecting pliers

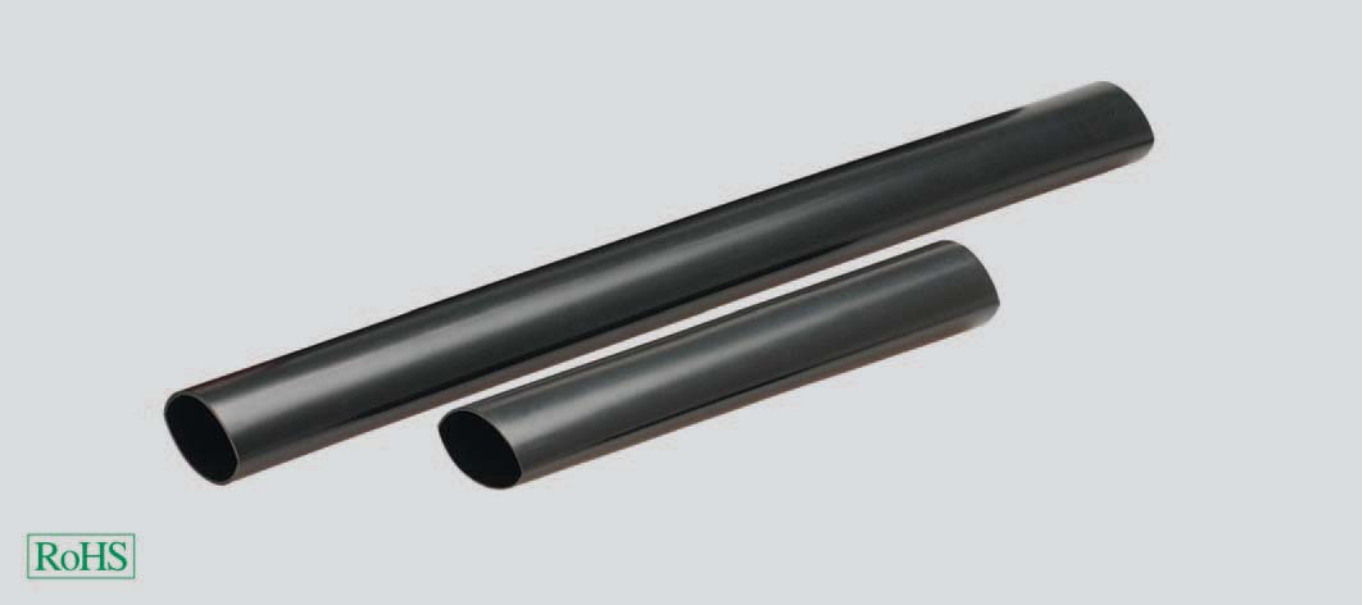
Part no.	Type	No. cores	Conductor Ø from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93150	AVZ	-	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

NSVM-S low voltage straight-through joint heat-shrinking type

single core



NSVM-S (single-core coupling sleeve)

Coupling sleeve for single-core plastic-insulated power cables to 0.6/1(1.2)kV, universal applications for connecting cables and lines made of PVC, PE and VPE, e.g. N(A)YY, N(A)2XY, NYM, NYY.

Application

- Interior
- Outdoors
- Underground
- Water

Properties

- halogen-free
- high electrical insulation values
- laterally water-tight
- good mechanical strength
- compact dimensions
- unrestricted storage
- large line and cable cross-sections
- highly resistant to chemical influences, alkaline earths and UV rays

Scope of delivery

- inner seal
- outer seal
- illustrated assembly instruction

Test

According to CENELEC HD 623 (VDE0278,Part623)

single core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93890	NSVM-S1	0.6/1kV	1x 10,0 - 1x 25,0	1	o. r.	o. r.	o. r.
93891	NSVM-S1	0.6/1kV	1x 35,0 - 1x 70,0	1	o. r.	o. r.	o. r.
93892	NSVM-S1	0.6/1kV	1x 95,0 - 1x 240,0	1	o. r.	o. r.	o. r.
93893	NSVM-S1	0.6/1kV	1x 150,0 - 1x 300,0	1	o. r.	o. r.	o. r.
93894	NSVM-S1	0.6/1kV	1x 300,0 - 1x 500,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

NSVM-S low voltage straight-through joint heat-shrinking type

multiple core

NSVM-S (multi-core coupling sleeve)

Coupling sleeve for multi-core plastic-insulated power cables to 0.6/1(1.2)kV, universal applications for connecting cables and lines from PVC, PE and VPE, e.g. N(A)YY, N(A)2XY, N(A)YCWY, NYM, NYY.

Application

- Indoors
- Outdoors
- Underground
- Water

Properties

- halogen-free
- high electrical insulation values
- laterally water-tight
- good mechanical strength
- compact dimensions
- unrestricted storage
- large line and cable cross-sections
- highly resistant to chemical influences, earth alkalis and UV rays

Scope of delivery

- inner seal
- outer seal
- illustrated assembly instruction

Test

According to CENELEC HD 623 (VDE0278,Part623)

multiple core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94400	NSVM-S3	0.6/1kV	3x 1,5 - 3x 16,0	1	o. r.	o. r.	o. r.
94401	NSVM-S3	0.6/1kV	3x 6,0 - 3x 25,0	1	o. r.	o. r.	o. r.
94402	NSVM-S3	0.6/1kV	3x 25,0 - 3x 70,0	1	o. r.	o. r.	o. r.
94403	NSVM-S3	0.6/1kV	3x 95,0 - 3x 150,0	1	o. r.	o. r.	o. r.
94404	NSVM-S3	0.6/1kV	3x 185,0 - 3x 300,0	1	o. r.	o. r.	o. r.
93382	NSVM-S4	0.6/1kV	4x 1,5 - 4x 6,0	1	o. r.	o. r.	o. r.
93388	NSVM-S4	0.6/1kV	4x 1,5 - 4x 16,0	1	o. r.	o. r.	o. r.
93383	NSVM-S4	0.6/1kV	4x 6,0 - 4x 25,0	1	o. r.	o. r.	o. r.
93384	NSVM-S4	0.6/1kV	4x 16,0 - 4x 50,0	1	o. r.	o. r.	o. r.
93385	NSVM-S4	0.6/1kV	4x 25,0 - 4x 95,0	1	o. r.	o. r.	o. r.
93386	NSVM-S4	0.6/1kV	4x 25,0 - 4x 150,0	1	o. r.	o. r.	o. r.
93389	NSVM-S4	0.6/1kV	4x 95,0 - 4x 300,0	1	o. r.	o. r.	o. r.
94405	NSVM-S5	0.6/1kV	5x 1,5 - 5x 6,0	1	o. r.	o. r.	o. r.
94406	NSVM-S5	0.6/1kV	5x 1,5 - 5x 10,0	1	o. r.	o. r.	o. r.
94407	NSVM-S5	0.6/1kV	5x 1,5 - 5x 16,0	1	o. r.	o. r.	o. r.
94408	NSVM-S5	0.6/1kV	5x 16,0 - 5x 25,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

NSVM-S E90 low voltage straight-through joint heat-shrinking type

NSVM-S E90
Flame-resistant heat-shrinkable low-voltage connecting sleeve. For connecting type (N)HX(HX) and (N)HXCHX safety cables wherever specified.

Application
Power stations, tunnels, airports, elevators, stairways etc.

Properties
- flame-resistant
- halogen-free
- very low smoke generation
- self-extinguishing
- suitable for all installation types

Scope of delivery
- inner seal
- insulation tube
- outer seal
- illustrated assembly instruction

Test
DIN4102, part 12,
status february 1996 (E90)
DIN VDE 0472, part 814 (FE 180)
IEC 332

for cable type (N) HXHX

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94460	NSVM-SE4	0.6/1kV	4x 1,5 - 4x 4,0	1	o. r.	o. r.	o. r.
94461	NSVM-SE4	0.6/1kV	4x 6,0 - 4x 10,0	1	o. r.	o. r.	o. r.
94462	NSVM-SE4	0.6/1kV	4x 16,0 - 4x 25,0	1	o. r.	o. r.	o. r.
94463	NSVM-SE4	0.6/1kV	4x 35,0 - 4x 50,0	1	o. r.	o. r.	o. r.
94464	NSVM-SE4	0.6/1kV	4x 70,0 - 4x 95,0	1	o. r.	o. r.	o. r.
94465	NSVM-SE4	0.6/1kV	4x 120,0 - 4x 150,0	1	o. r.	o. r.	o. r.
94466	NSVM-SE4	0.6/1kV	4x 185,0 - 4x 240,0	1	o. r.	o. r.	o. r.
94467	NSVM-SE5	0.6/1kV	5x 1,5 - 5x 4,0	1	o. r.	o. r.	o. r.
94468	NSVM-SE5	0.6/1kV	5x 6,0 - 5x 10,0	1	o. r.	o. r.	o. r.
94469	NSVM-SE5	0.6/1kV	5x 16,0 - 5x 25,0	1	o. r.	o. r.	o. r.

for cable type (N) HXCHX

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94470	NSVM-SE4/1	0.6/1kV	4x 1,5 / 1,5 - 4x 4,0 / 4,0	1	o. r.	o. r.	o. r.
94471	NSVM-SE4/1	0.6/1kV	4x 6,0 / 6,0 - 4x 10,0 / 10,0	1	o. r.	o. r.	o. r.
94472	NSVM-SE4/1	0.6/1kV	4x 16,0 / 16,0 - 4x 25,0 / 16,0	1	o. r.	o. r.	o. r.
94473	NSVM-SE4/1	0.6/1kV	4x 35,0 / 16,0 - 4x 50,0 / 25,0	1	o. r.	o. r.	o. r.
94474	NSVM-SE4/1	0.6/1kV	4x 70,0 / 35,0 - 4x 95,0 / 50,0	1	o. r.	o. r.	o. r.
94475	NSVM-SE4/1	0.6/1kV	4x 120,0 / 70,0 - 4x 150,0 / 70,0	1	o. r.	o. r.	o. r.
94476	NSVM-SE4/1	0.6/1kV	4x 185,0 / 95,0 - 4x 240,0 / 120,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

MSVM-S medium voltage straight-through joint heat-shrinking type

single core

MSVM-S

The centre tension transition sleeve suitable for connecting all single-core plastic power cables with external conductor layer up to 18/30(36)kV.
For connecting cables with differing cross-sections, conductor materials and cable designs with regard to external conductor layer and sheathing.

Properties

- safe field effect
- simple assembly
- large cross-sections
- unlimited conductivity
- immediately operational

Scope of delivery

- unit: 1
- two suspensible silicone control elements
- field effect filler tape (blue)
- thick-walled heat shrink-on tube
- copper fabric shielding
- heat shrink-on tube as an outside protection
- assembly instruction

single core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Diameter from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93107	MSVM-S12/1	6/10kV	35,0 - 95,0	13,2 - 20,0	1	o. r.	o. r.	o. r.
93108	MSVM-S12/1	6/10kV	95,0 - 240,0	18,2 - 25,0	1	o. r.	o. r.	o. r.
93109	MSVM-S12/1	6/10kV	150,0 - 300,0	20,9 - 35,0	1	o. r.	o. r.	o. r.
93110	MSVM-S12/1	6/10kV	300,0 - 400,0	28,6 - 45,0	1	o. r.	o. r.	o. r.
93111	MSVM-S12/1	6/10kV	500,0 - 800,0	28,6 - 60,0	1	o. r.	o. r.	o. r.
93117	MSVM-S24/1	12/20kV	10,0 - 35,0	13,2 - 15,0	1	o. r.	o. r.	o. r.
93118	MSVM-S24/1	12/20kV	50,0 - 150,0	18,2 - 25,0	1	o. r.	o. r.	o. r.
93119	MSVM-S24/1	12/20kV	70,0 - 240,0	20,9 - 30,0	1	o. r.	o. r.	o. r.
93120	MSVM-S24/1	12/20kV	150,0 - 300,0	24,2 - 35,0	1	o. r.	o. r.	o. r.
93379	MSVM-S24/1	12/20kV	400,0 - 630,0	28,6 - 45,0	1	o. r.	o. r.	o. r.
93398	MSVM-S24/1	12/20kV	630,0 - 1000,0	28,6 - 45,0	1	o. r.	o. r.	o. r.
93121	MSVM-S36/1	18/30kV	35,0 - 70,0	20,9 - 18,0	1	o. r.	o. r.	o. r.
93122	MSVM-S36/1	18/30kV	50,0 - 150,0	24,2 - 25,0	1	o. r.	o. r.	o. r.
93123	MSVM-S36/1	18/30kV	150,0 - 300,0	28,6 - 35,0	1	o. r.	o. r.	o. r.
93124	MSVM-S36/1	18/30kV	300,0 - 500,0	28,6 - 45,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

MSVM-S medium voltage straight-through joint heat-shrinking type

triple core

MSVM-S

The centre tension transition sleeve is suitable for connecting all 3-core plastic power cables with external conductor layer up to 18/30(36)kV.
For connecting cables with differing cross-sections, conductor materials and cable designs with regard to external conductor layer and sheathing.
Special solutions enable a 3-core plastic power cable to be connected to 3 single-core plastic power cables.

Properties

- safe field effect
- simple assembly
- large cross-sections
- unlimited conductivity
- immediately operational

Scope of delivery

- unit: 1
- two suspensible silicone control elements
- field effect filler tape (blue)
- thick-walled heat shrink-on tube
- copper fabric shielding
- heat shrink-on tube as an outside protection
- assembly instruction

triple core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Diameter from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93135	MSVM-S12/3	6/10kV	3x 10,0 - 3x 25,0	13,2 - 20,0	1	o. r.	o. r.	o. r.
93136	MSVM-S12/3	6/10kV	3x 35,0 - 3x 95,0	18,2 - 25,0	1	o. r.	o. r.	o. r.
93137	MSVM-S12/3	6/10kV	3x 95,0 - 3x 240,0	20,9 - 35,0	1	o. r.	o. r.	o. r.
93142	MSVM-S24/3	12/20kV	3x 10,0 - 3x 35,0	13,2 - 15,0	1	o. r.	o. r.	o. r.
93143	MSVM-S24/3	12/20kV	3x 50,0 - 3x 150,0	18,2 - 25,0	1	o. r.	o. r.	o. r.
93144	MSVM-S24/3	12/20kV	3x 70,0 - 3x 240,0	20,9 - 30,0	1	o. r.	o. r.	o. r.
93145	MSVM-S24/3	12/20kV	3x 150,0 - 3x 300,0	24,2 - 35,0	1	o. r.	o. r.	o. r.
93186	MSVM-S36/3	18/30kV	3x 35,0 - 3x 70,0	20,9 - 18,0	1	o. r.	o. r.	o. r.
93187	MSVM-S36/3	18/30kV	3x 50,0 - 3x 150,0	24,2 - 25,0	1	o. r.	o. r.	o. r.
93188	MSVM-S36/3	18/30kV	3x 150,0 - 3x 300,0	28,6 - 35,0	1	o. r.	o. r.	o. r.

triple core - special solutions

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Diameter from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93138	MSVM-S12/3 S	6/10kV	3x 35,0 - 3x 70,0	13,2 - 20,0	1	o. r.	o. r.	o. r.
93139	MSVM-S12/3 S	6/10kV	3x 95,0 - 3x 150,0	18,2 - 25,0	1	o. r.	o. r.	o. r.
93140	MSVM-S12/3 S	6/10kV	3x 185,0 - 3x 300,0	20,9 - 35,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

IREV-S indoor termination, shrinking type

IREV-S

The interior end seals are suitable for all single-conductor and three-conductor. Medium-range voltage plastic cables with differing conductor layers and sheath designs up to 18/30(36)kV.

Properties

- safe field effect
- simple assembly
- wider application range
- excellent external layer behaviour
- unlimited conductivity
- immediately operational

Note

- An additional earthing kit is required for cables with copper sheath.
- Without terminals.
- 1 unit = 1 set with 3 items.

Scope of delivery

- unit: 1
- suspensible silicone control element
- sealing band
- creeping current resistant, weather-proof heat shrink-on tube
- assembly instruction
- suspensible silicone sheds

single core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93190	IREV-S12/1	6/10kV	10,0 - 25,0	1	o. r.	o. r.	o. r.
93191	IREV-S12/1	6/10kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
94420	IREV-S12/1	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
93192	IREV-S12/1	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
93193	IREV-S12/1	6/10kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94421	IREV-S12/1	6/10kV	400,0 - 800,0	1	o. r.	o. r.	o. r.
94422	IREV-S12/1	6/10kV	800,0 - 1000,0	1	o. r.	o. r.	o. r.
94423	IREV-S24/1	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
93194	IREV-S24/1	12/20kV	25,0 - 150,0	1	o. r.	o. r.	o. r.
93195	IREV-S24/1	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
93196	IREV-S24/1	12/20kV	120,0 - 300,0	1	o. r.	o. r.	o. r.
93197	IREV-S24/1	12/20kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94424	IREV-S24/1	12/20kV	630,0 - 1000,0	1	o. r.	o. r.	o. r.
93198	IREV-S36/1	18/30kV	35,0 - 70,0	1	o. r.	o. r.	o. r.
94425	IREV-S36/1	18/30kV	50,0 - 150,0	1	o. r.	o. r.	o. r.
93199	IREV-S36/1	18/30kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
93200	IREV-S36/1	18/30kV	500,0 - 800,0	1	o. r.	o. r.	o. r.

3-core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94435	IREV-S12/3	6/10kV	10,0 - 25,0	1	o. r.	o. r.	o. r.
93201	IREV-S12/3	6/10kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
93202	IREV-S12/3	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
93203	IREV-S12/3	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
94436	IREV-S24/3	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
94437	IREV-S24/3	12/20kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
94438	IREV-S24/3	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94439	IREV-S24/3	12/20kV	120,0 - 300,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

FLEV-S outdoor termination, shrinking type

FLEV-S

The outside end seals are suitable for all single-conductor and three-conductor medium-range voltage plastic cables with differing conductor layers and sheath designs up to 18/30(36)kV.

Properties

- Safe field effect
- Simple assembly
- Wider application range
- Excellent external layer behaviour
- Unlimited conductivity
- Immediately operational

Note

- An additional earthing kit is required for cables with copper sheath.
- Without terminals.
- 1 unit = 1 set with 3 items.

Scope of delivery

- unit: 1
- suspensible silicone control element
- sealing band
- creeping current resistant, weather-proof heat shrink-on tube
- assembly instruction
- suspensible silicone sheds

single core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93360	FLEV-S12/1	6/10kV	10,0 - 25,0	1	o. r.	o. r.	o. r.
93361	FLEV-S12/1	6/10kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
94426	FLEV-S12/1	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
93362	FLEV-S12/1	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
93363	FLEV-S12/1	6/10kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94427	FLEV-S12/1	6/10kV	400,0 - 800,0	1	o. r.	o. r.	o. r.
94428	FLEV-S12/1	6/10kV	800,0 - 1000,0	1	o. r.	o. r.	o. r.
94429	FLEV-S24/1	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
93364	FLEV-S24/1	12/20kV	25,0 - 150,0	1	o. r.	o. r.	o. r.
93365	FLEV-S24/1	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
93366	FLEV-S24/1	12/20kV	120,0 - 300,0	1	o. r.	o. r.	o. r.
93380	FLEV-S24/1	12/20kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94430	FLEV-S24/1	12/20kV	630,0 - 1000,0	1	o. r.	o. r.	o. r.
93367	FLEV-S36/1	18/30kV	35,0 - 70,0	1	o. r.	o. r.	o. r.
93368	FLEV-S36/1	18/30kV	50,0 - 150,0	1	o. r.	o. r.	o. r.
93369	FLEV-S36/1	18/30kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
93370	FLEV-S36/1	18/30kV	500,0 - 800,0	1	o. r.	o. r.	o. r.

3-core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94443	FLEV-S12/3	6/10kV	10,0 - 25,0	1	o. r.	o. r.	o. r.
93371	FLEV-S12/3	6/10kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
93372	FLEV-S12/3	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
93373	FLEV-S12/3	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
94444	FLEV-S24/3	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
94445	FLEV-S24/3	12/20kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
94446	FLEV-S24/3	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94447	FLEV-S24/3	12/20kV	120,0 - 300,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

MSVM-A medium voltage straight-through joint with slip-on method

single core

MSVM-A

The medium voltage straight -through joint with slip-on method is suitable for connecting single-core plastic power cables up to 12/20(24)kV. For connecting cables with differing cross-sections, conductor materials and cable designs with regard to external conductor layer and shielding.

Properties

- Quick and simple assembly
- Large cross-sections
- Unlimited conductivity
- Immediately operational

Scope of delivery

- unit: 1
- two suspensible silicone control elements
- one-piece silicon insulating body with integrated conductor smoothing
- thick-walled heat shrink-on tube
- copper fabric shielding
- assembly instruction

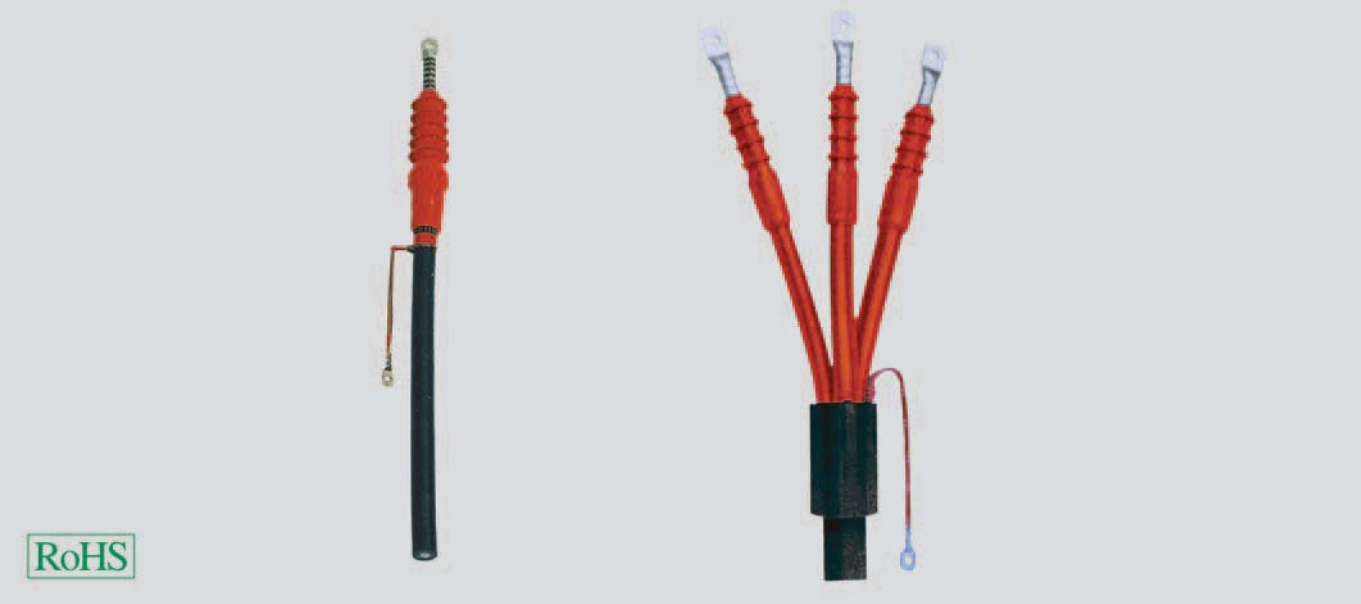
single core

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94350	MSVM-A12	6/10kV	25,0 - 95,0	1	o. r.	o. r.	o. r.
94351	MSVM-A12	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
94352	MSVM-A12	6/10kV	50,0 - 240,0	1	o. r.	o. r.	o. r.
94353	MSVM-A12	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
94355	MSVM-A24	12/20kV	16,0 - 120,0	1	o. r.	o. r.	o. r.
94356	MSVM-A24	12/20kV	35,0 - 95,0	1	o. r.	o. r.	o. r.
94357	MSVM-A24	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94358	MSVM-A24	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94359	MSVM-A24	12/20kV	35,0 - 240,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

IREV-A, FLEV-A termination with slip-on method



IREV-A/FLEV-A

The interior end seals and outside end seals in push-on technology are suitable for all single-conductor medium-range voltage plastic cables with differing conductor layers and sheath designs up to 18/30(36)kV.

Properties

- simple, quick assembly
- large cross-sections
- unlimited conductivity
- no pre-expansion
- no flame or heat source required
- immediately operational

Scope of delivery

- unit: 1
- one-piece suspensible silicon end lock
- integrated field control
- assembly instruction

IREV-A - indoor termination with slip-on method

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94371	IREV-A12	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
94372	IREV-A12	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
94373	IREV-A12	6/10kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94374	IREV-A12	6/10kV	300,0 - 800,0	1	o. r.	o. r.	o. r.
94375	IREV-A24	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
94376	IREV-A24	12/20kV	35,0 - 120,0	1	o. r.	o. r.	o. r.
94377	IREV-A24	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94378	IREV-A24	12/20kV	120,0 - 400,0	1	o. r.	o. r.	o. r.
94379	IREV-A24	12/20kV	240,0 - 630,0	1	o. r.	o. r.	o. r.
94380	IREV-A36	18/30kV	16,0 - 95,0	1	o. r.	o. r.	o. r.
94381	IREV-A36	18/30kV	50,0 - 240,0	1	o. r.	o. r.	o. r.
94382	IREV-A36	18/30kV	120,0 - 400,0	1	o. r.	o. r.	o. r.

FLEV-A - outdoor termination with slip-on method

Part no.	Type	Nominal voltage Uo/U(Um)	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
94384	FLEV-A12	6/10kV	95,0 - 240,0	1	o. r.	o. r.	o. r.
94385	FLEV-A12	6/10kV	150,0 - 400,0	1	o. r.	o. r.	o. r.
94386	FLEV-A12	6/10kV	240,0 - 500,0	1	o. r.	o. r.	o. r.
94387	FLEV-A12	6/10kV	300,0 - 800,0	1	o. r.	o. r.	o. r.
94388	FLEV-A24	12/20kV	10,0 - 35,0	1	o. r.	o. r.	o. r.
94389	FLEV-A24	12/20kV	35,0 - 120,0	1	o. r.	o. r.	o. r.
94390	FLEV-A24	12/20kV	70,0 - 240,0	1	o. r.	o. r.	o. r.
94391	FLEV-A24	12/20kV	120,0 - 400,0	1	o. r.	o. r.	o. r.
94392	FLEV-A24	12/20kV	240,0 - 630,0	1	o. r.	o. r.	o. r.
94393	FLEX-A36	18/30kV	50,0 - 240,0	1	o. r.	o. r.	o. r.
94394	FLEX-A36	18/30kV	120,0 - 400,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Medium voltage accessories

Medium-range voltage accessories

KMRS: for a fast, reliable repair of sheath damage up to 1000 V. Consisting of cable sheath repair tape, emery cloth, cleaning cloth.
Sealant: for cable penetration, halogen-free dual-component PUR cast resin, practical dual chamber mixing bag.
Sealing tape, black: for sealing cable and line gussets, repair of damaged cable sheaths, water-tight sealing of cable penetrations.

Properties

KMRS: vulcanising, extremely good electrical properties; outstanding tensile strength, absolute moisture tight.
Sealant: good adhesion to metals, plastic, concrete, plastic and natural stones; removable, environmentally compatible, gas and water-tight to 1.5 bar, soft-elastic following hardening.
Sealing tape: very good adhesion to metal, glass, rubber, plastic, good dielectric and physical properties.

KMRS repair set

Part no.	Type	Description	Thickness x Width mm x mm	Content	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93141	KMRS	Cable sheath repair set	-	Mixed bag	1	o. r.	o. r.	o. r.

LG sealing compound

Part no.	Type	Description	Thickness x Width mm x mm	Content	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93125	Sealant	LG 250 (incl. spatula)	-	250,0 ml	1	o. r.	o. r.	o. r.
93126	Sealant	LG 500 (incl. spatula)	-	500,0 ml	1	o. r.	o. r.	o. r.

sealing tape

Part no.	Type	Description	Thickness x Width mm x mm	Content	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93127	Sealing tape	-	3,2 x 38,0	1,5 m	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Medium voltage accessories

Medium-range voltage accessories

HSIB, black: as conductor insulation for plastic-insulated cables to 69kV, repair and connection of numerous insulating and cable materials, for sealing casting moulds and stuffing cable insulation.
Line warning tape, yellow with black marking: used as an early warning device for excavation work. It should be placed approx. 40 cm above the supply line, PE laminated film.

Properties

HSIB: good electric and physical properties guarantee long tool life, good dielectric properties, highly weather-resistant, extremely expandable, non-adhesive, welds quickly to form homogenous, cavity-free mass, easy to handle, easy to process, completely removable.
Line warning tape: Good warning effect through more than 400% expansion, colour-fast, age and cold-resistant, expansion remains unchanged, permanently legible through crystal clear film coating over lettering.

HSIB high voltage insulation tape

Part no.	Type	Description	Thickness x Width mm x mm	Content	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93128	HSIB	High-voltage insulating tape	0,5 x 19,0	10 m	1	o. r.	o. r.	o. r.
93129	HSIB	High-voltage insulating tape	0,75 x 19,0	10 m	1	o. r.	o. r.	o. r.

channel warning tape

Part no.	Type	Description	Thickness x Width mm x mm	Content	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
93130	Channel warning tape	Caution: cable	0,15 x 40,0	250 m	1	o. r.	o. r.	o. r.
93131	Channel warning tape	Caution: high-voltage cable	0,15 x 40,0	250 m	1	o. r.	o. r.	o. r.
93132	Channel warning tape	Caution: telephone cable	0,15 x 40,0	250 m	1	o. r.	o. r.	o. r.
93133	Channel warning tape	Caution: street lighting	0,15 x 40,0	250 m	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Cables & wires

We design, manufacture and supply for all markets and every application.

HELUKABEL® provides cables and wires for all markets and for all applications. The comprehensive standard and warehouse stock leaves hardly anything to be desired and comprises:

- Control cables
- Data and computer cables
- Heat-resistant cables
- Cables for foreign standards
- Halogen-free cables
- Coaxial cables
- Fibre optics
- Flat cables
- Vehicle cables
- Installation cables
- High-voltage / medium voltage cables
- Servo and sensor cables
- Drag chain cables
- Robot cables
- Network cables
- Spiral and pre-assembled cables

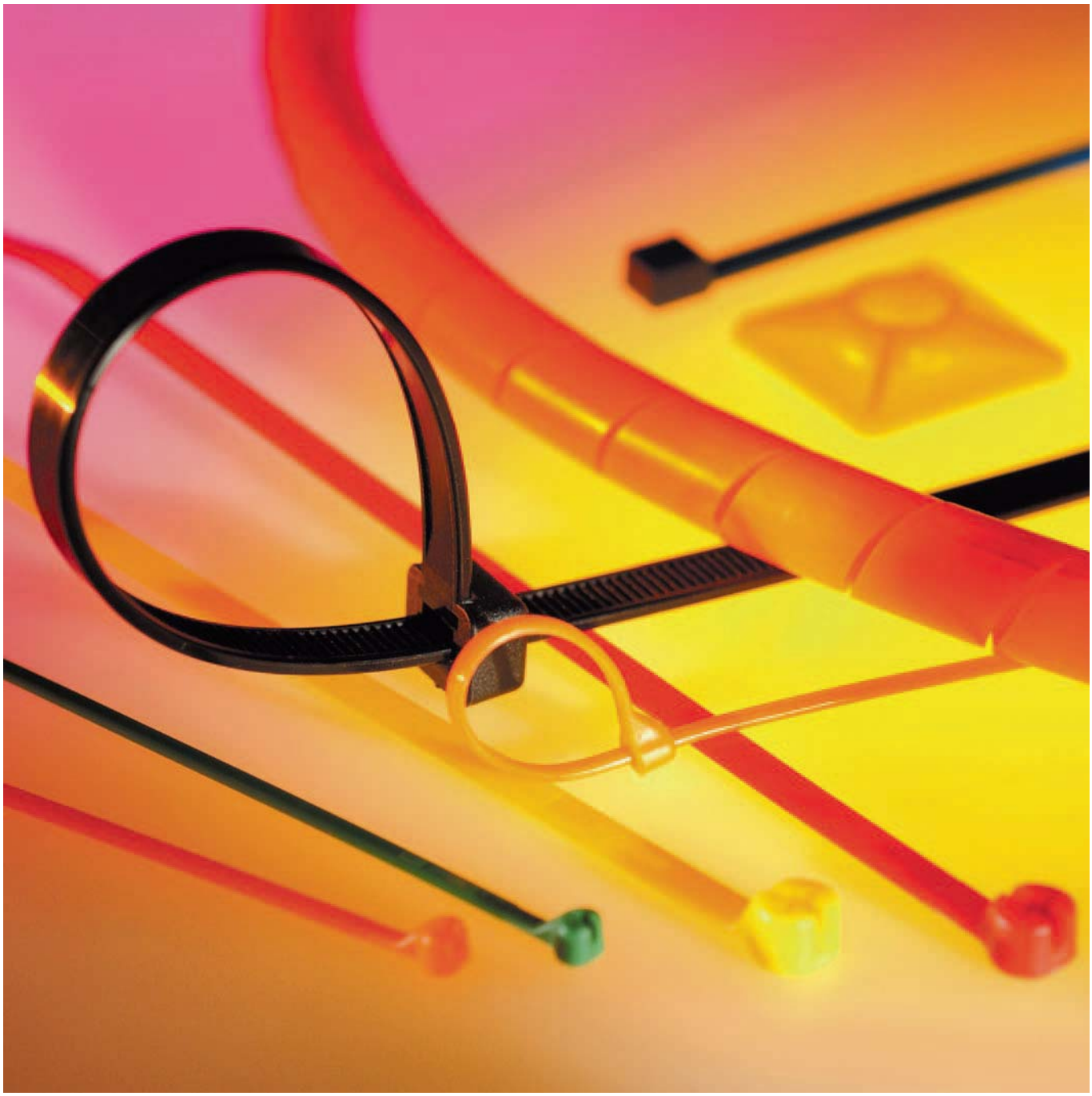


Photo: HELUKABEL®

Bundling, binding and fixing

Bundling, binding and fixing

Plastic helix

KW 369

Cable binders

Series Thomas & Betts
- for standard applications
  - Cable tie **TY-RAP®** 370
- UV-stabilised
  - Cable tie **TY-MX** 371
- highly stabilised
  - Cable tie **TYH** 372
- highly resistant
  - Cable tie **TYZ** 373
- with additional fastening
  - with mounting hole 374
  - with plug-in clip 374
- with marking area
  - underneath the sealing head 375
  - above the sealing head 375

Series Standard
- for standard applications
  - Cable tie **T** 376
- weatherproof
  - Cable tie **T-WS** 377
- detachable
  - Cable tie **W** 378
- robust application - stainless steel
  - Cable tie **E** 379

Velcro fastener

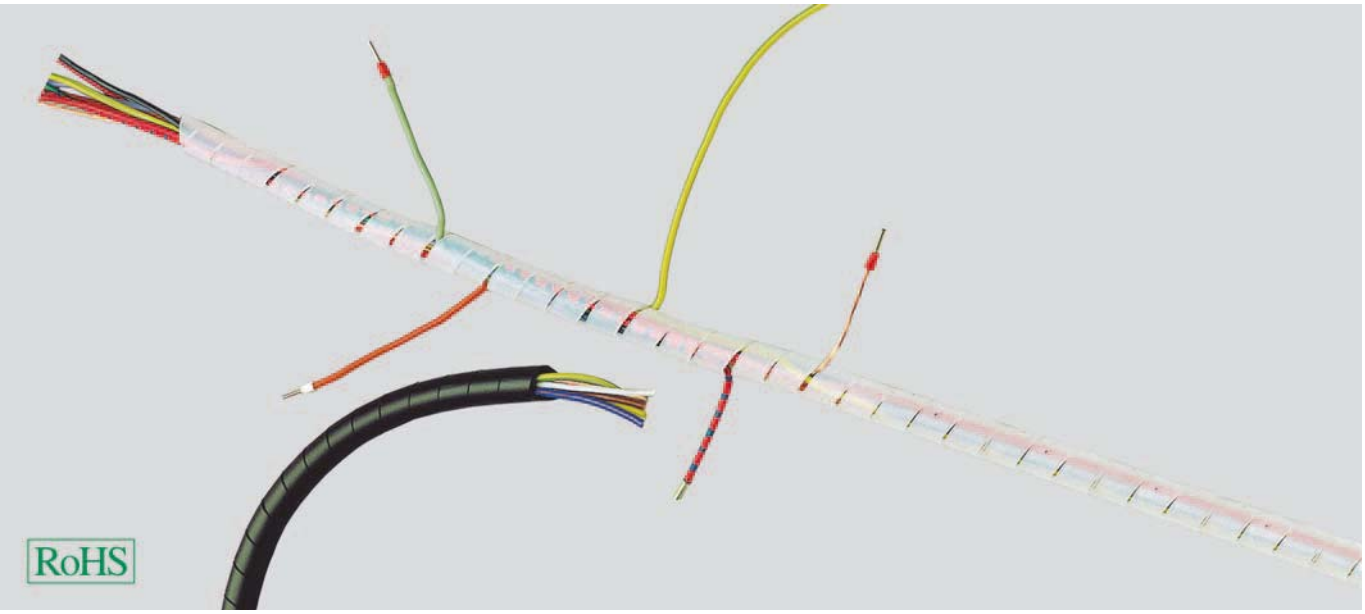
- with punched hole
  - velcro fastener **KLL** 380
- with plastic grommet
  - velcro fastener **KLÖ** 380

Mounting base

Series BS
- Mounting base **BS** 381

Series T&B
- Mounting base **TC**
  - for band fastening 382
  - as mounting base 382
  - as screw base 383
  - with saddle 383
  - as adhesive base 384

KW plastic helix



KW
Plastic helix made of polyethylene.
Protects wiring harnesses, wires and lines.
Bundles and binds single wires and provides mechanical protection for loosely installed or moving cables and lines.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyethylene

- halogen-free

Note
Other materials or colours on request.

Technical data
Temperature range: -30°C up to +80°C

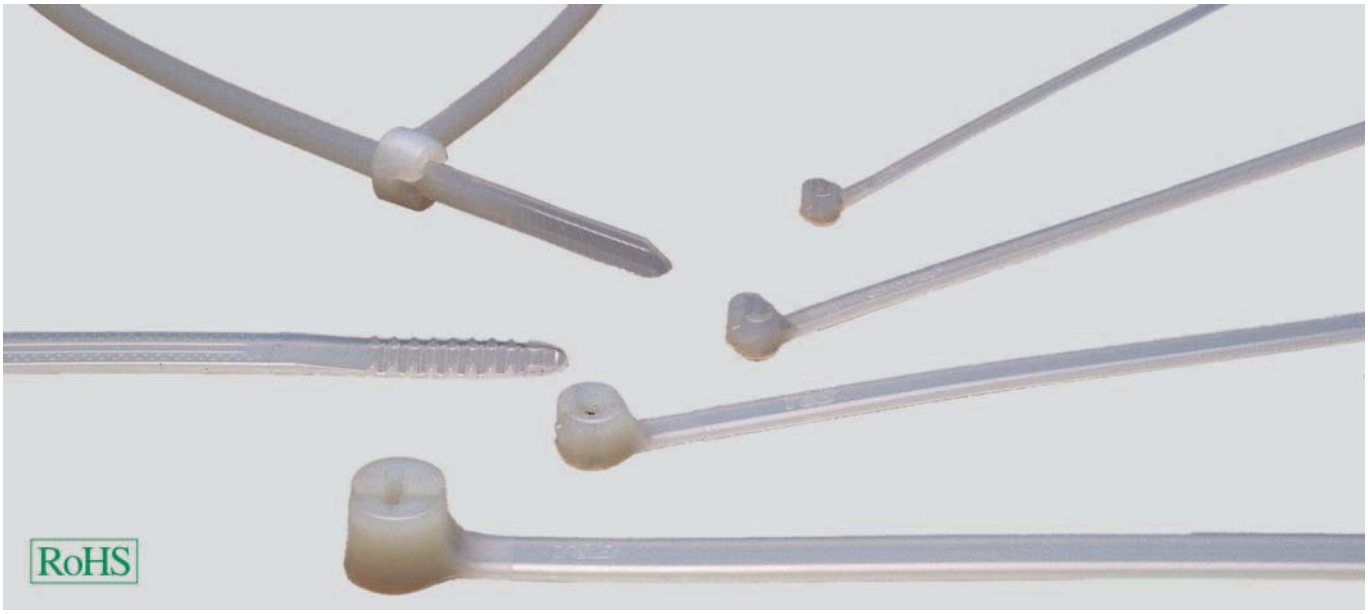
Part no.	Size	Colour	Bundle Ø mm	Per metres	Net EUR/100 metres at a purchase of up to 100	101 - 500	501 - 1000
91000	6	transparent	5,0 - 20,0	25	o. r.	o. r.	o. r.
91001	6	black	5,0 - 20,0	25	o. r.	o. r.	o. r.
96659	6	yellow	5,0 - 20,0	25	o. r.	o. r.	o. r.
96891	6	orange	5,0 - 20,0	25	o. r.	o. r.	o. r.
91002	12	transparent	12,0 - 40,0	25	o. r.	o. r.	o. r.
91003	12	black	12,0 - 40,0	25	o. r.	o. r.	o. r.
96658	12	yellow	10,0 - 40,0	25	o. r.	o. r.	o. r.
97042	12	orange	10,0 - 40,0	25	o. r.	o. r.	o. r.
96300	22	transparent	20,0 - 150,0	25	o. r.	o. r.	o. r.
96299	22	black	20,0 - 150,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TY-RAP® cable tie with steel lug lock

a product by Thomas & Betts



TY-RAP® transparent

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel.

This technology enables the cable tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

Polyamide 6.6

- halogen-free

Note

Brown, red, orange, yellow, green, purple or grey available on request.

Technical data

Temperature range: -40°C up to +85°C

Flammability acc. to UL 94: V2

Part no. transparent	Type T & B	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91051	TYB 23M	92,0	2,4	16,0	80,0	1000	o. r.	o. r.	o. r.
91055	TY 232M	203,0	2,4	50,0	80,0	1000	o. r.	o. r.	o. r.
91058	TY 234M	356,0	2,4	102,0	80,0	1000	o. r.	o. r.	o. r.
91061	TYB 24M	140,0	3,6	29,0	180,0	1000	o. r.	o. r.	o. r.
91064	TY 242M	204,0	3,6	50,0	180,0	1000	o. r.	o. r.	o. r.
91067	TY 26M	284,0	3,6	76,0	130,0	1000	o. r.	o. r.	o. r.
91070	TY 244M	368,0	3,6	103,0	130,0	1000	o. r.	o. r.	o. r.
91073	TYB 25M	186,0	4,8	45,0	220,0	1000	o. r.	o. r.	o. r.
91076	TY 253M	295,0	4,8	78,0	220,0	1000	o. r.	o. r.	o. r.
91079	TY 28M	361,0	4,8	102,0	220,0	1000	o. r.	o. r.	o. r.
91082	TY 272M	223,0	6,9	50,0	540,0	500	o. r.	o. r.	o. r.
91085	TY 27M	340,0	6,9	90,0	540,0	500	o. r.	o. r.	o. r.
91088	TY 29M	771,0	6,9	229,0	540,0	500	o. r.	o. r.	o. r.

small package

Part no. transparent	Type T & B	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91050	TY 5-23M	92,0	2,4	16,0	80,0	100	o. r.	o. r.	o. r.
91054	TY 5-232M	203,0	2,4	50,0	80,0	100	o. r.	o. r.	o. r.
91057	TY 5-234M	356,0	2,4	102,0	80,0	100	o. r.	o. r.	o. r.
91060	TY 5-24M	140,0	3,6	29,0	180,0	100	o. r.	o. r.	o. r.
91063	TY 5-242M	204,0	3,6	50,0	180,0	100	o. r.	o. r.	o. r.
91066	TY 5-26M	284,0	3,6	76,0	130,0	100	o. r.	o. r.	o. r.
91069	TY 5-244M	368,0	3,6	103,0	130,0	100	o. r.	o. r.	o. r.
91072	TY 5-25M	186,0	4,8	45,0	220,0	100	o. r.	o. r.	o. r.
91075	TY 5-253M	295,0	4,8	78,0	220,0	100	o. r.	o. r.	o. r.
91078	TY 5-28M	361,0	4,8	102,0	220,0	100	o. r.	o. r.	o. r.
91081	TY 5-272M	223,0	6,9	50,0	540,0	50	o. r.	o. r.	o. r.
91084	TY 5-27M	340,0	6,9	90,0	540,0	50	o. r.	o. r.	o. r.
91087	TY 5-29M	771,0	6,9	229,0	540,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TY-MX cable tie with steel lug lock

a product by Thomas & Betts

TY-RAP® (UV-stabilised)

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel. This technology enables the cable tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

Polyamide 6.6
UV-resistant

- halogen-free

Note

Other colours and materials available on request.

Technical data

Temperature range: -40°C up to +85°C

Flammability acc. to UL 94: V2

UV-stabilised

Part no. black	Type T & B	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91052	TYB 23MX	92,0	2,4	16,0	80,0	1000	o. r.	o. r.	o. r.
91056	TY 232MX	203,0	2,4	50,0	80,0	1000	o. r.	o. r.	o. r.
91059	TY 234MX	356,0	2,4	102,0	80,0	1000	o. r.	o. r.	o. r.
91062	TYB 24MX	140,0	3,6	29,0	180,0	1000	o. r.	o. r.	o. r.
91065	TY 242MX	204,0	3,6	50,0	180,0	1000	o. r.	o. r.	o. r.
91068	TY 26MX	284,0	3,6	76,0	130,0	1000	o. r.	o. r.	o. r.
91071	TY 244MX	368,0	3,6	103,0	130,0	1000	o. r.	o. r.	o. r.
91074	TYB 25MX	186,0	4,8	45,0	220,0	1000	o. r.	o. r.	o. r.
91077	TY 253MX	295,0	4,8	78,0	220,0	1000	o. r.	o. r.	o. r.
91080	TY 28MX	361,0	4,8	102,0	220,0	1000	o. r.	o. r.	o. r.
91083	TY 272MX	223,0	6,9	50,0	540,0	500	o. r.	o. r.	o. r.
91086	TY 27MX	340,0	6,9	90,0	540,0	500	o. r.	o. r.	o. r.
91089	TY 29MX	771,0	6,9	229,0	540,0	500	o. r.	o. r.	o. r.

UV-stabilised - small package

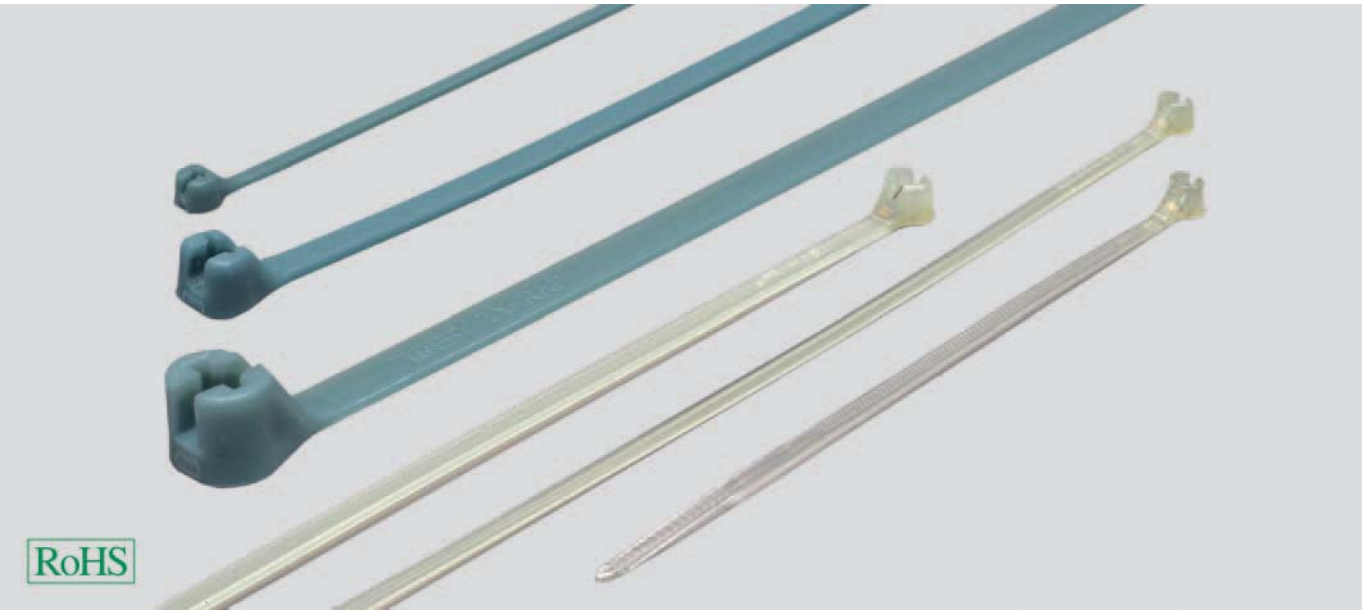
Part no. black	Type T & B	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
97310	TY 5-23MX	92,0	2,4	16,0	80,0	100	o. r.	o. r.	o. r.
97311	TY 5-232MX	203,0	2,4	50,0	80,0	100	o. r.	o. r.	o. r.
97312	TY 5-234MX	356,0	2,4	102,0	80,0	100	o. r.	o. r.	o. r.
97313	TYB 5-24MX	140,0	3,6	29,0	180,0	100	o. r.	o. r.	o. r.
97314	TY 5-242MX	204,0	3,6	50,0	180,0	100	o. r.	o. r.	o. r.
97436	TY 5-26MX	284,0	3,6	76,0	130,0	100	o. r.	o. r.	o. r.
97437	TY 5-244MX	368,0	3,6	103,0	130,0	100	o. r.	o. r.	o. r.
93694	TY 5-25MX	186,0	4,8	45,0	220,0	100	o. r.	o. r.	o. r.
93695	TY 5-253MX	295,0	4,8	78,0	220,0	100	o. r.	o. r.	o. r.
93696	TY 5-28MX	361,0	4,8	102,0	220,0	100	o. r.	o. r.	o. r.
93697	TY 5-272MX	223,0	6,9	50,0	540,0	50	o. r.	o. r.	o. r.
93698	TY 5-27MX	340,0	6,9	90,0	540,0	50	o. r.	o. r.	o. r.
93699	TY 5-29MX	771,0	6,9	229,0	540,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TYH cable tie with steel lug lock

a product by Thomas & Betts



TY-RAP®

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel.

This technology enables the cable tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

H = Polyamide 6.6 (heat-stabilised)

- halogen-free

Technical data

Temperature range: -40°C up to +105°C

Flammability acc. to UL 94: V2

high stabilized

Part no.	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
97280	TYH 23M	transparent	92,0	2,4	16,0	80,0	1000	o. r.	o. r.	o. r.
96481	TYH 232M	transparent	203,0	2,4	50,0	80,0	1000	o. r.	o. r.	o. r.
96577	TYH 24M	transparent	140,0	3,6	29,0	130,0	1000	o. r.	o. r.	o. r.
98520	TYH 242M	transparent	208,0	3,6	50,0	130,0	1000	o. r.	o. r.	o. r.
97249	TYH 26M	transparent	284,0	3,6	76,0	130,0	1000	o. r.	o. r.	o. r.
97213	TYH 25M	transparent	186,0	4,8	45,0	220,0	1000	o. r.	o. r.	o. r.
98521	TYH 253M	transparent	290,0	4,8	78,0	220,0	1000	o. r.	o. r.	o. r.
96291	TYH 28M	transparent	360,0	4,8	102,0	220,0	1000	o. r.	o. r.	o. r.
98522	TYH 272M	transparent	222,0	7,6	50,0	540,0	500	o. r.	o. r.	o. r.
97154	TYH 27M	transparent	340,0	7,0	90,0	540,0	500	o. r.	o. r.	o. r.
97250	TYH 29M	transparent	771,0	6,9	229,0	530,0	500	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TYZ cable tie with steel lug lock

a product by Thomas & Betts

TY-RAP®

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel.

This technology enables the tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

- halogen-free

Technical data

Temperature range: -46°C up to +150°C

Flammability acc. to UL 94: V0

Application

- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

high resistant

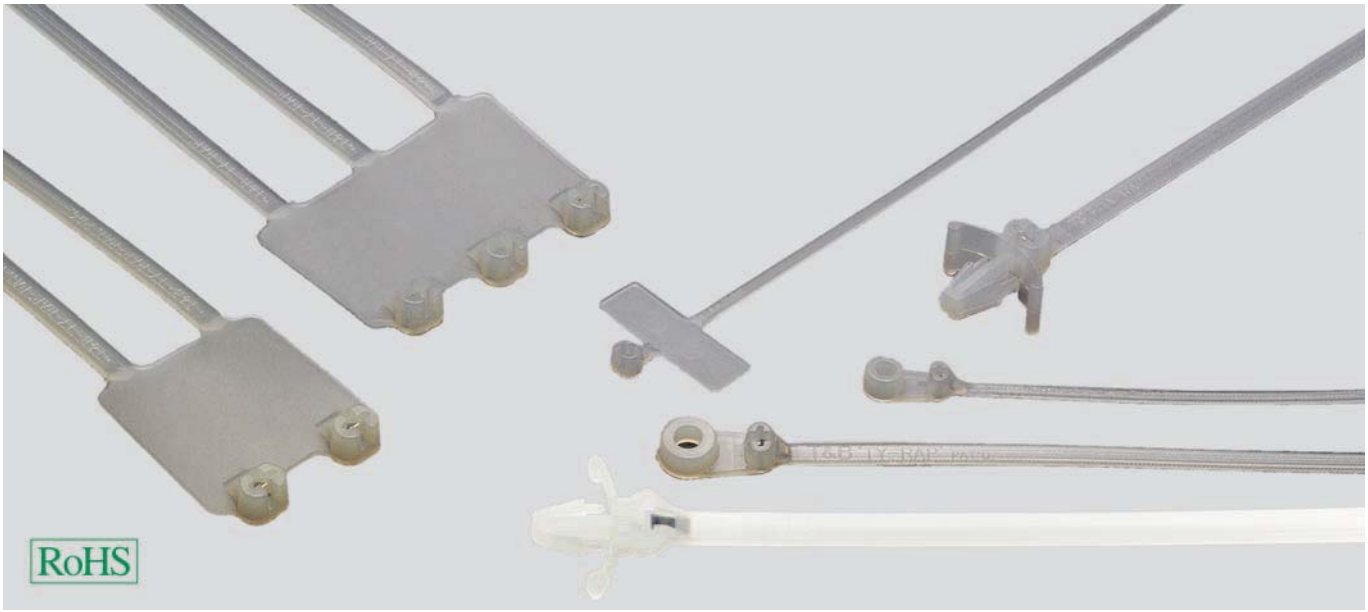
Part no.	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
96909	TYZ 23M	aquamarine	92,0	2,4	16,0	80,0	1000	o. r.	o. r.	o. r.
96290	TYZ 25M	aquamarine	186,0	4,8	45,0	220,0	1000	o. r.	o. r.	o. r.
96724	TYZ 28M	aquamarine	360,0	4,8	102,0	220,0	500	o. r.	o. r.	o. r.
94800	TYZ 27M	aquamarine	340,0	7,0	90,0	540,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TY-RAP® special cable tie cable tie with steel lug lock

a product by Thomas & Betts



TY-RAP® (special types)

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel. This technology enables the cable tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

Polyamide 6.6

- halogen-free

Technical data

Temperature range: -40°C up to +85°C

Flammability acc. to UL 94: V2

with assembly hole

Part no. transparent	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Hole Ø mm	Field W x H	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91093	TY 33M	transparent	102,0	2,3	16,0	80	3	-	1000	o. r.	o. r.	o. r.
91094	TY 34M	transparent	151,0	3,5	29,0	180	4.4	-	1000	o. r.	o. r.	o. r.
91095	TY 635M	transparent	198,0	4,7	45,0	220	4	-	1000	o. r.	o. r.	o. r.
91096	TY 35M	transparent	199,0	4,7	45,0	220	5.1	-	1000	o. r.	o. r.	o. r.
91098	TY 37M	transparent	356,0	7,7	90,0	540	6.7	-	500	o. r.	o. r.	o. r.

with plug-in clip

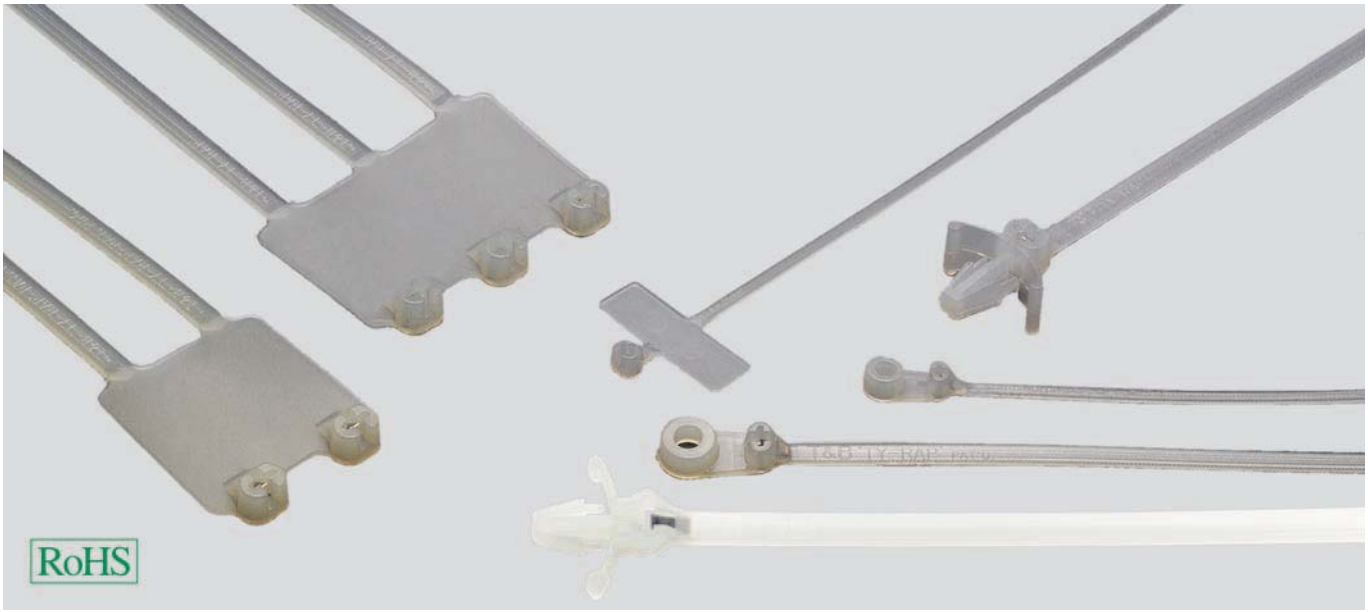
Part no. transparent	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Hole Ø mm	Field W x H	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91103	TY 38M	transparent	200,0	4,7	44,0	220	-	-	1000	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TY-RAP® with label cable tie with steel lug lock

a product by Thomas & Betts



TY-RAP®

TY-RAP® cable tie with steel lug lock made of corrosion-resistant, non-magnetic steel. This technology enables the cable tie to offer excellent binding properties even under the most rigorous conditions such as heat, cold, humidity etc. and makes it insensitive to vibrations and external influences.

Material

Polyamide 6.6

- halogen-free

Note

TY-RAP® (special types)

Technical data

Temperature range: -40°C up to +85°C

Flammability acc. to UL 94: V2

marking area below the latch

Part no. transparent	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Hole Ø mm	Field W x H	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91108	TY 51M	transparent	92,0	2,4	16,0	80	-	25.4 x 7.9	500	o. r.	o. r.	o. r.
91109	TY 512M	transparent	210,0	2,4	51,0	80	-	25.4 x 7.9	1000	o. r.	o. r.	o. r.
91110	TY 48M	transparent	360,0	4,8	102,0	220	-	13.1 x 57.2	1000	o. r.	o. r.	o. r.
91111	TY 46M	transparent	184,0	4,8	45,0	220	-	13.1 x 27	1000	o. r.	o. r.	o. r.
91112	TY 46MD	transparent	184,0	4,8	45,0	2 x 220	-	29.7 x 27	500	o. r.	o. r.	o. r.
91113	TY 46MT	transparent	184,0	4,8	45,0	3 x 220	-	46 x 27	500	o. r.	o. r.	o. r.
91114	TY 46MF	transparent	184,0	4,8	45,0	4 x 220	-	63.1 x 27	250	o. r.	o. r.	o. r.

marking area above the latch

Part no. transparent	Type T & B	Colour	Length mm	Width mm	Bundle Ø mm	Capacity N	Hole Ø mm	Field W x H	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91106	TY 53M	transparent	102,0	2,4	16,0	80	-	20.6 x 9.3	500	o. r.	o. r.	o. r.
91107	TY 532M	transparent	212,0	2,4	51,0	80	-	20.6 x 9.3	1000	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T cable tie

Cable binders
Cable tie with plastic lug for directionality and mounting cables and lines.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide 6.6

- halogen-free
- silicone-free

Technical data
Temperature range: -40°C up to +80°C

Flammability acc. to UL 94: V2

Part no. transparent	Part no. black	Type	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
90150	90140	T 2-20	100,0	2,5	20,0	80,0	100	o. r.	o. r.	o. r.
90151	90141	T 2-50	200,0	2,5	50,0	80,0	100	o. r.	o. r.	o. r.
90152	90142	T 3-35	140,0	3,5	35,0	130,0	100	o. r.	o. r.	o. r.
90153	90143	T 3-50	200,0	3,5	55,0	130,0	100	o. r.	o. r.	o. r.
90154	90144	T 3-75	280,0	3,5	76,0	130,0	100	o. r.	o. r.	o. r.
90157	90147	T 5-85	200,0	4,5	47,0	220,0	100	o. r.	o. r.	o. r.
90156	90146	T 5-75	280,0	4,5	76,0	220,0	100	o. r.	o. r.	o. r.
90158	90148	T 5-100	360,0	4,5	109,0	220,0	100	o. r.	o. r.	o. r.
90159	90149	T 8-100	360,0	7,5	100,0	530,0	100	o. r.	o. r.	o. r.
96491	96492	T 9-165	550,0	8,9	155,0	790,0	100	o. r.	o. r.	o. r.
97219	97223	T 9-230	775,0	8,9	230,0	790,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T-WS cable tie

weather-proof

new

Cable tie T-WS

Cable tie with plastic lug for bundling and mounting cables and lines.

Application

- Outdoor use

Material

Polyamide 6.6
UV-resistant

- halogen-free

Properties

- weather- stabilised

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

Flammability acc. to UL 94: V2

Part no. black	Type	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
905525	T-WS 25/100 BK	100,0	2,5	22,0	80,0	100	o. r.	o. r.	o. r.
905527	T-WS 25/140 BK	145,0	2,5	35,0	80,0	100	o. r.	o. r.	o. r.
905526	T-WS 25/205 BK	205,0	2,5	55,0	80,0	100	o. r.	o. r.	o. r.
905528	T-WS 28/330 BK	330,0	2,8	95,0	110,0	100	o. r.	o. r.	o. r.
905529	T-WS 35/150 BK	150,0	3,5	35,0	135,0	100	o. r.	o. r.	o. r.
905530	T-WS 35/190 BK	190,0	3,5	50,0	135,0	100	o. r.	o. r.	o. r.
905531	T-WS 35/290 BK	285,0	3,5	80,0	135,0	100	o. r.	o. r.	o. r.
905532	T-WS 40/175 BK	175,0	4,0	40,0	180,0	100	o. r.	o. r.	o. r.
905535	T-WS 46/150 BK	150,0	4,6	35,0	225,0	100	o. r.	o. r.	o. r.
905533	T-WS 46/200 BK	210,0	4,7	55,0	355,0	100	o. r.	o. r.	o. r.
905536	T-WS 46/245 BK	245,0	4,6	65,0	225,0	100	o. r.	o. r.	o. r.
906682	T-WS 46/390 BK	390,0	4,7	110,0	355,0	100	o. r.	o. r.	o. r.
905537	T-WS 47/300 BK	300,0	4,7	85,0	355,0	100	o. r.	o. r.	o. r.
905542	T-WS 76/225 BK	225,0	7,6	55,0	535,0	100	o. r.	o. r.	o. r.
905539	T-WS 76/300 BK	300,0	7,6	80,0	535,0	100	o. r.	o. r.	o. r.
905543	T-WS 76/365 BK	365,0	7,6	100,0	670,0	100	o. r.	o. r.	o. r.
906683	T-WS 76/380 BK	387,0	7,6	100,0	535,0	100	o. r.	o. r.	o. r.
905541	T-WS 76/460 BK	460,0	7,6	130,0	535,0	100	o. r.	o. r.	o. r.
906684	T-WS 76/760 BK	760,0	7,6	225,0	535,0	100	o. r.	o. r.	o. r.
906685	T-WS 88/820 BK	820,0	8,8	245,0	780,0	100	o. r.	o. r.	o. r.
906686	T-WS 89/530 BK	525,0	8,9	150,0	780,0	100	o. r.	o. r.	o. r.
905546	T-WS 132/535 BK	535,0	13,2	150,0	1115,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

W cable tie
unlockable

Cable tie
Detachable cable tie for temporary assembly. This cable tie can be opened by hand without using a tool.

Material
Polyamide 6.6

- halogen-free
- silicone-free

Technical data
Temperature range: -40°C up to +80°C

Flammability acc. to UL 94: V2

Part no. black	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
97633	120,0	7,6	26,0	220,0	100	o. r.	o. r.	o. r.
97634	200,0	7,6	50,0	220,0	100	o. r.	o. r.	o. r.
97635	300,0	7,6	80,0	220,0	100	o. r.	o. r.	o. r.
97636	370,0	7,6	102,0	220,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

E cable tie
stainless steel

Cable binder
Cable tie made of stainless steel with ball lock for use in extreme conditions, such as high temperatures, aggressive environment, high tensile load.

Material
Stainless steel 1.4401 / AISI 316

Properties
Corrosion and radiation resistant, anti-magnetic, resistant to high temperatures and aggressive chemicals

Technical data
Temperature range: -80°C up to +538°C

Note
Approvals: GL, DNV, Lloyd´s, UL

Part no.	Length mm	Width mm	Bundle Ø mm	Capacity N	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
90900	150,0	4,6	44,0	445,0	100	o. r.	o. r.	o. r.
90901	200,0	4,6	50,0	445,0	100	o. r.	o. r.	o. r.
90902	290,0	4,6	75,0	445,0	100	o. r.	o. r.	o. r.
90903	360,0	4,6	102,0	445,0	100	o. r.	o. r.	o. r.
90904	200,0	7,9	50,0	1112,0	100	o. r.	o. r.	o. r.
90905	290,0	7,9	75,0	1112,0	100	o. r.	o. r.	o. r.
90906	360,0	7,9	102,0	1112,0	100	o. r.	o. r.	o. r.
90907	520,0	7,9	152,0	1112,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KLL/KLÖ hook and loop cable tie

Velcro tie
Particularly suited for sensitive cables and lines that are to be bundled or fastened without kinking or pinching.

Velcro binders exert only low pressure on the lines and lie evenly and flush.
Suitable for up to 10,000 actuations in reusable bundling applications.

Material
KLL - Polyamide sleeve / PE mushroom head tape / with punched hole

Note
KLL – pre-punched on rolls
KLÖ – Packed small in poly bags

Technical data
Temperature range: -40°C up to +85°C

KLL with punched hole

Part no.	Colour	Length mm	Width mm	Bundle Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93730	black	150,0	20,0	45,0	1000	o. r.	o. r.	o. r.
93731	black	200,0	20,0	60,0	750	o. r.	o. r.	o. r.
93732	black	330,0	20,0	100,0	450	o. r.	o. r.	o. r.

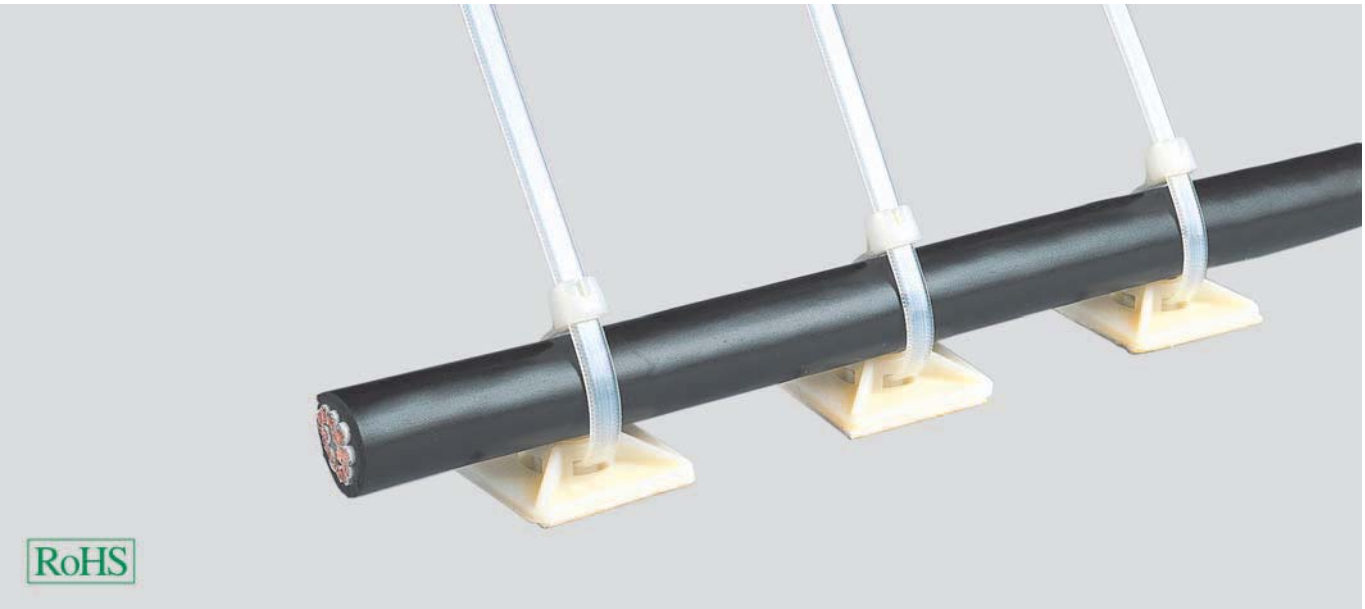
KLÖ with plastic eye

Part no.	Colour	Length mm	Width mm	Bundle Ø mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93735	red-black	195,0	25,0	55,0	10	o. r.	o. r.	o. r.
93736	red-black	240,0	25,0	70,0	10	o. r.	o. r.	o. r.
93737	red-black	360,0	25,0	110,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

BS mounting base



BS
BS mounting base self-adhesive and screwable for installing cables, lines, tubes and pipes.
Simple handling by the combination with cable ties.

Application
- Plant and machine construction
- Robot construction
- Automation technology
- Vehicle construction and shipbuilding
- Rail technology
- Installation technology
- Control cabinet construction

Material
Polyamide 6.6

Colour: transparent

Note
Foamed self-adhesive foil adheres to smooth and grease-free surfaces and smooths out slightly uneven surfaces.
.

Technical data
Temperature range: -40°C up to +85°C

as adhesive base

Part no. transparent	Type	Size l x w	Cable tie max. width mm	Drill hole mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91090	BS 1	19,0 x 19,0	3,6	4,0	100	o. r.	o. r.	o. r.
91091	BS 2	28,0 x 28,0	5	5,0	100	o. r.	o. r.	o. r.
91092	BS 3	26,5 x 26,5	4,8	4,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TC mounting base

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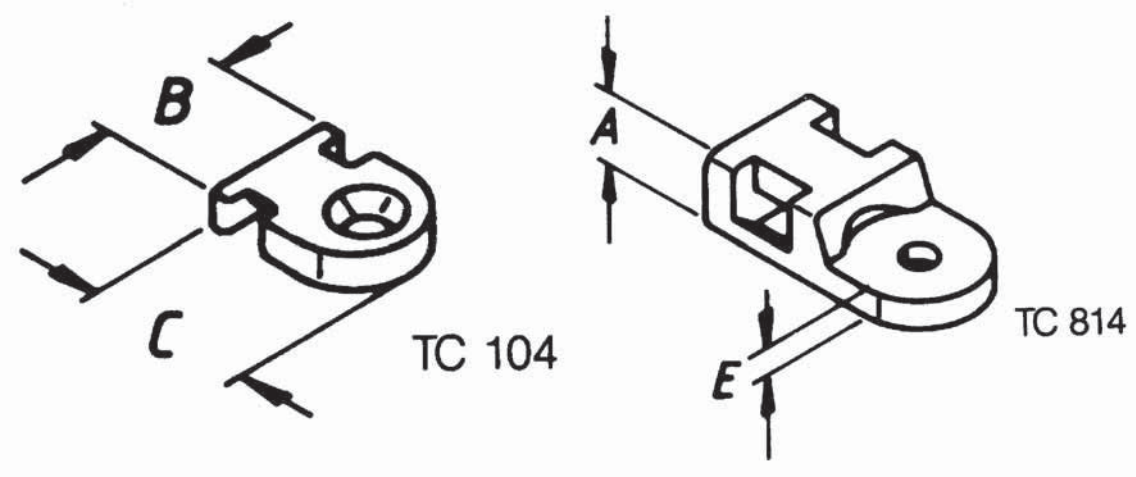


TC for band fastening

Small base for band fastening with countersunk screws, cylinder bolts or rivet assembly.

Material

Polyamide 6.6
Colour: transparent

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

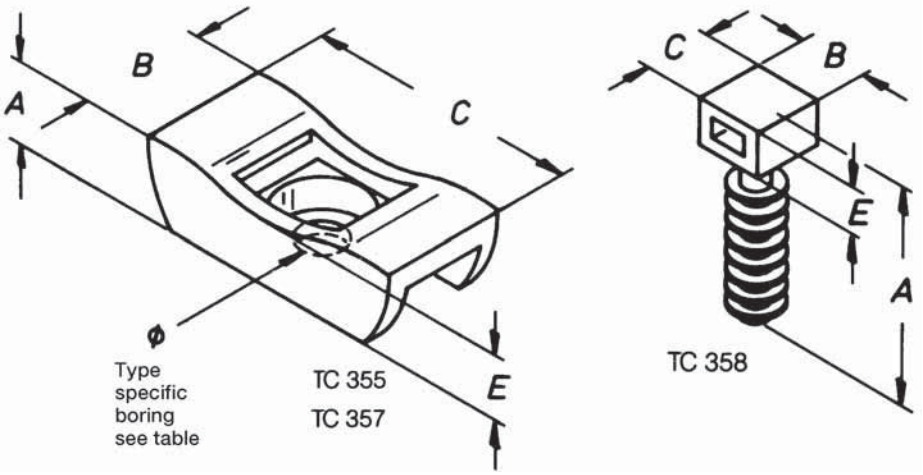
for band fastening

Part no. transparent	Type	Fixing	A mm	B mm	C mm	D mm	E mm	F mm	Boring mm	Tie width max. mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91039	TC 102	Screw-in	3,2	12,7	19,1	-	-	-	4,4	4,8	100	o. r.	o. r.	o. r.
91040	TC 104	Screw-in	2,4	7,9	10,3	-	-	-	3,4	2,4	100	o. r.	o. r.	o. r.
91042	TC 112	Screw-in	4,8	9,5	19,1	-	2,0	-	4,4	4,8	100	o. r.	o. r.	o. r.
91043	TC 812	Screw-in	4,8	9,5	19,1	-	2,0	-	5,1	4,8	100	o. r.	o. r.	o. r.
93006	TC 814	Screw-in	4,8	9,5	19,1	-	2,0	-	3,3	4,8	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

mounting base



TC as mounting base

Mounting base for robust fastening of lines, pipes and tubes - outdoor applications included.

Material

Polyamide 6.6
Colour: black

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

as mounting base

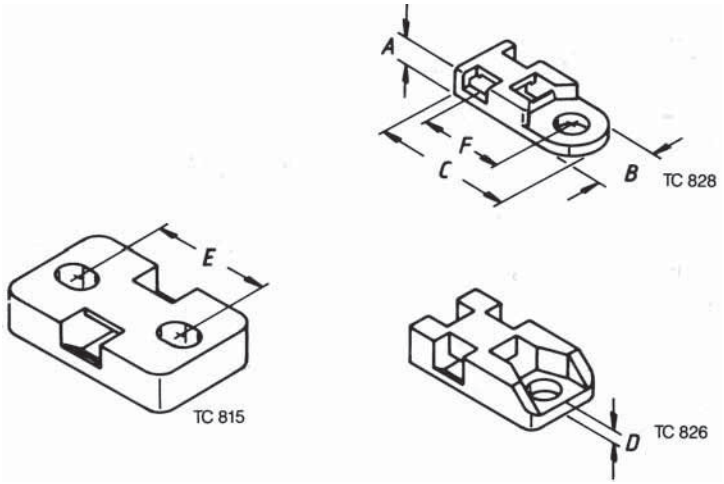
Part no. black	Type	Fixing	A mm	B mm	C mm	D mm	E mm	F mm	Boring mm	Tie width max. mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
91046	TC 355	Screw-in	15,9	19,1	44,5	-	11,1	-	4,6	12,7	25	o. r.	o. r.	o. r.
91047	TC 357	Screw-in	15,9	19,1	44,5	-	11,1	-	6,7	12,7	25	o. r.	o. r.	o. r.
91048	TC 358	For fastening with anchors	31,8	9,9	9,9	-	7,1	-	6,4	4,8	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TC mounting base

a product by Thomas & Betts



TC as screw base

Mounting base for bolting or riveting. Cable binder can be inserted from 4 sides.

Material

Polyamide 6.6
Colour: transparent

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

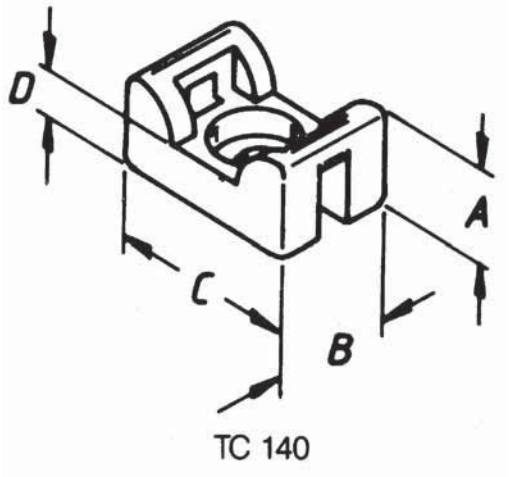
as screwing socket

Part no. transparent	Type	Fixing	A mm	B mm	C mm	D mm	E mm	F mm	Boring mm	Tie width max. mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
93007	TC 815	Screw-in	6,4	19,1	31,2	-	19,9	-	5,3	7,6	500	o. r.	o. r.	o. r.
93044	TC 826	Screw-in	5,7	12,7	23,8	-	-	-	4,4	4,8	1000	o. r.	o. r.	o. r.
93045	TC 828	Screw-in	3,8	10,1	22,5	-	-	-	4,3	4,8	1000	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

mounting base



TC with saddle

Mounting base with support saddle.

Material

Polyamide 6.6
Colour: transparent

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

with saddle

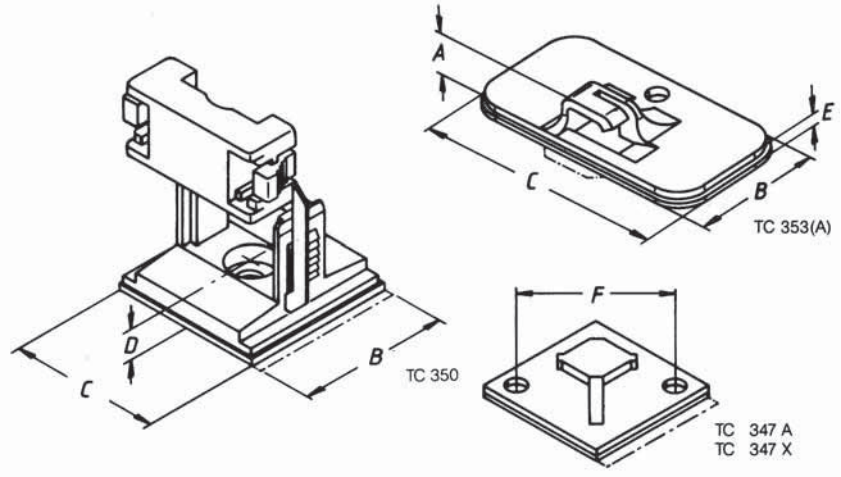
Part no. transparent	Type	Fixing	A mm	B mm	C mm	D mm	E mm	F mm	Boring mm	Tie width max. mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
93005	TC 140	Screw-in	6,7	8,7	14,2	3,6	-	-	3,0	2,4	500	o. r.	o. r.	o. r.
93003	TC 141	Screw-in	7,5	11,1	17,0	4,0	-	-	3,8	4,8	500	o. r.	o. r.	o. r.
93004	TC 142	Screw-in	10,7	14,2	23,4	5,2	-	-	5,2	7,6	500	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TC mounting base

a product by Thomas & Betts



TC as adhesive base

Adhesive base with foamed adhesive foil for smoothing out slightly uneven surfaces.
Adheres to smooth, grease-free surfaces.

Material

Polyamide 6.6
Colour: transparent

Technical data

Temperature range: -40°C up to +85°C
Temperature range temporary up to +105°C

Note

Part no. 91036 is black and UV-resistant.

as adhesive base

Part no.	Type	Fixing	A mm	B mm	C mm	D mm	E mm	F mm	Boring mm	Tie width max. mm	Unit	Net EUR/100 items at a purchase of up to 1000	1001 - 5000	5001 - 10000
93000	TC 344 A	Self-adhesive	4,9	19,1	19,1	-	-	-	-	3,6	1000	o. r.	o. r.	o. r.
93001	TC 347 A	Self-adhesive	8,5	29,0	29,0	-	-	-	-	7,6	1000	o. r.	o. r.	o. r.
91036	TC 347 X	Screw-in	7,8	28,6	28,6	-	-	-	-	7,6	1000	o. r.	o. r.	o. r.
93002	TC 353 A	Self-adhesive	9,1	25,4	50,9	-	-	-	-	4,8	100	o. r.	o. r.	o. r.
91037	TC 349A	Self-adhesive	14,5	25,0	25,0	2,7	-	2,7	-	-	100	o. r.	o. r.	o. r.
91038	TC 350	Screw-in	21,3	25,0	25,0	4,0	-	4,0	-	-	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

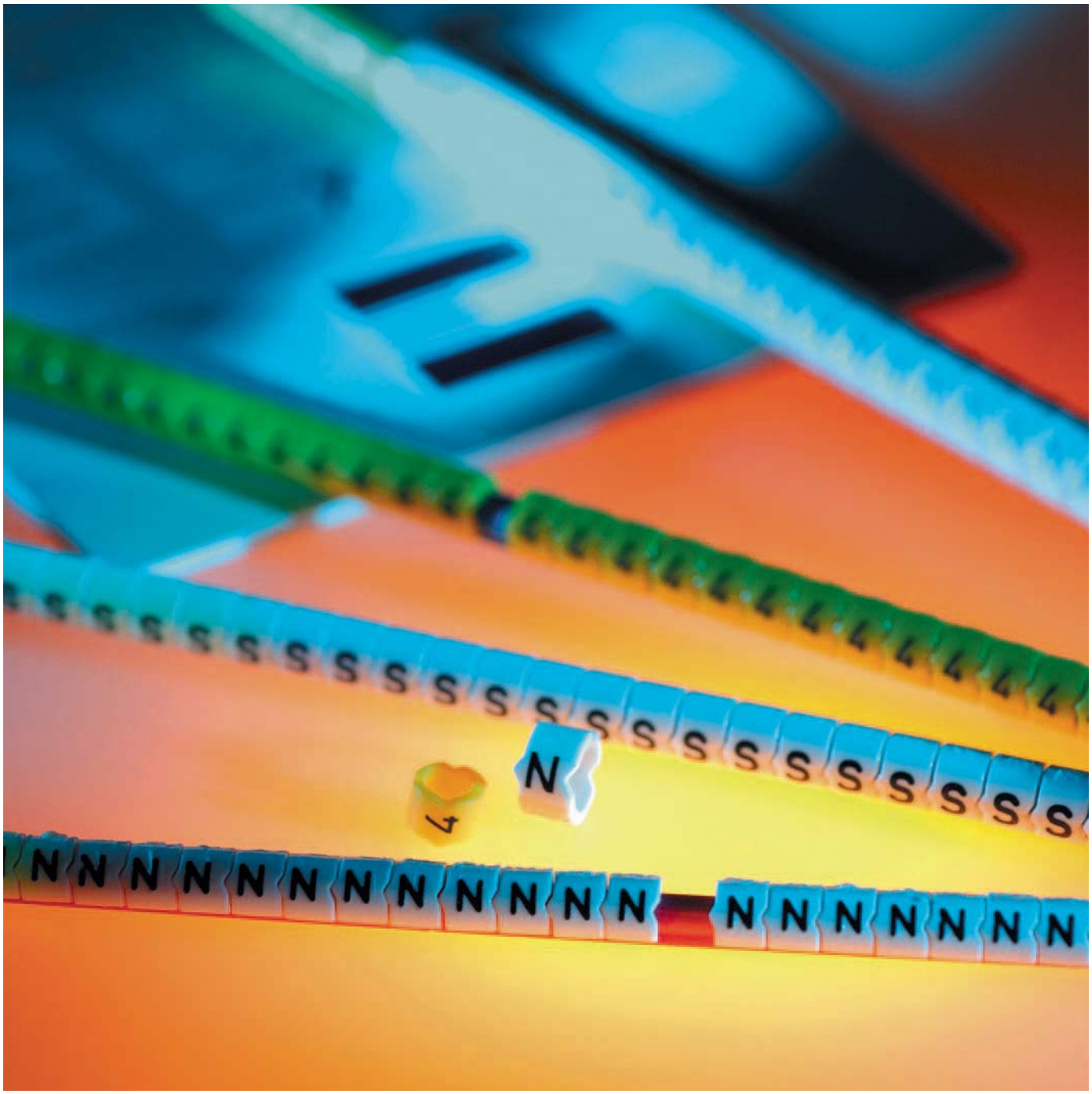


Photo: HELUKABEL®

Identification and marking

Identification and marking

Marking rings

SR

Mounting rod 387
Marking rings 388
Symbol allocation 389

Cable markers

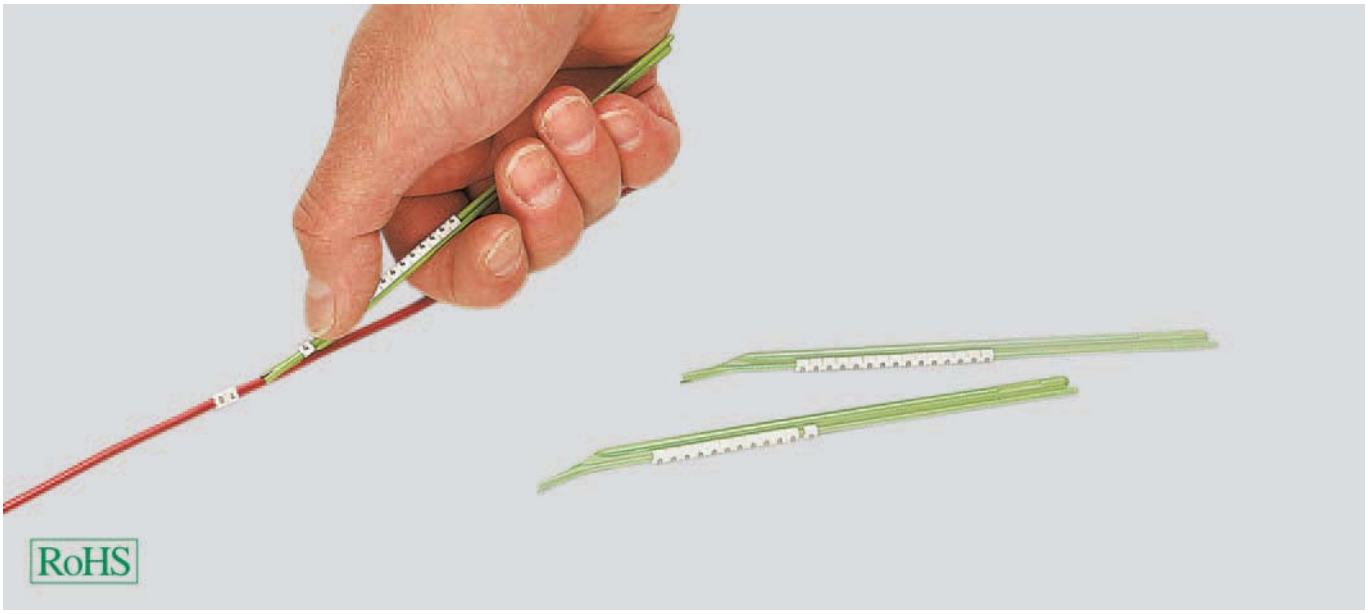
printed

Cable marker **E WM** 390

writeable

Cable marker **WMBW** 391
Cable marker **TM** 392

SR assembly rod



SR assembly rods

Simple handling afforded by marking rods characterise these marking rings.
The nozzle-shaped marking rod is forced onto the line and the snap-on sleeve pushed with the thumb.
The marker sits tight on the line without slip.

Material

Copolymer

- halogen-free

Technical data

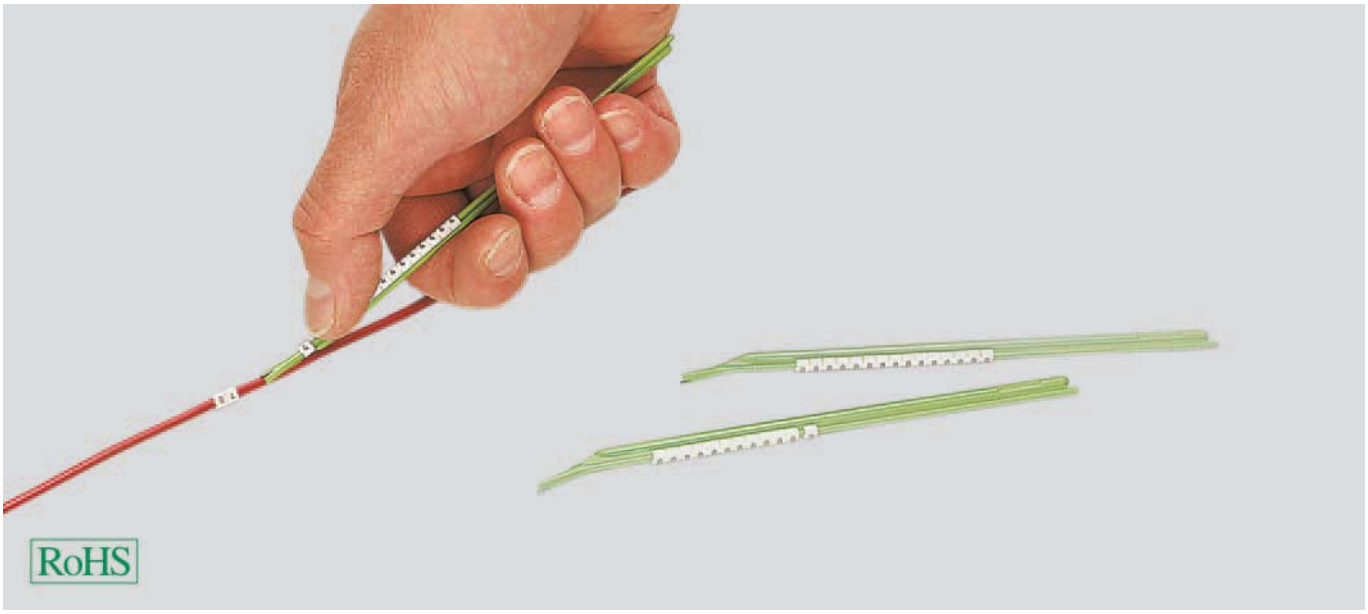
Temperature range: -40°C up to +105°C

Part no.	Colour with inscription	Type	Cross section from - to mm²	Cable Ø from - to mm	Stick colour	Unit	Net EUR/100 unit at a purchase of 1	2 - 5	6 - 10
95697	-	Assembly rod for SR 15	10 - 16	5,8 - 8,5	orange	5	o. r.	o. r.	o. r.
95797	-	Assembly rod for SR 17	16 - 25	8,5 - 11,5	orange	5	o. r.	o. r.	o. r.
99821	-	Assembly rod for SR 21	25 - 70	11,5 - 15,5	grey	2	o. r.	o. r.	o. r.
99822	-	Assembly rod for SR 24	70 - 100	15 - 19	grey	2	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

SR marking rings



SR
Simple handling afforded by assembly rods characterise these marking rings.
The nozzle-shaped assembly rod is forced onto the line and the snap-on sleeve pushed with the thumb.
The marker sits tight on the line without slip.
Available in white or yellow with black marking.

Application
1.0 mm to 19.0 mm
0.10 mm² - 100 mm²

Material
Copolymer

- halogen-free

Properties
Halogen-free, resistant to oils, cleaning agents, fuels and alkalis.

Note
Code:
Replace the XX by the number of your required letter, figure or symbol.
1 unit = 10 rods with each 30 rings.
Product 956xx up to 959xx without rod. The rod can be ordered separately.

Technical data
Temperature range: -40°C up to +105°C

Part no.	Colour with inscription	Type	Cross section from - to mm²	Cable Ø from - to mm	Stick colour	Unit	Net EUR/100 unit at a purchase of 1	2 - 5	6 - 10
950xx	white/yellow with black	SR 01	0,1 - 0,5	1 - 1,4	brown	300	o. r.	o. r.	o. r.
951xx	white/yellow with black	SR 02	0,5 - 0,7	1,4 - 1,8	grey	300	o. r.	o. r.	o. r.
952xx	white/yellow with black	SR 03	0,8 - 1	1,9 - 2,6	green	300	o. r.	o. r.	o. r.
953xx	white/yellow with black	SR 06	1,5 - 3,4	2,6 - 3,5	red	300	o. r.	o. r.	o. r.
954xx	white/yellow with black	SR 09	2,5 - 6	3,3 - 4,5	blue	300	o. r.	o. r.	o. r.
955xx	white/yellow with black	SR 12	6 - 10	4,5 - 6	yellow	300	o. r.	o. r.	o. r.
956xx	white/yellow with black	SR 15	10 - 16	5,8 - 8,5	-	50	o. r.	o. r.	o. r.
957xx	white/yellow with black	SR 17	16 - 25	8,5 - 11,5	-	50	o. r.	o. r.	o. r.
958xx	white/yellow with black	SR 21	25 - 70	11 - 15,5	-	50	o. r.	o. r.	o. r.
959xx	white/yellow with black	SR 24	70 - 100	15 - 19	-	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Marking rings SR

How to find the correct product code.

Replace the XX by the number of your required letter, figure or symbol.

Basic colour: white

e. g.

A	≙	… 00
B	≙	… 01
C	≙	… 02
D	≙	… 03
E	≙	… 04
F	≙	… 05
G	≙	… 06
H	≙	… 07
I	≙	… 08
J	≙	… 09
K	≙	… 10
L	≙	… 11
M	≙	… 12
N	≙	… 13
O	≙	… 14
P	≙	… 15
Q	≙	… 16
R	≙	… 17
S	≙	… 18
T	≙	… 19
U	≙	… 20
V	≙	… 21
W	≙	… 22
X	≙	… 23
Y	≙	… 24
Z	≙	… 25

0	≙	… 60
1	≙	… 61
2	≙	… 62
3	≙	… 63
4	≙	… 64
5	≙	… 65
6	≙	… 66
7	≙	… 67
8	≙	… 68
9	≙	… 69

+ (plus)	≙	… 80
– (minus)	≙	… 81
• (spot)	≙	… 82
/ (diagonal slash)	≙	… 83
~ (alternating current)	≙	… 84
⏚ (earthing)	≙	… 85
neutral	≙	… 86

Basic colour: yellow

A	≙	… 30
B	≙	… 31
C	≙	… 32
D	≙	… 33
E	≙	… 34
F	≙	… 35
G	≙	… 36
H	≙	… 37
I	≙	… 38
J	≙	… 39
K	≙	… 40
L	≙	… 41
M	≙	… 42
N	≙	… 43
O	≙	… 44
P	≙	… 45
Q	≙	… 46
R	≙	… 47
S	≙	… 48
T	≙	… 49
U	≙	… 50
V	≙	… 51
W	≙	… 52
X	≙	… 53
Y	≙	… 54
Z	≙	… 55

0	≙	… 70
1	≙	… 71
2	≙	… 72
3	≙	… 73
4	≙	… 74
5	≙	… 75
6	≙	… 76
7	≙	… 77
8	≙	… 78
9	≙	… 79

+ (plus)	≙	… 90
– (minus)	≙	… 91
• (spot)	≙	… 92
/ (diagonal slash)	≙	… 93
~ (alternating current)	≙	… 94
⏚ (earthing)	≙	… 95
neutral	≙	… 96

Example: Product code 95435 indicates ring type SR 09, letter „F" in yellow.

E WM cable marker

a product by Thomas & Betts

E WM

Self-adhesive cable marker in practical pocket book size.
10 side marker on siliconised carrier cards.
Installation applications, for repair and maintenance.
Book dimension: 15 x 8 cm
Marker: 5 x 31 mm
Perforated individual characters, 5 x 5 mm

Material

Fibre tape

self-adhesive

Covering: carton

Properties

Permanently self-adhesive, insensitive to moisture and oils.

Technical data

Temperature range: -35°C up to +95°C

Cable marker

Part no.	Type	Book content	Marker	Unit	Net EUR/100 items at a purchase of 1	2 - 5	6 - 10
91148	E WM 0-9	40	Marker: 0 to 9	1	o. r.	o. r.	o. r.
91149	E WM 0-45	10	Marker: 0 to 45	1	o. r.	o. r.	o. r.
91150	E WM 46-90	10	Marker: 46 to 90	1	o. r.	o. r.	o. r.
91151	E WM A-Z	10	Marker: A to Z, +, - ,0 to 15	1	o. r.	o. r.	o. r.
91152	E WM 123	150	Marker: 1, 2, 3	1	o. r.	o. r.	o. r.
91153	E WM ABC	150	Marker: A, B, C	1	o. r.	o. r.	o. r.
91154	E WM ABC	10	Marker: 1 to 33, A, B, C, +, -, ; and for each 20 markers: T1, T2, T3	1	o. r.	o. r.	o. r.
91155	E WM A-90	4	Marker: 0 to 90, and for each 2 markers: A - Z, +, -, 0 to 15	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

WMBW cable marker

a product by Thomas & Betts

WMBW

Self-adhesive, writable cable marker in practical pocket book size.
10 side marker on siliconised carrier cards.
Installation applications, for repair and maintenance.
Book dimension: 15 x 8 cm

Material

Vinyl strips

self-adhesive

Covering: carton

Technical data

Temperature range: -30°C up to +70°C

WMBW

Part no.	Type	Book content	Size mm	Description field mm	Unit	Net EUR/100 items at a purchase of 1	2 - 5	6 - 10
91158	WMBW 3	30	25,0 x 124,0	25,0 x 25,0	1	o. r.	o. r.	o. r.
91159	WMBW 5	50	25,0 x 70,0	19,0 x 25,0	1	o. r.	o. r.	o. r.
91160	WMBW 12	200	13,0 x 32,0	13,0 x 16,0	1	o. r.	o. r.	o. r.
91161	WMBW 14	400	6,0 x 32,0	6,0 x 16,0	1	o. r.	o. r.	o. r.
91162	WMBW 34	140	19,0 x 32,0	16,0 x 19,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TM cable marker

TM

Self-adhesive, writable cable marker in practical pocket book size.
10 side marker on siliconised carrier cards.
Installation applications, for repair and maintenance.
Book dimension: 15 x 8 cm

Material

PVC

self-adhesive
self-extinguishing
UV-resistant
oil-resistant

Adhesive: acrylate
Covering: carton

Properties

Resistant to:

- Water
- Alcohol
- Oils
- Greases
- Fuels
- Alphatic solvents
- Weak acids
- Salts
- Alkalis

Technical data

Temperature range: -40°C up to +80°C
Temperature range temporary up to +120°C

TM

Part no.	Type	Book content	Size mm	Description field mm	Unit	Net EUR/100 items at a purchase of 1	2 - 5	6 - 10
91146	TM 50	90	15,0 x 50,0	15,0 x 25,0	1	o. r.	o. r.	o. r.
91180	TM 75	60	25,0 x 75,0	25,0 x 25,0	1	o. r.	o. r.	o. r.
91181	TM 150	30	25,0 x 150,0	25,0 x 25,0	1	o. r.	o. r.	o. r.
91147	TM 230	30	25,0 x 230,0	25,0 x 25,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Photo: HELUKABEL®

Core end sleeves and cable lugs

Core end sleeves and cable lugs

Assignment tools to compression cable lugs, core end sleeves / cable lugs 396

Core end sleeves

insulated
- **Colour code** of the insulation 398
- for single conductors
  - **ADI** 399
  - reel products
    - **ADI-B** 401
  - assortment box
    - **ESD-ADI** 402
  - for short-circuit proof lines
    - **ADI-K** 403
- for two conductors
  - **DUO** 404
  - assortment box
    - **ESD-DUO** 405

not insulated
- for single conductors
  - **ADU** 406

Shield connectors

insulated
- Series Thomas&Betts
  - **Shield-Kon® RSK** 407

Solderless terminals

insulated
- eye-type 408
- forked 409
- round pattern 409
- round pin plugs 410
- butt connectors 411
- closed end-splices 411
- blade receptacles 412
- blade terminals 412
- blade receptacles - all-insulated 413
- flat distributors 413
- Reel products
  - eye-type 414
  - forked 414

not insulated
- Solderless terminals **B**
  - eye-type 415
  - forked 416
  - round pattern 417

Core end sleeves and cable lugs

Tubular cable lugs

Copper
- not insulated
  - for normal conductors
    - tubular cable lug **T** - straight 418
    - tubular cable lug **W** - angulated 45° 420
    - tubular cable lug **W** - angulated 90° 422
    - tubular cable lug **S** - small flange 424
  - for fine stranded wires
    - tubular cable lug **F** 425
  - compression cable lugs
    - compression cable lug **DC** 427
- not insulated - Series K
  - for normal conductors
    - tubular cable lug **K1** 428
    - tubular cable lug **K2** 429
  - for fine-wire conductors
    - tubular cable lug **KF** 431
  - sleeves for compacted conductors
    - sleeves for compacted conductors **KH-R** round 433
    - sleeves for compacted conductors **KH-3** for 3-core cable 434
    - sleeves for compacted conductors **KH-4** for 4-core cable 434

Aluminium
- not insulated
  - for normal conductors
    - compression cable lug **KA** 435

Aluminium with copper connection
- not insulated
  - for normal conductors
    - compression cable lug **KAC** Al/Cu 436
- Washer
    - washer **KAC** Al/Cu 437

Nickel
- not insulated
  - for normal conductors
    - tubular lug **N** 438

Compression joints

low voltage copper
- not insulated
    - compression joint **PV-C** 439
    - compression joint **PV-CÖ -** with oil stop 440

low voltage aluminium
- not insulated
    - compression joint **PV-A** 441

medium voltage copper
- not insulated
    - compression joint **PV-CM** 442
    - compression joint **PV-CMÖ -** with oil stop 443

medium voltage aluminium
- not insulated
    - compression joint **PV-AM** 444
    - compression joint **PV-AMÖ -** with oil stop 445

Assignment tools to compression cable lugs, core end sleeves/cable lugs

	0,14	0,34	0,5	0,75	1	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
ADI	PEW 8.84 Part no. 906324 square crimping																				
			803/0 Part no. 91602 indent crimping																		
			DEB 0560 Part no. 97343 indent crimping																		
				804 Part no. 91601 indent crimping																	
					803/5 Part no. 91603 indent crimping																
										K22 Part no. 904736 and appropriate inserts trapezoid											
ADI-B			Stripax-Plus Part no. 91923 strip products																		
	Automatic crimpers on request coil products																				
ADI-K	PEW 8.84 Part no. 903624 square pressing																				
			803/0 Part no. 91602 indent crimping																		
			DEB 0560 Part no. 97343 indent crimping																		
				804 Part no. 91601 indent crimping																	
						803/5 Part no. 91603 indent crimping															
DUO			PEW 8.84 Part no. 903624 square crimping																		
								K22 Part no. 904736 and appropriate inserts trapezoid													
ADU	PEW 8.84 Part no. 903624 square crimping																				
			DEB 0560 Part no. 97343 indent crimping																		
										K22 Part no. 904736 and appropriate inserts											
Shield Kon	ERG 740 96757 and appropriate tool inserts																				
solderless terminals, insulated			802/0 Part no. 91612 oval crimping																		
			802/1 Part no. 91163 oval crimping																		
										K22 Part no. 904736 and appropriate inserts indent crimping											
										EK35/4 Part no. 904897 and appropriate inserts indent crimping											
solderless terminals, insulated, tape product	on request – when machine is present must be clarified previously whether our tape product is usable																				
B solderless terminals, non insulated			805/2 Part no. 91606 indent crimping																		
										K22 Part no. 904736 and appropriate inserts indent crimping											
											HK 120/30 Part no. 906440 and appropriate inserts indent crimping										

mechanical

hydraulic

Appropriate inserts on request

Assignment tools to compression cable lugs, core end sleeves/cable lugs

	0,14	0,34	0,5	0,75	1	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
T and W and S and K2 tubular cable lugs				K2 Part no. 904732 indent crimping																	
									K5 Part no. 904733 indent crimping												
									K05 Part no. 904734 hexagonal crimping												
										K06 Part no. 904735 hexagonal crimping											
									K22 Part no. 904736 and appropriate inserts hexagonal crimping												
									EK35/4 Part no. 904897 and appropriate inserts indent crimping												
											HK 120/30 Part no. 906440 and appropriate inserts (HQ) hexagonal crimping										
F tubular cable lug									K5 Part no. 904733 indent crimping												
										EK35/4 Part no. 904897 and appropriate inserts indent crimping											
										K22 Part no. 904736 and appropriate inserts indent crimping											
														806/4 Part no. 91616 indent crimping							
																	806/8 Part no. 91618 indent crimping				
											HK 120/30 Part no. 906440 and appropriate inserts indent crimping										
											HK25/2 Part no. 906441 and appropriate insert indent crimping										
K1 tubular cable lug				K2 Part no. 904732 indent crimping																	
KF tubular cable lug									K5 Part no. 904733 indent crimping												
										EK35/4 Part no. 904897 and appropriate inserts indent crimping											
										K22 Part no. 904736 and appropriate inserts indent crimping											
											HK 120/30 Part no. 906440 and appropriate inserts indent crimping										
											HK25/2 Part no. 906441 and appropriate insert indent crimping										
KH-3, KH-4										K22 Part no. 904736 and appropriate inserts for pressing roundly											
KA compression cable lug										EK35/4 Part no. 904897 with appropriate inserts hexagonal crimping											
										K22 Part no. 904736 and appropriate inserts hexagonal crimping											
											HK25/2 Part no. 906441 and appropriate inserts hexagonal crimping										
KAC compression cable lug										EK35/4 Part no. 904897 hexagonal crimping											
										K22 Part no. 904736 and appropriate inserts hexagonal crimping											
N tubular cable lug			K25 Part no. 905561 indent crimping																		
										K22 Part no. 904736 and appropriate inserts hexagonal crimping											
															HK 120/30 Part no. 906440 and appropriate inserts (HF1370/1395)						
compression joint PV-C, PV-CÖ, PV-A, PV-CM, PV-CMÖ, PV-AM, PV-AMÖ									K22 Part no. 904736 and appropriate inserts hexagonal crimping												
									EK35/4 Part no. 904897 and appropriate inserts hexagonal crimping												
												HK25/2 Part no. 906441 and appropriate inserts hexagonal crimping									

mechanical

hydraulic

Appropriate inserts on request

Colour code of the insulation of the wire end sleeve

Cross-section mm²	Inside-Ø mm	Colour code Telemechanique	Z+F	DIN
0,14		brown	grey	
0,25		violet	light blue	
0,34		pink	turquoise	
0,5		white	orange	white
0,75		light blue	white	grey
1,0		red	yellow	red
1,5		black	red	black
2,5		grey	blue	blue
4		orange	grey	grey
6		green	black	yellow
10		brown	ivory	red
16		ivory	green	blue
25		black	brown	yellow
35		red	beige	red
50		blue	olive	blue
70	13,5		yellow	
95	14,5		red	
120	16,5		blue	
150	19,5		yellow	

ADI core end sleeves
insulated

ADI
Insulated core end sleeves prevent stripped wires from fanning.
The hopper-shaped plastic collar enables them to be pushed easily onto the wires.
To DIN, ZF, and Telemecanique colour code.

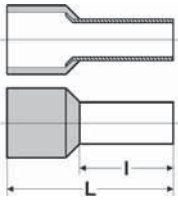
Material
Sleeve: copper
Surface: tinned

Insulating shroud: polypropylene

Note
Versions:
K = short
N = normal
HL = semi-long
L = long

Assignment to cable cross section according to DIN 46228: up to 50mm² to nominal size an DIN color code - over 50mm² no specification; Assignment to suitable size possible.

Technical data
Temperature range: up to +105°C
Temperature range temporary up to +120°C



Dimensions
L Total length
l Stick length

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91850	0,14 / normal	brown	Telemecanique	10,4	6,0	500	o. r.	o. r.	o. r.
91851	0,14 / long	brown	Telemecanique	12,4	8,0	500	o. r.	o. r.	o. r.
91852	0,25 / normal	violet	Telemecanique	10,4	6,0	500	o. r.	o. r.	o. r.
91853	0,25 / normal	light blue	Z+F	10,4	6,0	500	o. r.	o. r.	o. r.
91855	0,25 / long	light blue	Z+F	12,4	8,0	500	o. r.	o. r.	o. r.
91854	0,25 / long	violet	Telemecanique	12,4	8,0	500	o. r.	o. r.	o. r.
91857	0,34 / normal	turquoise	Z+F	10,4	6,0	500	o. r.	o. r.	o. r.
91856	0,34 / normal	pink	Telemecanique	10,4	6,0	500	o. r.	o. r.	o. r.
91858	0,34 / long	pink	Telemecanique	12,4	8,0	500	o. r.	o. r.	o. r.
91859	0,34 / long	turquoise	Z+F	12,4	8,0	500	o. r.	o. r.	o. r.
91860	0,5 / short	white	DIN	12,0	6,0	500	o. r.	o. r.	o. r.
91861	0,5 / short	orange	Z+F	12,0	6,0	500	o. r.	o. r.	o. r.
91383	0,5 / normal	orange	Z+F	14,0	8,0	500	o. r.	o. r.	o. r.
91350	0,5 / normal	white	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91863	0,5 / semi-long	orange	Z+F	16,0	10,0	500	o. r.	o. r.	o. r.
91862	0,5 / semi-long	white	DIN	16,0	10,0	500	o. r.	o. r.	o. r.
91865	0,75 / short	white	Z+F	12,4	6,0	500	o. r.	o. r.	o. r.
91864	0,75 / short	light blue	Telemecanique	12,4	6,0	500	o. r.	o. r.	o. r.
94023	0,75 / short	grey	DIN	12,4	6,0	500	o. r.	o. r.	o. r.
91351	0,75 / normal	light blue	Telemecanique	14,6	8,0	500	o. r.	o. r.	o. r.
93030	0,75 / normal	grey	DIN	14,6	8,0	500	o. r.	o. r.	o. r.
91384	0,75 / normal	white	Z+F	14,6	8,0	500	o. r.	o. r.	o. r.
91868	0,75 / semi-long	grey	DIN	16,4	10,0	500	o. r.	o. r.	o. r.
91866	0,75 / semi-long	light blue	Telemecanique	16,4	10,0	500	o. r.	o. r.	o. r.
91867	0,75 / semi-long	white	Z+F	16,4	10,0	500	o. r.	o. r.	o. r.
91871	0,75 / long	grey	DIN	18,4	12,0	500	o. r.	o. r.	o. r.
91870	0,75 / long	white	Z+F	18,4	12,0	500	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

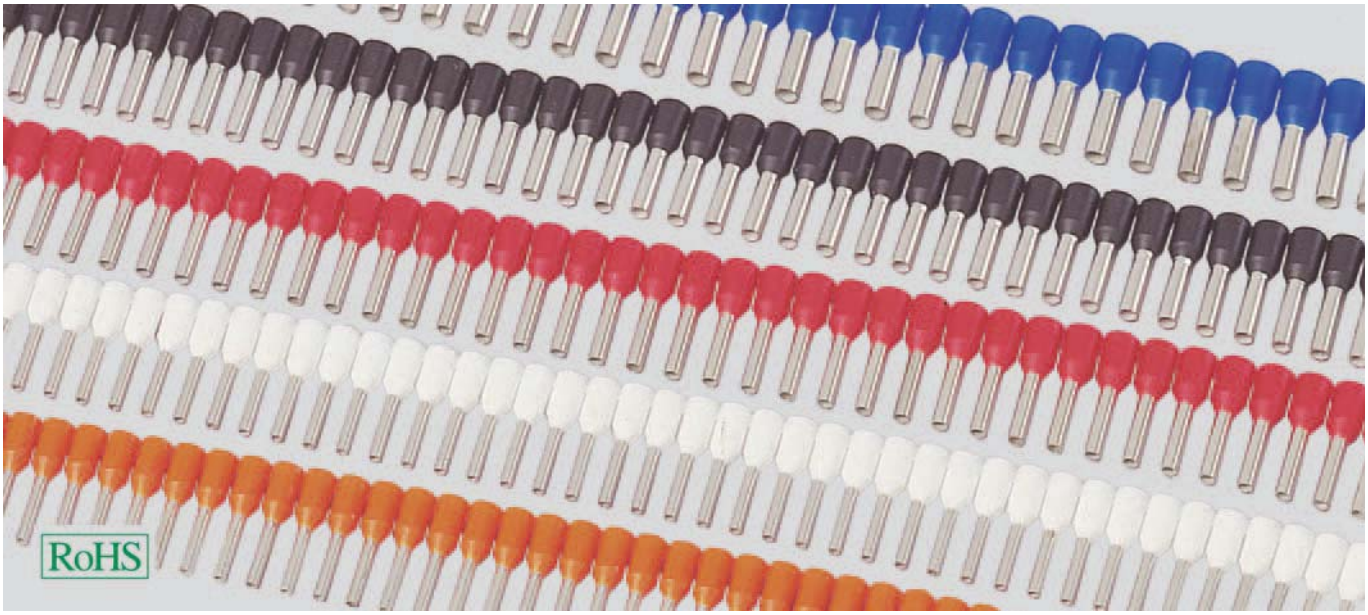
ADI core end sleeves
insulated

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91869	0,75 / long	light blue	Telemecanique	18,4	12,0	500	o. r.	o. r.	o. r.
91872	1,0 / short	red	DIN	12,4	6,0	500	o. r.	o. r.	o. r.
91873	1,0 / short	yellow	Z+F	12,4	6,0	500	o. r.	o. r.	o. r.
91352	1,0 / normal	red	DIN	14,6	8,0	500	o. r.	o. r.	o. r.
91385	1,0 / normal	yellow	Z+F	14,6	8,0	500	o. r.	o. r.	o. r.
91874	1,0 / semi-long	red	DIN	16,4	10,0	500	o. r.	o. r.	o. r.
91875	1,0 / semi-long	yellow	Z+F	16,4	10,0	500	o. r.	o. r.	o. r.
91876	1,0 / long	red	DIN	18,4	12,0	500	o. r.	o. r.	o. r.
91877	1,0 / long	yellow	Z+F	18,4	12,0	500	o. r.	o. r.	o. r.
91353	1,5 / normal	black	DIN	14,6	8,0	500	o. r.	o. r.	o. r.
91386	1,5 / normal	red	Z+F	14,6	8,0	500	o. r.	o. r.	o. r.
91879	1,5 / semi-long	red	Z+F	16,4	10,0	500	o. r.	o. r.	o. r.
91878	1,5 / semi-long	black	DIN	16,4	10,0	500	o. r.	o. r.	o. r.
91881	1,5 / long	red	Z+F	24,4	18,0	500	o. r.	o. r.	o. r.
91880	1,5 / long	black	DIN	24,4	18,0	500	o. r.	o. r.	o. r.
91387	2,5 / normal	blue	DIN	15,2	8,0	500	o. r.	o. r.	o. r.
91354	2,5 / normal	grey	Telemecanique	15,2	8,0	500	o. r.	o. r.	o. r.
91882	2,5 / semi-long	grey	Telemecanique	19,0	12,0	500	o. r.	o. r.	o. r.
91883	2,5 / semi-long	blue	DIN	19,0	12,0	500	o. r.	o. r.	o. r.
91885	2,5 / long	blue	DIN	25,0	18,0	500	o. r.	o. r.	o. r.
91884	2,5 / long	grey	Telemecanique	25,0	18,0	500	o. r.	o. r.	o. r.
91388	4,0 / normal	grey	DIN	16,5	10,0	500	o. r.	o. r.	o. r.
91355	4,0 / normal	orange	Telemecanique	16,5	10,0	500	o. r.	o. r.	o. r.
91886	4,0 / semi-long	orange	Telemecanique	19,5	12,0	500	o. r.	o. r.	o. r.
91887	4,0 / semi-long	grey	DIN	19,5	12,0	500	o. r.	o. r.	o. r.
91888	4,0 / long	orange	Telemecanique	25,5	18,0	500	o. r.	o. r.	o. r.
91889	4,0 / long	grey	DIN	25,5	18,0	500	o. r.	o. r.	o. r.
91356	6,0 / normal	green	Telemecanique	20,0	12,0	100	o. r.	o. r.	o. r.
93031	6,0 / normal	yellow	DIN	20,0	12,0	100	o. r.	o. r.	o. r.
91389	6,0 / normal	black	Z+F	20,0	12,0	100	o. r.	o. r.	o. r.
91891	6,0 / long	black	Z+F	26,0	18,0	100	o. r.	o. r.	o. r.
91892	6,0 / long	yellow	DIN	26,0	18,0	100	o. r.	o. r.	o. r.
91890	6,0 / long	green	Telemecanique	26,0	18,0	100	o. r.	o. r.	o. r.
91357	10,0 / normal	brown	Telemecanique	21,5	12,0	100	o. r.	o. r.	o. r.
93032	10,0 / normal	red	DIN	21,5	12,0	100	o. r.	o. r.	o. r.
91390	10,0 / normal	ivory	Z+F	21,5	12,0	100	o. r.	o. r.	o. r.
91894	10,0 / long	ivory	Z+F	27,5	18,0	100	o. r.	o. r.	o. r.
94024	10,0 / long	red	DIN	27,5	18,0	100	o. r.	o. r.	o. r.
91893	10,0 / long	brown	Telemecanique	27,5	18,0	100	o. r.	o. r.	o. r.
91897	16,0 / normal	blue	DIN	22,2	12,0	100	o. r.	o. r.	o. r.
91896	16,0 / normal	green	Z+F	22,2	12,0	100	o. r.	o. r.	o. r.
91895	16,0 / normal	ivory	Telemecanique	22,2	12,0	100	o. r.	o. r.	o. r.
91898	16,0 / long	ivory	Telemecanique	28,2	18,0	100	o. r.	o. r.	o. r.
91899	16,0 / long	green	Z+F	28,2	18,0	100	o. r.	o. r.	o. r.
91900	16,0 / long	blue	DIN	28,2	18,0	100	o. r.	o. r.	o. r.
91392	25,0 / normal	brown	Z+F	29,0	16,0	50	o. r.	o. r.	o. r.
93034	25,0 / normal	yellow	DIN	29,0	16,0	50	o. r.	o. r.	o. r.
91359	25,0 / normal	black	Telemecanique	29,0	16,0	50	o. r.	o. r.	o. r.
91901	25,0 / long	black	Telemecanique	35,0	22,0	50	o. r.	o. r.	o. r.
91903	25,0 / long	yellow	DIN	35,0	22,0	50	o. r.	o. r.	o. r.
91902	25,0 / long	brown	Z+F	35,0	22,0	50	o. r.	o. r.	o. r.
91394	35,0 / normal	beige	Z+F	30,0	16,0	50	o. r.	o. r.	o. r.
91393	35,0 / normal	red	DIN	30,0	16,0	50	o. r.	o. r.	o. r.
91904	35,0 / long	red	DIN	39,0	25,0	50	o. r.	o. r.	o. r.
91905	35,0 / long	beige	Z+F	39,0	25,0	50	o. r.	o. r.	o. r.
91396	50,0 / normal	oliv	Z+F	36,4	20,0	50	o. r.	o. r.	o. r.
91395	50,0 / normal	blue	DIN	36,4	20,0	50	o. r.	o. r.	o. r.
91907	50,0 / long	oliv	Z+F	41,0	25,0	50	o. r.	o. r.	o. r.
91906	50,0 / long	blue	DIN	41,0	25,0	50	o. r.	o. r.	o. r.
91908	70,0 / normal	yellow	DIN	37,0	21,0	25	o. r.	o. r.	o. r.
91397	70,0 / long	yellow	DIN	43,0	27,0	25	o. r.	o. r.	o. r.
91909	95,0 / normal	red	DIN	44,0	25,0	25	o. r.	o. r.	o. r.
91910	120,0 / normal	blue	DIN	48,0	27,0	25	o. r.	o. r.	o. r.
91911	150,0 / normal	yellow	DIN	58,0	32,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ADI-B core end sleeves



ADI-B

Tape products for processing with Stripax-Plus (strip products) or automatic crimpers (coil products).

Insulated core end sleeves prevent stripped wires from fanning.
The hopper-shaped plastic collar enables them to be pushed easily onto the wires.

Material

Sleeve: copper
Surface: tinned

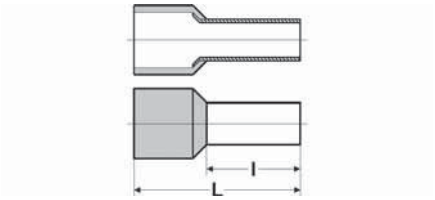
Insulating shroud: polypropylene

Note

Delivery formats:
Strips: 1 item = 10 strips x 50 pcs.
Coils: Endless on cardboard coil

Technical data

Temperature range: up to +105°C
Temperature range temporary up to +120°C



Dimensions

L Total length
l Stick length

strip

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91912	0,5	white	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91913	0,5	orange	Z+F	14,0	8,0	500	o. r.	o. r.	o. r.
91914	0,75	grey	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91915	0,75	white	Z+F	14,0	8,0	500	o. r.	o. r.	o. r.
91916	0,75	light blue	Telemecanique	14,0	8,0	500	o. r.	o. r.	o. r.
91917	1,0	red	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91918	1,0	yellow	Z+F	14,0	8,0	500	o. r.	o. r.	o. r.
91919	1,5	black	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91920	1,5	red	Z+F	14,0	8,0	500	o. r.	o. r.	o. r.
91921	2,5	blue	DIN	14,0	8,0	500	o. r.	o. r.	o. r.
91922	2,5	grey	Telemecanique	14,0	8,0	500	o. r.	o. r.	o. r.

coils

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
93036	0,5	white	DIN	14,0	8,0	10000	o. r.	o. r.	o. r.
93037	0,5	orange	Z+F	14,0	8,0	10000	o. r.	o. r.	o. r.
93038	0,75	light blue	Telemecanique	14,0	8,0	10000	o. r.	o. r.	o. r.
93039	0,75	white	Z+F	14,0	8,0	10000	o. r.	o. r.	o. r.
93040	0,75	grey	DIN	14,0	8,0	10000	o. r.	o. r.	o. r.
93041	1,0	red	DIN	14,0	8,0	7500	o. r.	o. r.	o. r.
93042	1,0	yellow	Z+F	14,0	8,0	7500	o. r.	o. r.	o. r.
93043	1,5	black	DIN	14,0	8,0	7500	o. r.	o. r.	o. r.
93046	1,5	red	Z+F	14,0	8,0	7500	o. r.	o. r.	o. r.
93047	2,5	grey	Telemecanique	14,0	8,0	5000	o. r.	o. r.	o. r.
93048	2,5	blue	DIN	14,0	8,0	5000	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ESD-ADI assortment box
insulated

ESD-ADI
Practical pocket sized assortment box.
Refillable, split into 4 or 5 compartments, with cross-section lettering.
Refilling with ADI core end sleeves.

Material
Assortment box: PVC
Sleeve: copper
Surface: tinned

Insulating shroud: polypropylene

Note
Empty cans:
- ESD 3: 5-part with lettering 0.5 mm² / 0.75 mm² / 1.0 mm² / 1.5 mm² / 2.5 mm²
- ESD 4: 4-part with lettering 4.0 mm² / 6.0 mm² / 10.0 mm² / 16.0 mm²

All sizes in regular length.

Part no.	Type	Colour code	Filling case 1	Filling case 2	Filling case 3	Filling case 4	Filling case 5	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
96753	ESD 1	Telemecanique	50x0,5	100x0,75	100x1,0	100x1,5	50x2.5	1	o. r.	o. r.	o. r.
96604	ESD 11	Z+F	50x0,5	100x0,75	100x1,0	100x1,5	50x2.5	1	o. r.	o. r.	o. r.
96688	ESD 111	DIN	50x0,5	100x0,75	100x1,0	100x1,5	50x2.5	1	o. r.	o. r.	o. r.
96764	ESD 2	Telemecanique	50x4,0	20x6,0	20x10,0	10x16,0	Empty	1	o. r.	o. r.	o. r.
96749	ESD 22	Z+F	50x4,0	20x6,0	20x10,0	10x16,0	Empty	1	o. r.	o. r.	o. r.
96736	ESD 222	DIN	50x4,0	20x6,0	20x10,0	10x16,0	Empty	1	o. r.	o. r.	o. r.
96671	ESD 3	-	Empty	Empty	Empty	Empty	Empty	1	o. r.	o. r.	o. r.
96727	ESD 4	-	Empty	Empty	Empty	Empty	Empty	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ADI-K core end sleeves - for short-circuit proof lines

insulated

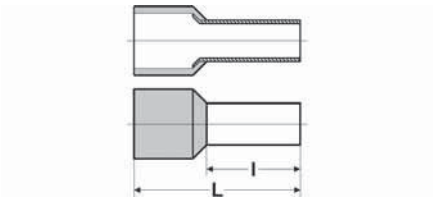
ADI-K

The core end sleeve is suitable for short circuit-proof lines.
It prevents stripped wires from fanning.
The hopper-shaped plastic collar enables them to be pushed easily onto the wires.

Material

Sleeve: copper
Surface: tinned

Insulating shroud: polypropylene



Dimensions

L Total length
l Stick length

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91589	1,5 / normal	black	DIN	17,5	8,0	100	o. r.	o. r.	o. r.
91590	1,5 / long	black	DIN	19,5	10,0	100	o. r.	o. r.	o. r.
91591	2,5 / normal	blue	DIN	17,5	8,0	100	o. r.	o. r.	o. r.
91592	2,5 / long	blue	DIN	21,5	12,0	100	o. r.	o. r.	o. r.
97479	4,0 / normal	grey	DIN	19,5	10,0	100	o. r.	o. r.	o. r.
91593	6,0 / normal	yellow	DIN	23,0	12,0	100	o. r.	o. r.	o. r.
91595	10,0 / normal	red	DIN	24,0	12,0	100	o. r.	o. r.	o. r.
91598	16,0 / normal	blue	DIN	25,5	12,0	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

DUO core end sleeves
insulated - for 2 conductors

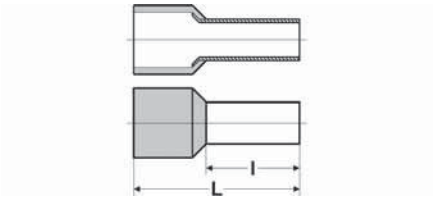
DUO
Insulated DUO core end sleeves for insertion of 2 conductors prevent stripped wires from fanning.
The hopper-shaped plastic collar enables them to be pushed easily onto the wires.
To DIN, ZF, and Telemecanique colour code.

Material
Sleeve: copper
Surface: tinned

Insulating shroud: polypropylene

Note
Versions:
N = normal
L = long

Technical data
Temperature range: up to +105°C
Temperature range temporary up to +120°C



Dimensions
L Total length
l Stick length

Part no.	Size mm²	Colour	Colour code	Total length mm	Stick length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91622	2x 0.5 / N	white	DIN	15,0	8,0	500	o. r.	o. r.	o. r.
91623	2x 0.5 / N	orange	Z+F	15,0	8,0	500	o. r.	o. r.	o. r.
91652	2x 0.75 / L	grey	DIN	17,0	10,0	500	o. r.	o. r.	o. r.
91671	2x 0.75 / L	light blue	Telemecanique	17,0	10,0	500	o. r.	o. r.	o. r.
91651	2x 0.75 / L	white	Z+F	17,0	10,0	500	o. r.	o. r.	o. r.
90125	2x 0.75 / N	grey	DIN	15,0	8,0	500	o. r.	o. r.	o. r.
91661	2x 0.75 / N	light blue	DIN	15,0	8,0	500	o. r.	o. r.	o. r.
91624	2x 0.75 / N	white	Z+F	15,0	8,0	500	o. r.	o. r.	o. r.
91653	2x 1 / L	red	DIN	17,0	10,0	500	o. r.	o. r.	o. r.
91654	2x 1 / L	yellow	Z+F	17,0	10,0	500	o. r.	o. r.	o. r.
90126	2x 1 / N	red	DIN	15,0	8,0	500	o. r.	o. r.	o. r.
91625	2x 1 / N	yellow	Z+F	15,0	8,0	500	o. r.	o. r.	o. r.
91655	2x 1.5 / L	black	DIN	20,0	12,0	500	o. r.	o. r.	o. r.
91672	2x 1.5 / L	red	Z+F	20,0	12,0	500	o. r.	o. r.	o. r.
90127	2x 1.5 / N	black	DIN	16,0	8,0	500	o. r.	o. r.	o. r.
91662	2x 1.5 / N	red	Z+F	16,0	8,0	500	o. r.	o. r.	o. r.
91656	2x 2.5 / L	blue	DIN	21,5	13,0	250	o. r.	o. r.	o. r.
91673	2x 2.5 / L	grey	Telemecanique	21,5	13,0	250	o. r.	o. r.	o. r.
90128	2x 2.5 / N	blue	DIN	18,5	10,0	250	o. r.	o. r.	o. r.
91663	2x 2.5 / N	grey	Telemecanique	18,5	10,0	250	o. r.	o. r.	o. r.
91626	2x 4 / N	grey	DIN	23,0	12,0	100	o. r.	o. r.	o. r.
91664	2x 4 / N	orange	Telemecanique	23,0	12,0	100	o. r.	o. r.	o. r.
91627	2x 6 / N	yellow	DIN	26,0	14,0	100	o. r.	o. r.	o. r.
91665	2x 6 / N	green	Telemecanique	26,0	14,0	100	o. r.	o. r.	o. r.
91666	2x 6 / N	black	Z+F	26,0	14,0	100	o. r.	o. r.	o. r.
91628	2x 10 / N	red	DIN	26,0	14,0	100	o. r.	o. r.	o. r.
91667	2x 10 / N	brown	Telemecanique	26,0	14,0	100	o. r.	o. r.	o. r.
91668	2x 10 / N	ivory	Z+F	26,0	14,0	100	o. r.	o. r.	o. r.
91629	2x 16 / N	blue	DIN	30,0	14,0	50	o. r.	o. r.	o. r.
91669	2x 16 / N	ivory	Telemecanique	30,0	14,0	50	o. r.	o. r.	o. r.
91670	2x 16 / N	green	Z+F	30,0	14,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ESD-DUO assortment box

insulated - for 2 conductors

ESD-DUO

Practical pocket sized assortment box. Refillable, split into 4 or 5 compartments, with cross-section lettering. Refilling with DUO core end sleeves.

Material

Assortment box: PVC
Sleeve: copper
Surface: tinned

Insulating shroud: polypropylene

Note

Empty cans:

- ESD 7: 4-part with lettering 2x0.75 mm² / 2x1.0 mm² / 2x1.5 mm² / 2x2.5 mm²
- ESD 8: 4-part with lettering 2x4.0 mm² / 2x6.0 mm² / 2x1.0 mm² / 2x16.0 mm²

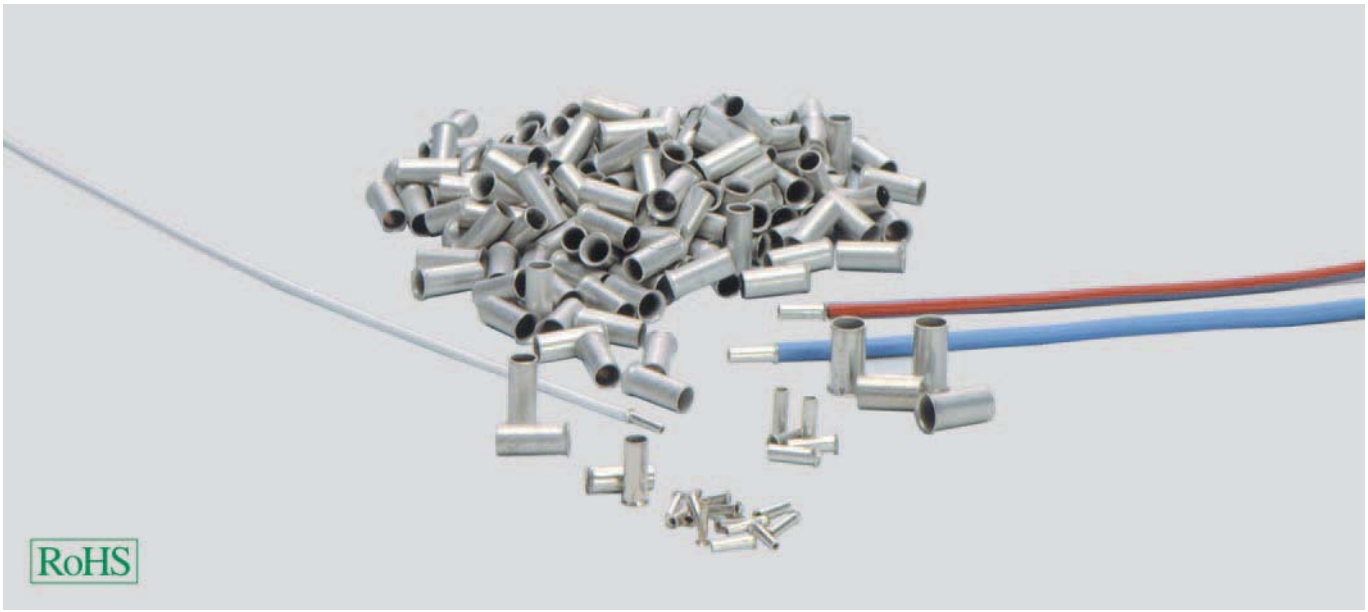
All sizes in regular length.

Part no.	Type	Colour code	Filling case 1	Filling case 2	Filling case 3	Filling case 4	Filling case 5	Unit	Net EUR/item at a purchase of 1	2 - 5	6 - 10
96617	ESD 5	DIN	50x0,75	50x1,0	50x1,5	50x2,5	Empty	1	o. r.	o. r.	o. r.
96648	ESD 6	DIN	20x4,0	10x6,0	10x10,0	5x16,0	Empty	1	o. r.	o. r.	o. r.
96629	ESD 7	-	Empty	Empty	Empty	Empty	Empty	1	o. r.	o. r.	o. r.
96652	ESD 8	-	Empty	Empty	Empty	Empty	Empty	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

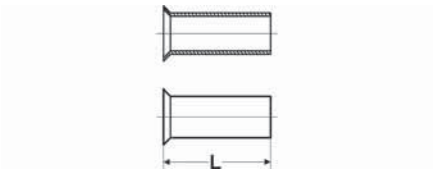
ADU core end sleeves
non insulated



ADU
Non-insulated core end sleeves prevent stripped wires from fanning. The hopper-shaped socket enables them to be pushed easily onto the wires.

Material
Sleeve: copper

Note
Assignment to cable cross section according to DIN 46228: up to 50mm² to nominal size - over 50mm² no specificatin; Assignment to suitable size possible.



Dimensions
L Total length

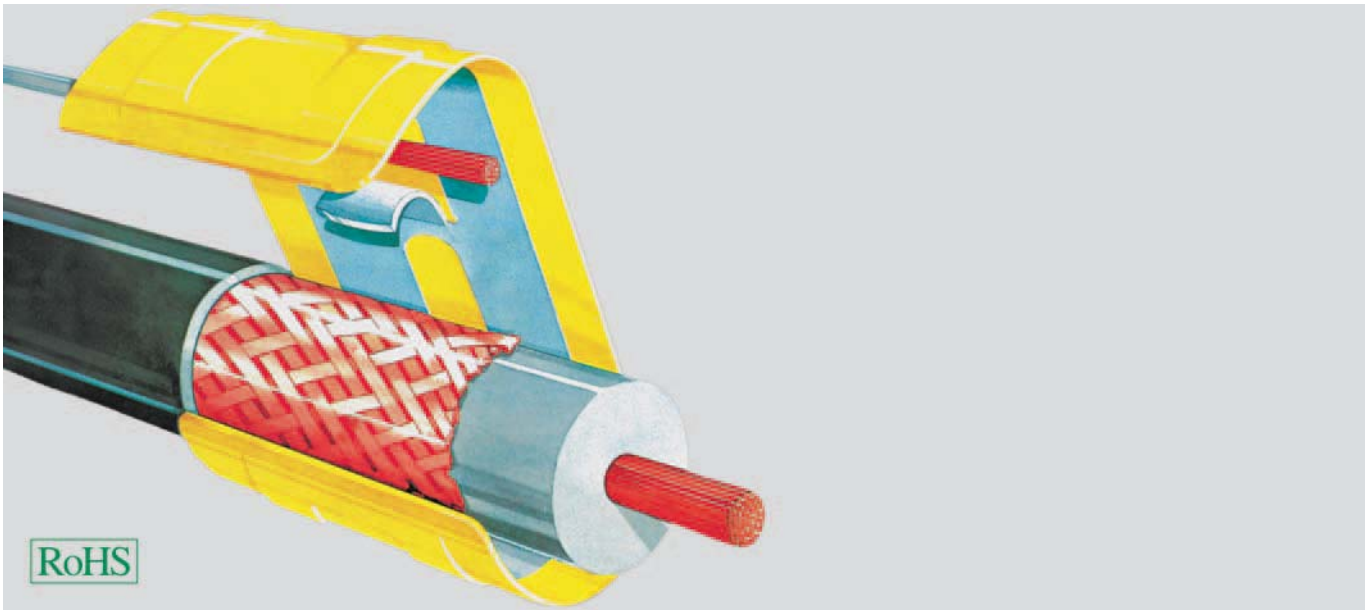
Part no.	Size mm²	Length mm	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
91368	0,5	6,0	1000	o. r.	o. r.	o. r.
91370	0,5	10,0	1000	o. r.	o. r.	o. r.
91371	0,75	6,0	1000	o. r.	o. r.	o. r.
91372	0,75	8,0	1000	o. r.	o. r.	o. r.
91373	1,0	6,0	1000	o. r.	o. r.	o. r.
91374	1,0	10,0	1000	o. r.	o. r.	o. r.
91375	1,5	7,0	1000	o. r.	o. r.	o. r.
91376	1,5	10,0	1000	o. r.	o. r.	o. r.
93096	2,5	7,0	1000	o. r.	o. r.	o. r.
93097	2,5	10,0	1000	o. r.	o. r.	o. r.
93099	4,0	9,0	1000	o. r.	o. r.	o. r.
94000	4,0	12,0	1000	o. r.	o. r.	o. r.
94001	6,0	10,0	250	o. r.	o. r.	o. r.
94002	6,0	12,0	250	o. r.	o. r.	o. r.
94003	6,0	15,0	250	o. r.	o. r.	o. r.
94004	10,0	12,0	250	o. r.	o. r.	o. r.
94005	10,0	15,0	250	o. r.	o. r.	o. r.
94006	10,0	18,0	250	o. r.	o. r.	o. r.
94007	16,0	12,0	250	o. r.	o. r.	o. r.
94008	16,0	15,0	250	o. r.	o. r.	o. r.
94009	16,0	18,0	250	o. r.	o. r.	o. r.
94010	25,0	12,0	100	o. r.	o. r.	o. r.
94011	25,0	15,0	100	o. r.	o. r.	o. r.
94012	25,0	18,0	100	o. r.	o. r.	o. r.
94013	25,0	25,0	100	o. r.	o. r.	o. r.
94014	25,0	32,0	100	o. r.	o. r.	o. r.
94015	35,0	18,0	100	o. r.	o. r.	o. r.
94016	35,0	25,0	100	o. r.	o. r.	o. r.
94018	35,0	32,0	100	o. r.	o. r.	o. r.
94019	50,0	18,0	100	o. r.	o. r.	o. r.
94020	50,0	22,0	100	o. r.	o. r.	o. r.
94021	70,0	25,0	100	o. r.	o. r.	o. r.
94022	70,0	32,0	100	o. r.	o. r.	o. r.
91030	95,0	25,0	50	o. r.	o. r.	o. r.
91031	95,0	32,0	50	o. r.	o. r.	o. r.
96841	120,0	32,0	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Shield Kon® RSK shield connectors

a product by Thomas & Betts



Shield Kon®

Shield connectors are crimped like a cable lug. The special crimping technique using ERG tools enables the connector to roll around the sheath.
Inside the connector is a clevis-type connector for the connector strip and a support for the sheathed cable.
ERG 740 processing tool

Material

copper
Surface: tinned

Insulation: polyester film

Technical data

Temperature range: -40°C up to +125°C

Part no.	Type	Colour code	Shield Ø mm	Tool insets	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91280	RSK 101	red	1,27 - 1,79	D-101 A	100	o. r.	o. r.	o. r.
91280	RSK 101	red	1,80 - 2,28	D-101 B	100	o. r.	o. r.	o. r.
91281	RSK 201	blue	2,29 - 2,55	D-201 C	100	o. r.	o. r.	o. r.
91281	RSK 201	blue	2,56 - 3,00	D-201 D	100	o. r.	o. r.	o. r.
91281	RSK 201	blue	3,01 - 3,34	D-201 E	100	o. r.	o. r.	o. r.
91281	RSK 201	blue	3,35 - 3,65	D-201 F	100	o. r.	o. r.	o. r.
91282	RSK 301	yellow	3,66 - 4,13	D-301 G	100	o. r.	o. r.	o. r.
91282	RSK 301	yellow	4,14 - 4,71	D-301 H	100	o. r.	o. r.	o. r.
91282	RSK 301	yellow	4,72 - 5,12	D-301 J	100	o. r.	o. r.	o. r.
91283	RSK 401	green	5,13 - 5,86	D-401 K	100	o. r.	o. r.	o. r.
91283	RSK 401	green	5,87 - 6,36	D-401 L	100	o. r.	o. r.	o. r.
91283	RSK 401	green	6,37 - 7,00	D-401 M	100	o. r.	o. r.	o. r.
91283	RSK 401	green	7,01 - 7,62	D-401 N	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated - eye type

RoHS

Insulated solderless terminals

PA insulated solderless terminals for cross sections of 0.1 to 16.0mm².
Simple cable inlet through Easy-Entry (expanded sleeve).
Insulated with high dielectric strength.

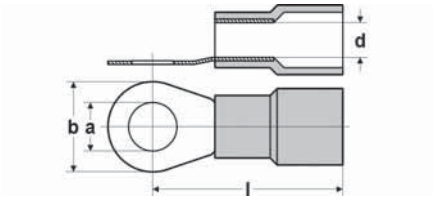
Material

Sleeve: Copper
Surface: tinned

Insulation: Partially-insulated, PA

Technical data

Temperature range: -60°C up to +125°C



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91475	HZ 3	yellow	0,1 - 0,5	3,2	Ring-shaped	100	o. r.	o. r.	o. r.
91476	HZ 4	yellow	0,1 - 0,5	4,3	Ring-shaped	100	o. r.	o. r.	o. r.
91477	HZ 5	yellow	0,1 - 0,5	5,3	Ring-shaped	100	o. r.	o. r.	o. r.
91478	HA 3	red	0,5 - 1,5	3,2	Ring-shaped	100	o. r.	o. r.	o. r.
91479	HA 3,5	red	0,5 - 1,5	3,7	Ring-shaped	100	o. r.	o. r.	o. r.
91480	HA 4	red	0,5 - 1,5	4,3	Ring-shaped	100	o. r.	o. r.	o. r.
91481	HA 5	red	0,5 - 1,5	5,3	Ring-shaped	100	o. r.	o. r.	o. r.
91849	HA 5S	red	0,5 - 1,5	5,7	Ring-shaped	100	o. r.	o. r.	o. r.
91482	HA 6	red	0,5 - 1,5	6,5	Ring-shaped	100	o. r.	o. r.	o. r.
96776	HA 8	red	0,5 - 1,5	8,4	Ring-shaped	100	o. r.	o. r.	o. r.
91483	HB 3	blue	1,5 - 2,5	3,2	Ring-shaped	100	o. r.	o. r.	o. r.
91484	HB 4	blue	1,5 - 2,5	4,3	Ring-shaped	100	o. r.	o. r.	o. r.
91485	HB 5	blue	1,5 - 2,5	5,3	Ring-shaped	100	o. r.	o. r.	o. r.
94944	HB 5S	blue	1,5 - 2,5	5,7	Ring-shaped	100	o. r.	o. r.	o. r.
91486	HB 6	blue	1,5 - 2,5	6,5	Ring-shaped	100	o. r.	o. r.	o. r.
91487	HB 8	blue	1,5 - 2,5	8,4	Ring-shaped	100	o. r.	o. r.	o. r.
97696	HB 10	blue	1,5 - 2,5	10,5	Ring-shaped	100	o. r.	o. r.	o. r.
91488	HC 4	yellow	2,5 - 6,0	4,3	Ring-shaped	100	o. r.	o. r.	o. r.
91489	HC 5	yellow	2,5 - 6,0	5,3	Ring-shaped	100	o. r.	o. r.	o. r.
91490	HC 6	yellow	2,5 - 6,0	6,5	Ring-shaped	100	o. r.	o. r.	o. r.
91491	HC 8	yellow	2,5 - 6,0	8,4	Ring-shaped	100	o. r.	o. r.	o. r.
91492	HC 10	yellow	2,5 - 6,0	10,5	Ring-shaped	100	o. r.	o. r.	o. r.
96607	HD 5	red	10,0	5,3	Ring-shaped	50	o. r.	o. r.	o. r.
90055	HD 6	red	10,0	6,5	Ring-shaped	50	o. r.	o. r.	o. r.
96400	HD 8	red	10,0	8,4	Ring-shaped	50	o. r.	o. r.	o. r.
96616	HD 10	red	10,0	10,5	Ring-shaped	50	o. r.	o. r.	o. r.
96620	HE 5	blue	16,0	5,3	Ring-shaped	50	o. r.	o. r.	o. r.
96401	HE 6	blue	16,0	6,5	Ring-shaped	50	o. r.	o. r.	o. r.
96402	HE 8	blue	16,0	8,4	Ring-shaped	50	o. r.	o. r.	o. r.
90056	HE 10	blue	16,0	10,5	Ring-shaped	50	o. r.	o. r.	o. r.
90057	HE 12	blue	16,0	13	Ring-shaped	50	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated

Insulated solderless terminals

PA insulated solderless terminals for cross sections of 0.25 to 6.0mm².
Simple cable inlet through Easy-Entry (expanded sleeve).
Insulated with high dielectric strength.

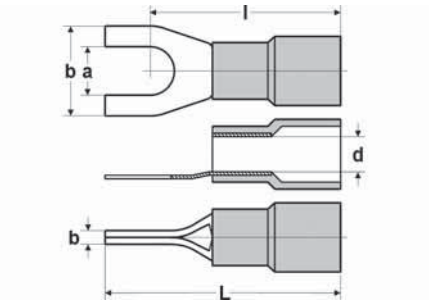
Material

Sleeve: Copper
Surface: tinned

Insulation: Partially-insulated, PA

Technical data

Temperature range: -60°C up to +125°C



forked

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91403	HA 35F	red	0,5 - 1,5	3,7	Fork-type cable lug	100	o. r.	o. r.	o. r.
91404	HA 4F	red	0,5 - 1,5	4,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91405	HA 5F	red	0,5 - 1,5	5,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91406	HA 6F	red	0,5 - 1,5	6,5	Fork-type cable lug	100	o. r.	o. r.	o. r.
91408	HB 3F	blue	1,5 - 2,5	3,2	Fork-type cable lug	100	o. r.	o. r.	o. r.
91409	HB 35F	blue	1,5 - 2,5	3,7	Fork-type cable lug	100	o. r.	o. r.	o. r.
91410	HB 4F	blue	1,5 - 2,5	4,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91411	HB 5F	blue	1,5 - 2,5	5,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91412	HB 6F	blue	1,5 - 2,5	6,5	Fork-type cable lug	100	o. r.	o. r.	o. r.
91415	HC 4F	yellow	2,5 - 6,0	4,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91416	HC 5F	yellow	2,5 - 6,0	5,3	Fork-type cable lug	100	o. r.	o. r.	o. r.
91417	HC 6F	yellow	2,5 - 6,0	6,5	Fork-type cable lug	100	o. r.	o. r.	o. r.

round pattern

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91418	HZP	yellow	0,1 - 0,5	-	Pin-type cable lug	100	o. r.	o. r.	o. r.
91419	HAP	red	0,5 - 1,5	-	Pin-type cable lug	100	o. r.	o. r.	o. r.
91420	HBP	blue	1,5 - 2,5	-	Pin-type cable lug	100	o. r.	o. r.	o. r.
91421	HCP	yellow	2,5 - 6,0	-	Pin-type cable lug	100	o. r.	o. r.	o. r.
96575	HDP	red	10,0	-	Pin-type cable lug	100	o. r.	o. r.	o. r.
96576	HEP	blue	16,0	-	Pin-type cable lug	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated

RoHS

Insulated solderless terminals

PA insulated solderless terminals for cross sections of 0.25 to 6.0mm².
Simple cable inlet through Easy-Entry (expanded sleeve).
Insulated with high dielectric strength.

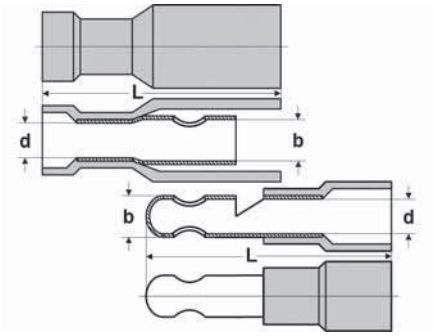
Material

Sleeve: Copper
Surface: tinned

Insulation: Partially-insulated, PA

Technical data

Temperature range: -60°C up to +125°C



round pin plugs

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91422	HABM	red	0,5 - 1,5	-	Plug	100	o. r.	o. r.	o. r.
91423	HAB	red	0,5 - 1,5	-	Sleeve	100	o. r.	o. r.	o. r.
91424	HB 5BM	blue	1,5 - 2,5	-	Plug	100	o. r.	o. r.	o. r.
91425	HB 5B	blue	1,5 - 2,5	-	Sleeve	100	o. r.	o. r.	o. r.
96594	HC 5BM	yellow	2,5 - 6,0	-	Plug	100	o. r.	o. r.	o. r.
96595	HC 5B	yellow	2,5 - 6,0	-	Sleeve	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated

RoHS

Insulated solderless terminals

Insulated solderless terminals for cross sections of 0.25 to 6.0 m2.
Simple cable inlet through Easy-Entry (expanded sleeve).
Insulated with high dielectric strength.

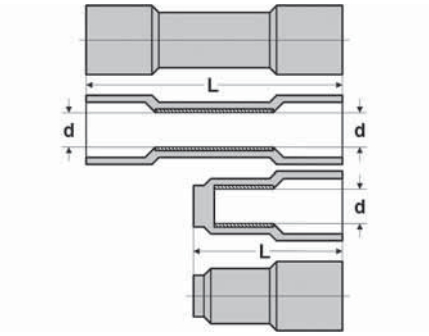
Material

Sleeve: Copper
Surface: tinned

Insulation: Partially-insulated, PA

Technical data

Temperature range: -60°C up to +125°C



butt connector

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91426	HAA 15	red	0,5 - 1,5	-	Connector	100	o. r.	o. r.	o. r.
91427	HBB 25	blue	1,5 - 2,5	-	Connector	100	o. r.	o. r.	o. r.
91429	HCC 6	yellow	2,5 - 6,0	-	Connector	100	o. r.	o. r.	o. r.

closed end-splices

Part no.	Type	Colour	Cross-section mm²	Connection bolts M	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91398	HAJ	transparent	0,5 - 1,5	-	Terminal connector	100	o. r.	o. r.	o. r.
91428	HBJ	transparent	1,5 - 2,5	-	Terminal connector	100	o. r.	o. r.	o. r.
91430	HCJ	transparent	2,5 - 6,0	-	Terminal connector	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated

RoHS

Insulated solderless terminals

PA insulated solderless terminals for cross sections of 0.5 to 6.0mm².
Simple cable inlet through Easy-Entry.

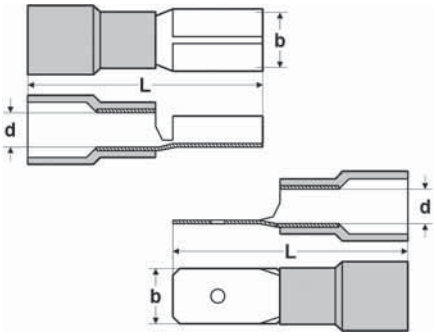
Material

Sleeve: copper
Surface: tinned

Insulation: PA

Technical data

Temperature range: -25°C up to +105°C



blade receptacle

Part no.	Type	Colour	Cross-section mm²	Flat plug size mm	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91432	RA 29	red	0,5 - 1,5	flat, 2.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
91431	RA 28	red	0,5 - 1,5	flat, 2.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
91434	RA 48	red	0,5 - 1,5	flat, 4.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
91433	RA 49	red	0,5 - 1,5	flat, 4.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
91435	RA 63	red	0,5 - 1,5	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96428	RB 28	blue	1,5 - 2,5	flat, 2.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96415	RB 29	blue	1,5 - 2,5	flat, 2.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
91438	RB 48	blue	1,5 - 2,5	flat, 4.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
91439	RB 49	blue	1,5 - 2,5	flat, 4.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
91440	RB 63	blue	1,5 - 2,5	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
91443	RC 63	yellow	2,5 - 6,0	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
91445	RC 95	yellow	2,5 - 6,0	flat, 9.5 x 1.2 mm	Sleeve	100	o. r.	o. r.	o. r.

blade terminal

Part no.	Type	Colour	Cross-section mm²	Flat plug size mm	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
98700	RA 29 M	red	0,5 - 1,5	flat, 2.8 x 0.5 mm	Plug	100	o. r.	o. r.	o. r.
98701	RA 28 M	red	0,5 - 1,5	flat, 2.8 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.
98584	RA 48 M	red	0,5 - 1,5	flat, 4.8 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.
98577	RA 49 M	red	0,5 - 1,5	flat, 4.8 x 0.5 mm	Plug	100	o. r.	o. r.	o. r.
91437	RA 63 M	red	0,5 - 1,5	flat, 6.3 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.
98599	RB 48 M	blue	1,5 - 2,5	flat, 4.8 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.
98598	RB 49 M	blue	1,5 - 2,5	flat, 4.8 x 0.5 mm	Plug	100	o. r.	o. r.	o. r.
91442	RB 63 M	blue	1,5 - 2,5	flat, 6.3 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.
91444	RC 63 M	yellow	2,5 - 6,0	flat, 6.3 x 0.8 mm	Plug	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated

Insulated squeeze snap-on connection

Insulated squeeze snap-on connection for cross sections of 0.5 to 6.0 mm².
Simple cable inlet through Easy-Entry (expanded sleeve).
Insulated with high dielectric strength.

Material

Sleeve: copper
Surface: tinned

Insulation: fully-insulated

Note

Versions:
Flat connector (insulated / fully insulated)
Flat connector sleeves (insulated / fully insulated)
Flat connector distributor

Technical data

Temperature range: -25°C up to +105°C

blade receptacle, all-insulated

Part no.	Type	Colour	Cross-section mm²	Flat plug size mm	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
96574	RA 28 V0	red	0,5 - 1,5	flat, 2.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96328	RA 29 V0	red	0,5 - 1,5	flat, 2.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
96329	RA 48 V0	red	0,5 - 1,5	flat, 4.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96330	RA 49 V0	red	0,5 - 1,5	flat, 4.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
96334	RA 63 V0	red	0,5 - 1,5	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96331	RB 48 V0	blue	1,5 - 2,5	flat, 4.8 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96332	RB 49 V0	blue	1,5 - 2,5	flat, 4.8 x 0.5 mm	Sleeve	100	o. r.	o. r.	o. r.
96335	RB 63 V0	blue	1,5 - 2,5	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.
96333	RC 63 V0	yellow	2,5 - 6,0	flat, 6.3 x 0.8 mm	Sleeve	100	o. r.	o. r.	o. r.

flat distributor

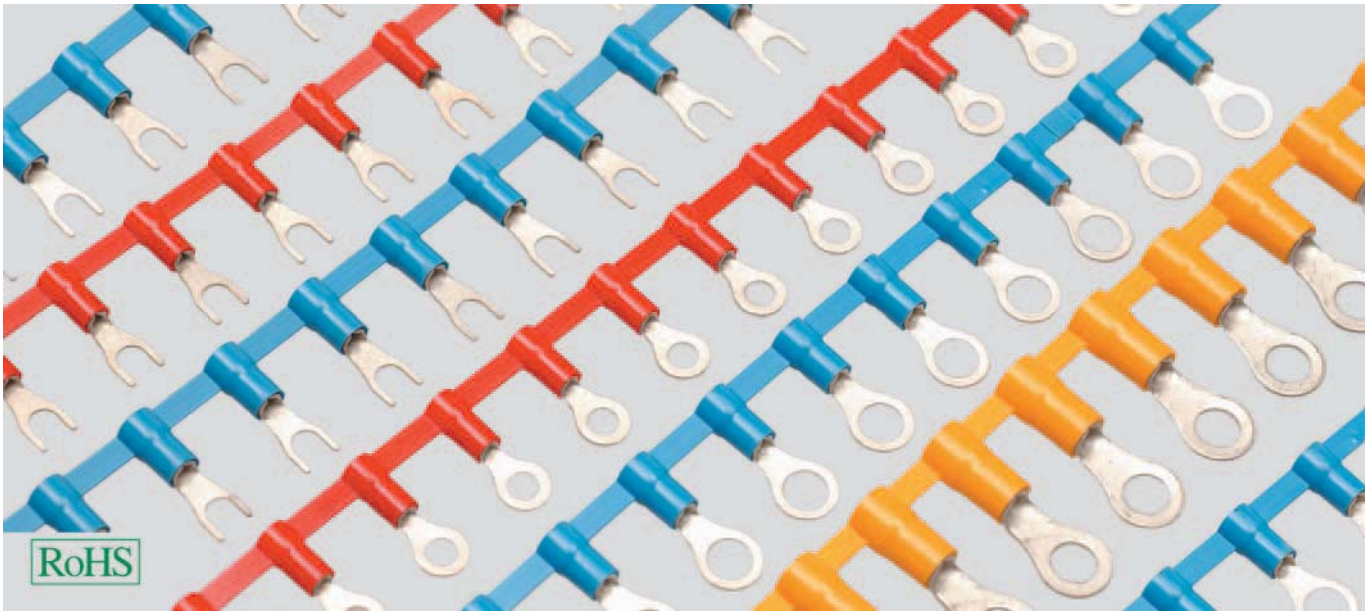
Part no.	Type	Colour	Cross-section mm²	Flat plug size mm	Design	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91436	RA 63 T	red	0,5 - 1,5	flat, 6.3 x 0.8 mm	Distributor	100	o. r.	o. r.	o. r.
91441	RB 63 T	blue	1,5 - 2,5	flat, 6.3 x 0.8 mm	Distributor	100	o. r.	o. r.	o. r.
94929	RC 63 T	yellow	2,5 - 6,0	flat, 6.3 x 0.8 mm	Distributor	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Solderless terminals

insulated - tape product



Solderless terminals, tape product

Polycarbonate-insulated connection material on tape has been developed as a cost-effective solution for medium and large pre-fabricated cables.

Material

Sleeve: Brass
Surface: tinned

Insulation: partially-insulated

Note

Roll diameter 450mm
Inner diameter of inclusion 27mm
Blade terminal / blade receptacle / pin-type cable lug on tape on request.

Technical data

Temperature range: -20°C up to +115°C
Temperature range temporary up to +130°C
Self-extinguishing acc. to UL 94 V0

eye type

Part no.	Type	Colour	Cross-section mm²	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
93740	BHA 3	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93741	BHA 35	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93742	BHA 4	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93743	BHA 5	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93744	BHA 6	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93745	BHB 3	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93746	BHB 4	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93747	BHB 5	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93748	BHB 6	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93749	BHB 8	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93750	BHC 4	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.
93751	BHC 5	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.
93752	BHC 6	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.
93753	BHC 8	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.

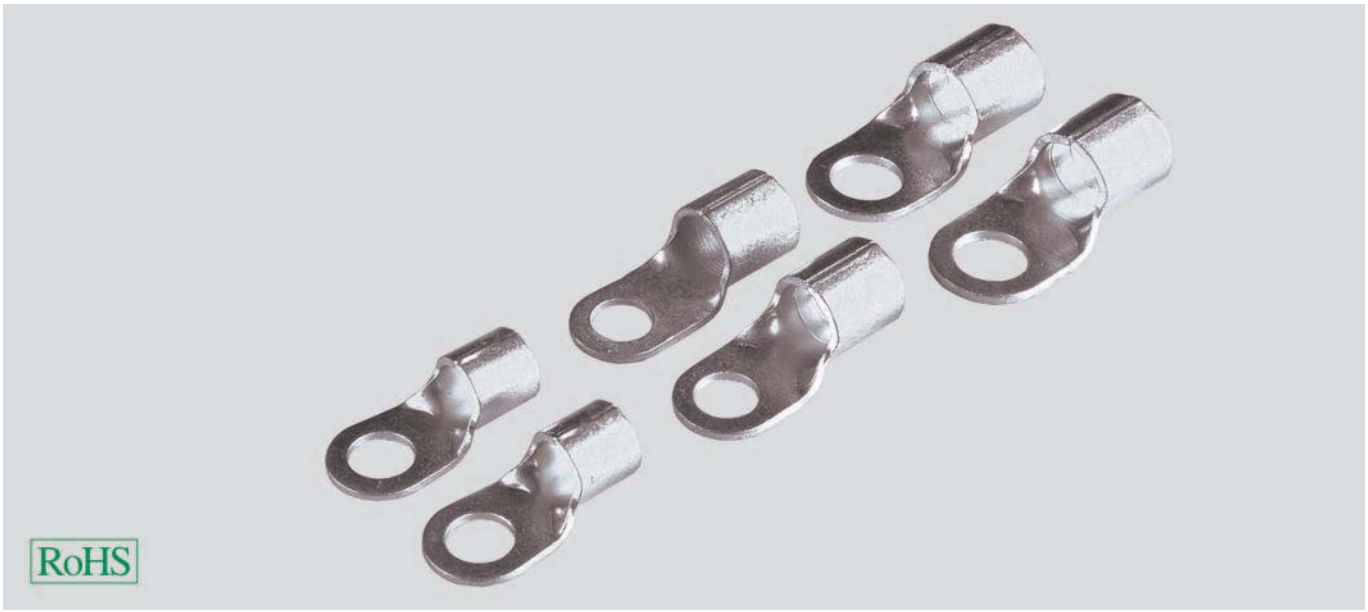
forked

Part no.	Type	Colour	Cross-section mm²	Unit	Net EUR/100 items at a purchase of up to 5000	5001 - 10000	10001 - 50000
93754	BHA 35 F	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93755	BHA 4 F	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93756	BHA 5 F	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93757	BHA 6 F	red	0,25 - 1,5	2000	o. r.	o. r.	o. r.
93758	BHB 3 F	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93759	BHB 35 F	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93760	BHB 4 F	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93761	BHB 5 F	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93762	BHB 6 F	blue	1,5 - 2,5	1750	o. r.	o. r.	o. r.
93763	BHC 4 F	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.
93764	BHC 5 F	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.
93765	BHC 6 F	yellow	4,0 - 6,0	1250	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

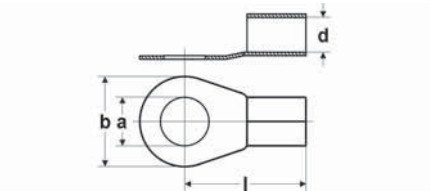
B solderless terminals
non insulated



Solderless terminals type B
Non-insulated solderless terminals in eye type design.

Material
Copper
Surface: tinned

Technical data
Temperature range: up to +125°C



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

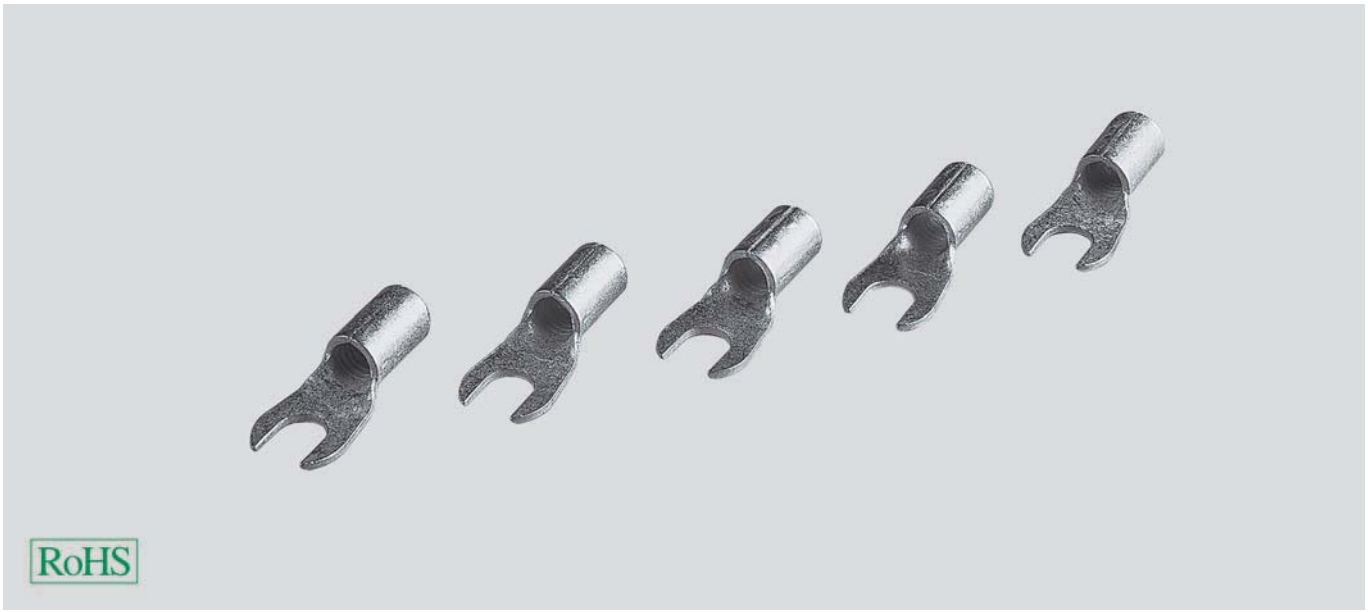
eye type

Part no.	Type	Cross-section mm²	a mm	b mm	d mm	t mm	l mm	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91514	B 1-3	0,5-1,5	3,2	6,0	1,6	1,0	11,0	0,7	100	o. r.	o. r.	o. r.
91515	B 1-4	0,5-1,5	4,3	8,0	1,6	1,0	12,0	0,8	100	o. r.	o. r.	o. r.
91516	B 1-5	0,5-1,5	5,3	10,0	1,6	1,0	13,0	0,8	100	o. r.	o. r.	o. r.
91517	B 2,5-3	1,5-2,5	3,2	6,0	2,3	1,0	11,0	0,6	100	o. r.	o. r.	o. r.
91518	B 2,5-4	1,5-2,5	4,3	8,0	2,3	1,0	12,0	0,8	100	o. r.	o. r.	o. r.
91519	B 2,5-5	1,5-2,5	5,3	10,0	2,3	1,0	14,0	0,9	100	o. r.	o. r.	o. r.
91520	B 2,5-6	1,5-2,5	6,5	11,0	2,3	1,0	16,0	1,1	100	o. r.	o. r.	o. r.
91521	B 6-4	2,5-6,0	4,3	8,0	3,6	1,0	14,0	1,4	100	o. r.	o. r.	o. r.
91522	B 6-5	2,5-6,0	5,3	10,0	3,6	1,0	15,0	1,5	100	o. r.	o. r.	o. r.
91523	B 6-6	2,5-6,0	6,5	11,0	3,6	1,0	16,0	1,6	100	o. r.	o. r.	o. r.
91524	B 6-8	2,5-6,0	8,4	14,0	3,6	1,0	19,0	2,1	100	o. r.	o. r.	o. r.
91525	B 10-5	10	5,3	10,0	4,5	1,1	16,0	2,3	100	o. r.	o. r.	o. r.
91526	B 10-6	10	6,5	11,0	4,5	1,1	17,0	2,4	100	o. r.	o. r.	o. r.
91527	B 10-8	10	8,4	14,0	4,5	1,1	20,0	2,9	100	o. r.	o. r.	o. r.
91528	B 16-5	16	5,3	11,0	5,8	1,2	20,0	3,9	100	o. r.	o. r.	o. r.
91529	B 16-6	16	6,5	11,0	5,8	1,2	20,0	3,8	100	o. r.	o. r.	o. r.
91530	B 16-8	16	8,4	14,0	5,8	1,2	22,0	4,2	100	o. r.	o. r.	o. r.
91531	B 16-10	16	10,5	18,0	5,8	1,2	24,0	4,9	100	o. r.	o. r.	o. r.
91532	B 25-6	25	6,5	12,0	7,5	1,5	25,0	7,1	50	o. r.	o. r.	o. r.
91533	B 25-8	25	8,4	16,0	7,5	1,5	25,0	7,6	50	o. r.	o. r.	o. r.
91534	B 25-10	25	10,5	18,0	7,5	1,5	26,0	7,4	50	o. r.	o. r.	o. r.
91535	B 35-8	35	8,4	16,0	9,0	1,6	26,0	9,7	50	o. r.	o. r.	o. r.
91536	B 35-10	35	10,5	18,0	9,0	1,6	27,0	9,9	50	o. r.	o. r.	o. r.
91537	B 35-12	35	13,0	22,0	9,0	1,6	31,0	11,0	50	o. r.	o. r.	o. r.
91538	B 50-8	50	8,4	18,0	11,0	1,8	34,0	7,9	50	o. r.	o. r.	o. r.
91539	B 50-10	50	10,5	18,0	11,0	1,8	34,0	16,7	50	o. r.	o. r.	o. r.
91540	B 50-12	50	13,0	22,0	11,0	1,8	36,0	17,7	50	o. r.	o. r.	o. r.
91541	B 70-10	70	10,5	22,0	13,0	2,0	38,0	25,2	25	o. r.	o. r.	o. r.
91542	B 70-12	70	13,0	22,0	13,0	2,0	38,0	21,8	25	o. r.	o. r.	o. r.
91543	B 70-16	70	17,0	28,0	13,0	2,0	42,0	25,6	25	o. r.	o. r.	o. r.
91544	B 95-10	95	10,5	24,0	15,0	2,5	42,0	40,0	25	o. r.	o. r.	o. r.
91545	B 95-12	95	13,0	24,0	15,0	2,5	42,0	35,7	25	o. r.	o. r.	o. r.
91546	B 95-16	95	17,0	28,0	15,0	2,5	44,0	40,0	25	o. r.	o. r.	o. r.
97765	B 120-10	120	10,5	24,0	17,0	3,0	44,0	56,0	25	o. r.	o. r.	o. r.
97766	B 120-12	120	13,0	24,0	17,0	3,0	44,0	54,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

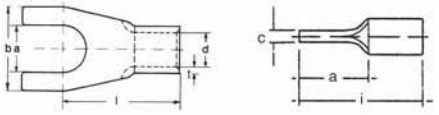
B solderless terminals
non insulated



Solderless terminals type B
Non-insulated solderless terminals in fork design.

Material
Sleeve: Copper
Surface: tinned

Technical data
Temperature range: up to +125°C



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

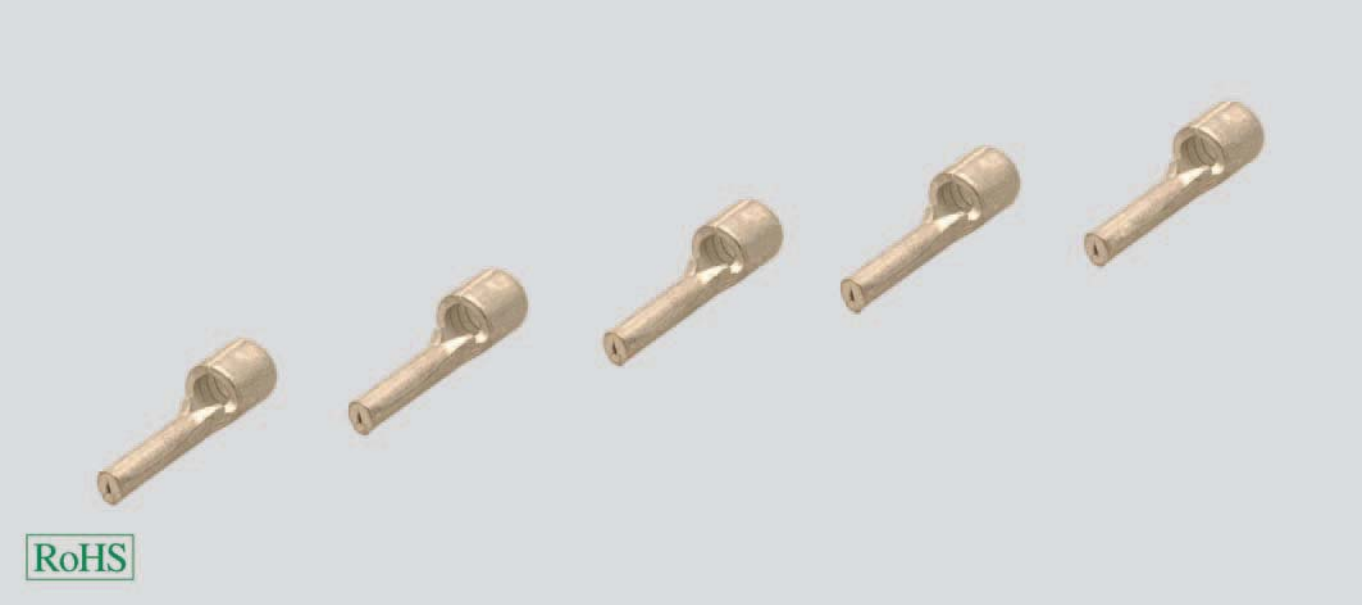
forked

Part no.	Type	Cross-section mm²	a mm	b mm	d mm	t mm	l mm	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91547	B 1-4F	0,5-1,5	4,3	7,0	1,6	0,8	12,0	0,7	100	o. r.	o. r.	o. r.
91548	B 1-5F	0,5-1,5	5,3	9,6	1,6	0,8	13,0	0,9	100	o. r.	o. r.	o. r.
91550	B 2,5-4F	1,5-2,5	4,3	7,0	2,3	0,8	12,0	0,8	100	o. r.	o. r.	o. r.
91551	B 2,5-5F	1,5-2,5	5,3	9,6	2,3	0,8	13,0	0,9	100	o. r.	o. r.	o. r.
91552	B 2,5-6F	1,5-2,5	6,5	12,0	2,3	0,8	13,0	1,1	100	o. r.	o. r.	o. r.
91553	B 6-4F	2,5-6,0	4,3	8,5	3,6	1,0	14,0	1,4	100	o. r.	o. r.	o. r.
91554	B 6-5F	2,5-6,0	5,3	9,0	3,6	1,0	14,0	1,6	100	o. r.	o. r.	o. r.
91555	B 6-6F	2,5-6,0	6,5	12,5	3,6	1,0	18,0	1,7	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

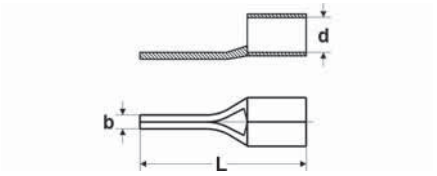
B solderless terminals
non insulated



Solderless terminals B
Non-insulated squeeze snap-on connection in pin design.

Material
Copper
Surface: tinned

Technical data
Temperature range: up to +125°C



Dimensions

a	Stick length
d	Inner diameter of the cable insertion
b	Stick width
L	Total length

round pattern

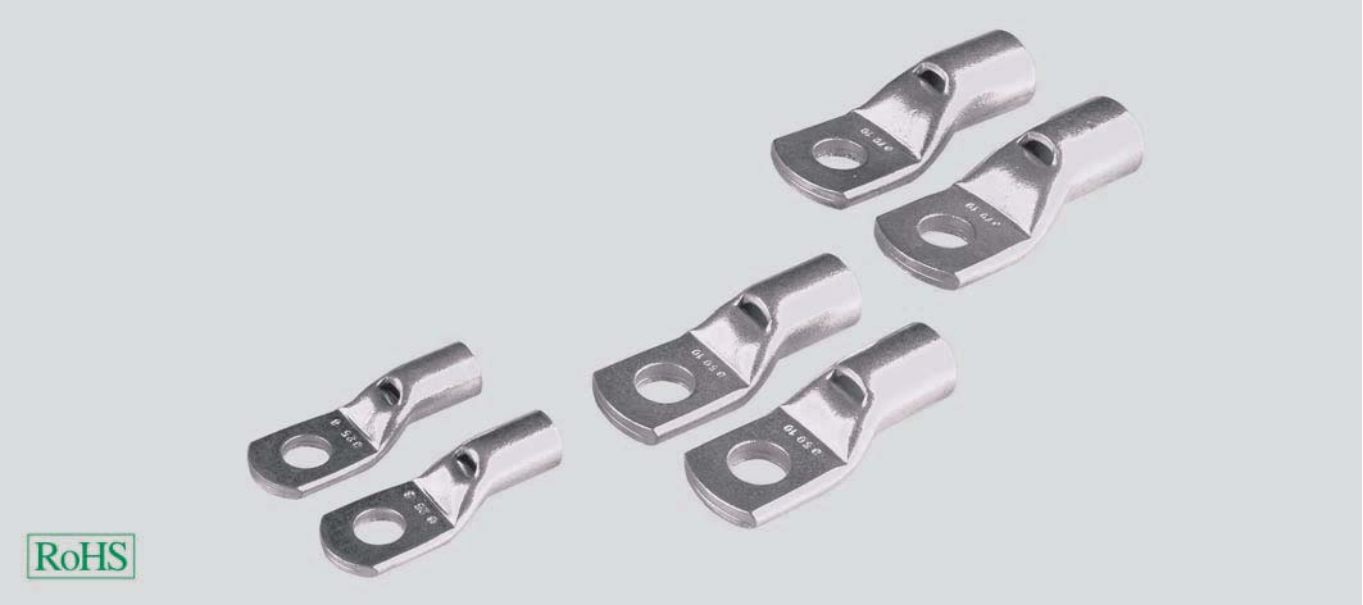
Part no.	Type	Cross-section mm²	a mm	b mm	d mm	t mm	l mm	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91556	B 0,5P	0,5-1,5	10,0	1,9	-	-	17,0	0,6	100	o. r.	o. r.	o. r.
91557	B 2,5P	1,5-2,5	10,0	1,9	-	-	17,0	0,7	100	o. r.	o. r.	o. r.
91558	B 6P	2,5-6,0	11,0	2,7	-	-	20,0	1,6	100	o. r.	o. r.	o. r.
91559	B 10P	10	11,0	4,3	-	-	24,5	2,7	100	o. r.	o. r.	o. r.
91560	B 16P	16	15,0	5,8	-	-	29,5	3,9	100	o. r.	o. r.	o. r.
91378	B 25P	25	15,0	6,8	-	-	33,5	6,3	1	o. r.	o. r.	o. r.
91379	B 35P	35	20,0	8,0	-	-	40,5	11,7	1	o. r.	o. r.	o. r.
91380	B 50P	50	20,0	9,5	-	-	45,0	17,9	1	o. r.	o. r.	o. r.
91381	B 70P	70	23,0	11,0	-	-	55,0	28,2	1	o. r.	o. r.	o. r.
91377	B 95P	95	23,0	12,5	-	-	55,0	43,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

T tubular cable lug - straight

not insulated - with inspection hole



Tubular cable lugs T

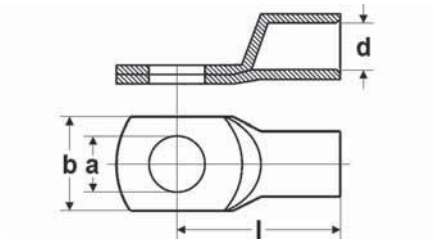
Non-insulated tubular cable lugs in eye type design.

Material

Copper
Surface: tinned

Technical data

Temperature range: up to +125°C



Dimensions

a Diameter of the boring
d Inner diameter of the cable insertion
b Flange width
l Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91458	T 1,5-4	1,5	4,3	2,3	8,0	15,2	-	1,6	100	o. r.	o. r.	o. r.
91459	T 1,5-5	1,5	5,3	2,3	8,0	15,2	-	1,7	100	o. r.	o. r.	o. r.
91460	T 2,5-4	2,5	4,3	2,6	6,9	15,2	-	1,1	100	o. r.	o. r.	o. r.
91461	T 2,5-5	2,5	5,3	2,6	7,6	15,2	-	1,1	100	o. r.	o. r.	o. r.
91462	T 2,5-6	2,5	6,4	2,6	9,1	16,7	-	1,4	100	o. r.	o. r.	o. r.
91463	T 4-4	4,0	4,3	3,3	8,0	19,4	-	2,5	50	o. r.	o. r.	o. r.
91464	T 4-5	4,0	5,3	3,3	10,0	19,9	-	2,7	50	o. r.	o. r.	o. r.
91465	T 4-6	4,0	6,4	3,3	11,0	20,9	-	2,8	50	o. r.	o. r.	o. r.
91467	T 6-5	6,0	5,3	3,5	10,0	20,5	-	5,5	100	o. r.	o. r.	o. r.
91468	T 6-6	6,0	6,4	3,5	12,0	20,5	-	5,4	100	o. r.	o. r.	o. r.
91469	T 10-6	10,0	6,4	4,5	12,0	22,5	-	5,3	100	o. r.	o. r.	o. r.
91470	T 10-8	10,0	8,4	4,5	15,0	25,0	-	6,4	100	o. r.	o. r.	o. r.
91471	T 10-10	10,0	10,5	4,5	17,0	27,0	-	7,0	100	o. r.	o. r.	o. r.
91472	T 16-6	16,0	6,4	5,5	12,0	27,0	-	9,2	100	o. r.	o. r.	o. r.
91473	T 16-8	16,0	8,4	5,5	15,0	29,0	-	10,1	100	o. r.	o. r.	o. r.
91474	T 16-10	16,0	10,5	5,5	17,0	31,0	-	10,9	100	o. r.	o. r.	o. r.
91561	T 25-6	25,0	6,4	7,0	14,0	30,0	-	12,7	100	o. r.	o. r.	o. r.
91562	T 25-8	25,0	8,4	7,0	16,0	32,5	-	15,9	100	o. r.	o. r.	o. r.
91563	T 25-10	25,0	10,5	7,0	18,0	34,5	-	15,2	100	o. r.	o. r.	o. r.
91564	T 25-12	25,0	13,2	7,0	19,0	35,5	-	15,0	100	o. r.	o. r.	o. r.
91565	T 35-6	35,0	6,4	8,5	17,0	32,5	-	19,3	100	o. r.	o. r.	o. r.
91566	T 35-8	35,0	8,4	8,5	17,0	35,0	-	21,4	100	o. r.	o. r.	o. r.
91567	T 35-10	35,0	10,5	8,5	19,0	37,0	-	22,9	100	o. r.	o. r.	o. r.
91568	T 35-12	35,0	13,2	8,5	21,0	38,0	-	22,3	100	o. r.	o. r.	o. r.
91569	T 50-6	50,0	6,4	10,0	20,0	37,0	-	30,9	100	o. r.	o. r.	o. r.
91570	T 50-8	50,0	8,4	10,0	20,0	37,0	-	30,1	100	o. r.	o. r.	o. r.
91571	T 50-10	50,0	10,5	10,0	20,0	39,0	-	31,7	100	o. r.	o. r.	o. r.
91572	T 50-12	50,0	13,2	10,0	23,0	40,0	-	31,8	100	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

T tubular cable lug - straight

not insulated - with inspection hole

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
91573	T 70-8	70,0	8,4	12,0	23,0	43,0	-	45,5	50	o. r.	o. r.	o. r.
91574	T 70-10	70,0	10,5	12,0	23,0	45,0	-	48,8	50	o. r.	o. r.	o. r.
91575	T 70-12	70,0	13,2	12,0	23,0	46,0	-	48,0	50	o. r.	o. r.	o. r.
91577	T 95-8	95,0	8,4	13,5	26,0	48,0	-	58,4	50	o. r.	o. r.	o. r.
91578	T 95-10	95,0	10,5	13,5	26,0	48,0	-	57,2	50	o. r.	o. r.	o. r.
91493	T 95-12	95,0	13,2	13,5	26,0	49,0	-	56,7	50	o. r.	o. r.	o. r.
96317	T 120-8	120,0	8,4	15,0	28,0	51,0	-	68,9	50	o. r.	o. r.	o. r.
91495	T 120-10	120,0	10,5	15,0	28,0	51,0	-	67,7	50	o. r.	o. r.	o. r.
91496	T 120-12	120,0	13,2	15,0	28,0	51,0	-	65,8	50	o. r.	o. r.	o. r.
91498	T 120-16	120,0	17,0	15,0	30,0	53,0	-	66,6	50	o. r.	o. r.	o. r.
97690	T 120-20	120,0	21,0	15,0	36,0	59,0	-	77,6	50	o. r.	o. r.	o. r.
97872	T 150-8	150,0	8,4	16,5	31,0	58,0	-	77,9	50	o. r.	o. r.	o. r.
91499	T 150-10	150,0	10,5	16,5	31,0	58,0	-	76,8	50	o. r.	o. r.	o. r.
91500	T 150-12	150,0	13,2	16,5	31,0	58,0	-	75,1	50	o. r.	o. r.	o. r.
91502	T 150-16	150,0	17,0	16,5	31,0	58,0	-	71,9	50	o. r.	o. r.	o. r.
96318	T 185-10	185,0	10,5	19,0	35,0	65,0	-	119,8	50	o. r.	o. r.	o. r.
91503	T 185-12	185,0	13,2	19,0	35,0	65,0	-	117,7	50	o. r.	o. r.	o. r.
91505	T 185-16	185,0	17,0	19,0	35,0	65,0	-	113,9	50	o. r.	o. r.	o. r.
91506	T 185-20	185,0	21,0	19,0	39,0	69,0	-	118,0	50	o. r.	o. r.	o. r.
93669	T 240-10	240,0	10,5	21,0	39,0	72,0	-	173,6	50	o. r.	o. r.	o. r.
96962	T 240-12	240,0	13,2	21,0	39,0	72,0	-	171,2	50	o. r.	o. r.	o. r.
91508	T 240-16	240,0	17,0	21,0	39,0	72,0	-	166,7	50	o. r.	o. r.	o. r.
91509	T 240-20	240,0	21,0	21,0	39,0	72,0	-	160,8	50	o. r.	o. r.	o. r.
96319	T 300-12	300,0	13,2	23,4	43,0	77,3	-	228,6	10	o. r.	o. r.	o. r.
91510	T 300-16	300,0	17,0	23,4	43,0	80,3	-	249,3	10	o. r.	o. r.	o. r.
91511	T 300-20	300,0	21,0	23,4	43,0	86,3	-	253,2	10	o. r.	o. r.	o. r.
91512	T 400-20	400,0	21,0	26,7	49,5	90,3	-	349,7	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

W tubular cable lug - angulated 45°

not insulated

RoHS

Elbow tubular lugs W45°

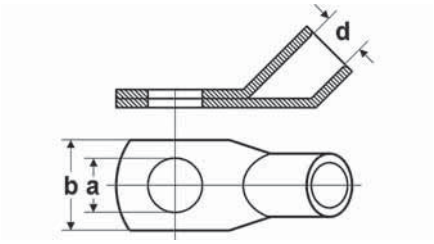
Non-insulated tubular lugs in eye type design, 45° angled.

Material

Copper
Surface: tinned

Technical data

Temperature range: up to +120°C



Dimensions

a Diameter of the boring
d Inner diameter of the cable insertion
b Flange width

eye type

Part no. 45°	Type	Cross-section mm²	a mm	d mm	b mm	Weight kg / 1000 Stück	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92520	W 6-5	6,0	5,3	3,5	10,0	6,0	100	o. r.	o. r.	o. r.
92521	W 6-6	6,0	6,4	3,5	12,0	5,9	100	o. r.	o. r.	o. r.
92522	W 6-8	6,0	8,4	3,5	15,0	6,7	100	o. r.	o. r.	o. r.
92523	W 6-10	6,0	10,5	3,5	17,0	7,2	100	o. r.	o. r.	o. r.
92524	W 6-12	6,0	13,2	3,5	19,0	7,7	100	o. r.	o. r.	o. r.
92525	W 10-5	10,0	5,3	4,5	12,0	6,0	100	o. r.	o. r.	o. r.
92526	W 10-6	10,0	6,4	4,5	12,0	5,9	100	o. r.	o. r.	o. r.
92527	W 10-8	10,0	8,4	4,5	15,0	6,7	100	o. r.	o. r.	o. r.
92528	W 10-10	10,0	10,5	4,5	17,0	7,2	50	o. r.	o. r.	o. r.
92529	W 10-12	10,0	13,2	4,5	19,0	7,6	100	o. r.	o. r.	o. r.
92530	W 16-5	16,0	5,3	5,5	12,0	10,1	100	o. r.	o. r.	o. r.
92531	W 16-6	16,0	6,4	5,5	12,0	10,0	100	o. r.	o. r.	o. r.
92532	W 16-8	16,0	8,4	5,5	15,0	11,0	100	o. r.	o. r.	o. r.
92533	W 16-10	16,0	10,5	5,5	17,0	11,7	100	o. r.	o. r.	o. r.
92534	W 16-12	16,0	13,2	5,5	19,0	12,3	100	o. r.	o. r.	o. r.
92535	W 25-5	25,0	5,3	7,0	14,0	13,4	100	o. r.	o. r.	o. r.
92536	W 25-6	25,0	6,4	7,0	14,0	13,1	100	o. r.	o. r.	o. r.
92537	W 25-8	25,0	8,4	7,0	16,0	14,7	100	o. r.	o. r.	o. r.
92538	W 25-10	25,0	10,5	7,0	18,0	15,6	100	o. r.	o. r.	o. r.
92539	W 25-12	25,0	13,2	7,0	19,0	16,0	50	o. r.	o. r.	o. r.
92541	W 35-6	35,0	6,4	8,5	17,0	20,4	100	o. r.	o. r.	o. r.
92542	W 35-8	35,0	8,5	8,5	17,0	22,8	100	o. r.	o. r.	o. r.
92543	W 35-10	35,0	10,5	8,5	19,0	23,9	25	o. r.	o. r.	o. r.
92544	W 35-12	35,0	13,2	8,5	21,0	25,4	100	o. r.	o. r.	o. r.
92546	W 35-16	35,0	17,0	8,5	26,0	0,0	25	o. r.	o. r.	o. r.
92547	W 50-6	50,0	6,4	10,0	20,0	31,4	100	o. r.	o. r.	o. r.
92548	W 50-8	50,0	8,4	10,0	20,0	34,5	100	o. r.	o. r.	o. r.
92549	W 50-10	50,0	10,5	10,0	20,0	35,8	100	o. r.	o. r.	o. r.
92550	W 50-12	50,0	13,2	10,0	23,0	37,6	100	o. r.	o. r.	o. r.
92552	W 50-16	50,0	17,0	10,0	28,0	0,0	25	o. r.	o. r.	o. r.
92553	W 50-20	50,0	21,0	10,0	30,0	0,0	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

W tubular cable lug - angulated 45°

not insulated

eye type

Part no. 45°	Type	Cross-section mm²	a mm	d mm	b mm	Weight kg / 1000 Stück	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92554	W 70-6	70,0	6,5	12,0	23,0	0,0	25	o. r.	o. r.	o. r.
92555	W 70-8	70,0	8,4	12,0	23,0	52,4	50	o. r.	o. r.	o. r.
92556	W 70-10	70,0	10,5	12,0	23,0	54,5	50	o. r.	o. r.	o. r.
92557	W 70-12	70,0	13,2	12,0	23,0	56,9	50	o. r.	o. r.	o. r.
92559	W 70-16	70,0	17,0	12,0	26,0	59,4	50	o. r.	o. r.	o. r.
92560	W 70-20	70,0	21,0	12,0	30,0	0,0	25	o. r.	o. r.	o. r.
92561	W 95-8	95,0	8,4	13,5	26,0	63,0	50	o. r.	o. r.	o. r.
92562	W 95-10	95,0	10,5	13,5	26,0	64,6	50	o. r.	o. r.	o. r.
92563	W 95-12	95,0	13,2	13,5	26,0	66,8	50	o. r.	o. r.	o. r.
92565	W 95-16	95,0	17,0	13,5	28,0	70,6	25	o. r.	o. r.	o. r.
92566	W 95-20	95,0	21,0	13,5	30,0	0,0	25	o. r.	o. r.	o. r.
92567	W 120-8	120,0	8,4	15,0	28,0	68,7	50	o. r.	o. r.	o. r.
92568	W 120-10	120,0	10,5	15,0	28,0	72,9	50	o. r.	o. r.	o. r.
92569	W 120-12	120,0	13,2	15,0	28,0	77,1	50	o. r.	o. r.	o. r.
92571	W 120-16	120,0	17,0	15,0	30,0	80,3	25	o. r.	o. r.	o. r.
92572	W 120-20	120,0	21,0	15,0	36,0	0,0	10	o. r.	o. r.	o. r.
92573	W 150-8	150,0	8,5	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
92574	W 150-10	150,0	10,5	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
92575	W 150-12	150,0	13,0	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
92577	W 150-16	150,0	17,0	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
92578	W 150-20	150,0	21,0	16,5	36,0	0,0	10	o. r.	o. r.	o. r.
92579	W 185-10	185,0	10,5	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
92580	W 185-12	185,0	13,0	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
92582	W 185-16	185,0	17,0	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
92583	W 185-20	185,0	21,0	19,0	39,0	0,0	10	o. r.	o. r.	o. r.
92584	W 240-10	240,0	10,5	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
92585	W 240-12	240,0	13,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
92587	W 240-16	240,0	17,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
92588	W 240-20	240,0	21,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
92589	W 300-12	300,0	13,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
92591	W 300-16	300,0	17,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
92592	W 300-20	300,0	21,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
92593	W 400-12	400,0	13,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.
92595	W 400-16	400,0	17,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.
92596	W 400-20	400,0	21,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

W tubular cable lug - angulated 90°

not insulated

Elbow tubular lugs W 90°

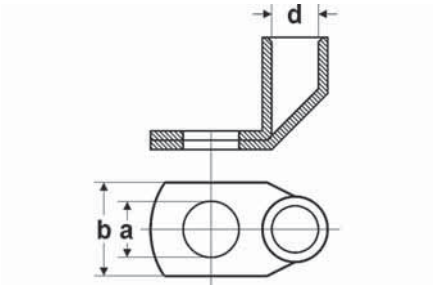
Non-insulated tubular lugs in eye type design, 90° angled.

Material

Copper
Surface: tinned

Technical data

Temperature range: up to +120°C



Dimensions

a Diameter of boring
d Inner diameter of the cable insertion
b Flange width

eye type

Part no. 90°	Type	Cross-section mm²	a mm	d mm	b mm	Weight kg / 1000 Stück	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90866	W 6-5	6,0	5,3	3,5	10,0	6,0	100	o. r.	o. r.	o. r.
96303	W 6-6	6,0	6,4	3,5	12,0	5,9	100	o. r.	o. r.	o. r.
90867	W 6-8	6,0	8,4	3,5	15,0	6,7	100	o. r.	o. r.	o. r.
90868	W 6-10	6,0	10,5	3,5	17,0	7,2	100	o. r.	o. r.	o. r.
90869	W 6-12	6,0	13,2	3,5	19,0	7,7	100	o. r.	o. r.	o. r.
90939	W 10-5	10,0	5,3	4,5	12,0	6,0	100	o. r.	o. r.	o. r.
96309	W 10-6	10,0	6,4	4,5	12,0	5,9	100	o. r.	o. r.	o. r.
96908	W 10-8	10,0	8,4	4,5	15,0	6,7	100	o. r.	o. r.	o. r.
90940	W 10-10	10,0	10,5	4,5	17,0	7,2	100	o. r.	o. r.	o. r.
90941	W 10-12	10,0	13,2	4,5	19,0	7,6	100	o. r.	o. r.	o. r.
90942	W 16-5	16,0	5,3	5,5	12,0	10,1	100	o. r.	o. r.	o. r.
96308	W 16-6	16,0	6,4	5,5	12,0	10,0	100	o. r.	o. r.	o. r.
96907	W 16-8	16,0	8,4	5,5	15,0	11,0	100	o. r.	o. r.	o. r.
96310	W 16-10	16,0	10,5	5,5	17,0	11,7	100	o. r.	o. r.	o. r.
90943	W 16-12	16,0	13,2	5,5	19,0	12,3	100	o. r.	o. r.	o. r.
90944	W 25-5	25,0	5,3	7,0	14,0	13,4	100	o. r.	o. r.	o. r.
98377	W 25-6	25,0	6,4	7,0	14,0	13,1	100	o. r.	o. r.	o. r.
90945	W 25-8	25,0	8,4	7,0	16,0	14,7	100	o. r.	o. r.	o. r.
90946	W 25-10	25,0	10,5	7,0	18,0	15,6	100	o. r.	o. r.	o. r.
90947	W 25-12	25,0	13,2	7,0	19,0	16,0	100	o. r.	o. r.	o. r.
90949	W 35-6	35,0	6,4	8,5	17,0	20,4	100	o. r.	o. r.	o. r.
90950	W 35-8	35,0	8,4	8,5	17,0	22,8	100	o. r.	o. r.	o. r.
96313	W 35-10	35,0	10,5	8,5	19,0	23,9	100	o. r.	o. r.	o. r.
90951	W 35-12	35,0	13,2	8,5	21,0	25,4	100	o. r.	o. r.	o. r.
90953	W 35-16	35,0	17,0	8,5	26,0	0,0	25	o. r.	o. r.	o. r.
90954	W 50-6	50,0	6,4	10,0	20,0	31,6	100	o. r.	o. r.	o. r.
96314	W 50-8	50,0	8,4	10,0	20,0	33,8	100	o. r.	o. r.	o. r.
90955	W 50-10	50,0	10,5	10,0	20,0	35,2	100	o. r.	o. r.	o. r.
90956	W 50-12	50,0	13,2	10,0	23,0	38,0	100	o. r.	o. r.	o. r.
90958	W 50-16	50,0	17,0	10,0	28,0	0,0	25	o. r.	o. r.	o. r.
90959	W 50-20	50,0	21,0	10,0	30,0	0,0	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

W tubular cable lug - angulated 90°

not insulated

eye type

Part no. 90°	Type	Cross-section mm²	a mm	d mm	b mm	Weight kg / 1000 Stück	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90960	W 70-6	70,0	6,5	12,0	23,0	0,0	25	o. r.	o. r.	o. r.
90961	W 70-8	70,0	8,4	12,0	23,0	50,9	100	o. r.	o. r.	o. r.
96315	W 70-10	70,0	10,5	12,0	23,0	53,4	100	o. r.	o. r.	o. r.
96316	W 70-12	70,0	13,2	12,0	23,0	54,4	100	o. r.	o. r.	o. r.
90963	W 70-16	70,0	17,0	12,0	26,0	58,5	100	o. r.	o. r.	o. r.
90964	W 70-20	70,0	21,0	12,0	30,0	0,0	25	o. r.	o. r.	o. r.
90965	W 95-8	95,0	8,4	13,5	26,0	61,1	50	o. r.	o. r.	o. r.
97672	W 95-10	95,0	10,5	13,5	26,0	62,7	50	o. r.	o. r.	o. r.
90966	W 95-12	95,0	13,2	13,5	26,0	64,8	50	o. r.	o. r.	o. r.
90968	W 95-16	95,0	17,0	13,5	28,0	71,2	50	o. r.	o. r.	o. r.
90969	W 95-20	95,0	21,0	13,5	30,0	0,0	25	o. r.	o. r.	o. r.
90970	W 120-8	120,0	8,4	15,0	28,0	66,9	50	o. r.	o. r.	o. r.
90971	W 120-10	120,0	10,5	15,0	28,0	71,0	50	o. r.	o. r.	o. r.
90972	W 120-12	120,0	13,2	15,0	28,0	72,3	50	o. r.	o. r.	o. r.
90974	W 120-16	120,0	17,0	15,0	30,0	78,1	50	o. r.	o. r.	o. r.
90975	W 120-20	120,0	21,0	15,0	36,0	0,0	10	o. r.	o. r.	o. r.
90976	W 150-8	150,0	8,5	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
90977	W 150-10	150,0	10,5	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
90978	W 150-12	150,0	13,0	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
90980	W 150-16	150,0	17,0	16,5	31,0	0,0	10	o. r.	o. r.	o. r.
90981	W 150-20	150,0	21,0	16,5	36,0	0,0	10	o. r.	o. r.	o. r.
90982	W 185-10	185,0	10,5	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
90983	W 185-12	185,0	13,0	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
90985	W 185-16	185,0	17,0	19,0	35,0	0,0	10	o. r.	o. r.	o. r.
90986	W 185-20	185,0	21,0	19,0	39,0	0,0	10	o. r.	o. r.	o. r.
90987	W 240-10	240,0	10,5	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
90988	W 240-12	240,0	13,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
90990	W 240-16	240,0	17,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
90991	W 240-20	240,0	21,0	21,0	39,0	0,0	10	o. r.	o. r.	o. r.
90992	W 300-12	300,0	13,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
90994	W 300-16	300,0	17,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
90995	W 300-20	300,0	21,0	23,5	43,0	0,0	5	o. r.	o. r.	o. r.
90996	W 400-12	400,0	13,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.
90998	W 400-16	400,0	17,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.
90999	W 400-20	400,0	21,0	27,0	49,0	0,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

S tubular cable lug - straigt - small flange

not insulated

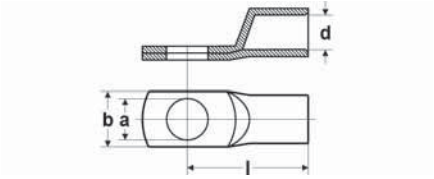
new

Tubular cable lugs S

Non-insulated tubular cable lugs in eye type design with small flange.
For screwing in switch cabinets with reduced connecting space.

Material

Sleeve: Copper
Surface: tinned



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no. straight	Type	Cross-section mm²	a mm	d mm	b mm	Weight kg / 1000 Stück	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
90910	S 35-6	35,0	6,5	8,5	15,0	17,8	25	o. r.	o. r.	o. r.
90911	S 50-6	50,0	6,5	10,0	15,0	29,5	25	o. r.	o. r.	o. r.
90912	S 50-8	50,0	8,5	10,0	17,0	28,2	25	o. r.	o. r.	o. r.
90913	S 50-10	50,0	10,5	10,0	19,0	30,8	25	o. r.	o. r.	o. r.
90914	S 70-6	70,0	6,5	12,0	17,0	42,2	25	o. r.	o. r.	o. r.
90915	S 70-8	70,0	8,5	12,0	17,0	41,0	25	o. r.	o. r.	o. r.
90916	S 70-10	70,0	10,5	12,0	19,0	44,5	25	o. r.	o. r.	o. r.
90917	S 70-12	70,0	13,0	12,0	19,0	42,2	25	o. r.	o. r.	o. r.
90918	S 95-6	95,0	6,5	13,5	19,0	54,9	25	o. r.	o. r.	o. r.
90919	S 95-8	95,0	8,5	13,5	19,0	54,6	25	o. r.	o. r.	o. r.
90920	S 95-10	95,0	10,5	13,5	19,0	51,3	25	o. r.	o. r.	o. r.
90921	S 95-12	95,0	13,0	13,5	19,0	51,5	25	o. r.	o. r.	o. r.
90922	S 120-6	120,0	6,5	15,0	19,0	61,6	10	o. r.	o. r.	o. r.
90923	S 120-8	120,0	8,5	15,0	19,0	59,4	10	o. r.	o. r.	o. r.
90924	S 120-10	120,0	10,5	15,0	19,0	58,1	10	o. r.	o. r.	o. r.
90925	S 120-12	120,0	13,0	15,0	19,0	59,2	10	o. r.	o. r.	o. r.
90926	S 150-6	150,0	6,5	16,5	19,0	68,5	10	o. r.	o. r.	o. r.
90927	S 150-8	150,0	8,5	16,5	19,0	68,0	10	o. r.	o. r.	o. r.
90928	S 150-10	150,0	10,5	16,5	19,0	67,5	10	o. r.	o. r.	o. r.
90929	S 150-12	150,0	13,0	16,5	19,0	71,5	10	o. r.	o. r.	o. r.
90930	S 185-10	185,0	10,5	19,0	24,5	105,9	10	o. r.	o. r.	o. r.
90931	S 185-12	185,0	13,0	19,0	31,0	110,9	10	o. r.	o. r.	o. r.
90932	S 185-16	185,0	17,0	19,0	31,0	97,6	10	o. r.	o. r.	o. r.
90933	S 240-10	240,0	10,5	21,0	31,0	127,0	5	o. r.	o. r.	o. r.
90934	S 240-12	240,0	13,0	21,0	31,0	137,2	5	o. r.	o. r.	o. r.
90935	S 240-16	240,0	17,0	21,0	31,0	132,8	5	o. r.	o. r.	o. r.
90936	S 300-10	300,0	10,5	23,5	31,0	197,0	5	o. r.	o. r.	o. r.
90937	S 300-12	300,0	13,0	23,5	31,0	227,2	5	o. r.	o. r.	o. r.
90938	S 300-16	300,0	17,0	23,5	31,0	225,0	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

F tubular cable lug for fine stranded wires - straight

not insulated

Tubular cable lugs F

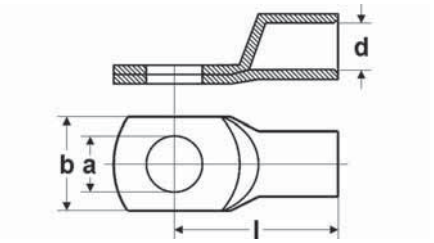
Non-insulated tubular cable lugs in eye type design for fine-wire flexible lines.
The expanded sleeve facilitates cable inlet.

Material

copper
Surface: tinned

Technical data

Temperature range: up to +125°C



Dimensions

a	Diameter oft the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99360	F6-5	6,0	5,3	4,35	10,8	25,0	-	5,6	100	o. r.	o. r.	o. r.
99361	F6-6	6,0	6,4	4,35	10,8	25,0	-	5,5	100	o. r.	o. r.	o. r.
99362	F6-8	6,0	8,4	4,35	14,0	27,5	-	5,5	100	o. r.	o. r.	o. r.
99363	F10-6	10,0	6,4	5,5	12,0	28,5	-	10,8	100	o. r.	o. r.	o. r.
99364	F10-8	10,0	8,4	5,5	16,0	33,5	-	12,6	100	o. r.	o. r.	o. r.
99365	F10-10	10,0	10,5	5,5	16,0	33,5	-	8,6	100	o. r.	o. r.	o. r.
99366	F16-6	16,0	6,4	6,75	14,0	30,0	-	10,8	100	o. r.	o. r.	o. r.
99367	F16-8	16,0	8,4	6,75	16,0	35,0	-	12,6	100	o. r.	o. r.	o. r.
99368	F16-10	16,0	10,5	6,75	16,0	35,0	-	12,0	100	o. r.	o. r.	o. r.
99369	F25-6	25,0	6,4	8,05	16,0	32,5	-	14,7	100	o. r.	o. r.	o. r.
99370	F25-8	25,0	8,4	8,05	17,0	32,5	-	14,5	150	o. r.	o. r.	o. r.
99371	F25-10	25,0	10,5	8,05	17,0	36,0	-	16,3	100	o. r.	o. r.	o. r.
99372	F35-8	35,0	8,4	9,35	18,5	36,0	-	20,6	100	o. r.	o. r.	o. r.
99373	F35-10	35,0	10,5	9,35	18,5	40,5	-	22,7	100	o. r.	o. r.	o. r.
99374	F35-12	35,0	12,8	9,35	18,5	40,5	-	23,0	100	o. r.	o. r.	o. r.
99380	F50-8	50,0	8,4	11,0	21,8	41,5	-	34,6	100	o. r.	o. r.	o. r.
99381	F50-10	50,0	10,5	11,0	21,8	41,5	-	33,6	100	o. r.	o. r.	o. r.
99375	F50-12	50,0	12,8	11,0	21,8	43,0	-	35,8	100	o. r.	o. r.	o. r.
99382	F70-8	70,0	8,4	13,25	24,4	43,5	-	42,9	100	o. r.	o. r.	o. r.
99383	F70-10	70,0	10,5	13,25	24,4	43,5	-	41,9	100	o. r.	o. r.	o. r.
99384	F70-12	70,0	12,8	13,25	24,4	46,0	-	42,5	100	o. r.	o. r.	o. r.
99385	F95-8	95,0	8,4	14,65	27,0	53,0	-	69,6	100	o. r.	o. r.	o. r.
99386	F95-10	95,0	10,5	14,65	27,0	53,0	-	67,6	100	o. r.	o. r.	o. r.
99387	F95-12	95,0	12,8	14,65	27,0	53,0	-	66,0	100	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

F tubular cable lug for fine stranded wires - straight

not insulated

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99388	F120-10	120,0	10,5	16,2	30,0	59,0	-	94,5	100	o. r.	o. r.	o. r.
99389	F120-12	120,0	12,8	16,2	30,0	59,0	-	93,3	100	o. r.	o. r.	o. r.
99390	F120-16	120,0	16,5	16,2	30,0	62,0	-	94,3	100	o. r.	o. r.	o. r.
99391	F150-10	150,0	10,5	18,0	33,0	63,0	-	114,8	100	o. r.	o. r.	o. r.
99392	F150-12	150,0	12,8	18,0	33,0	63,0	-	113,5	100	o. r.	o. r.	o. r.
99393	F150-16	150,0	16,5	18,0	33,0	66,0	-	114,7	100	o. r.	o. r.	o. r.
99376	F185-12	185,0	12,8	20,6	37,0	70,5	-	157,4	100	o. r.	o. r.	o. r.
99377	F185-16	185,0	16,5	20,6	37,0	75,0	-	165,2	100	o. r.	o. r.	o. r.
99378	F185-20	185,0	21,0	20,6	37,0	75,0	-	160,4	100	o. r.	o. r.	o. r.
99394	F240-12	240,0	12,8	23,1	41,0	77,5	-	178,9	100	o. r.	o. r.	o. r.
99395	F240-16	240,0	16,5	23,1	41,0	82,0	-	183,8	100	o. r.	o. r.	o. r.
99379	F240-20	240,0	21,0	23,1	41,0	82,0	-	179,1	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

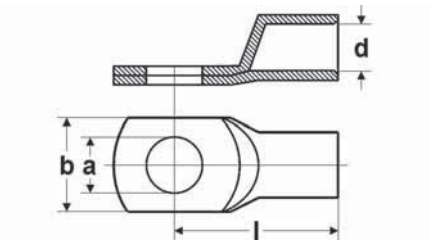
o. r. = on request

DC compression cable lug - straight
not insulated

Tubular cable lug DC
Non-insulated tubular cable lugs in eye type design for conductor arrangement RM, to DIN 46235.

Material
Copper
Surface: tinned

Note
Code type indicates the required hexagonal clamping insert.
Part No. 93223 and 93211 are not manufactured to DIN.



Diameter

a	Diameter of the boring
d	Inner diameter of the canle insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93221	DC 6-6	6,0	6,4	3,8	8,5	24,0	10,0	3,2	50	o. r.	o. r.	o. r.
93222	DC 10-6	10,0	6,4	4,5	9,0	27,0	10,0	3,8	50	o. r.	o. r.	o. r.
93223	DC 10-8	10,0	8,4	4,5	13,0	27,0	10,0	3,8	50	o. r.	o. r.	o. r.
93234	DC 16-6	16,0	6,4	5,5	13,0	36,0	20,0	13,2	50	o. r.	o. r.	o. r.
93210	DC 16-10	16,0	10,5	5,5	17,0	36,0	20,0	13,1	50	o. r.	o. r.	o. r.
93211	DC 25-12	25,0	13,0	7,0	19,0	38,0	20,0	16,5	50	o. r.	o. r.	o. r.
98919	DC 35-10	35,0	10,5	8,2	19,0	42,0	20,0	33,4	50	o. r.	o. r.	o. r.
93212	DC 35-12	35,0	13,0	8,2	21,0	42,0	20,0	32,1	50	o. r.	o. r.	o. r.
93213	DC 50-12	50,0	13,0	10,0	24,0	52,0	28,0	50,6	50	o. r.	o. r.	o. r.
93214	DC 70-12	70,0	13,0	11,5	24,0	55,0	28,0	68,0	25	o. r.	o. r.	o. r.
93215	DC 95-12	95,0	13,0	13,5	28,0	65,0	35,0	93,3	25	o. r.	o. r.	o. r.
93246	DC 95-16	95,0	17,0	13,5	32,0	65,0	35,0	95,8	25	o. r.	o. r.	o. r.
93247	DC 120-10	120,0	10,5	15,5	32,0	70,0	35,0	113,6	25	o. r.	o. r.	o. r.
93216	DC 120-12	120,0	13,0	15,5	32,0	70,0	35,0	112,8	25	o. r.	o. r.	o. r.
93248	DC 120-16	120,0	17,0	15,5	32,0	70,0	35,0	116,3	25	o. r.	o. r.	o. r.
93249	DC 150-10	150,0	10,5	17,0	34,0	78,0	35,0	169,7	10	o. r.	o. r.	o. r.
93217	DC 150-12	150,0	13,0	17,0	34,0	78,0	35,0	151,6	10	o. r.	o. r.	o. r.
93250	DC 150-16	150,0	17,0	17,0	34,0	78,0	35,0	166,8	10	o. r.	o. r.	o. r.
93251	DC 185-10	185,0	10,5	19,0	37,0	82,0	40,0	189,6	5	o. r.	o. r.	o. r.
93218	DC 185-12	185,0	13,0	19,0	37,0	82,0	40,0	188,9	5	o. r.	o. r.	o. r.
93252	DC 185-16	185,0	17,0	19,0	37,0	82,0	40,0	199,2	5	o. r.	o. r.	o. r.
98918	DC 240-12	240,0	13,0	21,5	42,0	92,0	40,0	275,5	1	o. r.	o. r.	o. r.
93253	DC 240-16	240,0	17,0	21,5	42,0	92,0	40,0	284,4	1	o. r.	o. r.	o. r.
93220	DC 300-16	300,0	17,0	24,5	48,0	100,0	50,0	324,6	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K1 tubular cable lug - straight

not isulated - with inspection hole

Tubular cable lug K1

Non-insulated, straight tubular cable lugs in eye type design. High definition version for reliable crimping.

Material

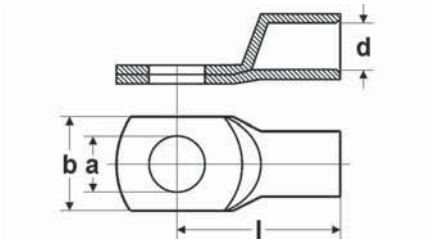
Copper
Surface: tinned

Properties

- With inspection hole

Technical data

Temperature range: up to +120°C



Diameter

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904497	K1 0,75-3	0,75	3,2	1,3	6,0	12,0	-	0,6	100	o. r.	o. r.	o. r.
904498	K1 0,75-4	0,75	4,3	1,3	6,5	13,0	-	0,6	100	o. r.	o. r.	o. r.
904499	K1 0,75-5	0,75	5,5	1,3	7,5	14,0	-	0,6	100	o. r.	o. r.	o. r.
904500	K1 1,5-3	1,5	3,2	1,8	6,5	12,0	-	0,8	100	o. r.	o. r.	o. r.
904501	K1 1,5-4	1,5	4,3	1,8	6,5	13,0	-	0,8	100	o. r.	o. r.	o. r.
904502	K1 1,5-5	1,5	5,3	1,8	7,5	14,0	-	0,8	100	o. r.	o. r.	o. r.
904503	K1 1,5-6	1,5	6,5	1,8	9,0	16,0	-	0,9	100	o. r.	o. r.	o. r.
904504	K1 2,5-3	2,5	3,2	2,3	7,5	12,0	-	1,2	100	o. r.	o. r.	o. r.
904505	K1 2,5-4	2,5	4,3	2,3	7,5	13,0	-	1,2	100	o. r.	o. r.	o. r.
904506	K1 2,5-5	2,5	5,3	2,3	8,5	14,0	-	1,3	100	o. r.	o. r.	o. r.
904507	K1 2,5-6	2,5	6,5	2,3	9,5	16,0	-	1,5	100	o. r.	o. r.	o. r.
904508	K1 2,5-8	2,5	8,5	2,3	13,0	20,0	-	1,8	100	o. r.	o. r.	o. r.
904509	K1 4-4	4,0	4,3	3,0	8,5	18,0	-	2,1	100	o. r.	o. r.	o. r.
904510	K1 4-5	4,0	5,3	3,0	9,0	18,0	-	2,1	100	o. r.	o. r.	o. r.
904511	K1 4-6	4,0	6,5	3,0	10,0	19,0	-	2,2	100	o. r.	o. r.	o. r.
904512	K1 4-8	4,0	8,5	3,0	13,0	22,0	-	2,8	100	o. r.	o. r.	o. r.
904513	K1 6-4	6,0	4,3	4,0	9,5	18,0	-	2,9	100	o. r.	o. r.	o. r.
904514	K1 6-5	6,0	5,3	4,0	9,5	19,0	-	3,0	100	o. r.	o. r.	o. r.
904515	K1 6-6	6,0	6,5	4,0	10,0	19,0	-	3,0	100	o. r.	o. r.	o. r.
904516	K1 6-8	6,0	8,8	4,0	14,0	22,0	-	3,2	100	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K2 tubular cable lug - straight
not insulated

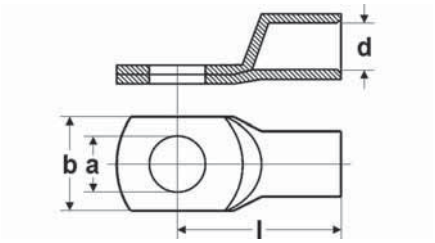
Tubular cable lug K2
Non-insulated tubular cable lugs in eye type design. High definition version for reliable crimping.

Material
Copper
Surface: tinned

Properties
- Without inspection hole

Note
Also available in angulated version (45° and 90°).

Technical data
Temperature range: up to +120°C



Abmessungen

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904517	K2 6-5	6,0	5,5	3,5	10,0	21,0	-	5,0	100	o. r.	o. r.	o. r.
904518	K2 6-6	6,0	6,5	3,5	12,0	21,0	-	4,7	100	o. r.	o. r.	o. r.
904519	K2 6-8	6,0	8,5	3,5	15,0	23,0	-	5,4	100	o. r.	o. r.	o. r.
904520	K2 6-10	6,0	10,5	3,5	17,0	25,0	-	5,9	100	o. r.	o. r.	o. r.
904521	K2 6-12	6,0	13,0	3,5	19,0	28,0	-	6,3	100	o. r.	o. r.	o. r.
904522	K2 10-5	10,0	5,5	4,5	12,0	22,0	-	5,0	100	o. r.	o. r.	o. r.
904523	K2 10-6	10,0	6,5	4,5	12,0	22,0	-	4,9	100	o. r.	o. r.	o. r.
904524	K2 10-8	10,0	8,5	4,5	15,0	25,0	-	5,8	100	o. r.	o. r.	o. r.
904525	K2 10-10	10,0	10,5	4,5	17,0	27,0	-	6,2	100	o. r.	o. r.	o. r.
904526	K2 10-12	10,0	13,0	4,5	19,0	29,0	-	6,4	100	o. r.	o. r.	o. r.
904527	K2 16-5	16,0	5,5	5,5	12,0	26,0	-	8,4	100	o. r.	o. r.	o. r.
904528	K2 16-6	16,0	6,5	5,5	12,0	27,0	-	8,6	100	o. r.	o. r.	o. r.
904529	K2 16-8	16,0	8,5	5,5	15,0	29,0	-	9,3	100	o. r.	o. r.	o. r.
904530	K2 16-10	16,0	10,5	5,5	17,0	31,0	-	9,9	100	o. r.	o. r.	o. r.
904531	K2 16-12	16,0	13,0	5,5	19,0	33,0	-	10,2	100	o. r.	o. r.	o. r.
904532	K2 25-5	25,0	5,5	7,0	14,0	30,0	-	12,2	25	o. r.	o. r.	o. r.
904533	K2 25-6	25,0	6,5	7,0	14,0	30,0	-	12,0	100	o. r.	o. r.	o. r.
904534	K2 25-8	25,0	8,5	7,0	16,0	32,0	-	13,1	100	o. r.	o. r.	o. r.
904535	K2 25-10	25,0	10,5	7,0	18,0	34,0	-	15,7	100	o. r.	o. r.	o. r.
904536	K2 25-12	25,0	13,0	7,0	19,0	35,0	-	13,9	25	o. r.	o. r.	o. r.
904537	K2 25-14	25,0	15,0	7,0	21,0	38,0	-	14,9	25	o. r.	o. r.	o. r.
904538	K2 35-6	35,0	6,5	8,5	17,0	32,0	-	18,5	100	o. r.	o. r.	o. r.
904539	K2 35-8	35,0	8,5	8,5	17,0	34,0	-	20,0	100	o. r.	o. r.	o. r.
904540	K2 35-10	35,0	10,5	8,5	19,0	37,0	-	21,3	100	o. r.	o. r.	o. r.
904541	K2 35-12	35,0	13,0	8,5	21,0	38,0	-	21,2	100	o. r.	o. r.	o. r.
904542	K2 35-14	35,0	15,0	8,5	21,0	40,0	-	21,8	25	o. r.	o. r.	o. r.
904543	K2 35-16	35,0	17,0	8,5	26,0	42,0	-	22,4	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

K2 tubular cable lug - straight

not insulated

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904544	K2 50-6	50,0	6,5	10,0	20,0	37,0	-	30,0	25	o. r.	o. r.	o. r.
904545	K2 50-8	50,0	8,5	10,0	20,0	37,0	-	29,3	50	o. r.	o. r.	o. r.
904546	K2 50-10	50,0	10,5	10,0	20,0	39,0	-	30,8	50	o. r.	o. r.	o. r.
904547	K2 50-12	50,0	13,0	10,0	23,0	43,0	-	32,3	50	o. r.	o. r.	o. r.
904548	K2 50-14	50,0	15,0	10,0	23,0	45,0	-	33,2	25	o. r.	o. r.	o. r.
904549	K2 50-16	50,0	17,0	10,0	28,0	46,0	-	33,8	25	o. r.	o. r.	o. r.
904550	K2 50-20	50,0	21,0	10,0	30,0	48,0	-	34,6	25	o. r.	o. r.	o. r.
904551	K2 70-6	70,0	6,5	12,0	23,0	43,0	-	44,9	25	o. r.	o. r.	o. r.
904552	K2 70-8	70,0	8,5	12,0	23,0	43,0	-	43,8	50	o. r.	o. r.	o. r.
904553	K2 70-10	70,0	10,5	12,0	23,0	44,0	-	45,4	50	o. r.	o. r.	o. r.
904554	K2 70-12	70,0	13,0	12,0	23,0	46,0	-	46,3	50	o. r.	o. r.	o. r.
904555	K2 70-14	70,0	15,0	12,0	23,0	48,0	-	47,6	25	o. r.	o. r.	o. r.
904556	K2 70-16	70,0	17,0	12,0	28,0	50,0	-	42,4	25	o. r.	o. r.	o. r.
904557	K2 70-20	70,0	21,0	12,0	30,0	53,0	-	50,9	25	o. r.	o. r.	o. r.
904558	K2 95-8	95,0	8,5	13,5	26,0	48,0	-	54,4	25	o. r.	o. r.	o. r.
904559	K2 95-10	95,0	10,5	13,5	26,0	48,0	-	54,0	50	o. r.	o. r.	o. r.
904560	K2 95-12	95,0	13,0	13,5	26,0	49,0	-	55,6	50	o. r.	o. r.	o. r.
904561	K2 95-14	95,0	15,0	13,5	26,0	51,0	-	56,2	25	o. r.	o. r.	o. r.
904562	K2 95-16	95,0	17,0	13,5	28,0	54,0	-	58,2	50	o. r.	o. r.	o. r.
904563	K2 95-20	95,0	21,0	13,5	36,0	60,0	-	67,1	25	o. r.	o. r.	o. r.
904564	K2 120-8	120,0	8,5	15,0	28,0	51,0	-	67,2	25	o. r.	o. r.	o. r.
904565	K2 120-10	120,0	10,5	15,0	28,0	51,0	-	65,7	50	o. r.	o. r.	o. r.
904566	K2 120-12	120,0	13,0	15,0	28,0	51,0	-	63,8	50	o. r.	o. r.	o. r.
904567	K2 120-14	120,0	15,0	15,0	28,0	52,0	-	64,5	25	o. r.	o. r.	o. r.
904568	K2 120-16	120,0	17,0	15,0	30,0	54,0	-	65,1	50	o. r.	o. r.	o. r.
904569	K2 120-20	120,0	21,0	15,0	36,0	63,0	-	77,4	25	o. r.	o. r.	o. r.
904570	K2 150-8	150,0	8,5	16,5	31,0	56,0	-	77,8	10	o. r.	o. r.	o. r.
904571	K2 150-10	150,0	10,5	16,5	31,0	56,0	-	76,2	10	o. r.	o. r.	o. r.
904572	K2 150-12	150,0	13,0	16,5	31,0	57,0	-	77,3	25	o. r.	o. r.	o. r.
904573	K2 150-14	150,0	15,0	16,5	31,0	57,0	-	76,4	10	o. r.	o. r.	o. r.
904574	K2 150-16	150,0	17,0	16,5	31,0	58,0	-	75,3	10	o. r.	o. r.	o. r.
904575	K2 150-20	150,0	21,0	16,5	36,0	66,0	-	88,0	10	o. r.	o. r.	o. r.
904576	K2 185-10	185,0	10,5	19,0	35,0	65,0	-	117,5	10	o. r.	o. r.	o. r.
904577	K2 185-12	185,0	13,0	19,0	35,0	65,0	-	118,2	10	o. r.	o. r.	o. r.
904578	K2 185-14	185,0	15,0	19,0	35,0	65,0	-	113,9	10	o. r.	o. r.	o. r.
904579	K2 185-16	185,0	17,0	19,0	35,0	65,0	-	112,4	25	o. r.	o. r.	o. r.
904580	K2 185-20	185,0	21,0	19,0	39,0	69,0	-	120,0	10	o. r.	o. r.	o. r.
904581	K2 240-10	240,0	10,5	21,0	39,0	72,0	-	147,2	10	o. r.	o. r.	o. r.
904582	K2 240-12	240,0	13,0	21,0	39,0	72,0	-	145,5	10	o. r.	o. r.	o. r.
904583	K2 240-14	240,0	15,0	21,0	39,0	72,0	-	142,4	10	o. r.	o. r.	o. r.
904584	K2 240-16	240,0	17,0	21,0	39,0	72,0	-	140,9	25	o. r.	o. r.	o. r.
904585	K2 240-20	240,0	21,0	21,0	39,0	72,0	-	136,0	10	o. r.	o. r.	o. r.
904586	K2 300-12	300,0	13,0	23,5	43,0	87,0	-	233,3	5	o. r.	o. r.	o. r.
904587	K2 300-14	300,0	15,0	23,5	43,0	87,0	-	231,4	5	o. r.	o. r.	o. r.
904588	K2 300-16	300,0	17,0	23,5	43,0	87,0	-	227,4	5	o. r.	o. r.	o. r.
904589	K2 300-20	300,0	21,0	23,5	43,0	87,0	-	221,9	5	o. r.	o. r.	o. r.
904590	K2 400-12	400,0	13,0	27,0	49,0	90,0	-	324,1	5	o. r.	o. r.	o. r.
904591	K2 400-14	400,0	15,0	27,0	49,0	90,0	-	322,4	5	o. r.	o. r.	o. r.
904592	K2 400-16	400,0	17,0	27,0	49,0	90,0	-	319,8	5	o. r.	o. r.	o. r.
904593	K2 400-20	400,0	21,0	27,0	49,0	90,0	-	314,1	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KF tubular cable lug for fine stranded wires - straight

not insulated

Tubular cable lug KF

Non-insulated, straight tubular cable lugs in eye type design. High definition version for reliable crimping of fine stranded wires. The expanded sleeve facilitates cable inlet.

Material

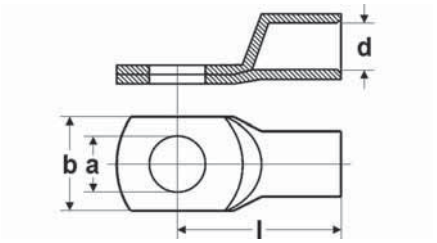
Copper
Surface: tinned

Properties

- without inspection hole

Technical data

Temperature range: up to +120°C



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable insertion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904594	KF10-5	10,0	5,3	5,5	12,0	27,0	-	7,2	100	o. r.	o. r.	o. r.
904595	KF10-6	10,0	6,5	5,5	12,0	27,0	-	7,1	100	o. r.	o. r.	o. r.
904596	KF10-8	10,0	8,5	5,5	16,0	29,0	-	7,7	100	o. r.	o. r.	o. r.
904597	KF10-10	10,0	10,5	5,5	16,0	31,0	-	8,2	100	o. r.	o. r.	o. r.
904598	KF10-12	10,0	13,0	5,5	19,0	32,0	-	8,2	100	o. r.	o. r.	o. r.
904599	KF16-5	16,0	5,3	6,6	13,0	30,0	-	11,0	100	o. r.	o. r.	o. r.
904600	KF16-6	16,0	6,5	6,6	13,0	30,0	-	10,7	100	o. r.	o. r.	o. r.
904601	KF16-8	16,0	8,5	6,6	16,0	32,0	-	12,1	100	o. r.	o. r.	o. r.
904602	KF16-10	16,0	10,5	6,6	17,0	34,0	-	12,8	100	o. r.	o. r.	o. r.
904603	KF16-12	16,0	13,0	6,6	19,0	35,0	-	12,8	100	o. r.	o. r.	o. r.
904604	KF25-5	25,0	5,3	7,9	15,0	32,0	-	15,2	25	o. r.	o. r.	o. r.
904605	KF25-6	25,0	6,5	7,9	15,0	32,0	-	15,0	100	o. r.	o. r.	o. r.
904606	KF25-8	25,0	8,5	7,9	17,0	34,0	-	16,1	100	o. r.	o. r.	o. r.
904607	KF25-10	25,0	10,5	7,9	17,0	37,0	-	17,1	100	o. r.	o. r.	o. r.
904608	KF25-12	25,0	13,0	7,9	19,0	38,0	-	17,4	25	o. r.	o. r.	o. r.
904609	KF35-6	35,0	6,5	9,2	17,0	35,0	-	19,1	100	o. r.	o. r.	o. r.
904610	KF35-8	35,0	8,5	9,2	18,0	37,0	-	20,8	100	o. r.	o. r.	o. r.
904611	KF35-10	35,0	10,5	9,2	18,0	40,0	-	22,4	100	o. r.	o. r.	o. r.
904612	KF35-12	35,0	13,0	9,2	19,0	41,0	-	22,2	25	o. r.	o. r.	o. r.
904613	KF35-14	35,0	15,0	9,2	21,0	43,0	-	24,1	25	o. r.	o. r.	o. r.
904614	KF50-6	50,0	6,5	11,0	21,0	41,0	-	35,4	25	o. r.	o. r.	o. r.
904615	KF50-8	50,0	8,5	11,0	21,0	41,0	-	34,4	50	o. r.	o. r.	o. r.
904616	KF50-10	50,0	10,5	11,0	21,0	43,0	-	36,4	50	o. r.	o. r.	o. r.
904617	KF50-12	50,0	13,0	11,0	21,0	46,0	-	37,3	50	o. r.	o. r.	o. r.
904618	KF50-14	50,0	15,0	11,0	23,0	48,0	-	38,9	25	o. r.	o. r.	o. r.
904619	KF50-16	50,0	17,0	11,0	28,0	50,0	-	40,2	25	o. r.	o. r.	o. r.

Continuation ▸

o. r. = on request

KF tubular cable lug for fine stranded wires - straight

not insulated

eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904620	KF70-8	70,0	8,5	13,0	25,0	46,0	-	44,6	50	o. r.	o. r.	o. r.
904621	KF70-10	70,0	10,5	13,0	25,0	48,0	-	46,2	50	o. r.	o. r.	o. r.
904622	KF70-12	70,0	13,0	13,0	25,0	50,0	-	47,1	50	o. r.	o. r.	o. r.
904623	KF70-14	70,0	15,0	13,0	25,0	52,0	-	48,7	25	o. r.	o. r.	o. r.
904624	KF70-16	70,0	17,0	13,0	25,0	54,0	-	58,5	25	o. r.	o. r.	o. r.
904625	KF95-8	95,0	8,5	14,5	28,0	52,0	-	63,5	25	o. r.	o. r.	o. r.
904626	KF95-10	95,0	10,5	14,5	28,0	52,0	-	62,3	50	o. r.	o. r.	o. r.
904627	KF95-12	95,0	13,0	14,5	28,0	53,0	-	63,1	50	o. r.	o. r.	o. r.
904628	KF95-14	95,0	15,0	14,5	28,0	55,0	-	64,6	25	o. r.	o. r.	o. r.
904629	KF95-16	95,0	17,0	14,5	28,0	56,0	-	65,6	50	o. r.	o. r.	o. r.
904630	KF120-10	120,0	10,5	16,2	30,0	57,0	-	83,1	50	o. r.	o. r.	o. r.
904631	KF120-12	120,0	13,0	16,2	30,0	58,0	-	83,9	50	o. r.	o. r.	o. r.
904632	KF120-14	120,0	15,0	16,2	30,0	58,0	-	80,6	25	o. r.	o. r.	o. r.
904633	KF120-16	120,0	17,0	16,2	30,0	59,0	-	81,7	50	o. r.	o. r.	o. r.
904634	KF120-20	120,0	21,0	16,2	36,0	66,0	-	95,6	25	o. r.	o. r.	o. r.
904635	KF150-10	150,0	10,5	18,0	34,0	64,0	-	109,1	10	o. r.	o. r.	o. r.
904636	KF150-12	150,0	13,0	18,0	34,0	65,0	-	108,9	25	o. r.	o. r.	o. r.
904637	KF150-14	150,0	15,0	18,0	34,0	67,0	-	114,2	10	o. r.	o. r.	o. r.
904638	KF150-16	150,0	17,0	18,0	34,0	68,0	-	113,0	10	o. r.	o. r.	o. r.
904639	KF150-20	150,0	21,0	18,0	40,0	70,0	-	113,6	10	o. r.	o. r.	o. r.
904640	KF185-12	185,0	13,0	20,6	39,0	72,0	-	154,0	10	o. r.	o. r.	o. r.
904641	KF185-14	185,0	15,0	20,6	39,0	72,0	-	152,0	10	o. r.	o. r.	o. r.
904642	KF185-16	185,0	17,0	20,6	39,0	72,0	-	150,0	25	o. r.	o. r.	o. r.
904643	KF185-20	185,0	21,0	20,6	39,0	72,0	-	142,0	10	o. r.	o. r.	o. r.
904644	KF240-12	240,0	13,0	23,1	41,0	80,0	-	163,0	10	o. r.	o. r.	o. r.
904645	KF240-14	240,0	15,0	23,1	41,0	83,0	-	168,0	10	o. r.	o. r.	o. r.
904646	KF240-16	240,0	17,0	23,1	41,0	83,0	-	167,1	25	o. r.	o. r.	o. r.
904647	KF240-20	240,0	21,0	23,1	41,0	85,0	-	171,2	10	o. r.	o. r.	o. r.
904648	KF300-12	300,0	13,0	26,1	47,0	96,0	-	256,0	5	o. r.	o. r.	o. r.
904649	KF300-14	300,0	15,0	26,1	47,0	96,0	-	265,6	5	o. r.	o. r.	o. r.
904650	KF300-16	300,0	17,0	26,1	47,0	96,0	-	256,0	5	o. r.	o. r.	o. r.
904651	KF300-20	300,0	21,0	26,1	47,0	96,0	-	262,4	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KH-R sleeves for compacted conductors

not insulated

Sleeve KH-R

Sleeves for compressed strands. Sleeves will be slipped over the strand before crimping with cable lugs type K1 or K2.

Material

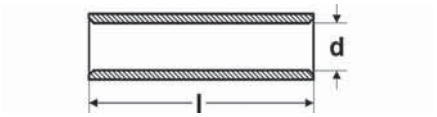
Sleeve: Copper
Surface: tinned

Note

For circular conductors

Technical data

Temperature range: up to +120°C



Dimensions

d Inner diameter of the cable insertion
l Length

KH-R for circular conductors

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904652	KH-R 16	16,0	5,0	11,0	-	0,2	100	o. r.	o. r.	o. r.
904653	KH-R 25	25,0	6,4	14,0	-	0,4	100	o. r.	o. r.	o. r.
904654	KH-R 35	35,0	7,7	15,0	-	0,8	100	o. r.	o. r.	o. r.
904655	KH-4 50	50,0	9,0	18,0	-	1,2	50	o. r.	o. r.	o. r.
904656	KH-R 70	70,0	10,6	19,0	-	1,7	50	o. r.	o. r.	o. r.
904657	KH-R 95	95,0	12,4	21,0	-	2,2	50	o. r.	o. r.	o. r.
904658	KH-R 120	120,0	13,9	22,0	-	2,6	50	o. r.	o. r.	o. r.
904659	KH-R 150	150,0	15,4	26,0	-	3,4	25	o. r.	o. r.	o. r.
904660	KH-R 185	185,0	17,6	26,0	-	4,0	25	o. r.	o. r.	o. r.
904661	KH-R 240	240,0	19,9	30,0	-	5,1	25	o. r.	o. r.	o. r.
904662	KH-R 300	300,0	22,4	38,0	-	7,2	10	o. r.	o. r.	o. r.
904663	KH-R 400	400,0	25,4	38,0	-	11,1	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KH-3, KH-4 sleeves for compacted conductors

not insulated

Sleeves KH-3, KH-4

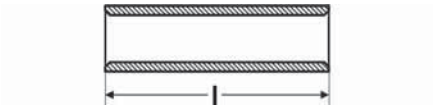
Sleeves for compressed strands.
KH-3: 120°-sleeves for 3-core-cables.
KH-4: 90°-sleeves for 4-core-cables.
Sleeves will be slipped over the strand and circularly pressed, before crimping with cable lugs type K1 or K2.

Material

Sleeve: Copper
Surface: tinned

Technical data

Temperature range: up to +120°C



Dimensions

l Length

KH-3 for 3-core cable

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904664	KH-3 35	35,0	-	14,0	-	0,8	100	o. r.	o. r.	o. r.
904665	KH-3 50	50,0	-	17,0	-	1,7	50	o. r.	o. r.	o. r.
904666	KH-3 70	70,0	-	18,0	-	2,9	50	o. r.	o. r.	o. r.
904667	KH-3 95	95,0	-	22,0	-	4,5	50	o. r.	o. r.	o. r.
904668	KH-3 120	120,0	-	23,0	-	4,9	50	o. r.	o. r.	o. r.
904669	KH-3 150	150,0	-	25,0	-	5,8	25	o. r.	o. r.	o. r.
904670	KH-3 185	185,0	-	25,0	-	8,0	25	o. r.	o. r.	o. r.
904671	KH-3 240	240,0	-	30,0	-	10,4	25	o. r.	o. r.	o. r.

KH-4 for 4-core cable

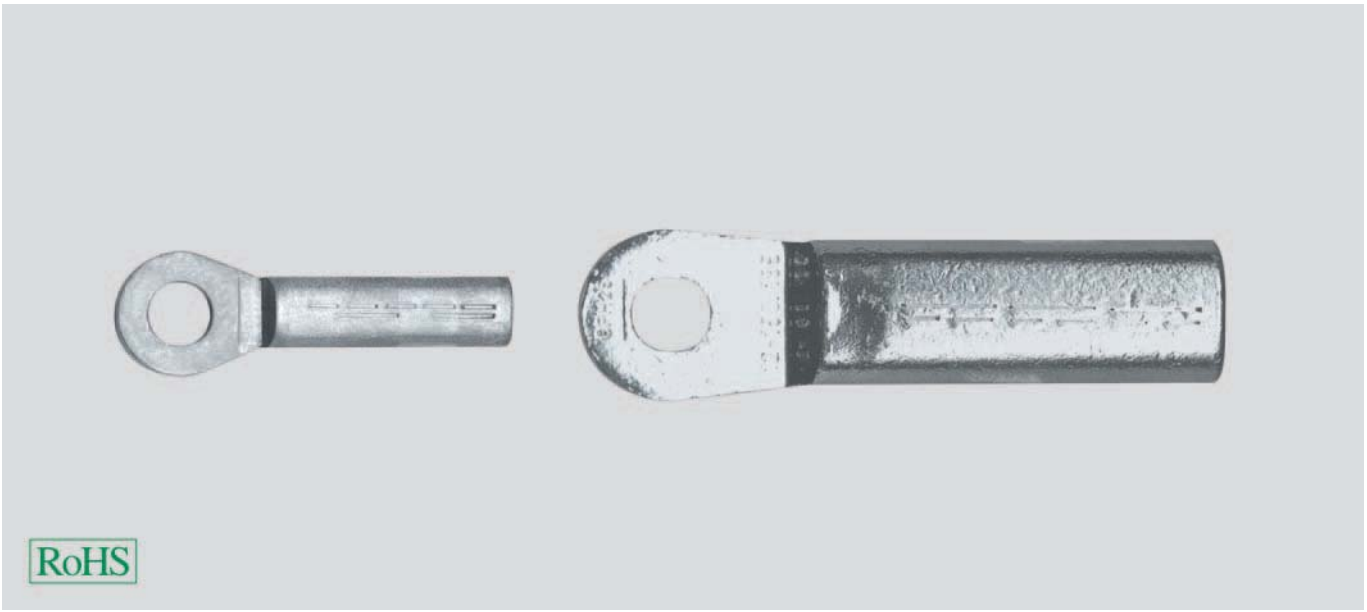
Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904672	KH-4 35	35,0	-	14,0	-	1,3	100	o. r.	o. r.	o. r.
904673	KH-4 50	50,0	-	17,0	-	1,7	50	o. r.	o. r.	o. r.
904674	KH-4 70	70,0	-	18,0	-	2,8	50	o. r.	o. r.	o. r.
904675	KH-4 95	95,0	-	22,0	-	4,0	50	o. r.	o. r.	o. r.
904676	KH-4 120	120,0	-	23,0	-	5,1	50	o. r.	o. r.	o. r.
904677	KH-4 150	150,0	-	25,0	-	5,7	25	o. r.	o. r.	o. r.
904678	KH-4 185	185,0	-	25,0	-	7,8	25	o. r.	o. r.	o. r.
904679	KH-4 240	240,0	-	30,0	-	8,5	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KA aluminum compression cable lug - straight

not insulated



RoHS

Tubular cable lug KA

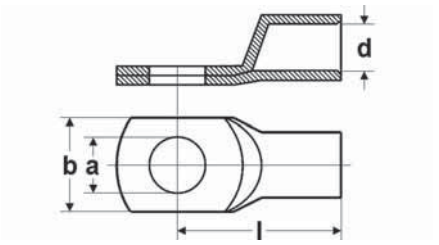
Non-insulated, straight tubular cable lugs in eye type design made by aluminum. High definition version for reliable crimping. Designed for conductor type RM acc. to DIN 48201 and circulary reshaped conductors.

Material

Aluminium
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.



Dimensions

a	Diameter of the boring
d	Inner diameter of the cable inclusion
b	Flange width
l	Length till middle of the boring

eye type

Part no.	Type	Cross-section RM/SM - SE mm²	a mm	d mm	b mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
904695	KA 10-6	10,0	6,5	5,0	16,0	52,0	10,0	8,6	25	o. r.	o. r.	o. r.
904696	KA 10-8	10,0	8,5	5,0	18,0	52,0	10,0	8,8	25	o. r.	o. r.	o. r.
904697	KA 16-8	16,0 - 25,0	8,5	5,8	18,0	52,0	12,0	13,7	10	o. r.	o. r.	o. r.
904698	KA 16-10	16,0 - 25,0	10,5	5,8	18,0	52,0	12,0	13,9	10	o. r.	o. r.	o. r.
904699	KA 25-8	25,0 - 35,0	8,5	6,8	18,0	60,0	12,0	14,1	10	o. r.	o. r.	o. r.
904700	KA 25-10	25,0 - 35,0	10,5	6,8	18,0	60,0	12,0	14,6	10	o. r.	o. r.	o. r.
904701	KA 35-10	35,0 - 50,0	10,5	8,0	21,0	67,0	14,0	20,8	10	o. r.	o. r.	o. r.
904702	KA 35-12	35,0 - 50,0	13,0	8,0	21,0	67,0	14,0	20,5	10	o. r.	o. r.	o. r.
904703	KA 50-10	50,0 - 70,0	10,5	9,8	25,0	72,0	16,0	26,8	10	o. r.	o. r.	o. r.
904704	KA 50-12	50,0 - 70,0	13,0	9,8	25,0	72,0	16,0	27,3	10	o. r.	o. r.	o. r.
904705	KA 70-10	70,0 - 95,0	10,5	11,2	28,0	86,0	18,0	44,2	10	o. r.	o. r.	o. r.
904706	KA 70-12	70,0 - 95,0	13,0	11,2	28,0	86,0	18,0	42,7	10	o. r.	o. r.	o. r.
904707	KA 95-10	95,0 - 120,0	10,5	13,2	32,0	90,0	22,0	74,0	4	o. r.	o. r.	o. r.
904708	KA 95-12	95,0 - 120,0	13,0	13,2	32,0	90,0	22,0	75,0	4	o. r.	o. r.	o. r.
904709	KA 95-16	95,0 - 120,0	17,0	13,2	34,0	90,0	22,0	73,0	4	o. r.	o. r.	o. r.
904710	KA 120-12	120,0 - 150,0	13,0	14,7	32,0	91,0	22,0	66,8	4	o. r.	o. r.	o. r.
904711	KA 120-16	120,0 - 150,0	17,0	14,7	34,0	91,0	22,0	64,1	4	o. r.	o. r.	o. r.
904712	KA 150-12	150,0 - 185,0	13,0	16,3	35,0	103,0	25,0	96,4	4	o. r.	o. r.	o. r.
904713	KA 150-16	150,0 - 185,0	17,0	16,3	35,0	103,0	25,0	92,4	4	o. r.	o. r.	o. r.
904714	KA 150-20	150,0 - 185,0	21,0	16,3	41,0	103,0	25,0	94,0	4	o. r.	o. r.	o. r.
904715	KA 185-12	185,0 - 240,0	13,0	18,3	40,0	106,0	28,0	126,1	1	o. r.	o. r.	o. r.
904716	KA 185-16	185,0 - 240,0	17,0	18,3	40,0	106,0	28,0	119,2	1	o. r.	o. r.	o. r.
904717	KA 185-20	185,0 - 240,0	21,0	18,3	40,0	106,0	28,0	131,0	1	o. r.	o. r.	o. r.
904718	KA 240-12	240,0 - 300,0	13,0	21,0	45,0	116,0	32,0	183,0	1	o. r.	o. r.	o. r.
904719	KA 240-16	240,0 - 300,0	17,0	21,0	45,0	116,0	32,0	176,0	1	o. r.	o. r.	o. r.
904720	KA 240-20	240,0 - 300,0	21,0	21,0	45,0	116,0	32,0	173,0	1	o. r.	o. r.	o. r.
904721	KA 300-16	300,0	17,0	23,3	49,0	124,0	34,0	175,0	1	o. r.	o. r.	o. r.
904722	KA 300-20	300,0	21,0	23,3	49,0	124,0	34,0	173,0	1	o. r.	o. r.	o. r.

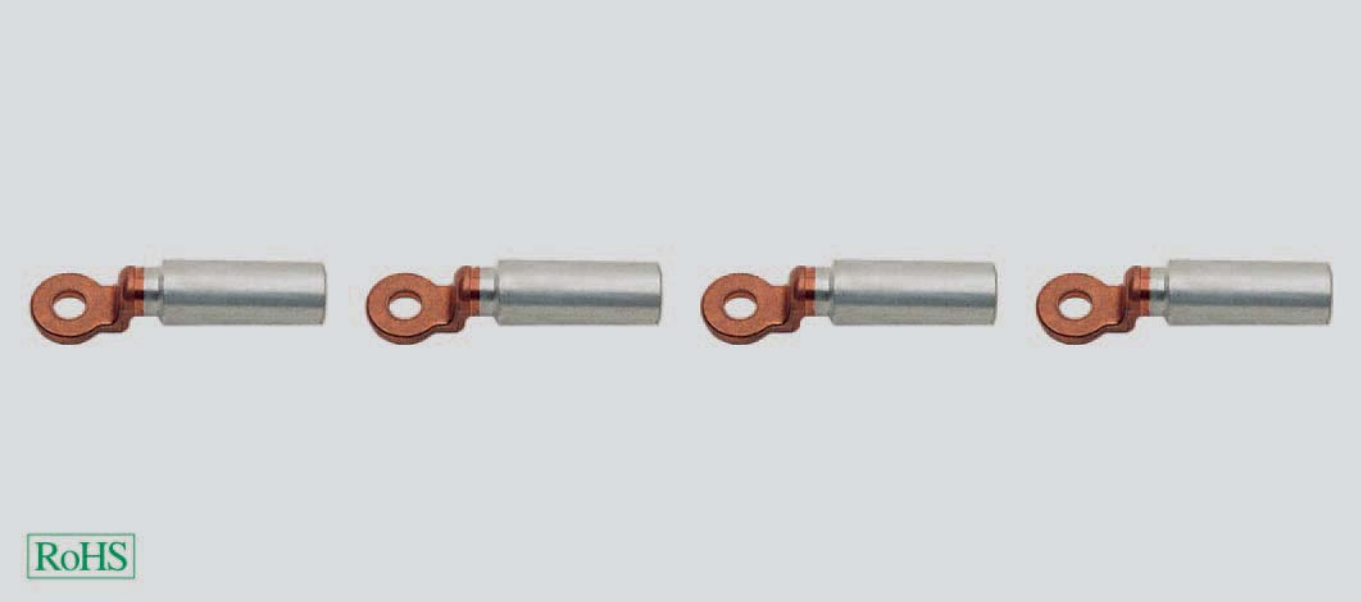
Dimensions and specifications may be changed without prior notice.

o. r. = on request

KAC AL/CU-compression cable lug - straight

not insulated

new



Tubular cable lug KAC

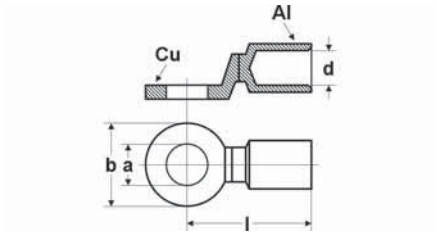
Non-insulated, straight tubular cable lugs in eye type design mady by aluminium. High definition version for reliable crimping. Barrier design with oil stop with solid copper screw-on palm.

Material

Aluminium / copper
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.



Diameter

a	Diameter of the boring
d	Inner diameter of the cable inclusion
b	Flange width
l	Length till middle of the boring

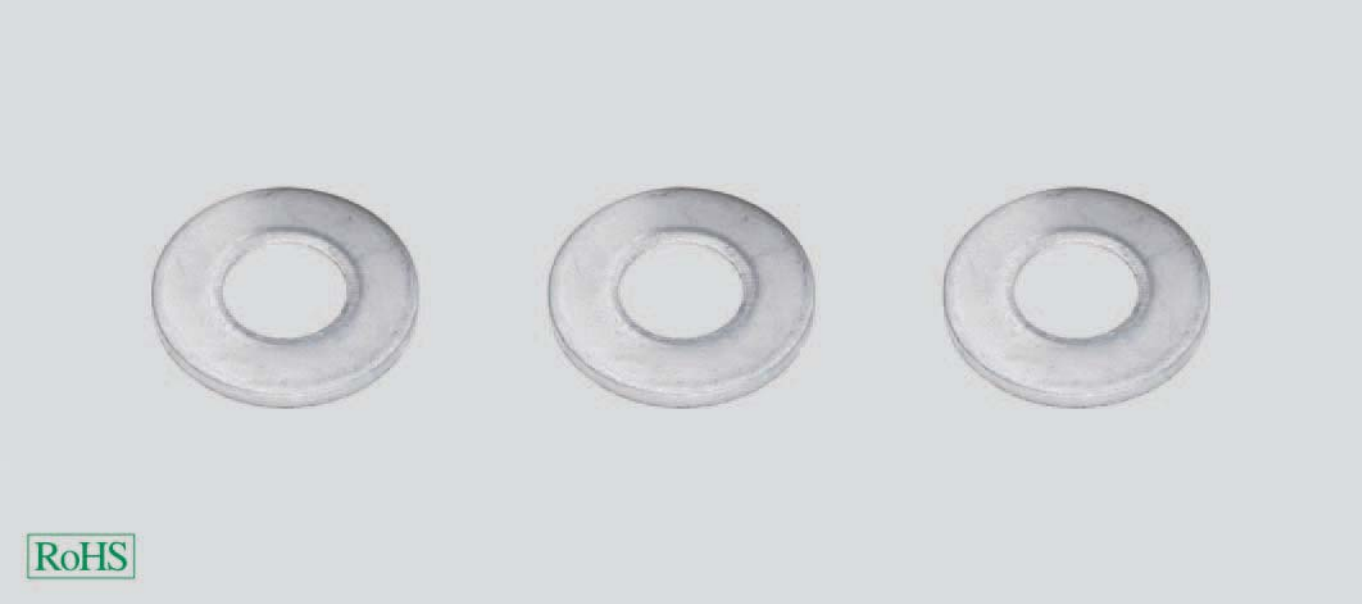
eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	l mm	Code type	Cu-Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 500	501 - 1000	1001 - 5000
906021	KAC 16-8	16,0	8,5	6,0	25,0	67,5	12,0	44,0	10	o. r.	o. r.	o. r.
906022	KAC 16-10	16,0	10,5	6,0	25,0	67,5	12,0	42,0	10	o. r.	o. r.	o. r.
906023	KAC 25-8	25,0	8,5	6,8	25,0	67,5	12,0	44,0	10	o. r.	o. r.	o. r.
906024	KAC 25-10	25,0	10,5	6,8	25,0	67,5	12,0	42,0	10	o. r.	o. r.	o. r.
906025	KAC 25-12	25,0	13,0	6,8	25,0	67,5	12,0	39,0	10	o. r.	o. r.	o. r.
906026	KAC 35-8	35,0	8,5	8,0	25,0	76,5	14,0	44,0	10	o. r.	o. r.	o. r.
906027	KAC 35-10	35,0	10,5	8,0	25,0	76,5	14,0	42,0	10	o. r.	o. r.	o. r.
906028	KAC 35-12	35,0	13,0	8,0	25,0	76,5	14,0	38,0	10	o. r.	o. r.	o. r.
906030	KAC 50-10	50,0	10,5	9,8	25,0	76,5	16,0	42,0	10	o. r.	o. r.	o. r.
906029	KAC 50-8	50,0	8,5	9,8	25,0	76,5	16,0	44,0	10	o. r.	o. r.	o. r.
906031	KAC 50-12	50,0	13,0	9,8	25,0	76,5	16,0	39,0	10	o. r.	o. r.	o. r.
906032	KAC 70-10	70,0	10,5	11,2	25,0	84,5	18,0	42,0	10	o. r.	o. r.	o. r.
906033	KAC 70-12	70,0	13,0	11,2	25,0	84,5	18,0	39,0	10	o. r.	o. r.	o. r.
906035	KAC 95-12	95,0	13,0	13,2	30,0	90,5	22,0	68,0	10	o. r.	o. r.	o. r.
906034	KAC 95-10	95,0	10,5	13,2	30,0	90,5	22,0	74,0	10	o. r.	o. r.	o. r.
906036	KAC 95-16	95,0	17,0	13,2	30,0	90,5	22,0	64,0	10	o. r.	o. r.	o. r.
906037	KAC 120-12	120,0	13,0	14,7	30,0	92,0	22,0	68,0	5	o. r.	o. r.	o. r.
906038	KAC 120-16	120,0	17,0	14,7	30,0	92,0	22,0	64,0	5	o. r.	o. r.	o. r.
906039	KAC 150-12	150,0	13,0	16,3	30,0	104,0	25,0	68,0	5	o. r.	o. r.	o. r.
906040	KAC 150-16	150,0	17,0	16,3	30,0	104,0	25,0	64,0	5	o. r.	o. r.	o. r.
906041	KAC 150-20	150,0	21,0	16,3	35,0	107,5	25,0	101,0	5	o. r.	o. r.	o. r.
906042	KAC 185-10	185,0	10,5	18,3	30,0	105,0	28,0	103,0	5	o. r.	o. r.	o. r.
905020	KAC 185-12	185,0	13,0	18,3	30,0	105,0	28,0	101,0	5	o. r.	o. r.	o. r.
905383	KAC 185-16	185,0	17,0	18,3	30,0	105,0	28,0	93,0	5	o. r.	o. r.	o. r.
906043	KAC 185-20	185,0	21,0	18,3	35,0	107,5	28,0	101,0	5	o. r.	o. r.	o. r.
906044	KAC 240-10	240,0	10,5	21,0	35,0	118,5	32,0	121,0	5	o. r.	o. r.	o. r.
905294	KAC 240-12	240,0	13,0	21,0	35,0	118,5	32,0	118,0	5	o. r.	o. r.	o. r.
906045	KAC 240-16	240,0	17,0	21,0	35,0	118,5	32,0	110,0	5	o. r.	o. r.	o. r.
906046	KAC 240-20	240,0	21,0	21,0	35,0	118,5	32,0	101,0	5	o. r.	o. r.	o. r.
904850	KAC 300-12	300,0	13,0	23,3	40,0	123,5	34,0	177,0	1	o. r.	o. r.	o. r.
906047	KAC 300-16	300,0	17,0	23,3	40,0	123,5	34,0	169,0	1	o. r.	o. r.	o. r.
906048	KAC 300-20	300,0	21,0	23,3	40,0	123,5	34,0	160,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KAC-U AL/CU-bi-metallic washer



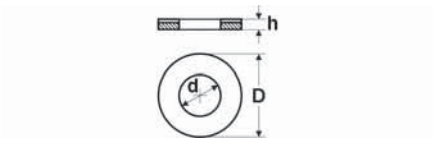
new

Washer KAC-U

Bi-metallic washer for the processing of aluminium-copper materials.
Only for use in dry areas.

Material

E-Al, one side copper plated



Dimensions

D	Outer diameter
d	Inner diameter
h	Height

Part no.	Size	Inner Ø mm	Outer Ø mm	Thickness mm	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
906049	M8 x 1,5	8,5	18,0	1,0	10	o. r.	o. r.	o. r.
906050	M10 x 1,5	11,0	22,0	2,0	10	o. r.	o. r.	o. r.
906051	M12 x 1,5	13,0	28,0	2,0	10	o. r.	o. r.	o. r.
906052	M14 x 1,5	15,0	28,0	2,0	10	o. r.	o. r.	o. r.
906053	M16 x 1,5	17,0	35,0	2,0	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

N nickel tubular cable lug - straight

not insulated

new

Tubular cable lug K2

Non-insulated tubular cable lugs in eye type design. High definition version for reliable crimping.

Material

nickel

Properties

- Without inspection hole

Technical data

Temperature range: up to +500°C

Note

a diameter hole
d clearance
b width
t wall thickness
l length to center of hole

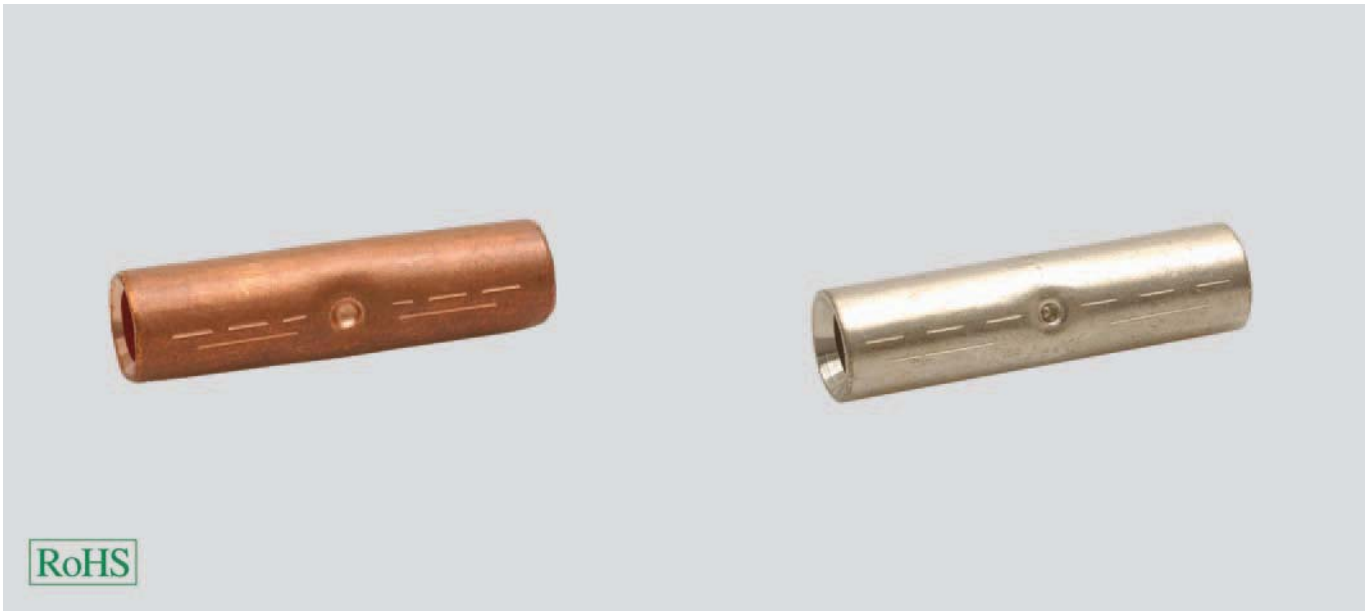
eye type

Part no.	Type	Cross-section mm²	a mm	d mm	b mm	t mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
98267	N 1-4	0.5 - 1	4,3	1,6	6,5	0,8	13,0	-	0,8	100	o. r.	o. r.	o. r.
98268	N 1-5	0.5 - 1	5,3	1,6	7,5	0,8	14,0	-	0,8	100	o. r.	o. r.	o. r.
97805	N 2,5-4	1.5 - 2.5	4,3	2,3	7,0	0,8	13,0	-	1,1	100	o. r.	o. r.	o. r.
97806	N 2,5-5	1.5 - 2.5	5,3	2,3	7,5	0,8	14,0	-	1,1	100	o. r.	o. r.	o. r.
97807	N 2,5-6	1.5 - 2.5	6,5	2,3	9,5	0,8	16,0	-	1,3	100	o. r.	o. r.	o. r.
98269	N 6-4	4 - 6	4,3	3,6	9,5	1,0	18,0	-	2,8	100	o. r.	o. r.	o. r.
97808	N 6-5	4 - 6	5,3	3,6	9,5	1,0	19,0	-	2,8	100	o. r.	o. r.	o. r.
97809	N 6-6	4 - 6	6,5	3,6	9,5	1,0	19,0	-	2,6	100	o. r.	o. r.	o. r.
98270	N 10-5	10,0	5,5	4,5	12,0	1,0	21,0	-	3,4	100	o. r.	o. r.	o. r.
98271	N 10-6	10,0	6,5	4,5	12,0	1,0	22,0	-	3,6	100	o. r.	o. r.	o. r.
98272	N 16-5	16,0	5,5	5,5	12,0	1,0	26,0	-	4,7	100	o. r.	o. r.	o. r.
98273	N 16-6	16,0	6,5	5,5	12,0	1,0	27,0	-	4,8	100	o. r.	o. r.	o. r.
98274	N 16-8	16,0	8,5	5,5	13,5	1,0	29,0	-	5,6	100	o. r.	o. r.	o. r.
98275	N 25-6	25,0	6,5	7,0	14,0	1,5	30,0	-	12,0	50	o. r.	o. r.	o. r.
98276	N 25-8	25,0	8,5	7,0	16,0	1,5	32,0	-	13,2	50	o. r.	o. r.	o. r.
98277	N 35-6	35,0	6,5	8,5	17,0	1,75	32,0	-	18,5	50	o. r.	o. r.	o. r.
98278	N 35-8	35,0	8,5	8,5	17,0	1,75	34,0	-	20,0	50	o. r.	o. r.	o. r.
98279	N 50-8	50,0	8,5	10,0	20,0	2,0	37,0	-	29,0	50	o. r.	o. r.	o. r.
98280	N 50-10	50,0	10,5	10,0	20,0	2,0	39,0	-	31,0	50	o. r.	o. r.	o. r.
98281	N 70-10	70,0	10,5	12,0	23,0	2,25	44,0	-	46,0	25	o. r.	o. r.	o. r.
98282	N 70-12	70,0	13,0	12,0	23,0	2,25	46,0	-	46,6	25	o. r.	o. r.	o. r.
98283	N 95-10	95,0	10,5	13,5	26,0	2,25	48,0	-	55,5	25	o. r.	o. r.	o. r.
98284	N 95-12	95,0	13,0	13,5	26,0	2,25	49,0	-	56,0	25	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

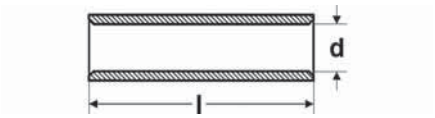
PV-C compression joint
not insulated



Compression joint PV-C
Clamping connection sleeves for unstrained clamping of conductors built to DIN 46267.

Material
copper
Surface: bare or tinned

Note
Code type indicates the required hexagonal clamping insert.



Dimensions
d Inner diameter of the cable inclusion
l Länge

bare

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93276	PV-C 6B	6,0	3,8	30,0	5,0	3,1	100	o. r.	o. r.	o. r.
93277	PV-C 10B	10,0	4,5	30,0	6,0	3,4	100	o. r.	o. r.	o. r.
93278	PV-C 16B	16,0	5,5	50,0	8,0	14,5	100	o. r.	o. r.	o. r.
93279	PV-C 25B	25,0	7,0	50,0	10,0	17,7	50	o. r.	o. r.	o. r.
93280	PV-C 35B	35,0	8,2	50,0	12,0	28,9	50	o. r.	o. r.	o. r.
93281	PV-C 50B	50,0	10,0	56,0	14,0	42,6	50	o. r.	o. r.	o. r.
93282	PV-C 70B	70,0	11,5	56,0	16,0	54,1	50	o. r.	o. r.	o. r.
93283	PV-C 95B	95,0	13,5	70,0	18,0	86,2	25	o. r.	o. r.	o. r.
93284	PV-C 120B	120,0	15,5	70,0	20,0	96,6	25	o. r.	o. r.	o. r.
93285	PV-C 150B	150,0	17,0	80,0	22,0	145,0	10	o. r.	o. r.	o. r.
93286	PV-C 185B	185,0	19,0	85,0	25,0	170,0	10	o. r.	o. r.	o. r.
93287	PV-C 240B	240,0	21,5	90,0	28,0	234,1	10	o. r.	o. r.	o. r.

tinned

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93263	PV-C 6V	6,0	3,8	30,0	5,0	3,4	50	o. r.	o. r.	o. r.
93264	PV-C 10V	10,0	4,5	30,0	6,0	3,4	50	o. r.	o. r.	o. r.
93265	PV-C 16V	16,0	5,5	50,0	8,0	14,9	50	o. r.	o. r.	o. r.
93266	PV-C 25V	25,0	7,0	50,0	10,0	18,0	50	o. r.	o. r.	o. r.
93267	PV-C 35V	35,0	8,2	50,0	12,0	31,5	50	o. r.	o. r.	o. r.
93268	PV-C 50V	50,0	10,0	56,0	14,0	43,7	50	o. r.	o. r.	o. r.
93269	PV-C 70V	70,0	11,5	56,0	16,0	55,4	25	o. r.	o. r.	o. r.
93270	PV-C 95V	95,0	13,5	70,0	18,0	88,4	25	o. r.	o. r.	o. r.
93271	PV-C 120V	120,0	15,5	70,0	20,0	99,2	25	o. r.	o. r.	o. r.
93272	PV-C 150V	150,0	17,0	80,0	22,0	148,6	10	o. r.	o. r.	o. r.
93273	PV-C 185V	185,0	19,0	85,0	25,0	173,5	10	o. r.	o. r.	o. r.
93274	PV-C 240V	240,0	21,5	90,0	28,0	240,3	10	o. r.	o. r.	o. r.
93275	PV-C 300V	300,0	24,5	100,0	32,0	298,6	10	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

PV-CÖ compression joints - with oil stop

not insulated - tinned

RoHS

Compression joint PV-CÖ

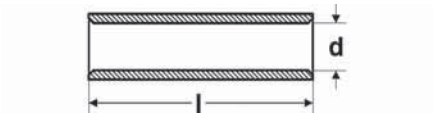
Clamping connection sleeves for clamping conductors built to DIN 46267.
For unstrained connections.
The centre web achieves a total oil stop.

Material

copper
Surface: tinned

Note

Code type indicates the required hexagonal clamping insert.



Dimensions

d Inner diameter of the cable inclusion
l Length

tinned

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
92768	PV-CÖ 16	16,0	5,5	50,0	8,0	15,4	25	o. r.	o. r.	o. r.
92769	PV-CÖ 25	25,0	7,0	50,0	10,0	18,4	25	o. r.	o. r.	o. r.
92770	PV-CÖ 35	35,0	8,2	50,0	12,0	29,9	25	o. r.	o. r.	o. r.
92771	PV-CÖ 50	50,0	10,0	56,0	14,0	44,6	25	o. r.	o. r.	o. r.
92772	PV-CÖ 70	70,0	11,5	56,0	16,0	56,1	25	o. r.	o. r.	o. r.
92773	PV-CÖ 95	95,0	13,5	70,0	18,0	88,8	25	o. r.	o. r.	o. r.
92774	PV-CÖ 120	120,0	15,5	70,0	20,0	100,6	25	o. r.	o. r.	o. r.
92775	PV-CÖ 150	150,0	17,0	80,0	22,0	148,9	5	o. r.	o. r.	o. r.
92776	PV-CÖ 185	185,0	19,0	85,0	25,0	175,7	5	o. r.	o. r.	o. r.
92777	PV-CÖ 240	240,0	21,5	90,0	28,0	242,3	5	o. r.	o. r.	o. r.
92778	PV-CÖ 300	300,0	24,5	100,0	32,0	301,5	5	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

PV-A aluminium compression joint

not insulated

Compression joint PV-A

Clamping connection sleeves for unstrained clamping of conductors built to DIN 46267.

RM/SM and SE conductor

Material

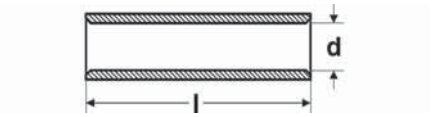
Aluminium
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.
Part No. 93444 and Part No. 93445 are not standardised.

Technical data

Temperature range: up to +120°C



Dimensions

d Inner diameter of the cable inclusion
l Length

bare

Part no.	Type	Cross-section RM/SM mm²	Cross-section SE mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
93444	PV-A 10	10,0	-	5,0	55,0	10,0	9,5	10	o. r.	o. r.	o. r.
93445	PV-A 16	16,0	25,0	5,8	55,0	12,0	14,0	10	o. r.	o. r.	o. r.
93446	PV-A 25	25,0	35,0	6,8	70,0	12,0	16,0	10	o. r.	o. r.	o. r.
93290	PV-A 35	35,0	50,0	8,0	85,0	14,0	26,0	10	o. r.	o. r.	o. r.
93291	PV-A 50	50,0	70,0	9,8	85,0	16,0	32,0	10	o. r.	o. r.	o. r.
93292	PV-A 70	70,0	95,0	11,2	105,0	18,0	53,0	10	o. r.	o. r.	o. r.
93293	PV-A 95	95,0	120,0	13,2	105,0	22,0	76,0	10	o. r.	o. r.	o. r.
93294	PV-A 120	120,0	150,0	14,7	105,0	22,0	78,0	10	o. r.	o. r.	o. r.
93295	PV-A 150	150,0	185,0	16,3	125,0	25,0	107,0	10	o. r.	o. r.	o. r.
93296	PV-A 185	185,0	240,0	18,3	125,0	28,0	143,0	5	o. r.	o. r.	o. r.
93297	PV-A 240	240,0	300,0	21,0	145,0	32,0	203,0	5	o. r.	o. r.	o. r.
93298	PV-A 300	300,0	-	23,3	145,0	34,0	222,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

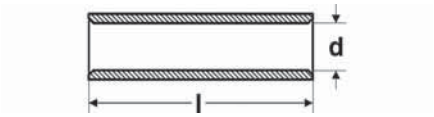
o. r. = on request

PV-CM compression joint
not insulated

Compression joint PV-CM
Clamping connection sleeves for unstrained clamping of Cu medium-range voltage cables 10-30 kV.

Material
copper
Surface: bare

Note
Code type indicates the required hexagonal clamping insert.



Dimensions
d Inner diameter of the cable inclusion
l Length

bare

Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99440	PV-CM 25	25,0	7,5	60,0	12,0	40,8	10	o. r.	o. r.	o. r.
99441	PV-CM 35	35,0	8,2	60,0	12,0	35,6	10	o. r.	o. r.	o. r.
99442	PV-CM 50	50,0	10,0	65,0	14,0	49,0	10	o. r.	o. r.	o. r.
99443	PV-CM 70	70,0	11,5	65,0	16,0	61,0	10	o. r.	o. r.	o. r.
99444	PV-CM 95	95,0	13,5	90,0	18,0	109,8	10	o. r.	o. r.	o. r.
99445	PV-CM 120	120,0	15,5	90,0	20,0	126,8	5	o. r.	o. r.	o. r.
99446	PV-CM 150	150,0	17,0	105,0	22,0	180,9	5	o. r.	o. r.	o. r.
99447	PV-CM 185	185,0	19,0	105,0	25,0	203,5	5	o. r.	o. r.	o. r.
99448	PV-CM 240	240,0	21,5	125,0	28,0	316,4	5	o. r.	o. r.	o. r.
99449	PV-CM 300	300,0	24,5	125,0	32,0	354,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

PV-CMÖ compression joint - with oil stop

not insulated

Compression joint PV-CMÖ

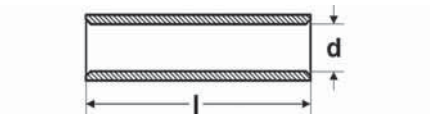
Clamping connection sleeves for unstrained clamping of Cu medium-range voltage cables 10-30 kV.
On the PV-CMÖ, the centre web achieves a total oil stop.

Material

Sleeve: copper
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.



bare - with oil stop

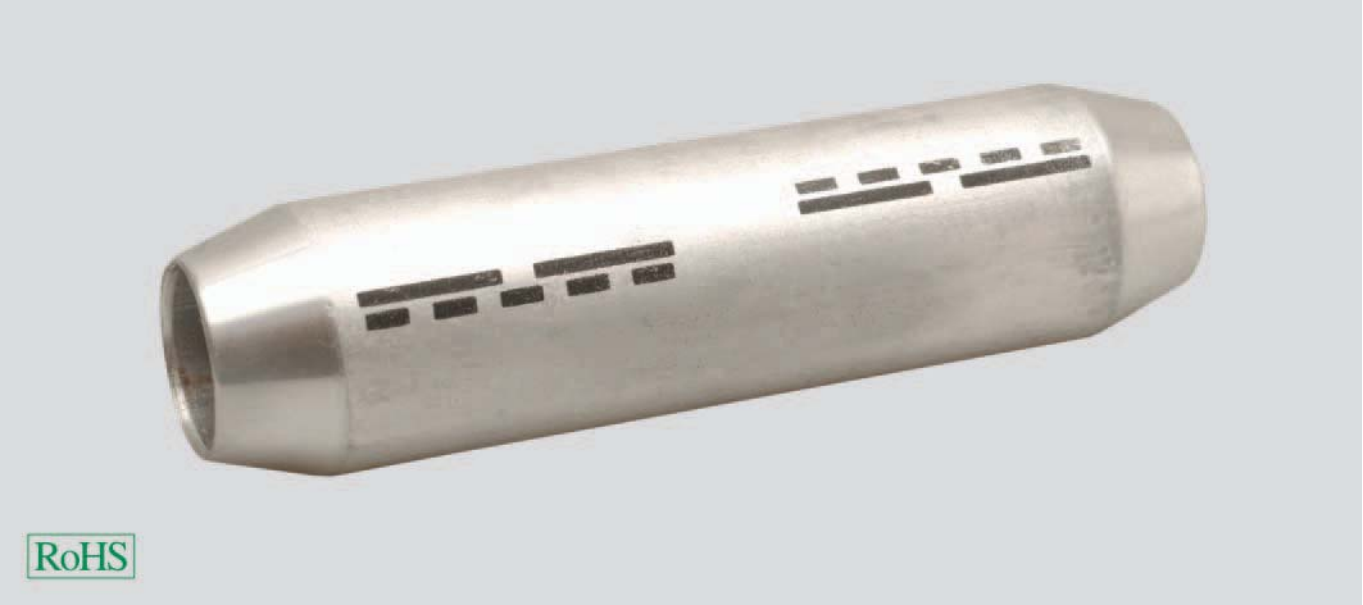
Part no.	Type	Cross-section mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99450	PV-CMÖ 25	25,0	7,5	60,0	12,0	40,8	25	o. r.	o. r.	o. r.
99451	PV-CMÖ 35	35,0	8,2	60,0	12,0	35,6	10	o. r.	o. r.	o. r.
99452	PV-CMÖ 50	50,0	10,0	65,0	14,0	49,0	10	o. r.	o. r.	o. r.
99453	PV-CMÖ 70	70,0	11,5	65,0	16,0	64,0	10	o. r.	o. r.	o. r.
99454	PV-CMÖ 95	95,0	13,5	90,0	18,0	109,8	10	o. r.	o. r.	o. r.
99455	PV-CMÖ 120	120,0	15,5	90,0	20,0	126,8	5	o. r.	o. r.	o. r.
99456	PV-CMÖ 150	150,0	17,0	105,0	22,0	188,4	5	o. r.	o. r.	o. r.
99457	PV-CMÖ 185	185,0	19,0	105,0	25,0	203,5	5	o. r.	o. r.	o. r.
99458	PV-CMÖ 240	240,0	21,5	125,0	28,0	316,4	5	o. r.	o. r.	o. r.
99459	PV-CMÖ 300	300,0	24,5	125,0	32,0	354,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

PV-AM aluminium compression joint

not insulated



Compression joint PV-AM

Clamping connection sleeves for unstrained clamping of Al medium-range voltage cables 10-30 kV.

Material

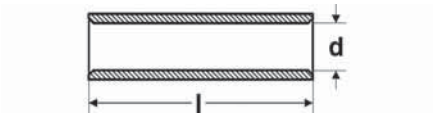
Aluminium
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.

Technical data

Temperature range: up to +120°C



Dimensions

d Inner diameter of the cable inclusion
l Length

bare

Part no.	Type	Cross-section RM/SM mm²	Cross-section SE mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99460	PV-AM 35	35,0	50,0	8,2	90,0	14,0	27,0	10	o. r.	o. r.	o. r.
99461	PV-AM 50	50,0	70,0	10,0	90,0	16,0	34,0	10	o. r.	o. r.	o. r.
99462	PV-AM 70	70,0	95,0	11,5	95,0	18,0	46,0	10	o. r.	o. r.	o. r.
99463	PV-AM 95	95,0	120,0	13,5	100,0	22,0	68,0	10	o. r.	o. r.	o. r.
99464	PV-AM 120	120,0	150,0	15,0	105,0	22,0	74,0	10	o. r.	o. r.	o. r.
99465	PV-AM 150	150,0	185,0	16,5	105,0	25,0	87,0	10	o. r.	o. r.	o. r.
99466	PV-AM 185	185,0	240,0	18,5	125,0	28,0	134,0	5	o. r.	o. r.	o. r.
99467	PV-AM 240	240,0	300,0	21,3	125,0	32,0	157,0	5	o. r.	o. r.	o. r.
99468	PV-AM 300	300,0	-	23,6	125,0	34,0	163,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

PV-AMÖ aluminium compression joint

not insulated

RoHS

Compression joint PV-AMÖ

Clamping connection sleeves for unstrained clamping of Al medium-range voltage cables 10-30 kV.
On the PV-AMÖ, the centre web achieves a total oil stop.

Material

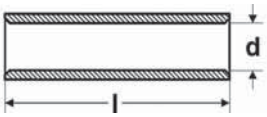
Sleeve: Aluminium
Surface: bare

Note

Code type indicates the required hexagonal clamping insert.

Technical data

Temperature range: up to +120°C



bare - with oil stop

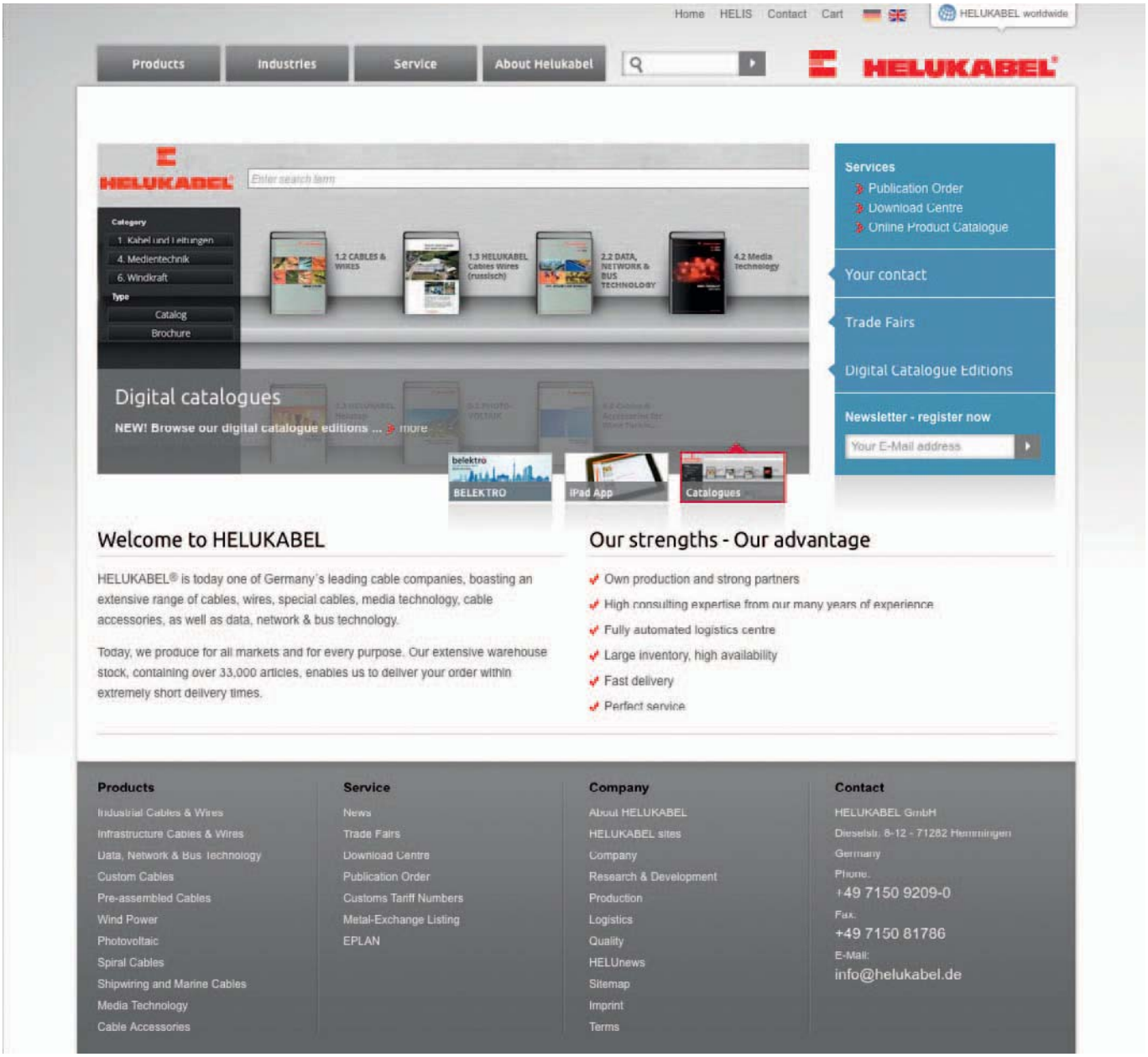
Part no.	Type	Cross-section RM/SM mm²	Cross-section SE mm²	d mm	l mm	Code type	Weight kg / 1000 items	Unit	Net EUR/100 items at a purchase of up to 100	101 - 500	501 - 1000
99470	PV-AMÖ 35	35,0	50,0	8,0	95,0	14,0	31,0	5	o. r.	o. r.	o. r.
99471	PV-AMÖ 50	50,0	70,0	9,8	95,0	16,0	56,0	5	o. r.	o. r.	o. r.
99472	PV-AMÖ 70	70,0	95,0	11,2	100,0	18,0	61,0	5	o. r.	o. r.	o. r.
99473	PV-AMÖ 95	95,0	120,0	13,2	105,0	22,0	92,0	5	o. r.	o. r.	o. r.
99474	PV-AMÖ 120	120,0	150,0	14,7	110,0	22,0	103,0	5	o. r.	o. r.	o. r.
99475	PV-AMÖ 150	150,0	185,0	16,3	110,0	25,0	120,0	5	o. r.	o. r.	o. r.
99476	PV-AMÖ 185	185,0	240,0	18,3	130,0	28,0	156,0	5	o. r.	o. r.	o. r.
99477	PV-AMÖ 240	240,0	300,0	21,0	130,0	32,0	191,0	5	o. r.	o. r.	o. r.
99478	PV-AMÖ 300	300,0	-	23,3	135,0	34,0	307,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Internet presence

You will find everything concerning cable, lines and accessories at www.helukabel.de



You will find all products and much more on the Internet. Whether company information, product data, metal prices, or catalogue requests. We offer the visitor to our Internet site an extensive collection of important information in all things concerning cable, lines, accessories, data technology, network technology & bus technology as soon as HELUROBOTICS.
Simply log in and try it out.
We are looking forward to your visit – www.helukabel.de

Photo: HELUKABEL®

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Tools

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HELUTOOL D15 cable shear

Cable shear HELUTOOL D15

- for cutting cables with diameters up to 15mm.
- forged
- tempered blade with precise finish
- burnished
- plastic coated handle
- Length 170mm
- Weight 210g

cable shear

Part no.	Type	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
903620	HELUTOOL D15	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOOL D20 cable shear

new

Cable shear HELUTOOL D20

- VDE approved, 1000V
- for cutting copper and aluminium cables, single and multi-core
- low handforce required due to favourable lever ratio and special blade geometry
- clean and smooth cut without crushing and deformation
- initial and final cut (upper and lower blade)
- allows cables of up to 20 mm dia. to be cut
- with guard
- handles plastic coated
- precision ground , hardened blades
- adjustable bolted joint, self-retaining screw
- high-grade special tool steel, forged, oil-hardened
- Length 200 mm
- Weight 340 g

cable shear

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
904933	HELUTOOL D20	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KST 1 cable shear

Cable shear KST 1

- with telescopic handles
- for Cu- uad Al-cables, single and multi-core
- cutting ranges up to 26mm
- Length 350 - 520 mm stepless
- Weight 1400 g

cable shear

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
99087	KST 1	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

KT3, KT4 cable shear

Cable shears

KT3

- For cutting cables with diameters up to 32mm
- Length 255mm
- Weight 590g

KT4

- For cutting cables with diameters up to 52mm
- Length 310mm
- Weight 890g

cable shear

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
904728	KT 3	1	o. r.	o. r.	o. r.
904729	KT 4	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

B-TC051 hydraulic shear

Hydraulic shear B-TC051

- Battery operated dual pistons hydraulic shear. Can be used for cables with diameters up to 50mm.
- Long service life
- Revolving head (up to 90°)
- Excess pressure valve as overload protection
- Pressure relief switch
- SOC indicator
- Hinged head for cutting ceaseless material
- Included in delivery: tool, 2 batteries, charger, carrying strap
- Weight hydraulic shear 5,4 kg
- Weight case 2,2 g

hydraulic shear

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
904730	B-TC051	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Electricians scissors for screened cables and wires

EMV

RoHS

new

Electricians scissors

- cuts copper braid shielded cables and wires
- clean cut with serrated edge
- with round wire cutter
- very stable version
- cut from special stainless steel, nickel plated
- handy
- Length 125 mm
- Weight 65 g

electricians scissors

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
905120	Geflechtschere	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Jokari stripping knife

Jokari stripping knife

- for small and large cable diameters

stripping knife

Part no.	Type	Diameter from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
98718	J 16	4,0 - 16,0	1	o. r.	o. r.	o. r.
98719	J 27	8,0 - 28,0	1	o. r.	o. r.	o. r.
98720	J 35	27,0 - 35,0	1	o. r.	o. r.	o. r.
98721	J 50	35,0 - 50,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Jokari with hook stripping knife

Jokari stripping knife

- Practical hook knife for peeling all standard round cables.
- Working range: 8 – 28 mm

stripping knife

Part no.	Type	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
98303	J 28 H	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Jokari round stripping knife

Jokari round stripping knife

Practical and handy knife for peeling all standard round cables.

- J15 for peeling and stripping (0.2-4.0mm²) with integrated slide-out blade.
- J12 for peeling.

stripping knife

Part no.	Type	Diameter from - to mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
98716	J 15	8,0 - 13,0	1	o. r.	o. r.	o. r.
98717	J 12	8,0 - 13,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Stripax-Plus processing tool for core end sleeves

RoHS

Stripax - Plus

- Processing tool for core end sleeves in strip format.
- Universal tool for cutting, stripping and crimping.
- Crimping to DIN 46228
- Length 210 mm
- Weight 260 g

processing tool for core end sleeves

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91923	Stripax-Plus	0,5 - 2,5	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

High Strip stripper

RoHS

High Strip wire strippers

- Automatic wire strippers for conductors with problematic insulation, e.g.: Silicone, rubber, TPE.

Stripper

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
98448	High Strip	0,5 - 4,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Multistrip 10 stripper

Stripper Multistrip 10

- Self adjusting
- For single and multi-core lines made of PVC, rubber etc.
- Adjustable stripping length up to 18mm
- Robust metal clamps
- Ergonomic two-component handle
- Length 195 mm
- Weight 200 g

Stripper

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904731	Multistrip 10	0,03 - 10,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

DUO Stripper 200 peeling and stripping

Duo Stripper 200

The Duo Stripper 200, one tool with 2 functions:
Peeling and stripping.

- Peels all standard round cables from 4-28mm, with adjustable cutting depth and rotating knife for automatic conversion from round to longitudinal sections.
- Stripping from 0.5 to 6.0m².

peeling and stripping

Part no.	Type	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91924	DUO 200	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

DUO Crimp 300 stripping, crimping, shearing

RoHS

DUO Crimp 300

The Duo Crimp 300, one tool with 3 functions:
Stripping, crimping, shearing.

- Stripping from 0.5 to 6.0mm².
- Crimping in 2 clamping ranges (0.5 to 2.5mm² and 4,0 to 6.0mm²)
- Shearing with integrated side cutter

stripping, crimping, shearing

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
97388	DUO-Crimp 300	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOOL PEW 8.84 crimping tool

Crimping tool HELUTOOL PEW 8.84

- burnished
- square crimp profile realized by synchronously driven crimp jaws
- 4 serrated crimp surfaces
- ergonomic two-component handle
- Length 180mm
- Weight 380g

crimping tool

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
903624	HELUTOOL PEW 8.84	0,08 - 10,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

803/0, 803/5, 804 pliers

Crimping pliers type 3/0; 803/5; 804

Type 803 crimping pliers for core end sleeves to DIN 46228 in cross-section 0.25 to 6.0mm².
Type 804 for core end sleeves to DIN 46228 and tubular lugs.

- Cross-section for core end sleeves 0.75 to 16.0mm².
- Cross-section for tubular lugs 0.75 to 2.5mm².

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91602	803/0	0,25 - 2,5	1	o. r.	o. r.	o. r.
91603	803/5	1,5 - 6,0	1	o. r.	o. r.	o. r.
91601	804	0,5 - 16,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

802/0 pliers

Jointing clamp type 802/0

For insulated cable lug, with positive lock.
Clamping range 0.5 to 6.0mm².

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91612	802/0	0,5 - 6,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

802/1 pliers

Jointing clamp type 802/1

For insulated cable lugs, with positive lock
and mechanism for reducing the hand force
by 50% to 250N.
(Durable life, min. 50,000 clampings).
Clamping range 0.5 to 6.0mm².

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91163	802/1	0,5 - 6,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

DEB 0560 pliers

Jointing clamp type DEB 0560

For insulated and non-insulated core end sleeves, for completely safe clamping with positive lock.
Clamping range 0.5 to 6.0mm².

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
97343	DEB 0560	0,5 - 6,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

805/0, 805/2 pliers

RoHS

Crimping pliers type 805/0; 805/2

For non-insulated tubular lugs (standard design) and solderless terminals to DIN 46234, with positive lock.

- Cross-section for tubular lugs 0.75 to 16.0mm².
- Cross-section for solderless terminals 0.5 to 16.0mm².

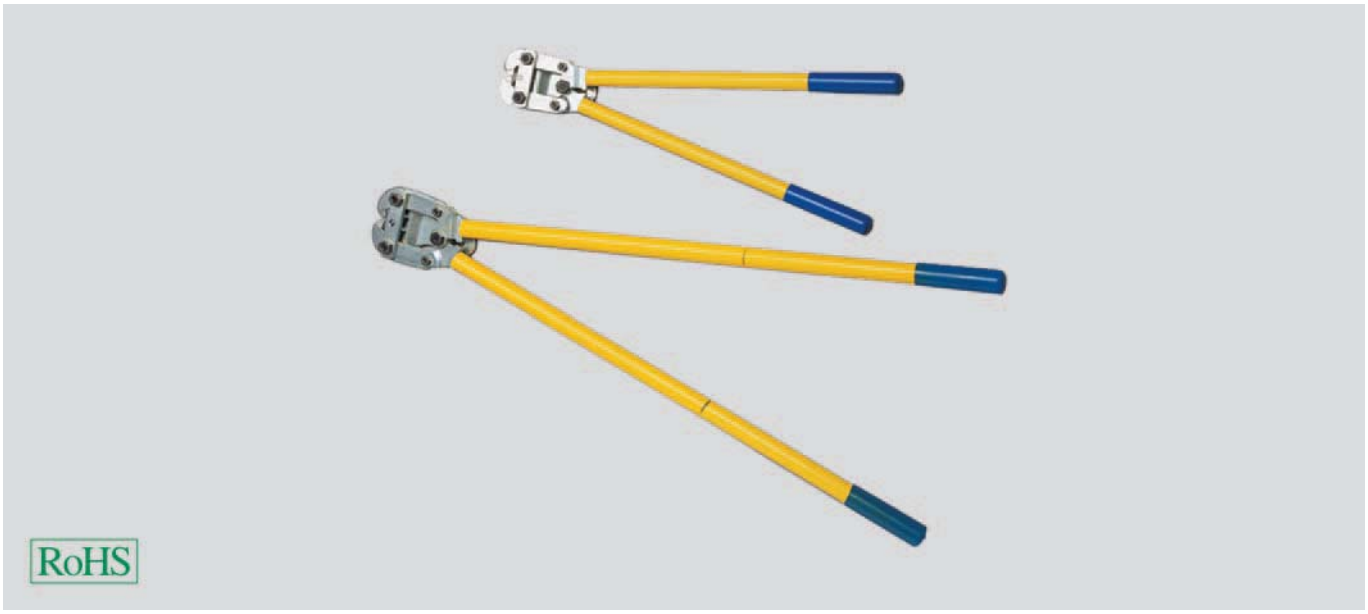
pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91605	805/0	0,75 - 16,0	1	o. r.	o. r.	o. r.
91606	805/2	0,5 - 16,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

806/0, 806/4, 806/8 pliers



Crimping pliers type 806/0, 806/4 and 806/8

For non-insulated terminal lugs (standard design) with rotating profile disk, arbour clamping.

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91607	806/0	6,0 - 50,0	1	o. r.	o. r.	o. r.
91616	806/4	50,0 - 120,0	1	o. r.	o. r.	o. r.
91618	806/8	120,0 - 240,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

807/1, 807/2 pliers

Jointing clamps
type 807/1; 807/2

For non-insulated tubular lugs (standard design) with rotating profile disk, hexagonal clamping.

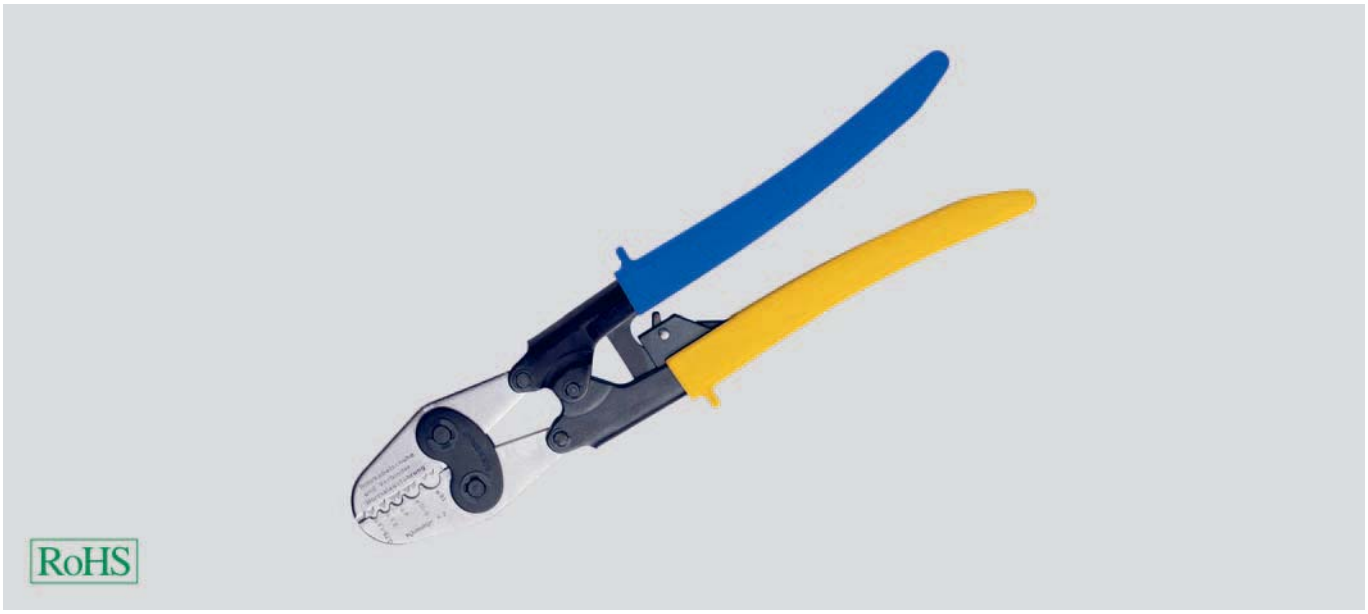
pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
91610	807/1	6,0 - 50,0	1	o. r.	o. r.	o. r.
91611	807/2	10,0 - 120,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K2 pliers



Pliers K2

For terminal lugs and connection sleeves in standard design

- Crimping profile with notch, fixed with lock
- Length 325mm
- Weight 600g

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904732	K2	0,75 - 16,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K5 pliers

Pliers K5

For terminal lugs and connection sleeves in standard design

- Crimping profile with notch, fixed in revolving profile
- Length 600mm
- Weight 2,4kg

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904733	K5	6,0 - 50,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K05 pliers

Pliers K05

For terminal lugs and connection sleeves in standard design

- Hexagonal crimping profile, fixed in revolving profile
- Length 390mm
- Weight 1,1kg

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904734	K05	6,0 - 50,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K06 pliers

RoHS

Pliers K06

For terminal lugs and connection sleeves in standard design

- Hexagonal crimping profile, fixed in revolving profile
- Length 650mm
- Weight 2,9kg

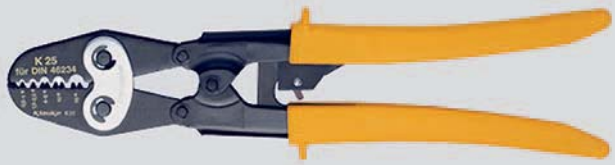
pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904735	K06	10,0 - 120,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K25 Pliers



RoHS

Pliers K25

- indent crimping
- spring-supported tool opening
- for nickel tubular cable lugs
- Length 325 mm
- Weight 0,6 kg

pliers

Part no.	Type	Cross-section min. - max. mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
905561	K25	0,5 - 16,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22 pliers

RoHS

Pliers K22

- crown revolving by 360°
- hinged
- convertible inserts
- telescopic handle
- Length 560mm to 860mm
- Weight 2,5kg

Pliers

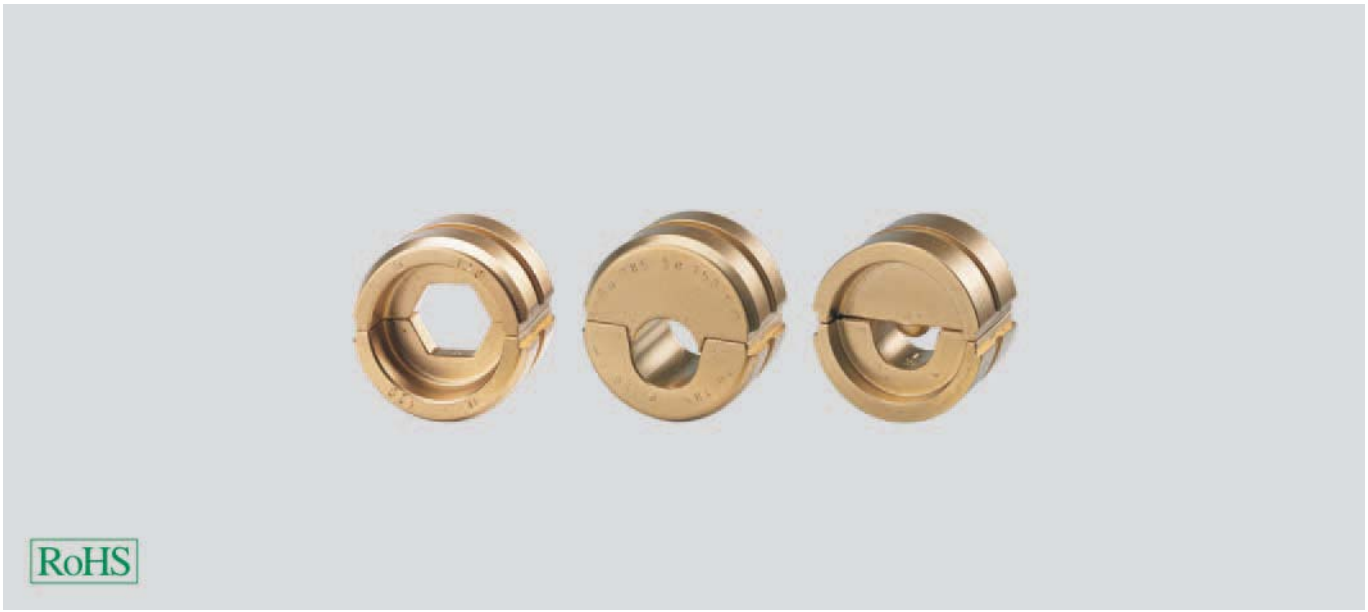
Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904736	K22	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22

inserts R22 for copper tubular cable lugs



RoHS

Inserts R22 for pliers K22

Convertible inserts for pliers K22.
Inserts type R22 for terminal lugs and connection sleeves in standard design (esp. terminal lugs of types K1, K2); pressing width 5mm.

inserts R22 for copper tubular cable lugs

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904737	R2250	50,0	1	o. r.	o. r.	o. r.
904738	R2270	70,0	1	o. r.	o. r.	o. r.
904739	R2295	95,0	1	o. r.	o. r.	o. r.
904740	R22120	120,0	1	o. r.	o. r.	o. r.
904741	R22150	150,0	1	o. r.	o. r.	o. r.
904742	R22185	185,0	1	o. r.	o. r.	o. r.
904743	R22240	240,0	1	o. r.	o. r.	o. r.
904744	R22300	300,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22

inserts RU22 for pressing sleeves roundly

RoHS

Inserts RU22 for pliers K22

Convertible inserts for pliers K22.
Inserts type RU22 for pressing sleeves roundly (esp. KH-R, KH-3, KH-4); pressing width 19,5mm.

inserts RU22 for pressing sleeves roundly

Part no.	Type	Cross-section SE mm²	Cross-section SM mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904745	RU223525	35,0	25,0	1	o. r.	o. r.	o. r.
904746	RU225035	50,0	35,0	1	o. r.	o. r.	o. r.
904747	RU227050	70,0	50,0	1	o. r.	o. r.	o. r.
904748	RU229570	95,0	70,0	1	o. r.	o. r.	o. r.
904749	RU2212095	120,0	95,0	1	o. r.	o. r.	o. r.
904750	RU22150120	150,0	120,0	1	o. r.	o. r.	o. r.
904751	RU22185150	185,0	150,0	1	o. r.	o. r.	o. r.
904752	RU22240185	240,0	185,0	1	o. r.	o. r.	o. r.
904753	RU22300240	300,0	240,0	1	o. r.	o. r.	o. r.

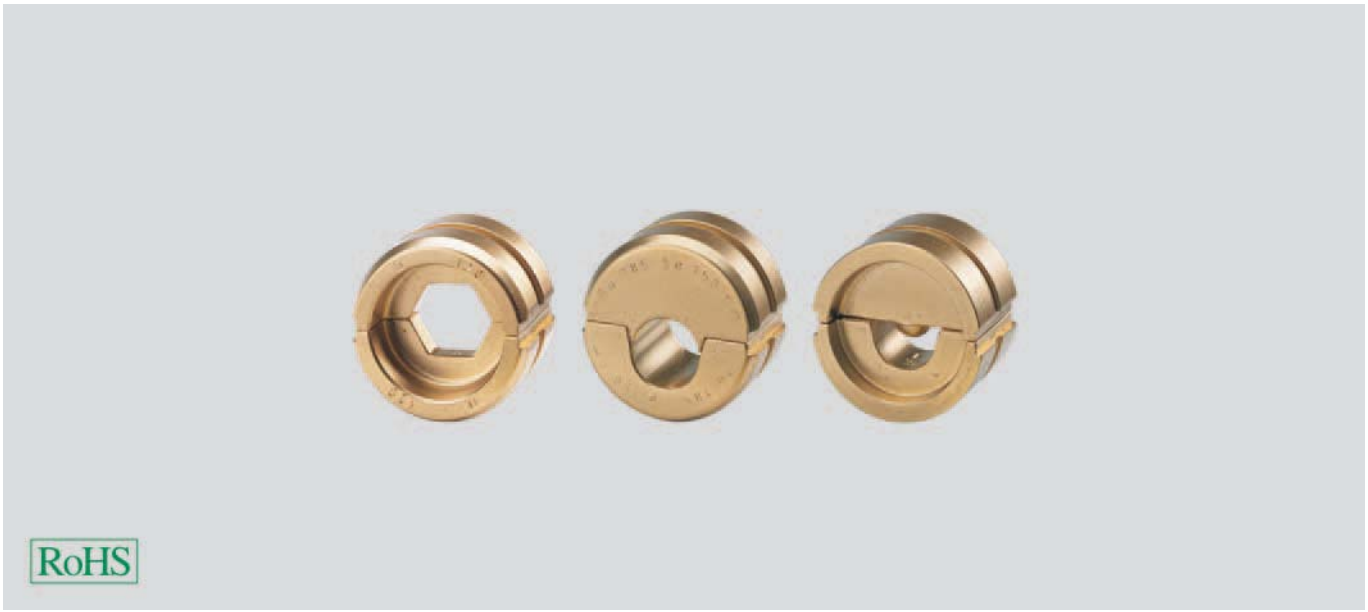
Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22

inserts F22 for tubular cable lugs, copper for fine-wire lines

new



RoHS

Inserts F22 for pliers K22

Convertible inserts for pliers K22.
Inserts type F22 for terminal lugs and connection sleeves applied to fine stranded lines (esp. terminal lugs of type KF).

inserts F22 for tubular cable lugs, copper for fine-wire lines

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904754	F2210	10,0	1	o. r.	o. r.	o. r.
904755	F2216	16,0	1	o. r.	o. r.	o. r.
904756	F2225	25,0	1	o. r.	o. r.	o. r.
904757	F2235	35,0	1	o. r.	o. r.	o. r.
904758	F2250	50,0	1	o. r.	o. r.	o. r.
904759	F2270	70,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22

inserts A22 for aluminium compression cable lugs

RoHS

new

Inserts A22 for pliers K22

Convertible inserts for pliers K22.
Inserts type A22 for compression cable lugs and connectors made from aluminium (esp. cable lugs KA) or aluminium / copper (esp. cable lugs KAC).
Up to 185mm² press width 7mm, if greater 5 mm.

Note

Crimping dies for 25 mm² is also suitable for 16 mm².
Crimping dies for 120 mm² is also suitable for 95 mm².

inserts A22 for aluminium compression cable lugs

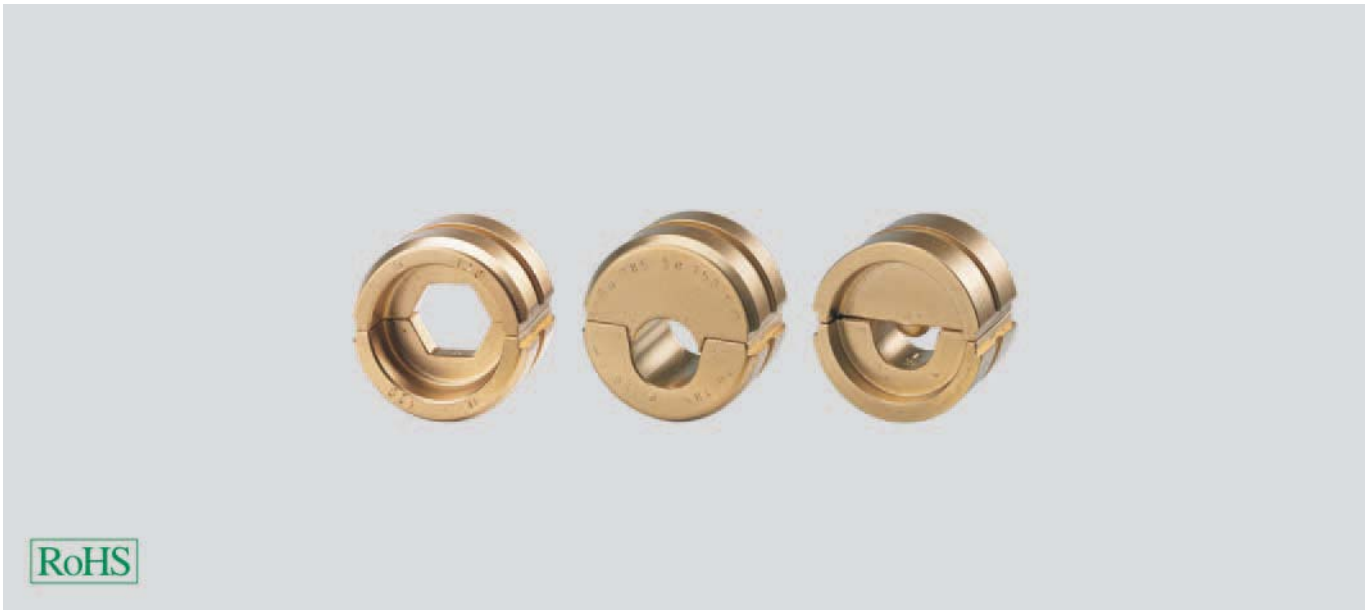
Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
906054	A221625	25,0	1	o. r.	o. r.	o. r.
906055	A2235	35,0	1	o. r.	o. r.	o. r.
906056	A2250	50,0	1	o. r.	o. r.	o. r.
906057	A2270	70,0	1	o. r.	o. r.	o. r.
906058	A2295120	120,0	1	o. r.	o. r.	o. r.
906059	A22150	150,0	1	o. r.	o. r.	o. r.
906060	A22185	185,0	1	o. r.	o. r.	o. r.
906061	A22240	240,0	1	o. r.	o. r.	o. r.
906062	A22300	300,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

K22

inserts N22 for tubular cable lug, nickel



RoHS

Inserts N22 for pliers K22

Convertible inserts for pliers K22.
Suitable for cable lugs made by nickel.
Indent crimping.

inserts N22 for tubular cable lug, nickel

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
905549	N2210	10,0	1	o. r.	o. r.	o. r.
905550	N2216	16,0	1	o. r.	o. r.	o. r.
905551	N2225	25,0	1	o. r.	o. r.	o. r.
905552	N2235	35,0	1	o. r.	o. r.	o. r.
905553	N2250	50,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EK 35/4 pliers

storage battery-hydraulic systems

RoHS

new

Battery powered crimping tool EK 35/4

- Large cross section range 6-150 mm²
- Slim crimping head
- Closed crimping head, flip top style, rotatable
- Ergonomic design for convenient one-hand operation
- Lightweight for effortless operations
- Automatic retraction when crimping ist complete
- Charge level indicator of the batteries.
- Delivery in plastic case (tool, battery, charger)
- Press capacity 35 kN
- Weight 1,7 kg

pliers

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904897	EK 35/4	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EK 35/4

inserts HR 4 for tubular cable lugs, copper

new

RoHS

Convertible inserts for pliers EK 35/4

Inserts type HR4 for tubular cable lugs and connectors made by copper in standard design (esp. cable lugs K1, K2)

- crimp width 5 mm
- hexagonal profile

inserts HR 4 for tubular cable lugs, copper

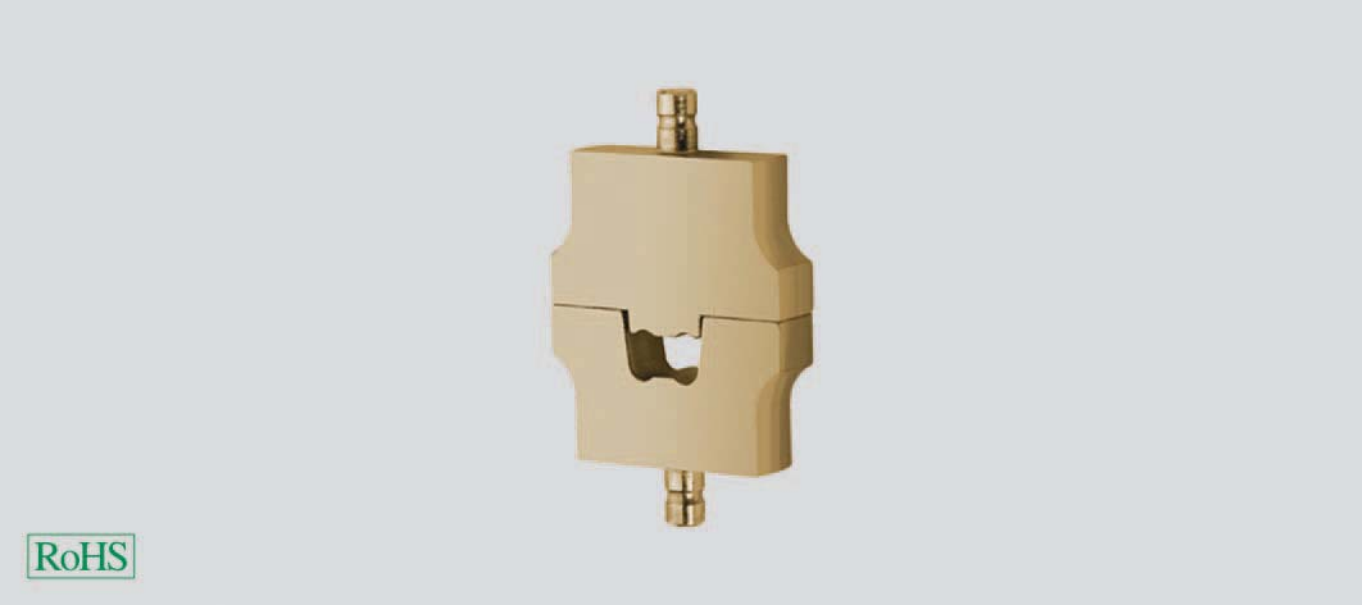
Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904925	HR46	6,0	1	o. r.	o. r.	o. r.
904899	HR410	10,0	1	o. r.	o. r.	o. r.
904900	HR416	16,0	1	o. r.	o. r.	o. r.
904901	HR425	25,0	1	o. r.	o. r.	o. r.
904902	HR435	35,0	1	o. r.	o. r.	o. r.
904903	HR450	50,0	1	o. r.	o. r.	o. r.
904904	HR470	70,0	1	o. r.	o. r.	o. r.
904914	HR495	95,0	1	o. r.	o. r.	o. r.
906063	HR4120	120,0	1	o. r.	o. r.	o. r.
906064	HR4150	150,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

EK 35/4

inserts HAES4 for insulated core end sleeves for compacted fine-wire-lines



new

Convertible inserts for pliers
EK 35/4

Inserts type HAES 4 for insulated core end sleeves for compacted fine-wire-lines.

- crimp width 10 mm

inserts HAES4 for insulated core end sleeves for compacted fine-wire-lines

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904928	HAES410	10,0	1	o. r.	o. r.	o. r.
904929	HAES416	16,0	1	o. r.	o. r.	o. r.
904930	HAES425	25,0	1	o. r.	o. r.	o. r.
904931	HAES435	35,0	1	o. r.	o. r.	o. r.
904932	HAES450	50,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HPZ 80.1 pliers

hand-hydraulic

new

Crimping pliers HPZ 80.1

- for insulated core end sleeves
- 180° rotatable head
- hinged
- convertible inserts
- two-stage hydraulic
- press capacity up to 80kN
- for conductors cross-sections up to 240 mm².
- scope of delivery: in plastic suitcase without crimping dies
- Length 600 mm
- Weight incl. case 9,4 kg

pliers

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
906081	HPZ 80.1	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HPZ 80.1

inserts PAE 80.1 for core end sleeves

new

Convertible inserts for pliers HPZ 80.1

Inserts type PAE 80.1 for core end sleeves. Suitable particularly for compacted conductors. Prismatic crimping profile with lateral grooves.

inserts PAE 80.1 for core end sleeves

Part no.	Type	Cross-section mm²	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
906082	PAE80.1-10	10,0	1	o. r.	o. r.	o. r.
906083	PAE80.1-16	16,0	1	o. r.	o. r.	o. r.
906084	PAE80.1-25	25,0	1	o. r.	o. r.	o. r.
906085	PAE80.1-35	35,0	1	o. r.	o. r.	o. r.
906086	PAE80.1-50	50,0	1	o. r.	o. r.	o. r.
906087	PAE80.1-70	70,0	1	o. r.	o. r.	o. r.
906088	PAE80.1-95	95,0	1	o. r.	o. r.	o. r.
906089	PAE80.1-120	120,0	1	o. r.	o. r.	o. r.
906090	PAE80.1-150	150,0	1	o. r.	o. r.	o. r.
906091	PAE80.1-185	185,0	1	o. r.	o. r.	o. r.
906092	PAE80.1-240	240,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ERG 740 compression tool

a product by Thomas & Betts

RoHS

ERG 740 hand compression tool

Hand compression tool suitable for clamping Shield-Kon connectors.
Processing range for single-piece Shield-Kon connectors from 1.27 to 7.62mm.

Compression tool

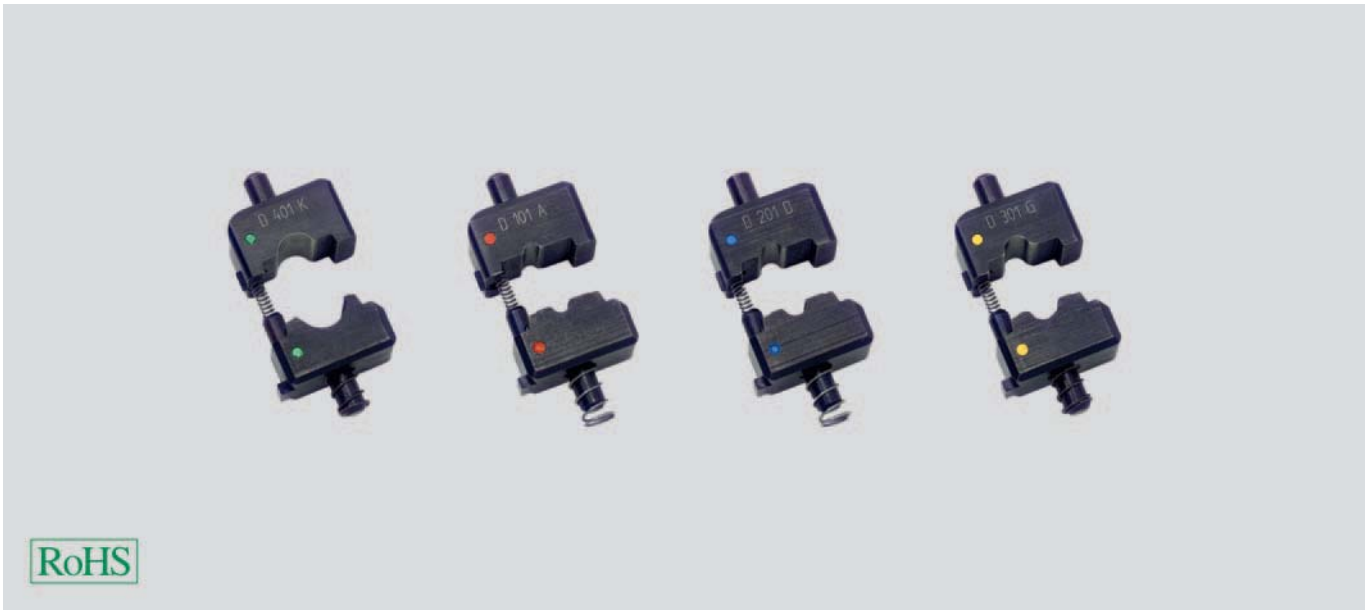
Part no.	Type T & B	Shield Ø mm	Net EUR/item at a purchase of 1	2 - 4	5 - 10
96757	ERG 740	7,62	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ERG 740 tool inserts

a product by Thomas & Betts



Tool inserts for ERG 740

The tool inserts are simple and quick to change by hand.

tool inserts

Part no.	Type T & B	Shield Ø mm	Corr. connector	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904774	D-101 A	1,27 - 1,79	RSK 101	1	o. r.	o. r.	o. r.
904775	D-101 B	1,80 - 2,28	RSK 101	1	o. r.	o. r.	o. r.
904776	D-201 C	2,29 - 2,55	RSK 101	1	o. r.	o. r.	o. r.
904777	D-201 D	2,56 - 3,00	RSK 201	1	o. r.	o. r.	o. r.
903718	D-201 E	3,01 - 3,34	RSK 201	1	o. r.	o. r.	o. r.
904778	D-201 F	3,35 - 3,65	RSK 201	1	o. r.	o. r.	o. r.
904779	D-301 G	3,66 - 4,13	RSK 301	1	o. r.	o. r.	o. r.
903735	D-301 H	4,14 - 4,71	RSK 301	1	o. r.	o. r.	o. r.
904692	D-301 J	4,72 - 5,12	RSK 301	1	o. r.	o. r.	o. r.
904780	D-401 K	5,13 - 5,86	RSK 401	1	o. r.	o. r.	o. r.
904693	D-401 L	5,87 - 6,36	RSK 401	1	o. r.	o. r.	o. r.
903731	D-401 M	6,37 - 7,00	RSK 401	1	o. r.	o. r.	o. r.
903685	D-401 N	7,01 - 7,62	RSK 401	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ST Box spanners

Socket wrench ST

Special socket wrench, slotted.
For professional installation of glands in extremely restricted spaces.
The guide slot also makes it suitable for glands with integral cables.

Material

Steel
Surface: tinned

box spanners

Part no.	Spanner size mm	l mm	c mm	D mm	Unit	Net EUR/100 items at a purchase of 1	2 - 4	5 - 10
97356	14,0	60,0	8,5	19,5	1	o. r.	o. r.	o. r.
97535	15,0	60,0	8,5	19,5	1	o. r.	o. r.	o. r.
97536	17,0	60,0	10,0	23,5	1	o. r.	o. r.	o. r.
97148	19,0	60,0	10,0	25,3	1	o. r.	o. r.	o. r.
97537	20,0	60,0	12,0	27,0	1	o. r.	o. r.	o. r.
97149	22,0	60,0	12,0	29,5	1	o. r.	o. r.	o. r.
97538	24,0	60,0	14,0	31,9	1	o. r.	o. r.	o. r.
98726	26,0	60,0	16,0	34,5	1	o. r.	o. r.	o. r.
97417	27,0	60,0	16,0	35,5	1	o. r.	o. r.	o. r.
97539	30,0	60,0	20,0	40,8	1	o. r.	o. r.	o. r.
97150	33,0	60,0	20,0	43,8	1	o. r.	o. r.	o. r.
97540	36,0	60,0	24,0	47,8	1	o. r.	o. r.	o. r.
97541	40,0	100,0	27,0	52,5	1	o. r.	o. r.	o. r.
97542	41,0	100,0	27,0	53,5	1	o. r.	o. r.	o. r.
97151	42,0	100,0	27,0	54,7	1	o. r.	o. r.	o. r.
98727	46,0	100,0	34,0	56,0	1	o. r.	o. r.	o. r.
97543	50,0	100,0	34,0	64,5	1	o. r.	o. r.	o. r.
97152	53,0	100,0	34,0	69,0	1	o. r.	o. r.	o. r.
98728	55,0	100,0	35,0	75,5	1	o. r.	o. r.	o. r.
97544	57,0	100,0	35,0	76,5	1	o. r.	o. r.	o. r.
97545	60,0	100,0	40,0	78,0	1	o. r.	o. r.	o. r.
97546	64,0	100,0	40,0	84,0	1	o. r.	o. r.	o. r.
98729	68,0	100,0	40,0	85,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOOL MZ circlip pliers

new

HELUTOOL MZ

assembly pliers for cable glands

- fast and reliable installation of cable glands
- automatic progressively adjustable size of the jaw
- ratchet-like function with pivoting angle 60°
- with fixed adjustment for continous working
- good aplicable even in constricted working areas
- stable for professional use
- extremely handy
- two-components-plastic handles

circlip pliers

Part no.	Type	Unit	Net EUR/item at a purchase of		
			1	2 - 4	5 - 10
904892	MZ 13/23	1	o. r.	o. r.	o. r.
904893	MZ 24/36	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

ERG 50, ERG 120 circlip pliers for cable tie made of plastic

a producht by Thomas & Betts

new

Assembly tool for plastic cable ties ERG50 / ERG120

Ergonomic hand tool with adjustable tension setting and automatic cutting. 360° degree rotating nose enables operation from any position. An impact damper absorbs the rear shocks, that occur when cutting the tie ends.

- adjustable tension settings
- automatic cutting mechanism
- Length 200 mm
- Height 25 mm
- Width 125 mm
- Weight 240 mm

circlip pliers for cable tie made of plastic

Part no.	Type	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
905663	ERG 50	1	o. r.	o. r.	o. r.
905849	ERG 120	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

CT5 circlip pliers for cable ties made of stainless steel

new

Assembly tool CT5 for stainless steel cable ties

- Ergonomic and stable clamping tool by steel for clamping of ball valves and shaped head and steel girders with and without coating, with tape cutter
- Length 210mm

circlip pliers for cable ties made of stainless steel

Part no.	Type	Tie width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904787	CT5	up to 12,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

HELUTOOL 250 pocket, 190 drum unwinder

Drum unwinder HELUTOOL

For simple reeling of cable drums.

- Dynamic brake for constant traction: retarding effect corresponds to the weight bearing on.
- Small weight
- Small size
- Can be used with broken drums

drum unwinder

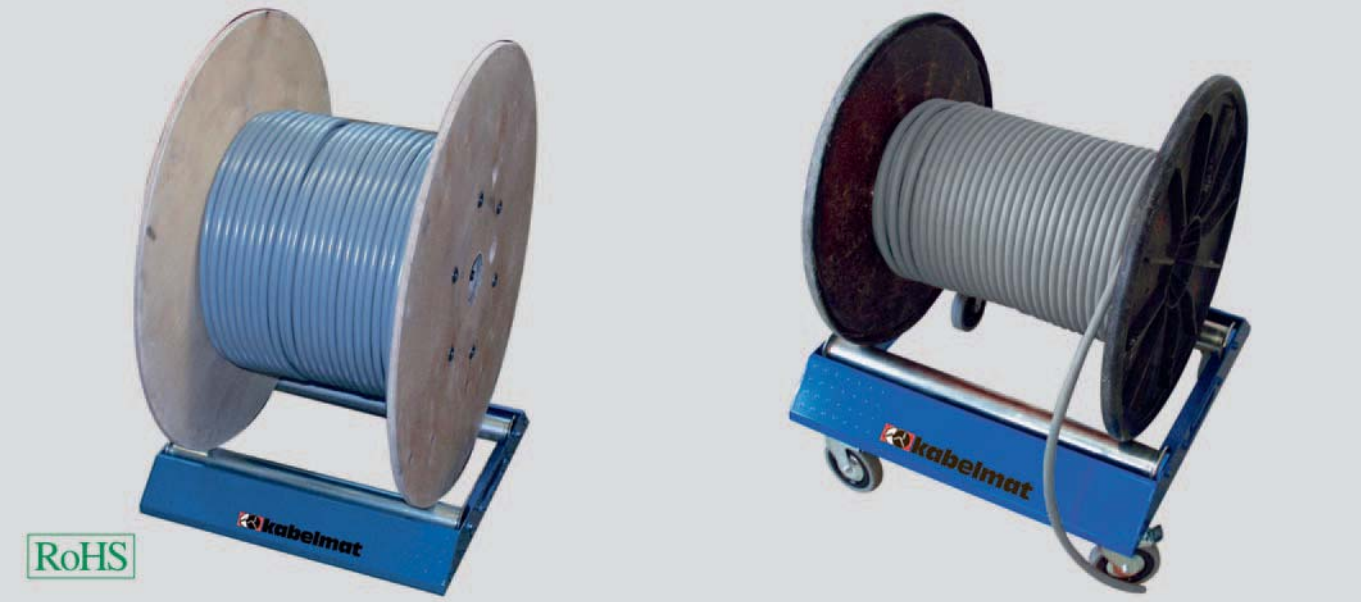
Part no.	Type	Weight approx. kg	Load capacity kg	Diameter approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
903716	HELUTOOL 250 pocket	1,0	190	250	-	1	o. r.	o. r.	o. r.
93529	HELUTOOL 190	7,0	380	500	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMBOI 500 drum decoiler

shaftless



Shaftless drum decoiler TROMBOI 500

Pay-off for drums for different diameters and weights.

- solid construction
- loading ramp
- sturdy welded steel construction
- specially suitable for one-way drums
- ball bearing axles

drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904760	TROMBOI 500	8,0	140	150 - 700	520	1	o. r.	o. r.	o. r.
904761	TROMBOI 500 castor (1 set = 4 items)	-	-		-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMBOI 800 / TROMBOI 1400 drum decoiler

shaftless

Shaftless drum decoiler
TROMBOI 800 / 1400

Pay-off for drums for different diameters and weights.

- compact design
- loading ramp
- sturdy welded steel construction
- specially suitable for one-way drums
- ball bearing axles

drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904762	TROMBOI 800	21,0	500	400 - 1000	580	1	o. r.	o. r.	o. r.
904763	TROMBOI 1400	25,1	1500	500 - 1800	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMBOI 7-10 / TROMBOI 9-14 drum decoiler

with axis

Drum decoiler with axis TROMBOI 7-10 / 9-14

For drum handling at construction sites, when installing cables, at stock or shipping.

- Solid welded contruction
- The sturdy axle holders have to be inserted and locked in a height suitable for the workable drum dimension.
- The drum axle has to be pushed through the drum.
- After having been rolled into the axle holder the drum has to be lifted by means of the manual hydraulic pump.

Note

Additional axis on request

drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904764	TROMBOI 7-10	22,5	1000	700 - 1000	-	1	o. r.	o. r.	o. r.
904765	TROMBOI 9-14	41,5	1700	900 - 1400	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMBOI 2003 drum decoiler

with axis

Drum decoiler with axis TROMBOI 2003

For drum handling at construction sites, when installing cables, at stock or shipping.

- Solid welded construction
- The sturdy axle holders have to be inserted and locked in a height suitable for the workable drum dimension.
- The drum axle has to be pushed through the drum.
- After having been rolled into the axle holder the drum has to be lifted by means of the manual hydraulic pump.

Note

Additional axis on request

drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904766	TROMBOI 2003	132,0	4000	710 - 2000	-	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMCAR 1000 / TROMCAR 1250 movable drum decoiler

with axis

Movable drum decoiler with axis TROMCAR 1000 / 1250

Application: stock, construction site, installation department etc.

- Moving cable drums with robust lift-up tool. The drums are lifted and loaded by leverage.
- Lift-up clamp as handle.
- Extra sized wheels.

TROMCAR 1000 with 2 wheels and 2 footholds.
TROMCAR 1250 with 3 wheels.

movable drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904767	TROMCAR 1000	50,0	1000	500 - 1000	710	1	o. r.	o. r.	o. r.
904768	TROMCAR 1250	52,0	700	500 - 1250	1000	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

TROMTRAK 1250 movable drum decoiler

with axis

RoHS

Movable drum decoiler with axis TROMTRAK 1250

For handling of cable drums.

- Two-fold embedded axis.
- Smooth operation by adjustable brake.
- Build-on lockable castors.

movable drum decoiler

Part no.	Type	Weight approx. kg	Load capacity kg	Reel-Ø approx. mm	Reel width mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
904769	TROMTRAK 1250	58,0	1000	630 - 1250	890	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

MESSBOI longimetry devices

Longimetry devices MESSBOI M10, MESSBOI M30

To avoid material loss.

- simple design
- easy to operate
- calibration optional
- counter 9999,99m, with rest button
- repeat accuracy +/-2%

MESSBOI M10 stationary.
MESSBOI M30 stationary and portable.

longimetry devices

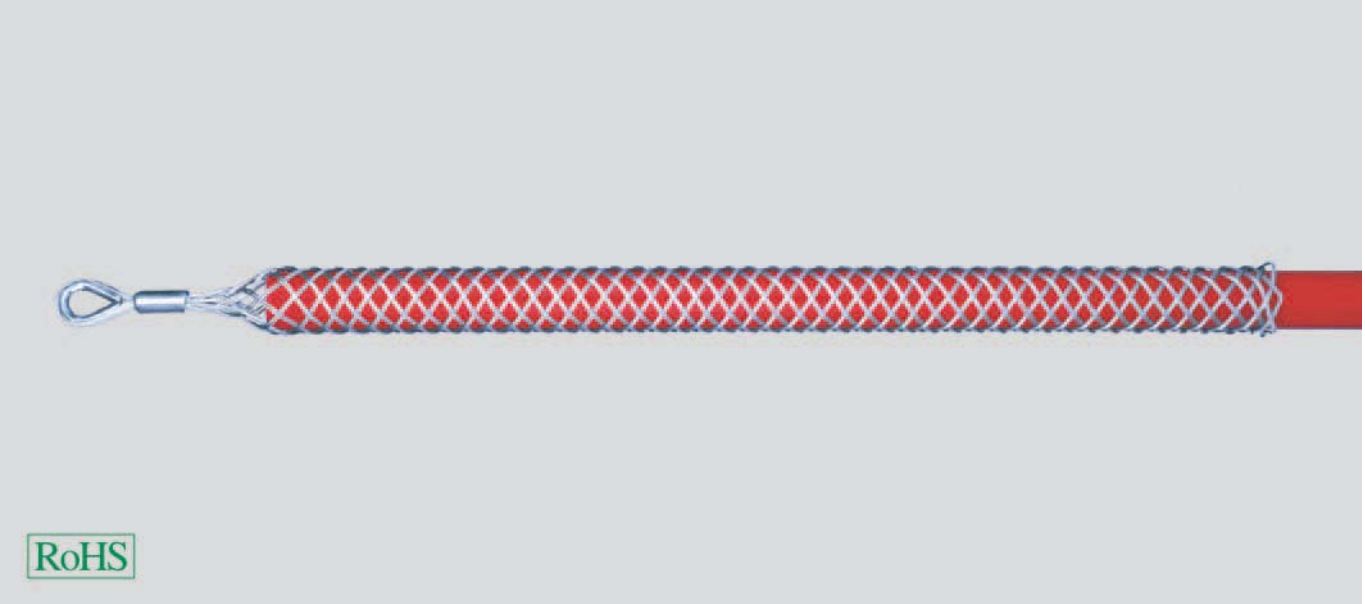
Part no.	Type	Weight approx. kg	Cable Ø approx. mm	Unit	Net EUR/item at a purchase of 1	2 - 4	5 - 10
97924	MESSBOI M10	0,5	1 - 15	1	o. r.	o. r.	o. r.
97775	MESSBOI M30/012	2,2	1 - 30	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

cable grips to tape

new



Cable grips with thimble and press clamp, closed

This cable grip is used wherever cables with high tensile forces are routed.

- with thimble and press clamp
- self-tightening under tension load
- back-woven

Material

Stahl, verzinkt

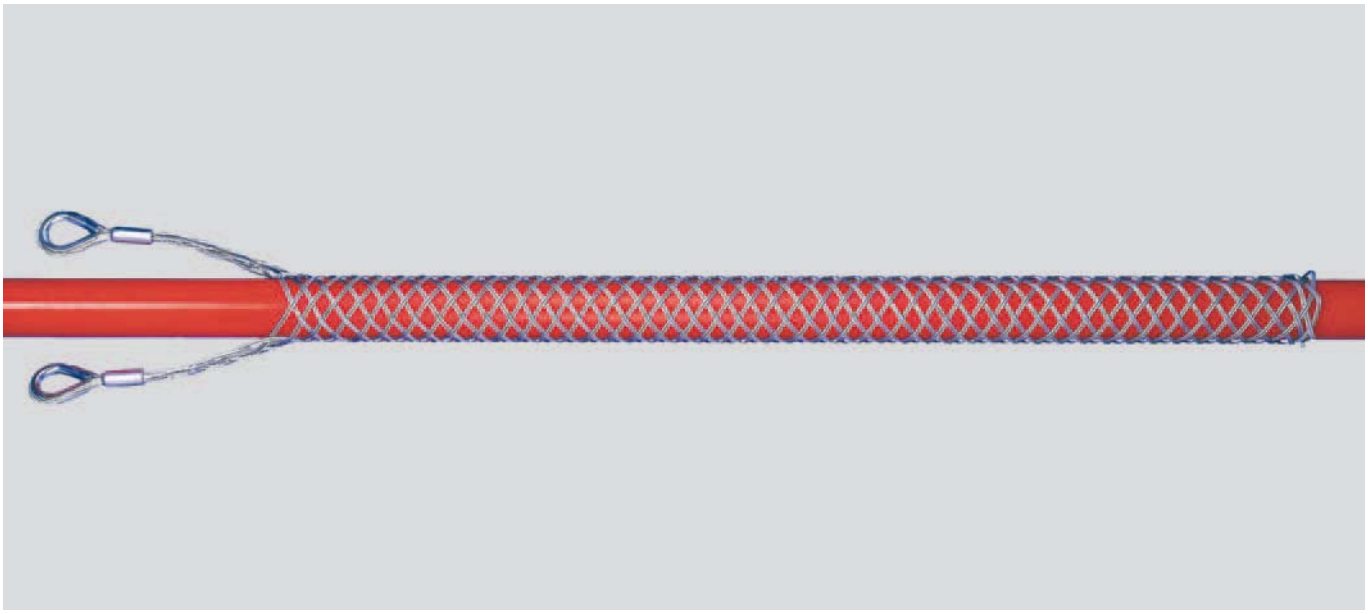
cable grips with thimble

Part no.	Min. inner Ø mm	Max. inner Ø mm	Unit	Net EUR/items at a purchase of 1	2 - 4	5 - 10
905891	6,0	10,0	1	o. r.	o. r.	o. r.
905892	10,0	15,0	1	o. r.	o. r.	o. r.
905893	15,0	20,0	1	o. r.	o. r.	o. r.
905375	20,0	25,0	1	o. r.	o. r.	o. r.
905371	30,0	40,0	1	o. r.	o. r.	o. r.
905376	25,0	30,0	1	o. r.	o. r.	o. r.
905894	40,0	50,0	1	o. r.	o. r.	o. r.
905163	50,0	60,0	1	o. r.	o. r.	o. r.
905895	60,0	70,0	1	o. r.	o. r.	o. r.
905896	70,0	90,0	1	o. r.	o. r.	o. r.
905897	90,0	110,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

cable grips to fleet



new

Cable fleeting grips

This cable grip is used as a cable installation grip e.g., wherever cables are suspended vertically. Previously drawn cables can be re-drawn.

- with thimble and press clamp
- self-tightening under tension load
- back-woven

Material

Stahl, verzinkt

cable fleeting grips

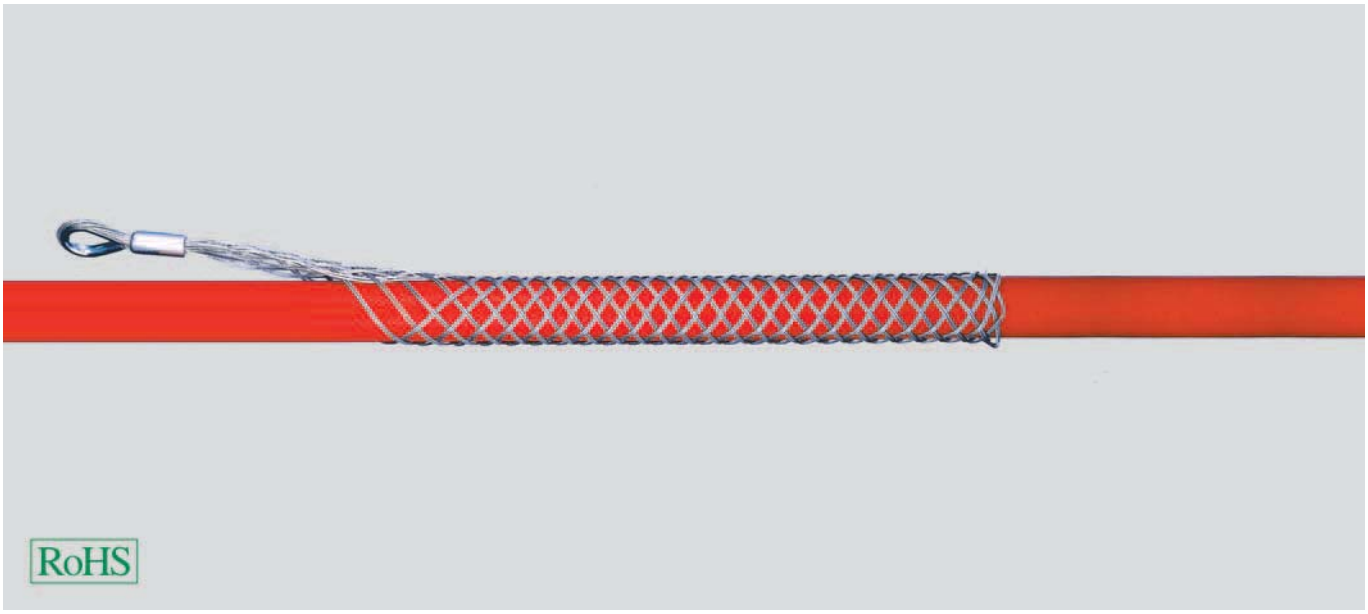
Part no.	Min. inner Ø mm	Max. inner Ø mm	Unit	Net EUR/items at a purchase of 1	2 - 4	5 - 10
905898	6,0	10,0	1	o. r.	o. r.	o. r.
905899	10,0	15,0	1	o. r.	o. r.	o. r.
905900	15,0	20,0	1	o. r.	o. r.	o. r.
905901	20,0	25,0	1	o. r.	o. r.	o. r.
905902	25,0	30,0	1	o. r.	o. r.	o. r.
905903	30,0	40,0	1	o. r.	o. r.	o. r.
905904	40,0	50,0	1	o. r.	o. r.	o. r.
905905	50,0	60,0	1	o. r.	o. r.	o. r.
905906	60,0	70,0	1	o. r.	o. r.	o. r.
905907	70,0	90,0	1	o. r.	o. r.	o. r.
905908	90,0	110,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

cable grips to assemble

new



Cable installation grips

Employed as a cable installation grip. For anti-slip installation of vertically attached cables.

- with thimble and press clamp
- self-tightening under tension load
- back-woven

Material

Edelstahl 1.4401 / AISI 316

cable grips

Part no.	Min. inner Ø mm	Max. inner Ø mm	Unit	Net EUR/items at a purchase of 1	2 - 4	5 - 10
905909	8,0	10,0	1	o. r.	o. r.	o. r.
905601	10,0	15,0	1	o. r.	o. r.	o. r.
905602	15,0	20,0	1	o. r.	o. r.	o. r.
905603	20,0	25,0	1	o. r.	o. r.	o. r.
905604	25,0	30,0	1	o. r.	o. r.	o. r.
905597	30,0	40,0	1	o. r.	o. r.	o. r.
905605	40,0	50,0	1	o. r.	o. r.	o. r.
905606	50,0	60,0	1	o. r.	o. r.	o. r.
905607	60,0	70,0	1	o. r.	o. r.	o. r.
905918	70,0	90,0	1	o. r.	o. r.	o. r.
905919	90,0	110,0	1	o. r.	o. r.	o. r.

Dimensions and specifications may be changed without prior notice.

o. r. = on request

Photo: HELUKABEL®

HELUTEC®
Signal and power connectors

HELUTEC® Signal and power connectors

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HELUTEC® – Functional design for harsh environments 508
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HELUTEC® – Quick and safe: Three technologies for easy handling

EMC

IP 66/67

UP TO –20G– VIBRATION PROOF

EMC

IP 66/67

UP TO –20G– VIBRATION PROOF

The innovative HELUTEC®-system

This sensational quick connect system is as stable as it is reliable and saves precious time and installation costs. The vibration proof system was designed for connectors size M17, M23 and M40, which are included in the HELUTEC®-Series 617, 917, 623, 723, 923 and 940. HELUTEC® receptacle connectors are always compatible with a standard thread connector or alternatively with the innovative speedtec system – downward compatibility is guaranteed.
Slide on, turn, perfect fit!
Patented perfection included.

The patented special development for the HELUTEC®-Serie 615/915

Is perfect when space is tight. The selflocking system can be connected comfortably even in confined space. The spring system in the coupling nut lets it slide on the mating connector and the prestressed spring mechanism locks securely. For disconnection it requires just a quarter turn and a slight pull on the connector. The connection is absolutely vibration proof. Accidental loosening is impossible. Specifically designed and patented for HELUTEC®-Series 615/915 connectors.

The assembly-ready „overmold“ solution

The bond for life. Once the connector housing and the shell are united in the assembly process they can not be separated anymore. This would destroy the connector. Like any other standard overmold connector locktec connectors are manipulation proof and can not be tampered with in the field. It is compatible with all standard cable sizes and length. There are two types of connection techniques available: A standard thread or the patented proprietary fast-lock system. The overmold without overmold, bend relief already integrated. A great variety of pin layouts available.

HELUTEC® – Functional design for harsh environments

Frost protection down to -50 °C

A cool thing: HELUTEC® Connectors are temperature-resistant way down below freezing point and therefore predestined for special tasks in extreme climate zones. The electrical and mechanical characteristics remain stable, even when it gets hot. Intercontec connectors do not have a problem with 130 °C, they do not sweat. No matter if you are using a large size connector or a model from the smaller series. They withstand harsh conditions and keep their unique design.

Protection classes IP 66/67 & 69K

Perfect for wetlands: Generally all HELUTEC® connectors are protected against water spray and temporary immersion. Every cable assembly with an is IP 66/67 protected. For special application in water or steam Intercontec offers a special qualification to reach IP 69K. In this process the cable clamp is fine tuned to the individual cable. Moisture does not have a chance.

Protection class IP 68

Working under pressure: The HELUTEC® Series 615/915 are also capable of long-term missions under water. 120 hours at 15 meters under water with 1.5 bar pressure do not cause any problems, as tests have shown. Therefore the system is rated IP 68.

HELUTEC®-Series 617 / 623 / 627

Signal connectors – Controlling and monitoring

Well-engineered, versatile, safe: Complicated applications where space is limited are a speciality of HELUTEC®. Wherever you need to transmit signals, control motors or monitor the functions of complex machines, HELUTEC® connectors Series 617, 623 and 627 do the job. A great variety of pin layouts in various kinds of connector housings are available. Even the classic HELUTEC® connector lines show time and again their innovative side when confronted with new applications.

Properties:

- Drive Systems
- Robotics
- Mechanical Engineering
- Automation Mechatronics
- Medical/Chemical Engineering
- Packaging and Printing
- Aerospace
- Equipment Construction Machinery
- Railroad/ Transportation
- Shipbuilding
- Renewable Energies
- Lightning Sound Staging
- Food Industry
- Textile Industry

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

HELUTEC®-Series 917 / 923 / 932 / 940 / 958

Powerful & safe: Power connectors

Extremely durable: HELUTEC®-power connectors reliably rev up drive motors, spindle drives and servomotors to high speed. With ease they can handle millions of start-stop manoeuvres. Voltage up to 630 V and currents up to 200 A are transmitted dependably in continuous operation and in the roughest of environments. Depending on the particular application the integration of 50 mm² wires as well as small installation sizes are available from HELUTEC®, perfectly EMC shielded. Strong vibrations and sudden shocks do not pose a problem during daily operation, neither do heat, cold, moisture, dust and dirt. All connectors are tested in the test lab to safeguard the long-term durability in the field. Besides special stress tests (vibrations up to 50 G) individual customer requirements are analysed in terms of adjustments to the installation situation and integrated system solutions.

Properties:

- Drive Systems
- Robotics
- Mechanical Engineering
- Automation Mechatronics
- Medical/Chemical Engineering
- Packaging and Printing
- Aerospace
- Equipment Construction Machinery
- Railroad/ Transportation
- Shipbuilding
- Renewable Energies
- Lightning Sound Staging
- Food Industry
- Textile Industry

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

HELUTEC®-Series 723

The unique and first hybrid connector with bus modul

Full speed ahead with five power and six signal contacts plus one quadrax element. The latter provides for fast Industrial Ethernet connections in real time mode and opens completely new possibilities with its ready-to-assemble, separately shielded Ethernet element. For the first time this system meets requirements for higher electric strength. When daisy-chaining decentrally controlled servo motors for example, it is possible to run 850 VDC. Therefore the super-hybrid connector size M23 can also handle 30 A of current and a wire cross section up to 4 mm².

The superior technical data speak for themselves as well as the many versions that are available: No matter if you prefer straight, angled or continuously rotatable connector housings – the HELUTEC® connector is the new star on the horizon for applications in automation technology.

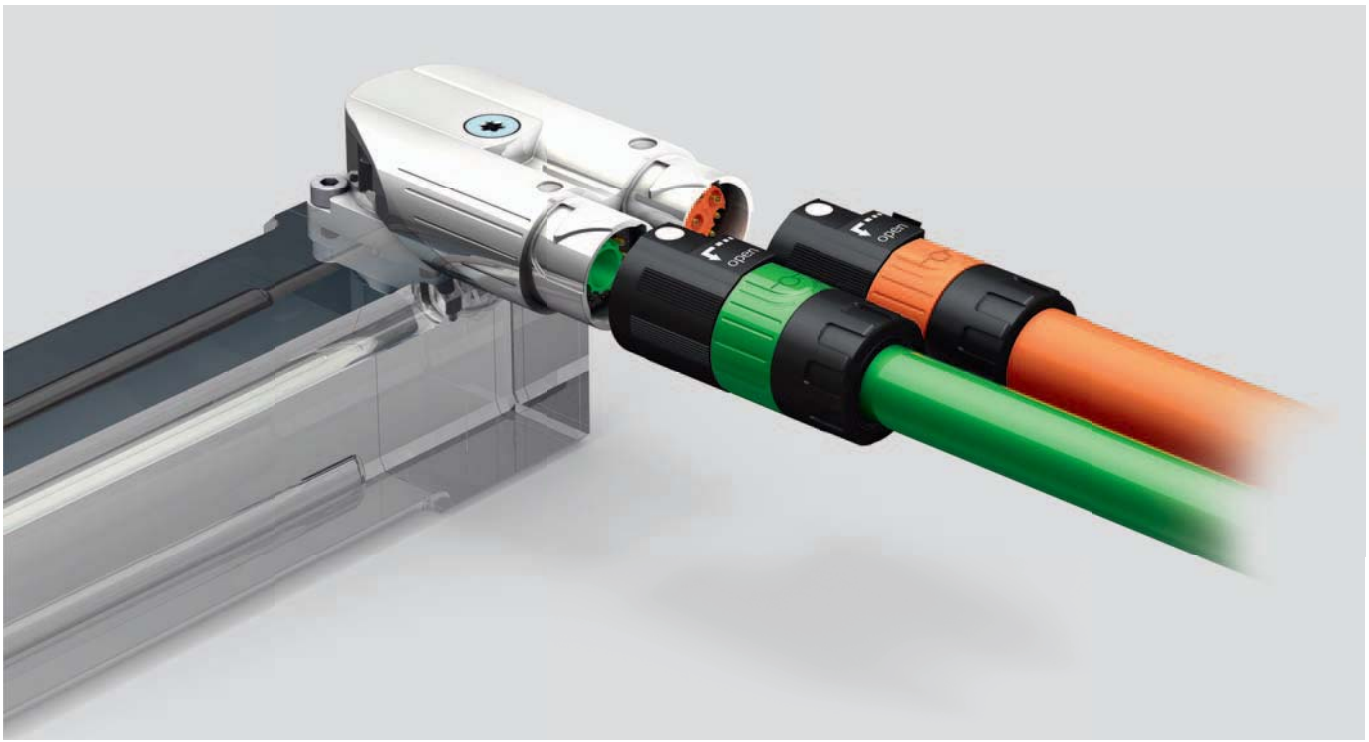
Hinweise:

High-speed data transmission at a variety of field bus systems is possible.

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

HELUTEC®-Series 615 / 915

Tiny connectors for small space



Small in size yet great in performance: The system impresses with high performance in a small format. Only one mounting hole is required to realize a combination of power and signal connection or power and bus connection on a small motor. The optimal partition of connector lid and connector housing creates a lot of room inside the connector for the assembly process. Mechanical as well as color codings provide additional safety. Contact assembly has never been easier. Except for crimping the system requires no special tools. After installation the system remains 300° continuously rotatable thus allowing the user to choose the most convenient direction of cable outlet.

The single version offers the same characteristics as its big brother and is available as signal or power connector. Thus it is perfectly suitable for miniaturized applications, where space is critical and room for cabling limited. There is no easier way to establish safe connections today.

Properties:

- EMC
- IP 66/67
- up to 20G VIBRATION PROOF
- c UL us

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

HELUTEC®-Series 926

A plastic connector for stage and lightning

Curtains up for the Series 926 and for everybody who stands in the limelight treading the boards! These connectors are a shining example for an innovative, reliable and easy to use plastic connector. They proudly serve and make sure everybody and everything appears in the right light.

Safety is a top-priority: Lightning and stage technicians must be protected from electric shock when handling cables and equipment.

The solid plastic design, flame retardant according to UL 94 V0 and the modern connection method with a one hand push-pull mechanism point the way into the future. Connectors are also clearly coded facilitating fast and intuitive handling. But the Series 926 connectors are not limited to the show biz.

With 630 V rated voltage and 66 A rated current while ready to take on 16 mm² wires and protecting everything IP 66/67 they have the power to shine in other areas as well. Offshore and marine applications from oil rigs and wind turbines to any kind of seafaring vessel are only examples for the capabilities of this system.

Properties:

- **IP 66/67**

Technical data see table selection signal and power / hybrid on page 520 and 521
For more detailed information and our online configurator see www.helutec.de.

Tools and accessories

Crimping pliers

CRIMPING PLIERS A, B AND F SERIES
Manual crimping pliers
for Ø 1 mm contacts
max. crimping range 1 mm²
including positioning insert
Order-no C0.101.00

CRIMPING PLIERS A, B, C, D AND F SERIES
Manual crimping pliers
for Ø 1 mm contacts and Ø 2 mm
contacts max. crimping range 4 mm²
Order-no. C0.201.00

Positioning insert
for Ø 1 mm contacts
Order-no. C0.003.00

Positioning insert
for Ø 2 mm contacts
Order-no. C0.004.00

Positioning insert
for Ø 1 mm and
Ø 2 mm contacts
Order-no. C0.009.00

Tools and accessories

Crimping pliers

CRIMPING PLIERS M17 SERIES
Manual crimping pliers
for Ø 0.6 mm contacts
max. crimping range 0.5 mm²
including positioning insert
Order-no. C0.231.00

Positioning insert
for Ø 0.6 mm contacts suitable for crimping pliers C0.101.00
Order-no. C0.228.00

CRIMPING PLIERS C SERIES
Manual crimping pliers
for Ø 3.6 mm contacts
max. crimping range 16 mm²
Order-no. C0.008.00

Positioniereinsatz
für Ø 3,6 mm Kontakte
Order-no. C0.010.00

Tools and accessories

Crimping pliers

PNEUMATIC CRIMPER
for Ø 3.6 mm and Ø 2.0 mm contacts,
crimping range 1.5 - 16 mm²
Order-no. C0.044.00

Crimping Insert
for crimper C0.044.00

Order-no.	Contact	Crimping range
C0.042.00	Male Ø 2.0 mm	1.5 / 2.5 mm²
C0.041.00	Female Ø 3.6 mm	1.5 / 2.5 mm²
C0.040.00	Male/female Ø 3.6 mm	4.0 / 6.0 mm²
C0.043.00	Male/female Ø 3.6 mm	10.0 mm²
C0.233.00	Male/female Ø 3.6 mm	16.0 mm²

Locator
for crimper C0.044.00

Order-no.	Contact	Crimping range
C0.036.00	Male/female Ø 2.0 mm	1.5 / 2.5 mm²
C0.037.00	Male/female Ø 3.6 mm	1.5 - 10.0 mm²
C0.038.00	Male/female Ø 3.6 mm	1.5 - 16.0 mm²

BATTERY POWERED CRIMPING PLIERS
S AND D SERIES
B131-C
Order-no. C0.207.00

Crimping inserts
max. 10 mm²,16 mm²
Order-no. C0.211.00

Crimping inserts
max. 35 mm²
Order-no. C0.209.00

Crimping inserts
max. 25 mm²
Order-no. C0.210.00

Crimping inserts
max. 50 mm²
Order-no. C0.208.00

Tools and accessories

Crimping pliers

CRIMPING PLIERS FOR REEL FEED CONTACTS FOR A AND F SERIES

Manual crimping pliers for reel feed Ø 1 mm
Crimping range: 0.03 - 1.0 mm²
Order-no. C0.237.00

Reel feed male contacts 1 mm

Order-no.	Crimping range
61.170.80.025	0.03 - 0.08 mm²
61.171.80.025	0.08 - 0.20 mm²
61.172.80.025	0.20 - 0.52 mm²
61.173.80.025	0.75 - 1.00 mm²
Unit: 10 x 25 pcs.	

Reel feed female contacts 1 mm

Order-no.	Crimping range
60.198.80.021	0.03 - 0.08 mm²
60.199.80.021	0.08 - 0.20 mm²
60.200.80.021	0.20 - 0.52 mm²
60.201.80.021	0.75 - 1.00 mm²
Unit: 10 x 25 pcs.	

CRIMPING PLIERS FOR REEL FEED FEMALE CONTACTS B UND C SERIES

Manual crimping pliers for reel feed contacts Ø 2 mm
Crimping range: 1.5 - 2.5 mm²
Order-no. C0.073.00

Manual crimping pliers for reel feed contacts Ø 2 mm
Crimping range: 0.5 - 1.0 mm²
Order-no. C0.072.00

■ Unit not included

Reel feed female contact Ø 2 mm
Crimping range: 0.5 - 2.5 mm²
Order-no. 60.046.21.015

Packaging unit:
200 pcs. reel feed female contacts per unit

Tools and accessories

Stripping and crimping machine

STRIPPING AND CRIMPING MACHINE STRIPCRIMP 750 FOR A, B, C AND F SERIES

B131-C

Order-no. WA10043

Order-no.	Reel feed	Crimping range	Crimping size	Tool-no.
contacts 1 mm				
60.198.80	female contact	0.03 - 0.08 mm²	1	WM10241
60.199.80	female contact	0.08 - 0.20 mm²	2	WM10242
60.200.80	female contact	0.20 - 0.52 mm²	3	WM10243
60.201.80	female contact	0.75 - 1.00 mm²	4	WM10244
61.170.80	male contact	0.03 - 0.08 mm²	1	WM10241
61.171.80	male contact	0.08 - 0.20 mm²	2	WM10242
61.172.80	male contact	0.20 - 0.52 mm²	3	WM10243
61.173.80	male contact	0.75 - 1.00 mm²	4	WM10244
Packaging unit: 7000 pcs. reel feed contacts per unit				
contacts 2 mm				
60.046.21	female contact	0.50 - 2.50 mm²		WM10246
Packaging unit: 3000 pcs. reel feed contacts per unit				

HELUKABEL®

HELUTEC®
Hightech connector solutions

HELUTEC® – the new cable accessory program from HELUKABEL®. Signal and power circular connector series for industrial applications.

Our Online Service:
www.helutec.de

Test our **Connector Configurator** at www.helutec.de. This online service allows you to configure standard types of HELUTEC® industrial connectors.

HELUTEC® is also available pre-assembled.

Any questions? Please contact us directly:

For further information, please order our detailed HELUTEC® technical documentation.

Selection Guide

Application	Technical Data						Series	Type
	Ampacity (in A)	Nominal voltage (in V)	Pin arrangement	Contact diameter (in mm)	Max. termination diameter (in mm²)	Max cable clamp diameter (in mm) spezial sizes on demand		
Signal	5	63	12	1	1	4.5 - 12	615	on request
	5 / 14	63	15 (12+3)	1	0.75/1.5	4.5 - 12		on request
	9	40	7	1	1	4 - 8		on request
Signal	7	32	12	1	1	3.5 - 12	617	M17
	3.6	63	17	0.6	0.5	3.5 - 12		M17
Signal	20	32	6/7	2	2.5	3.5 - 17	623	M23
	10	160	9 (8+1)	1/2	1/2.5	3.5 - 17		M23
	10	160	9	1	1	3.5 - 17		M23
	9	125	10	1	1	3.5 - 17		M23
	7	160	12	1	1	3.5 - 17		M23
	7	125	17	1	1	3.5 - 17		M23
	7	63	19 (16+3)	1/1.5	1/1.5	3.5 - 17		M23
	7	63	19 (15+4)	1	1	4.2 - 17		twintec B
Signal	9	60	26	1	1.5	4.2 - 17	627	M27

Selection Guide

Application	Technical Data						Series	Type
	Ampacity (in A)	Nominal voltage (in V)	Pin arrangement	Contact diameter (in mm)	Max. termination diameter (in mm²)	Max cable clamp diameter (in mm) spezial sizes on demand		
Power	14/3.6	630/63	9 (4+5)	1	0.75/1.5	4.5 - 12	915	on request
Power	20	630	4	1.5	2.5	3.5 - 12	917	M17
	14	630	7	1	1.5	3.5 - 12		M17
	14/3.6	630/63	9 (4+5)	1	0.75/1.5	3.5 - 12		M17
	64	630	1	3.6	10	3.5 - 12		singletec
Power	30	630	6	2	4	4.2 - 17	623	M23
	30	630/250	8 (4+4)	2/1	4/1.5	4.2 - 17		M23
	30	630/250	9 (4+5)	2/1	4/1.5	4.2 - 17		M23
	200	630	1	8	50	4.2 - 17		singletec
Power	66	630	3	3	16	4.2 - 14.5	926	eltec
Power	75/30	630/250	6 (4+2)	3.6/2	16/4	7 - 25	940	M40
	75/30	630/250	8 (4+4)	3.6/2	16/4	7 - 25		M40
	75/30	630/250	9 (4+5)	3.6/2	16/4	7 - 25		M40
Power	150/12	630/250	8 (4+4)	10/1.6	50/1.5	17 - 36	958	M58

HELUTEC® industrial plug connectors – also available from us pre-assembled.

Simply ask – we are happy to help.
Tel. +49 7150/9209-756, -140

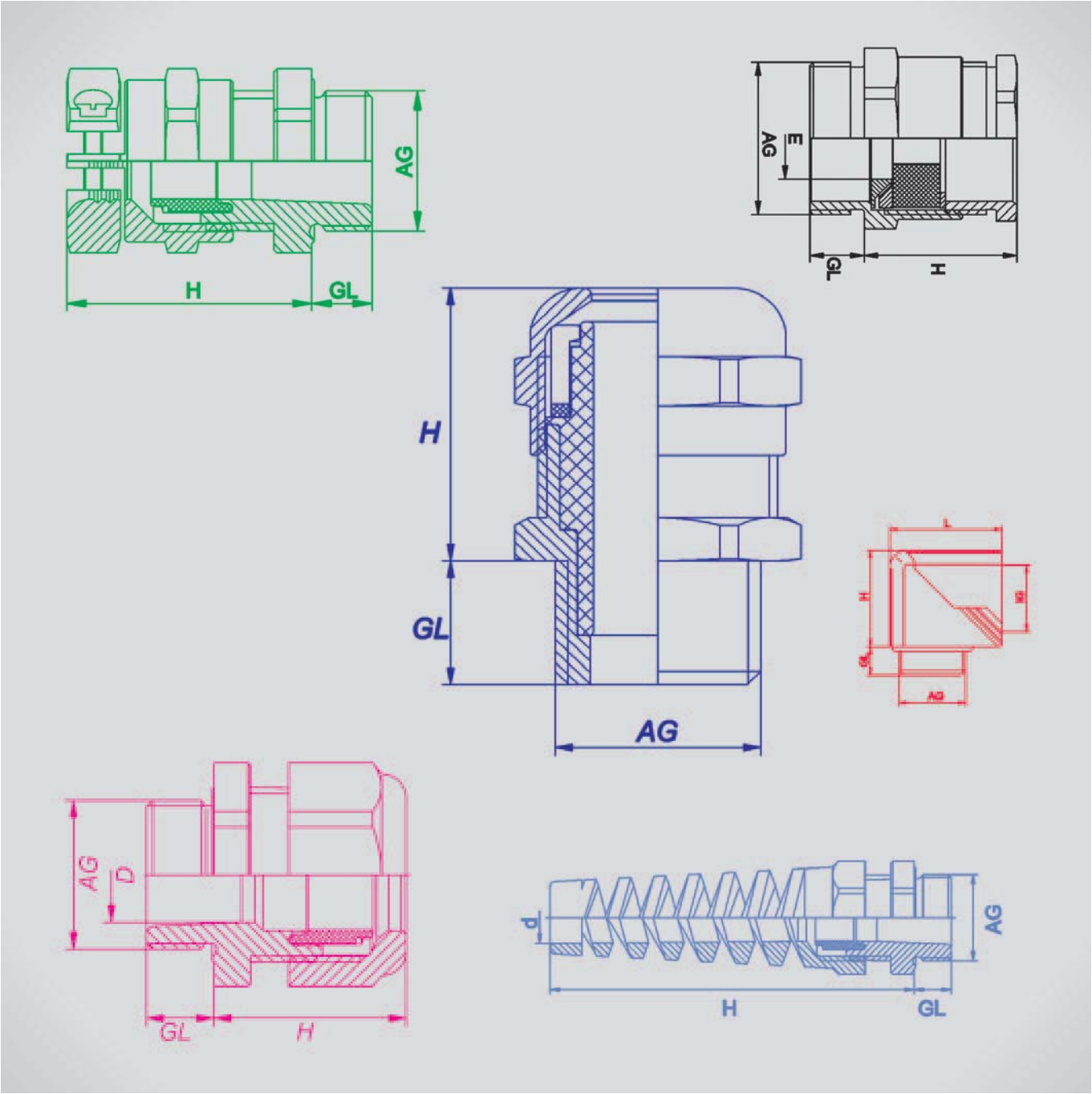


Photo: HELUKABEL®

Technical information

Technical information

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General information

Basic functions of a cable gland

Transferring cables and wires

- Power (electricity)
- Signals and data (current, voltage, light)

Cable protection

If a wire is to be connected in a housing, the housing must have a protective lead-through. Otherwise there is a danger that the wire will become damaged in case of movement.

Strain relief

A wire always moves to a greater or lesser extent – both during installation, and in long-term use. It is important to protect it against tensile loads. The movements may be either constant or intermittent. For this reason, a cable gland with strain relief is necessary.
Strain reliefs are described in EN 50262. A distinction is made between retention, strain relief A and strain relief B. Generally, cable glands have strain relief A.

Protection classification

The lead-through in the wall of the housing must be sealed. This is described by ingress protection IP. The cable glands presented here have protection classification IP 68 – 5 bar. The 6 stands for "No dust penetration", while the 8 stands for "Protected when permanently submerged in water" – this is tested at a water pressure of 5 bar (corresponds to 50 m water depth) for a duration of 30 min.

Seal with insert

A seal is compressed by tightening the cap nut. A particularly high quality seal and strain relief are achieved.

Sealing with clamping plates

When the cap nuts are screwed tight, lamellae press against the moulded seal – the wire is thereby sealed and the strain is relieved. The particular advantage of the clamping lamellae is that they make a large clamping range possible, to allow for different wire diameters.

Resistance

Different applications demand different degrees of resistance.
Plastic cable glands made from polyamide can be used at a temperature range of between -20 °C and +100 °C. They are abrasion- and impact resistant as well as being resistant against hydrocarbons/fuels and cleaning agents.
Stainless steel glands are suitable for heavy-duty use– they are waterproof and resistant to a large number of disinfectants used in food production.
Brass glands are used when a long-lasting metal gland is required. Cable glands for EMC applications are also made from brass (EMC = Electro-magnetic Compatibility).

Compact design

- No disassembly during final assembly. Simply loosening the cap nuts is sufficient.
- No losing components
- Quick assembly

Standard EN 50262

Cable glands are produced and tested according to the standard EN 50262. This stipulates the dimensions of the connection threads ("metric threaded connection") as well as a series of safety-relevant parameters, e.g. strain relief. Cable glands are also available with another threaded connection (PG, NPT, etc.).

RoHS

Directive 2002/95/EC defines environment-relevant standards for electrical and electronic components and devices. This is known as RoHS for short: „Restriction of the use of certain hazardous substances in electrical and electronic equipment". The use of heavy metals (lead, cadmium, etc.) and a number of other hazardous substances is forbidden.

Installation notes

No disassembly

Disassembly of the glands HELUTOP® HT, HSK, Helufast, UNI-DICHT, KVA, SD are not necessary – provided that the cap nut is applied in such a way as to allow smooth running, there is no problem with subsequent insertion of the cable.

Screwing in

When screwing, observe the necessary tightening torque. If only one through-hole without thread is available, a lock nut must be used.

Protection classification

In order to achieve the desired protection classification even when working with an unfavourable surface, it may be necessary to use an O-ring or a connection thread gasket. To ensure a consistently high-quality seal, we recommend re-tightening the gland some time after assembly.

Lead through cable – turn cap nut – that's all there is to it!

Approval to HELUTOP® HT

HELUTOP® HT-M cable gland from polyamide, metric thread

Approval certificate no. 138040
Approval certificate no. 134171

Type designation BM (corresponding to HELUTOP® HT-M)

For all products:
Temperature range: -20°C / +80°
Protection classification: IP 68 - 5bar (30min.)

Size metric	Sealing range mm	Clamping range of Strain relief mm	Category of Strain relief	Installation torque tested to EN 50262* Nm	Category of impact effect
M12x1,5	3-6	3-6	A	1,7/2,5	2
M16x1,5	4-8	4-8	A	2,5/3,75	2
M16x1,5	5-10	5-10	A	2,5/3,75	2
M20x1,5	6-12	6-12	A	3,3/3,75	2
M20x1,5	10-14	10-14	A	3,3/3,75	2
M25x1,5	12-17	12-17	A	5,0/7,5	2
M25x1,5	13-18	13-18	A	5,0/7,5	2
M32x1,5	15-21	15-21	A	12/7,5	4
M32x1,5	18-25	18-25	A	12/7,5	4
M40x1,5	19-28	19-28	A	12/7,5	4
M40x1,5	22-31	22-31	A	12/7,5	4
M50x1,5	30-36	30-36	A	12/7,5	4
M63x1,5	34-44	34-44	A	12/7,5	4
M63x1,5	35-44	35-44	A	12/7,5	4

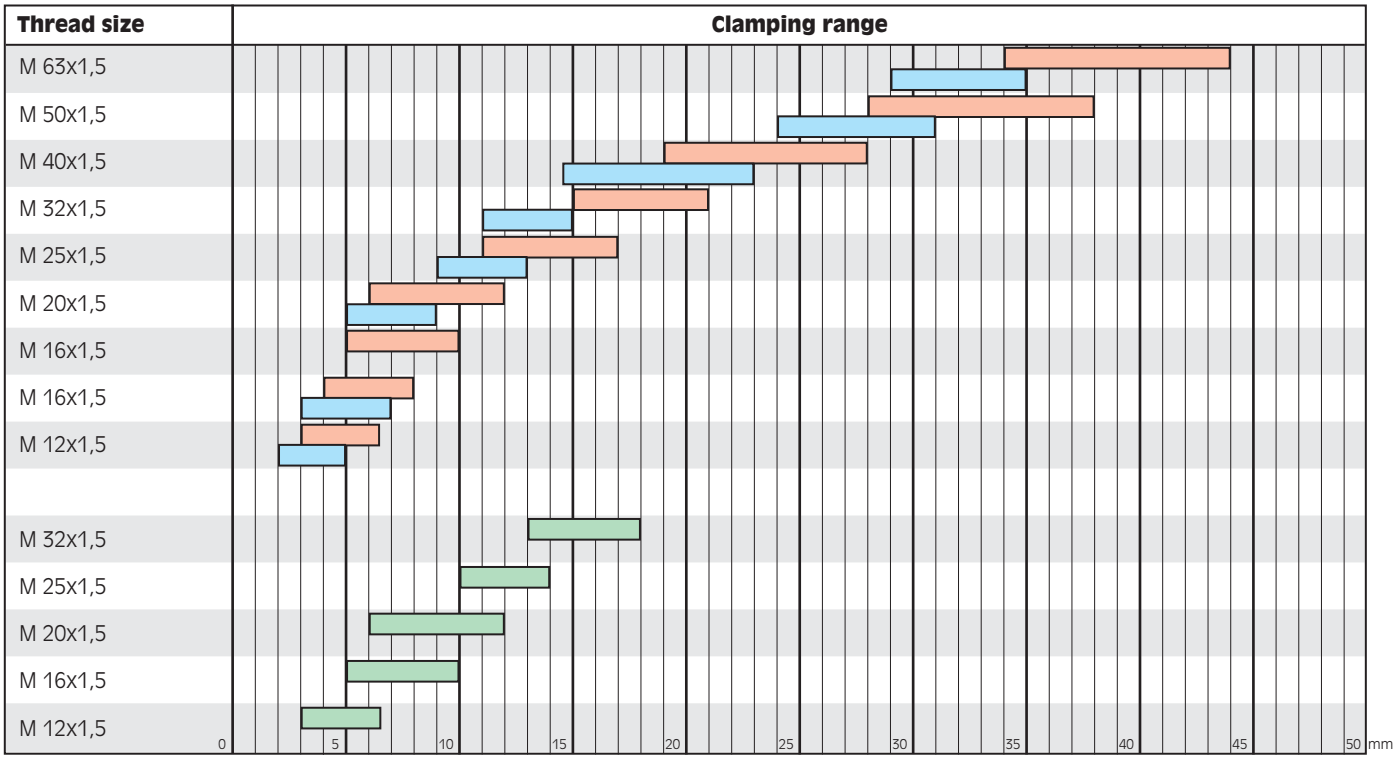
*Cap nut/gland and/or locknut

			VDE	UR/UL	CSA(US)
Helutop HT	metrical	M12 - M16	VDE	-	CSA(US)
		M20		UL	
		M32 - M63		-	
	PG		-	-	
	NPT	1/4" - 1"	-	-	
Helutop HT-R	metrical, reduced	M12 - M63	-	-	CSA(US)
Helutop HT-BS	metrical	M12 - M16	VDE	-	CSA(US)
		M20		UL	
		M32 - M63		-	
Helutop HT-K	metrical	M12 - M63	-	-	CSA(US)
	PG		-	-	
	NPT	1/4" - 1"	-	-	
Helutop-HT-MS	metrical	M12 - M16	-	UR	-
		M20 - M63		UL	
	PG		-	-	
	NPT	1/4" - 3/8"	-	UR	
		1/2"		UL	
		3/4" - 1"		-	
Helutop MS-EP	metrical	M12 - M16	-	UR	-
		M20 - M63		UL	
	NPT	1/4" - 3/8"	-	UR	-
		1/2"		UL	
		3/4" - 1"		-	
Helutop MS-E	PG		-	-	-
Helutop HT-E	metrical	M12 - M16	-	UR	-
		M20 - M63		UL	
	PG		-	-	
	NPT	1/4" - 3/8"	-	UR	
		1/2"		UL	
		3/4" - 1"		-	
Updated: 15 October 2007					

Clamping ranges HELUTOP® HT

Clamping ranges

	Gland type		
Polyamide Polyamide, with pre-assembled blind plug Stainless steel Brass Brass, for EMC applications	HELUTOP® HT HELUTOP® HT-BS HELUTOP® HT-E HELUTOP® HT-MS HELUTOP® HT-MS-EP	HELUTOP® HT-R HELUTOP® HT-MS-R	HELUTOP® HT-K
Thread size	**Standard**	**reduced sealing**	**with anti-kink protection**
M 12x1,5	3,0 - 6,5 mm	2,0 - 5,0 mm	3,0 - 6,5 mm
M 16x1,5	4,0 - 8,0 mm	3,0 - 7,0 mm	
M 16x1,5	5,0 - 10,0 mm		5,0 - 10,0 mm
M 20x1,5	6,0 - 12,0 mm	5,0 - 9,0 mm	6,0 - 12,0 mm
M 25x1,5	11,0 - 17,0 mm	9,0 - 13,0 mm	10,0 - 14,0 mm
M 32x1,5	15,0 - 21,0 mm	11,0 - 15,0 mm	13,0 - 18,0 mm
M 40x1,5	19,0 - 28,0 mm	14,5 - 23,0 mm	
M 50x1,5	28,0 - 38,0 mm	24,0 - 31,0 mm	
M 63x1,5	34,0 - 44,0 mm	29,0 - 35,0 mm	



Protection classifications to EN 60529

Definition of protection classifications to EN 60529

The protection classifications are indicated by a code, which always begins with the letters IP and ends with the number for the protection level, e.g. IP 54.

Protection level against solid foreign bodies			**Protection** level against water		
First number	**Short description**	**Definition**	**Second number**	**Short description**	**Definition**
0	Not protected	The object sensor, a 50 mm ball, must not fully penetrate.	0	Not protected	Vertically-falling droplets must not have a damaging effect.
1	Protected against solid foreign bodies of 50 mm diameter and larger	The object sensor, a 12.5 mm ball, must not fully penetrate.	1	Protected against dripping water	Vertically-falling droplets must not have a damaging effect if the housing is tilted by an angle of up to 150 on both sides of the perpendiculars.
2	Protected against solid foreign bodies of 12.5 mm diameter and larger	The object sensor, a 2.5 mm diameter ball, must not penetrate at all.	2	Protection against dripping water if the housing is tilted by up to 150.	Water sprayed at both sides of the perpendiculars at an angle of up to 60° must not have a damaging effect.
3	Protected against solid foreign bodies of 2.5 mm diameter and larger	The object sensor, a 2.5 mm diameter ball, must not penetrate at all.	3	Protected against spray water	Water sprayed against the housing from one direction must not have a damaging effect.
4	Protected against solid foreign bodies of 1.0 mm diameter and larger	The object sensor, a 1.0 mm diameter ball, must not penetrate at all.	4	Protected against spray water	Water sprayed against the housing in a jet from every direction must not have a damaging effect.
5	Dust protected	Dust penetration is not prevented completely. The amount of penetration, however, must not impair the function or safety of the device.	5	Protected against	Water sprayed against the housing in a strong jet from every direction must not have a damaging effect.
6	Dust protected	No dust penetration	6	Protected against strong hose water	Water sprayed against the housing in a strong jet from every direction must not have a damaging effect.
Example: Letters IP 65 First index: Protection against contact and penetration by foreign bodies Second index: Protection against liquid			7	Protected against the effect when temporarily submerged under water	The volume of penetrating water must not have a damaging effect when the housing is temporarily submerged under water at a certain pressure.
			8	Protected against the effect when permanently submerged under water	The volume of penetrating water must not have a damaging effect when the housing is permanently submerged under water.
			9k	Protected against the effect of water from high-pressure cleaners.	Water sprayed against the enclosure in a jet at increased pressure from every direction must not have any damaging effects.

Description of fire protection acc. to UL 94

Description of Fire Protection acc. to UL 94

Fire protection HB

In the horizontal combustion test, the material combusts slowly. Must not exceed a combustion speed of 3 inch/min. up to 3 mm wall thickness and 1.5 inch/7 min at over 3 mm wall thickness. Materials exceeding this combustion speed are not UL listed.

Fire protection V2

In the vertical combustion test, the material must self-extinguish after an average of 25 seconds (no single values over 30 seconds). Material drips can ignite wool placed underneath it. The afterglow, however, must not exceed 60 seconds.

Fire protection V1

In the vertical combustion test, the material must also self-extinguish after an average of 25 seconds (no single values over 30 seconds). By contrast, any drips must not ignite the wool. The afterglow must not exceed 30 seconds.

Fire protection V0

In the vertical combustion test, the material must self-extinguish in less than an average of 5 seconds (no single values over 10 seconds). Any drips must not ignite wool and the afterglow must not exceed 30 seconds.

Size comparison and metric/PG/NPT/BSP installation dimensions

Metric threaded connections to EN 60423

Nominal size	Outer diameter	Through-hole
M12x1,5	12,0	12,5
M16x1,5	16,0	16,5
M20x1,5	20,0	20,5
M25x1,5	25,0	25,5
M32x1,5	32,0	32,5
M40x1,5	40,0	40,5
M50x1,5	50,0	50,5
M63x1,5	63,0	63,5

PG threaded connection to DIN 40430

Nominal size	Outer diameter	Through-hole
PG7	12,5	12,7
PG9	15,2	15,4
PG11	18,6	18,8
PG13,5	20,4	20,6
PG16	22,5	22,7
PG21	28,3	28,5
PG29	37,0	37,2
PG36	47,0	47,2
PG42	54,0	54,2
PG48	59,3	59,5

American pipe thread NPT (conical)

Nominal size	Outer diameter	Through-hole
1/4"	13,616	
3/8"	17,055	
1/2"	21,223	
3/4"	26,568	
1"	33,227	
1 1/4"	41,984	
1 1/2"	48,053	
2"	60,091	
2 1/2"	72,699	
3"	88,608	
3 1/2"	100,013	

Gas pipe thread BSP (British Standard Pipe)

Nominal size	Outer diameter	Through-hole
1/4"	13,157	13,4
3/8"	16,662	17,0
1/2"	20,955	21,3
5/8"	26,441	26,8
1"	33,249	33,7
1 1/4"	41,910	42,2
1 1/2"	47,803	48,3
2"	59,614	60,2
2 1/2"	75,184	75,5
3"	87,884	88,5
3 1/2"	100,330	101,0
4"	113,030	114,0

Size comparison AWG / mm

AWG-no.	Cross-section	Diameter mm
500	253	17,96
350	177	15,03
250	127	12,07
4/0	107,2	11,68
3/0	85,0	10,40
2/0	67,5	9,27
1/0	53,5	8,25
1	42,4	7,35
2	33,6	6,54
4	21,2	5,19
6	13,3	4,12
8	8,37	3,26
10	5,26	2,59
12	3,31	2,05
14	2,08	1,63
16	1,31	1,29
18	0,823	1,024
20	0,519	0,813
22	0,324	0,643
24	0,205	0,511
26	2,128	0,405
28	0,0804	0,320
30	0,0507	0,255
32	0,0324	0,203
34	0,0200	0,160
36	0,0127	0,127
40	0,00487	0,079
42	0,00317	0,064
44	0,00203	0,051

Inch/mm conversion

Inches	mm
1/8	3,2
1/4	6,4
3/8	9,5
1/2	12,7
3/4	19,0
1	25,4
1 1/4	31,8
1 1/2	38,0
2	50,8
2 1/2	64,0
3	76,0
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Note

Technical alternations

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The length marking, which is not calibratable, represents a tool, e.g. for a simple material allowance determination or for the specifications of the residual length that remains on the drum. The deviation of the wire length represented by the length marking can be up to 1%. Incomplete length markings, length markings missing on sections or deviations of the wire length represented by the length marking do not establish a statutory duty. Only calibrated measuring devices must be used to determine the wire length.

Safety instructions

The cables and wires described in the catalog are manufactured in accordance with domestic and international standards as well as in-house standards. Adherence to the then valid safety guidelines, standards and legal regulations is provided for application safety. Product specific dangers can be excluded assumed a proper and professional installation and usage is guaranteed. For each product, this catalog describes general information for usage. Independent of the above, the specifications of the appropriate DIN VDE specifications are valid. However, the installation and processing can only be performed by professional electricians.

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