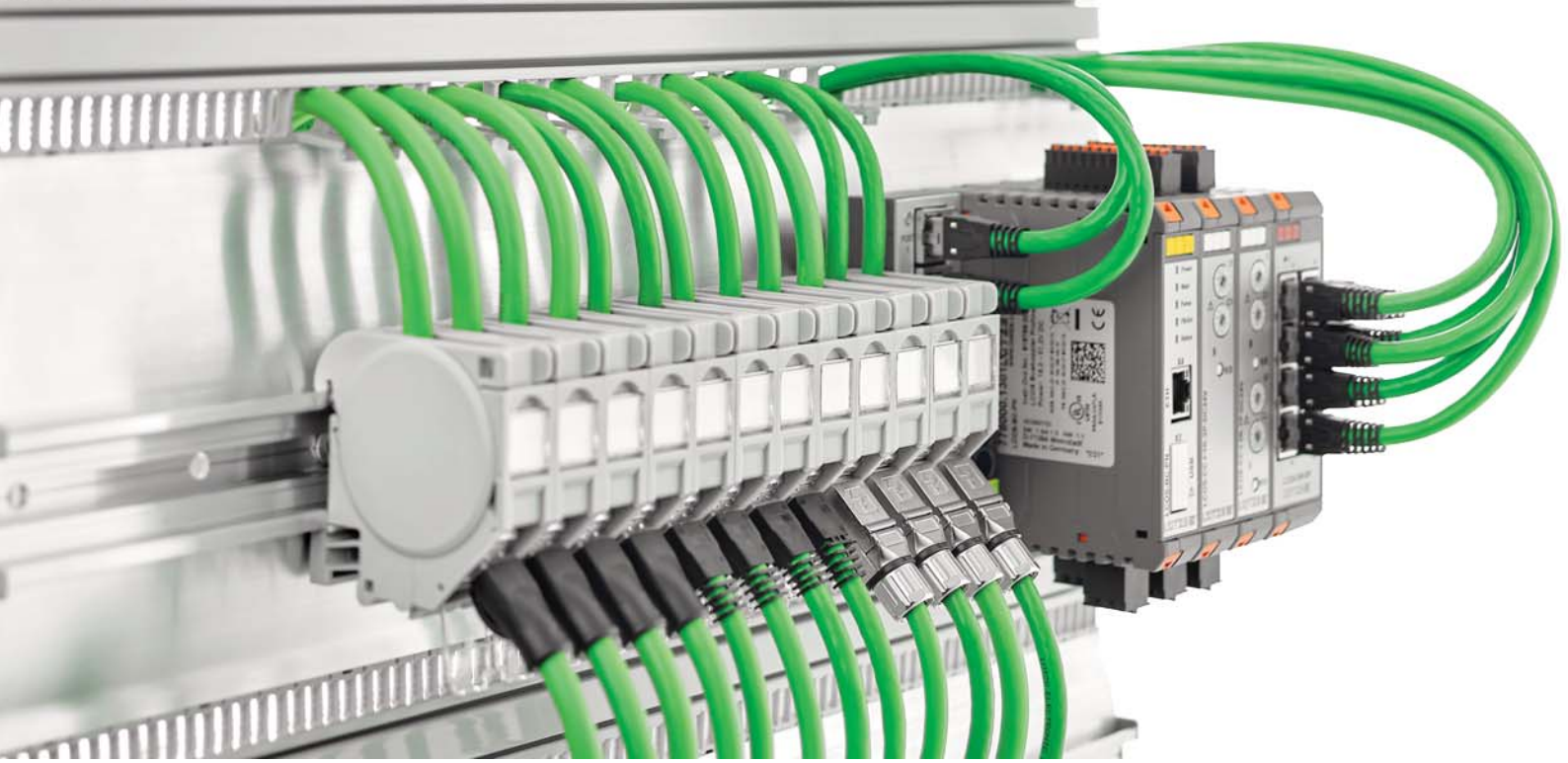


Connectivity Solutions

LÜTZE Connectivity Solutions

Cable Assemblies

Actuator Sensor Interface

Suppression Technology

SYSTEMATIC TECHNOLOGY

Efficiency in Automation

Cable • Connectivity • Cabinet • Control

Welcome to LÜTZE

Cable Solutions

Connectivity Solutions

Cabinet Solutions

Control Solutions

Transportation Solutions

LÜTZE - Efficiency in Automation

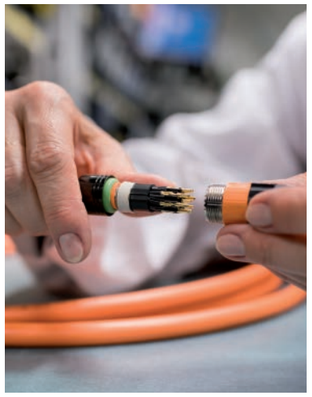
A tradition in automation for over 60 years, with countless pioneering achievements and patents, the LUETZE INTERNATIONAL Group is today one of the leading companies in the automation industry. LÜTZE supplies very efficient electronic and electrotechnical components, system solutions for automation and high tech for rail engineering.

The comprehensive and coordinated supply program ranges from high flexing cables and cable assemblies, to energy efficient *Air***STREAM** wiring systems for control cabinets through to intelligent Industry 4.0 solutions from the fields of interface technology, current monitoring, power supply and Ethernet infrastructure.

The LUETZE INTERNATIONAL Group has multiple locations throughout Europe, Asia and the USA and numerous distribution partners across the world to provide global product availability and service to our customers in all markets.

LÜTZE is one of the leading suppliers in the rail technology field. LÜTZE Transportation solutions are installed in numerous locomotives, city rail and underground rail systems, as well as high-speed trains across the world.

LÜTZE®
SYSTEMATIC TECHNOLOGY



What moves us:
Quality, innovation, eff iciency

A prime example of competence in cables: In addition to manufacturing expertise, our cable assembly specialists are familiar with all cable types and offer genuine added value. The decisive advantage: We're cable experts – since 1958.

LÜTZE SUPERFLEX® connected

The people at LÜTZE

Quality, innovation and efficiency begin with people. We would not be where we are today without our highly qualified and motivated employees. An uncompromising focus on quality, 60 years of experience in automation technology and of course a common desire for greater innovation and efficiency – that's what makes LÜTZE so successful.

The people at LÜTZE are familiar with automation applications and technologies across all disciplines, as they are involved with our broad range of products comprising four product areas Cable, Connectivity, Cabinet and Control.

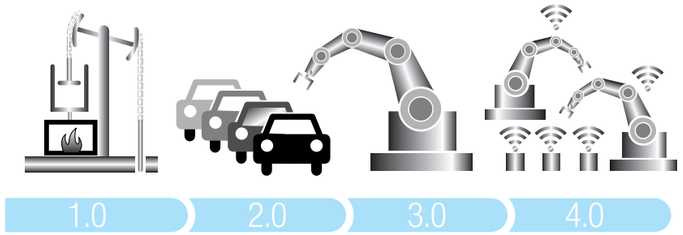
INDUSTRY 4.0

IIoT - **Industrial Internet of Things**

What is Industry 4.0?

A German government memo released way back in 2013 was one of the first times that 'Industrie 4.0' was mentioned.

The high-tech strategy document outlined a plan to almost fully computerise the manufacturing industry without the need for human involvement.



The first industrial revolution was the one that saw the transition from farming to factory production in the 19th Century. The second ran from around the 1850s, and began with the introduction of steel, culminating in the early electrification of factories and the first signs of mass production.

In more recent times is the third industrial revolution that refers to the change from analogue, mechanical, and electronic technology to digital technology that took place from the late 1950s to the late 1970s.

Industry 4.0 is another area where the Internet of Things looks to play a huge role thanks to the sheer volume of sensors and "things" that have the potential to feed information into it and add value to manufacturing processes. Projections on the industry have mentioned the IoT alongside cyber-physical systems as ways in which a combination of software, sensors, processors and communications technology will underpin the very development of Industry 4.0.

LÜTZE Connectivity

The smart machines of the future need reliable connections. LÜTZE has a large range of industrial ethernet cables and connectors and is capable of producing cable assemblies that provide users of automation equipment with the connections they need, using either RJ45, M12 or M8 connectors.

Smart electronic current control from LÜTZE

The control equipment on machines needs DC voltage, so the monitoring of these circuits is a logical next step as part of the IIoT concept.

The LOCC-Box devices from LÜTZE can provide complete information from the machine load circuits and communicate this information via Ethercat/Profinet to facilitate external monitoring at either the machine level and or remotely.

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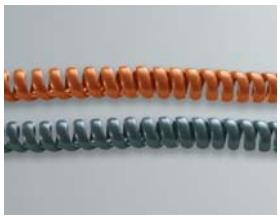

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Product photos
The product photos are not to scale and do not accurately depict every single product detail.

Download the latest technical information from www.luetze.com

NEW!
The LÜTZE Online Catalogue:
www.luetze.com/catalogue

Cable assemblies

Cable assemblies

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Product photos
The product photos are not to scale and do not accurately depict every single product detail.

Cable assemblies

Pre-assembled cables for various applications

Siemens Simatic SPS / S7 connector 54

Product photos
The product photos are not to scale and do not accurately depict every single product detail.

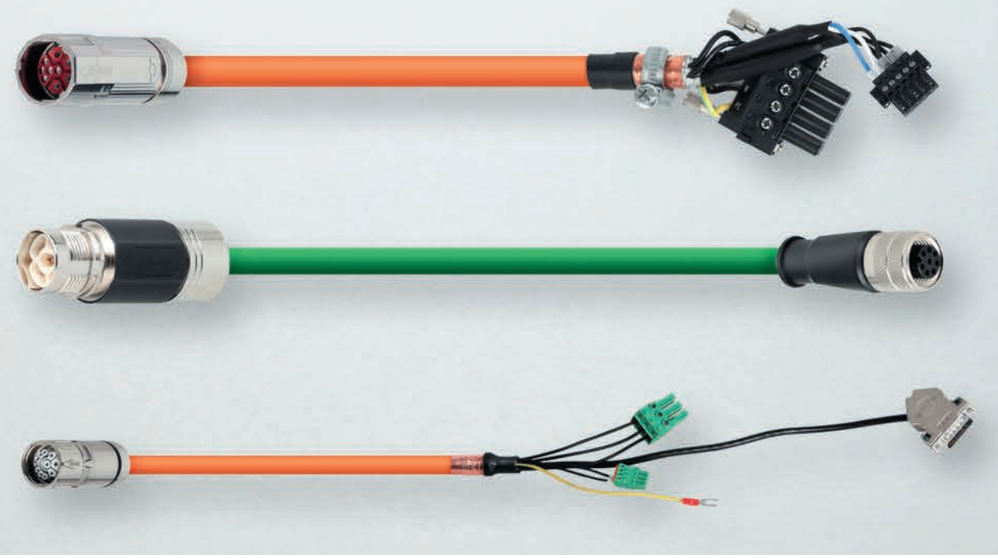
Ordering instructions
The LÜTZE Art.no. consists of two blocks that are separated by a dot:
6-digits before the dot: technical design
4-digits after the dot: lenght code in cm

Special features:
• No minimum order quantity
• All intermediate lenghts in increments of 0.5 m are available within a short time
• When ordering, please specify serial number and lenght key
• Additional types on request

Always the right connection:
LÜTZE cable assemblies

Helical cables - Manufactured to meet your specifications, our helical cables are suitable for high mechanical loads such as high-performance machines, lifting

platforms and lots of other moving applications. Also highly suited for use outside for millions of load changes without failure!



Moduled closed

LÜTZE SAFECON plastic moulded round plug connectors M23 for industrial use offer the user an economical and, at the same time, safe solution for the electrical connection of machines and systems.

The LÜTZE program contains various termination numbers and cable lengths. This means terminations of 6 - 28 and transfer outputs of up to 30 A at 630 V, and therefore robust, safe cabling is available for numerous signal and power applications.

The integrated protection against kinking and the inner metal housing with 360° EMC shielding ensure the cable assemblies meet the requirements for the industrial sector - **they really are sealed shut!**

Other benefits:
- Tamper-proof: unauthorised opening of the connector housing and incorrect connection in the connector are therefore excluded
- 100 % compatible with SIEMENS®, BOSCH REXROTH®, ALLEN BRADLEY®
- Manufacture from a batch size of 1
- Available at short notice
- Protection class IP66/67

Customer-specific solutions

Each installation is different. Therefore, make use of our cable assembly expertise; experts will plan your project and document your application making use of a product range containing more than 1700 cables, connectors, strain relief elements and protective hoses.

Customer questionnaire Connectivity

Company: _____

Contact person: _____

Department: _____

Street address: _____

Postal code, city/town: _____

Telephone: _____

Fax / E-Mail: _____

Deutschland
Friedrich Lütze GmbH
Tel.: +49 71 51 60 53-0
Fax: +49 71 51 60 53-277(-288)
info@luetze.de

Great Britain
LUTZE Ltd.
Tel.: +44 1827 31333-0
Fax: +44 1827 31333-2
sales.gb@lutze.co.uk

Manufacture

Description: _____

Batch sizes / scale quantities: _____

Annual requirement: _____

Delivery time / -date: _____

Cable

Name / Description: _____

Jacket material: _____

Jacket color: _____

Approvals: _____

Operating conditions: _____

Length (m): _____

Side A

☐ **Connectors**

Name / description: _____

Supplier: _____

Supplier item number: _____

☐ **Machined open end**

Name / description: _____

Stepped dimensions / wire lengths: _____

Contacts / connectors: _____

Supplier item number: _____

☐ **Cut off smoothly**

☐ labelled ☐ not labelled

Side A

☐ **Connectors**

Name / description: _____

Supplier: _____

Supplier item number: _____

☐ **Machined open end**

Name / description: _____

Stepped dimensions / wire lengths: _____

Contacts / connectors: _____

Supplier item number: _____

☐ **Cut off smoothly**

☐ labelled ☐ not labelled

General special features _____

Customer questionnaire Connectivity

Description side A

_____

Description side B

_____

Pin assignment

☐ View connection side
☐ View machining side

Non-used wires

☐ insulate
☐ cut off

Cable outlet

☐ straight
☐ angled in PIN direction: _____

Code settings

In direction: _____

Screen machining

	outside	inside
Cut off	☐	☐
On housing	☐	☐
On PIN	☐	☐
Execute with wire	☐	☐

Insulate outer screen against inner screen ☐
Connect inner screen ☐
Insulate inner screens against each other ☐
Cut off outer screen, put on jacket ☐
Screen window ☐

Width: _____
Position: _____

Label text

_____
_____

Wire printing available on request

Label position

After connector (mm): _____

Assignment

PIN	Wire no./colour	PIN	Wire no./colour

PIN assignment

☐ View connection side
☐ View machining side

Non-used wires

☐ insulate
☐ cut off

Cable outlet

☐ straight
☐ angled in PIN direction: _____

Code settings

In direction: _____

Screen machining

	outside	inside
Cut off	☐	☐
On housing	☐	☐
On PIN	☐	☐
Execute with wire	☐	☐

Insulate outer screen against inner screen ☐
Connect inner screens ☐
Insulate inner screens against each other ☐
Cut off outer screen, put on jacket ☐
Screen window ☐

Width: _____
Position: _____

Label text

_____
_____

Wire printing available on request

Label position

After connector (mm): _____

Special test parameter: _____
Packaging: _____

Construction questionnaire for LÜTZE SAFECON

Company: _____

Contact person: _____

Department: _____

Street address: _____

Postal code, city/town: _____

Telephone: _____

Fax: _____

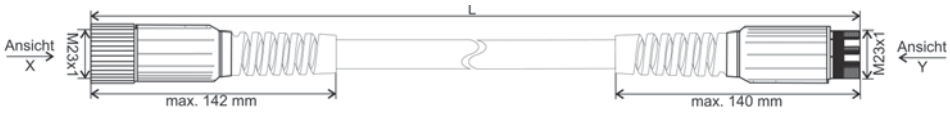
Germany
Friedrich Lütze GmbH
Tel.: +49 7151 6053-0
Fax: +49 7151 6053-277(-288)
info@luetze.de

Great Britain
LUTZE Ltd.
Tel.: +44 1827 31333-0
Fax: +44 1827 31333-2
sales.gb@lutze.co.uk

Please tell us your requirements by filling in this construction questionnaire:

Batch size: _____ pieces

Page 1



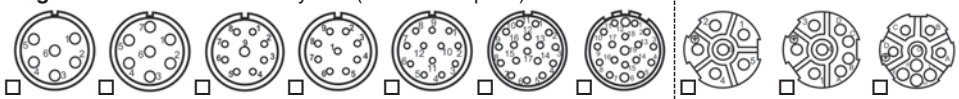
Page 2

Page 1 / View X

☐ clockwise

☐ counterclockwise

Signal — Pin layouts (more on request) — **Power**



☐ 6-pin ☐ 7-pin ☐ 8+1-pin ☐ 9-pin ☐ 12-pin ☐ 17-pin ☐ 16+3-pin ☐ 6-pin ☐ 8-pin ☐ 9-pin

Options
☐ Connector – inner thread M23 x 1
☐ Connector – speedtec quick release fastener
☐ Coupling – outer thread M23 x 1
☐ Coupling – speedtec quick release fastener
☐ Socket contacts ☐ pin contacts
Signal coding: ☐ 0° ☐ 80° ☐ 120° ☐ 20°

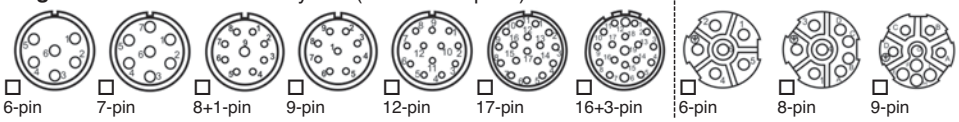
Cable
Assembly length L: _____ mm
☐ LÜTZE cable part number: _____
☐ Description / Requirement / Purpose / Specification:
_____
_____

Page 2 / View Y

☐ clockwise

☐ counterclockwise

Signal — Pin layouts (more on request) — **Power**



☐ 6-pin ☐ 7-pin ☐ 8+1-pin ☐ 9-pin ☐ 12-pin ☐ 17-pin ☐ 16+3-pin ☐ 6-pin ☐ 8-pin ☐ 9-pin

Options
☐ Connector – inner thread M23 x 1
☐ Connector – speedtec quick release fastener
☐ Coupling – outer thread M23 x 1
☐ Coupling – speedtec quick release fastener
☐ Socket contacts ☐ pin contacts
Signal coding: ☐ 0° ☐ 80° ☐ 120° ☐ 20°
☐ Other connectors Type/Version: _____
Manufacturer: _____
Manufacturer part number: _____

☐ Manipulation cable end (strip, remove insulation, change screen, shrink tubing, copper tape etc.) –

Description: _____
_____
_____
_____

☐ Cable end cut smoothly

Labelling
☐ Wrap-round label printing text distance to connector: _____
☐ Cable printing text distance to connector: _____
☐ Other labelling – Description: _____
☐ No labelling

Note: Please indicate pin assignment!

Construction questionnaire for Coil cables

Company: _____

Contact person: _____

Department: _____

Street address: _____

Postal code, city/town: _____

Telephone: _____

Fax: _____

Germany
Friedrich Lütze GmbH
Tel.: +49 7151 6053-0
Fax: +49 7151 6053-277(-288)
info@luetze.de

Great Britain
LUTZE Ltd.
Tel.: +44 1827 31333-0
Fax: +44 1827 31333-2
sales.gb@lutze.co.uk

Please let us know your requirements using this design questionnaire for coil cables:

L:	_____ mm	L0:	_____ mm
Ø AD:	_____ mm	Ø WD:	_____ mm
L1:	_____ mm	L2:	_____ mm
L3:	_____ mm	L4:	_____ mm
L5:	_____ mm	L6:	_____ mm

Quantity: _____ pcs.

Purpose

Installation situation: _____

_____

_____

Winding direction: _____

Standard cable art. no.: _____

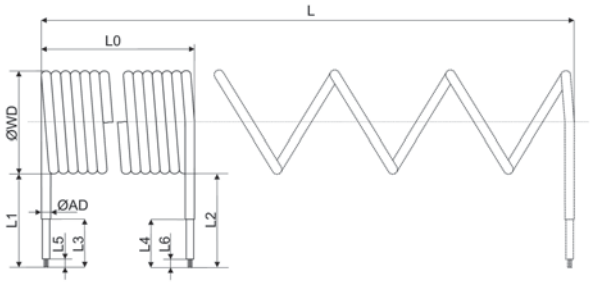
Jacket insulation material: _____

Number of strands: _____

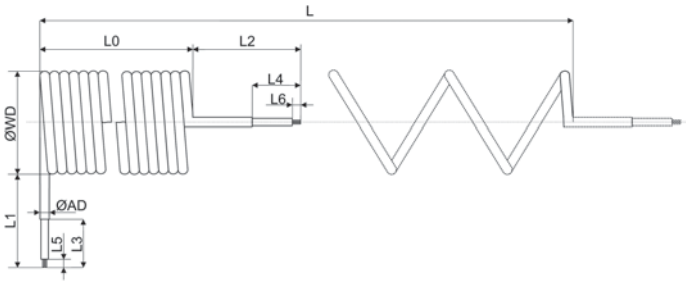
Strand cross-section: _____ mm²

Shielding: ☐ yes ☐ no

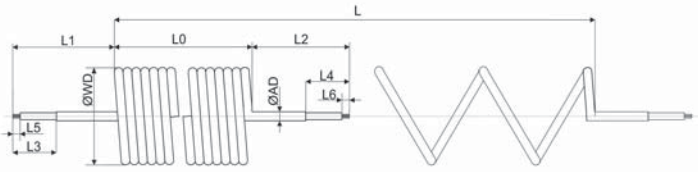
Please fill out this questionnaire and fax it back to us. We will be happy to give you a quotation. Thank you!



☐ Cable outlets, radial



☐ Cable outlets, radial and axial



☐ Cable outlets, axial

Comments

PUR Coil cables · unshielded

LÜTZE PURFLEX

Application
- Machine and device construction, transport and conveyor technology under harsh operating conditions
- Especially for industrial environments, machines and plants
- Lifting platforms, test benches and measuring systems as well as door drives

Properties
- Very good restoring force
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- Industrial and salt water resistant
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Free from paint wetting disruptive substances (LABS-free)
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free

Technical data

Rated voltage U_0/U	300/500 V
Temperature range moving	-20 °C … +80 °C
Temperature range fixed	-40 °C … +80 °C
Design	Cable outlet radial

Part No.		Number of conductors/cross-section	Spiral diameter mm	Spiral length mm	Max. extension length mm	Connection ends L1/L2	Conductor marking	Jacket color
PURFLEX								
190003	A*	3G1.5	30	500	2,250	250/250 mm	green/yellow • brown • blue	orange RAL 2003
190007	A*	3G1.5	30	1,000	4,000	250/250 mm	green/yellow • brown • blue	orange RAL 2003
190012	A*	3G1.5	30	1,500	5,750	250/250 mm	green/yellow • brown • blue	orange RAL 2003
190016	A*	3G1.5	30	2,000	7,500	250/250 mm	green/yellow • brown • blue	orange RAL 2003
190004	A*	4G1.5	33	500	2,250	250/250 mm	green/yellow • brown • black • grey	orange RAL 2003
190008	A*	4G1.5	33	1,000	4,000	250/250 mm	green/yellow • brown • black • grey	orange RAL 2003
190013	A*	4G1.5	33	1,500	5,750	250/250 mm	green/yellow • brown • black • grey	orange RAL 2003
190017	A*	4G1.5	33	2,000	7,500	250/250 mm	green/yellow • brown • black • grey	orange RAL 2003
190005	A*	5G1.5	40	500	2,250	250/250 mm	green/yellow • blue • brown • black • grey	orange RAL 2003
190009	A*	5G1.5	40	1,000	4,000	250/250 mm	green/yellow • blue • brown • black • grey	orange RAL 2003
190014	A*	5G1.5	40	1,500	5,750	250/250 mm	green/yellow • blue • brown • black • grey	orange RAL 2003
190018	A*	5G1.5	40	2,000	7,500	250/250 mm	green/yellow • blue • brown • black • grey	orange RAL 2003
190560	A*	7G1.5	46	2,000	7,500	600/600 mm	black • with white number print	orange RAL 2003
190006	A*	12G1.5	70	500	2,250	250/250 mm	black • with white number print	black RAL 9005
190010	A*	12G1.5	70	1,000	4,000	250/250 mm	black • with white number print	black RAL 9005
190015	A*	12G1.5	70	1,500	5,750	250/250 mm	black • with white number print	black RAL 9005
190019	A*	12G1.5	70	2,000	7,500	250/250 mm	black • with white number print	black RAL 9005

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Servomotor Cable Assemblies for fixed installation

According to Allen-Bradley 2090 standard

Application
- Especially for industrial environments in mechanical and system engineering
- Reinforced insulation with additional relief layer
- Based on NFPA 79 standards
- TC-ER for use in machines and open cable ducts
- UL Type 1000 V Flexible Motor Supply Cable for connection to motors
- In dry, damp and wet rooms

Properties
- Wire insulation reinforcing layer protects against premature cable failure due to reduced corona effect and therefore improves reliability and the life span
- Flexible wires with nylon for better resistance to pressure and impacts as per UL 1277
- High flexibility for complex installation distances and small bending radii
- Improved oil resistance due to specifically developed TPE jacket
- UV-resistant
- Silicone free
- RoHS compliant

Construction

Jacket material	TPE
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

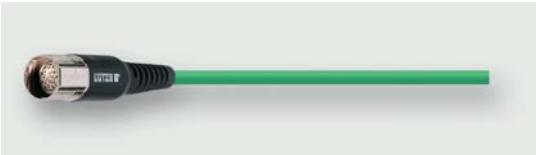
Rated voltage U_N	1000 V Flexible Motor Supply 1000 V WTTC 600 V UL TC 600 V UL MTW 600 V UL AWM 105 °C
Temperature range fixed	-40 °C … +90 °C (105 °C)
Temperature range moving	-5 °C … +90 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	15×D
Certifications	UL Flexible Motor Supply Cable UL Type WTTC 1000 V UL Type TC-ER MTW 600 V UL AWM Style 20328 RoHS REACH Class 1 Div. 2 per NEC Art. 336, 392, 501 C(UL) TC and CIC FT4 UL 1277 Oil Res I and II
Note	* Allen-Bradley article designations are registered trademarks of Rockwell Allen Bradley, and are for reference purposes only

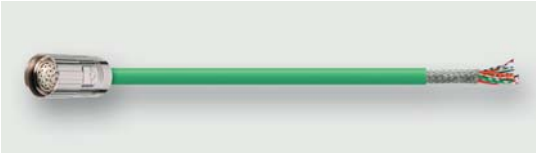
Part No.		Allen Bradley designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193966.1000	A*	2090-CPWM7DF-16AA10	10.0	(4GAWG16)	10.5
193356.1000	A*	2090-CPBM7DF-12AA10	10.0	(4GAWG12+(2×AWG18))	14.2
193352.1000	A*	2090-CPWM7DF-12AA10	10.0	(4GAWG12)	13.1
193306.1000	A*	2090-CPWM7DF-10AA10	10.0	(4GAWG10)	16.5
193353.1000	A*	2090-CPWM7DF-08AA10	10.0	(4GAWG8)	21.0
193960.1000	A*	2090-CPBM7DF-16AA10	10.0	(4GAWG16+(2×AWG18))	12.1
193990.1000	A*	2090-CPBM7DF-14AA10	10.0	(4GAWG14+(2×AWG18))	12.8
193956.1000	A*	2090-CPWM7DF-14AA10	10.0	(4GAWG14)	11.6
193362.1000	A*	2090-CPBM7DF-04AA10	10.0	(4GAWG4+(2×AWG18))	29.5
193357.1000	A*	2090-CPBM7DF-08AA10	10.0	(4GAWG8+(2×AWG18))	22.5
193961.1000	A*	2090-CPBM7DF-06AA10	10.0	(4GAWG6+(2×AWG18))	24.6
193962.1000	A*	2090-CPBM7DF-10AA10	10.0	(4GAWG10+(2×AWG18))	18.1
193369.1000	A*	2090-CPBM7DF-02AA10	10.0	(4GAWG2+(2×AWG18))	34.1

* S Article from stock
A Available with a lead time
R Available on request

Signal Cable Assemblies for fixed installation

According to Allen-Bradley 2090 standard





Application
- Feedback cables for Allen-Bradley drives
- Conform with NFPA79 for machine tool wiring
- Very suitable for extreme operating conditions and high interference signals
- In dry, damp and wet rooms
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Easy installation
- Specially developed TPE jacket for superior oil-resistance according to UL 1581
- Largely resistant to mineral and vegetable-based cutting oils
- UV-resistant
- Talc free and silicone free
- RoHS compliant

Construction

Jacket material	TPE
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	300 V UL 600 V UL AWM 90 °C
Temperature range fixed	-40 °C … +90 °C (105 °C)
Temperature range moving	-5 °C … +90 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	15×D
Oil resistant according to	UL 1581
Oil resistance	4 days in oil at 100 °C 60 days in oil at 75 °C
Burning behavior according to	UL Vertical-Tray UL VW-1
Certifications	UL cURus
Note	* Allen-Bradley article designations are registered trademarks of Rockwell Allen Bradley, and are for reference purposes only

Part No.		Allen Bradley designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193959.1000	A*	2090-CFBM7DF-CEAA10	10.0	(5×2×AWG22)	9.9
193358.1000	A*	2090-CFBM7DD-CEAA10	10.0	(5×2×AWG22)	9.9
Base cable full thread					
193337.1000	A*	2090-XXNFMF-S10	10.0	(2×AWG16+2×AWG22 +6×2×AWG26)	13.6

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Single Cable Assemblies for C-tracks

According to Allen-Bradley 2090 standard

Application
- Combined power supply cable with motor supply, brake and digital feedback especially for SERVO drives in machine and plant construction, transport and conveyor technology
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- Industrial and salt water resistant
- Excellent coolant and lubricant resistance
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Halogen free
- Talc free and silicone free
- RoHS compliant

Construction

Jacket material	Special PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	5×D
Minimum bending radius moving	7.5×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus UL AWM 21223
Note	**max. cable length according to Allen-Bradley specifications** Base cable for Kinetix® 5500 Drives max. 50 m Base cable for Kinetix® 5700 Drives max. 90 m Extension cable max. 30 m
Note	* Allen-Bradley article designations are registered trademarks of Rockwell Allen Bradley, and are for reference purposes only

Part No.		Allen Bradley designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193366.1000	A*	2090-CSBM1DF-18AF10	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
193364.1000	A*	2090-CSBM1DF-14AF10	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0
193371.1000	A*	2090-CSWM1DF-18AF10	10.0	(4G1.0+(2×AWG22))	11.8
193370.1000	A*	2090-CSWM1DF-14AF10	10.0	(4G2.5+(2×AWG22))	14.0
193375.1000	A*	2090-CSBM1DF-10AF10	10.0	(4G6+(2×1.0)+(2×AWG22))	17.8
193376.1000	A*	2090-CSWM1DF-10AF10	10.0	(4G6+(2×AWG22))	17.8
Base cable with 2198-KITCON-DSL					
193952.1000	A*	2090-CSBM1DE-18AF10	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
193963.1000	A*	2090-CSBM1DE-14AF10	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0
193379.1000	A*	2090-CSWM1DE-18AF10	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
193955.1000	A*	2090-CSWM1DE-14AF10	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0
193968.1000	A*	2090-CSBM1DE-10AF10	10.0	(4G6+(2×1.0)+(2×AWG22))	17.8
193967.1000	A*	2090-CSWM1DE-10AF10	10.0	(4G6+(2×1.0)+(2×AWG22))	17.8
Extension speed-connect					
193373.1000	A*	2090-CSBM1E1-18AF10	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
193374.1000	A*	2090-CSBM1E1-14AF10	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0

Servomotor Cable Assemblies for C-tracks

According to Allen-Bradley 2090 standard

Application
- Servo cables for Allen-Bradley drives
- Through optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resitance against aggressive coolants and lubricants
- Especially for industrial environments in mechanical and system engineering

Properties
- High active and passive interference resistance (EMC)
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus UL AWM 21223
Note	* Allen-Bradley article designations are registered trademarks of Rockwell Allen Bradley, and are for reference purposes only

Part No.		Allen Bradley designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193309.1000	A*	2090-CPWM7DF-16AF10	10.0	(4G1.5)	8.6
193307.1000	A*	2090-CPWM7DF-10AF10	10.0	(4G6.0)	14.0
193989.1000	A*	2090-CPBM7DF-10AF10	10.0	(4G6.0+(2×1.5))	16.1
193991.1000	A*	2090-CPBM7DF-16AF10	10.0	(4G1.5+(2×1.5))	11.4
193308.1000	A*	2090-CPWM7DF-14AF10	10.0	(4G2.5)	10.8
193957.1000	A*	2090-CPBM7DF-14AF10	10.0	(4G2.5+(2×1.5))	12.9
193311.1000	A*	2090-CPWM7DF-08AF10	10.0	(4G10)	17.6
193355.1000	A*	2090-CPBM7DF-08AF10	10.0	(4G10+(2×1.5))	19.5
Base cable full thread					
193985.1000	A*	2090-CPBM4DF-16AF10	10.0	(4G1.5+(2×1.5))	12.9
193303.1000	A*	2090-CPWM4DF-16AF10	10.0	(4G1.5)	8.6
193983.1000	A*	2090-CPBM4DF-14AF10	10.0	(4G2.5+(2×1.5))	14.2
193301.1000	A*	2090-CPWM4DF-14AF10	10.0	(4G2.5)	10.8
Extension speed-connect					
193996.1000	A*	2090-CPBM7E7-16AF10	10.0	(4G1.5+(2×1.5))	11.4
193994.1000	A*	2090-CPBM7E7-10AF10	10.0	(4G6.0+(2×1.5))	16.1
193360.1000	A*	2090-CPBM7E7-14AF10	10.0	(4G2.5+(2×1.5))	12.9
193361.1000	A*	2090-CPBM7E7-08AF10	10.0	(4G10+(2×1.5))	19.5

* S Article from stock
A Available with a lead time
R Available on request

Signal Cable Assemblies for C-tracks

According to Allen-Bradley 2090 standard

Application
- Feedback cables for Allen-Bradley drives
- Through optimized cable construction optimally suited for continuous flexing applications in C-tracks
- Very good resitance against aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cULus UL AWM 21223
Note	* Allen-Bradley article designations are registered trademarks of Rockwell Allen Bradley, and are for reference purposes only

Part No.		Allen Bradley designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193977.1000	A*	2090-CFBM7DF-CEAF10	10.0	(5×2×AWG22)	9.2
193958.1000	A*	2090-CFBM7DF-CDAF10	10.0	(2×AWG16+2×AWG22 +6×2×AWG26)	10.8
193350.1000	A*	2090-CFBM7DD-CEAF10	10.0	(5×2×AWG22)	9.2
Base cable full thread					
193973.1000	A*	2090-CFBM4DF-CDAF10	10.0	(2×AWG16+2×AWG22 +6×2×AWG26)	10.8
Extension speed-connect					
193979.1000	A*	2090-CFBM7E7-CEAF10	10.0	(5×2×AWG22)	9.2
193978.1000	A*	2090-CFBM7E7-CDAF10	10.0	(2×AWG16+2×AWG22 +6×2×AWG26)	10.8

* S Article from stock
A Available with a lead time
R Available on request

OCT hybrid cables for C-tracks

According to Beckhoff standard
Single-cable Hybrid SERVO motor lines

Application
- Combined power supply cable with motor supply, brake and digital feedback especially for SERVO drives in machine and plant construction, transport and conveyor technology
- Through full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- industrial- and salt water resistant
- Excellent coolant and lubricant resistance
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Halogen free
- Talc free and silicone free
- RoHS compliant

Construction

Jacket material	Special PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	5×D
Minimum bending radius moving	7.5×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus UL AWM 21223
Note	**max. cable lengths incl. extension based on Beckhoff standard** without motor choke max. 25 m – 35 m with motor choke max. 50 – 100 m depending on servo system
Note	* Beckhoff article designations are registered trademarks of Beckhoff, and are for reference purposes only

Part No.		Beckhoff designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
196938.1000	A*	ZK4500-8023-0100	10.0	(4G1.5+(2×1.0)+(2×AWG22))	13.2
196955.1000	A*	ZK4500-8024-0100	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0
170430.1000	A*	ZK4500-8025-0100	10.0	(4×4.0+(2×1.0)+(2×AWG22))	15.8
196495.1000	A*	ZK4500-8022-0100	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
171395.1000	A*	ZK4800-8022-0100	10.0	(4G1.0+(2×0.75)+(2×AWG22))	11.8
171523.1000	A*	ZK4800-8023-0100	10.0	(4G1.5+(2×1.0)+(2×AWG22))	13.2
171743.1000	A*	ZK4800-8024-0100	10.0	(4G2.5+(2×1.0)+(2×AWG22))	14.0
171744.1000	A*	ZK4800-8025-0100	10.0	(4×4.0+(2×1.0)+(2×AWG22))	15.8

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

OCT hybrid cables for C-tracks

According to BOSCH REXROTH standard
Single-cable Hybrid SERVO motor lines

Application
- For Indramat* system (and similar)
- Termination cable motor or motor/brake especially for frequency converters and SERVO drives in machine and plant construction, transport and conveyor technology
- Through full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- industrial- and salt water resistant
- Excellent coolant and lubricant resistance
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Halogen free
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	5×D
Minimum bending radius moving	7.5×D
Burning behavior according to	DIN EN 60332-1-2 IEC 60332-1-2 UL VW1, FT1
Halogen free according to	IEC 60754-1
Impedance	nom.100 Ω
Certifications	cURus
Note	* Bosch Rexroth article designations are registered trademarks of Bosch Rexroth, and are for reference purposes only

Part No.		BOSCH REXROTH designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
193131.1000	A*	RH2-021DBB-NN-010,0	10.0	(4G1,5+(2×0,75)+(4×AWG24))	13.3
193132.1000	A*	RH2-022DBB-NN-010,0	10.0	(4G1,5+(2×0,75)+(4×AWG24))	13.3
193133.1000	A*	RH2-023DBB-NN-010,0	10.0	(4G1,5+(2×0,75)+(4×AWG24))	13.3
193134.1000	A*	RH2-025DBB-NN-010,0	10.0	(4G1,5+(2×0,75)+(4×AWG24))	13.3
Extension speed-connect					
193135.1000	A*	RH2-521DBB-NN-010,0	10.0	(4G1,5+(2×0,75)+(4×AWG24))	13.3

Servomotor cables for C-tracks

According to Bosch Rexroth IKG standard

Application
- Motor cable for Bosch Rexroth SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Bosch Rexroth article designations are registered trademarks of Bosch Rexroth, and are for reference purposes only

Part No.		BOSCH REXROTH designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable					
193028.1000	A*	IKG4115/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193029.1000	A*	IKG4116/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193054.1000	A*	IKG4117/010.0	10.0	(4G4+2×(2×1.5))	16.3
193055.1000	A*	IKG4118/010.0	10.0	(4G6+2×(2×0.75))	18.4
193037.1000	A*	IKG4175/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	22.3
193030.1000	A*	IKG4136/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193062.1000	A*	IKG4176/010.0	10.0	(4G10+2×(2×1.5))	22.3
193031.1000	A*	IKG4140/010.0	10.0	(4G1.5+2×(2×0.75))	18.4
193060.1000	A*	IKG4139/010.0	10.0	(4G2.5+2×(2×0.75))	22.3
193038.1000	A*	IKG4177/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	12.9
193039.1000	A*	IKG4215/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	14.2
193077.1000	A*	IKG4169/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	16.3
193032.1000	A*	IKG4155/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193078.1000	A*	IKG4168/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	22.3
193061.1000	R*	IKG4172/010.0	10.0	(4G16+2×(2×1.5))	26.8
193035.1000	R*	IKG4173/010.0	10.0	(4G25+2×(2×1.5))	29.3
193036.1000	R*	IKG4174/010.0	10.0	(4G35+2×(2×1.5))	32.5
193033.1000	R*	IKG4620/010.0	10.0	(4G25+2×(2×1.5))	29.3
193079.1000	R*	IKG4621/010.0	10.0	(4G35+2×(2×1.5))	32.5

* S Article from stock
A Available with a lead time
R Available on request

Servomotor cables for C-tracks

According to Bosch Rexroth RKL standard

Application
- Motor cable for Bosch Rexroth SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	VDE 0482 Part 265-2 DIN EN 50265-2 IEC 60332-1 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Bosch Rexroth article designations are registered trademarks of Bosch Rexroth, and are for reference purposes only

Part No.		BOSCH REXROTH designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable					
193262.1000	A*	RKL0014/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193089.1000	A*	RKL0015/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193090.1000	A*	RKL0016/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193091.1000	A*	RKL0017/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193092.1000	A*	RKL0018/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193093.1000	A*	RKL0019/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193095.1000	A*	RKL0046/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193097.1000	A*	RKL0049/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193098.1000	A*	RKL0050/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193100.1000	A*	RKL0052/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193101.1000	A*	RKL0053/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193105.1000	A*	RKL0057/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193106.1000	A*	RKL0058/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193125.1000	A*	RKL4300/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193107.1000	A*	RKL4301/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193240.1000	A*	RKL4302/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193258.1000	A*	RKL4303/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193241.1000	A*	RKL4306/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193273.1000	A*	RKL4307/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193242.1000	A*	RKL4308/010.0	10.0	(4G2.5+2×(2×0.75))	14.2
193243.1000	A*	RKL4309/010.0	10.0	(4G2.5+2×(2×0.75))	14.2
193244.1000	A*	RKL4310/010.0	10.0	(4G2.5+2×(2×0.75))	14.2
193108.1000	A*	RKL4313/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193257.1000	A*	RKL4314/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193109.1000	A*	RKL4315/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193246.1000	A*	RKL4317/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193247.1000	A*	RKL4318/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193276.1000	A*	RKL4345/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193119.1000	A*	RKL4346/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
Extension					
193263.1000	A*	RKL4311/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193278.1000	A*	RKL4304/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193616.1000	A*	RKL4305/010.0	10.0	(4G1.0+2×(2×0.75))	12.5
193245.1000	A*	RKL4312/010.0	10.0	(4G2,5+2×(2×1.0))	14.2
193110.1000	A*	RKL4316/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193279.1000	A*	RKL4319/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193120.1000	A*	RKL4347/010.0	10.0	(4G2.5+2×(2×1.0))	14.2

* S Article from stock
A Available with a lead time
R Available on request

Servomotor cables for C-tracks

According to Bosch Rexroth RKL standard

Application
- Motor cable for Bosch Rexroth SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Bosch Rexroth article designations are registered trademarks of Bosch Rexroth, and are for reference purposes only

Part No.		BOSCH REXROTH designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable					
193094.1000	A*	RKL0045/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193099.1000	A*	RKL0051/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193102.1000	A*	RKL4354/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193103.1000	A*	RKL0055/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193104.1000	A*	RKL0056/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193259.1000	A*	RKL4320/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193252.1000	A*	RKL4321/010.0	10.0	(4G2.5+2×(2×0.75))	14.2
193282.1000	A*	RKL4322/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193248.1000	A*	RKL4323/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193249.1000	A*	RKL4324/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	22.3
193272.1000	A*	RKL4325/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193111.1000	A*	RKL4326/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193112.1000	A*	RKL4327/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193250.1000	A*	RKL4328/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193251.1000	A*	RKL4329/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	22.3
193253.1000	R*	RKL4330/010.0	10.0	(4G16+2×(2×1.5))	23.0
193254.1000	R*	RKL4331/010.0	10.0	(4G25+2×(2×1.5))	29.3
193113.1000	R*	RKL4332/010.0	10.0	(4G35+2×(2×1.5))	32.5
193114.1000	R*	RKL4333/010.0	10.0	(4G25+2×(2×1.5))	29.3
193115.1000	R*	RKL4334/010.0	10.0	(4G35+2×(2×1.5))	32.5
193260.1000	A*	RKL4343/010.0	10.0	(4G2.5+2×(2×0.75))	14.2
193118.1000	A*	RKL4344/010.0	10.0	(4G16+2×(2×1.5))	26.8
193121.1000	R*	RKL4349/010.0	10.0	(4G16+2×(2×1.5))	26.8
193122.1000	R*	RKL4387/010.0	10.0	(4G35+2×(2×1.5))	32.5
193123.1000	R*	RKL4778/010.0	10.0	(4G35+2×(2×1.5))	32.5
193124.1000	R*	RKL4785/010.0	10.0	(4G25+2×(2×1.5))	29.3
Extension					
193116.1000	A*	RKL4335/010.0	10.0	(4G1.5+2×(2×0.75))	12.9
193004.1000	A*	RKL4336/010.0	10.0	(4G2.5+2×(2×1.0))	14.2
193255.1000	A*	RKL4337/010.0	10.0	(4G4+(2×1.0)+(2×1.5))	16.3
193256.1000	A*	RKL4338/010.0	10.0	(4G6+(2×1.0)+(2×1.5))	18.4
193270.1000	A*	RKL4339/010.0	10.0	(4G10+(2×1.0)+(2×1.5))	22.3
193271.1000	R*	RKL4340/010.0	10.0	(4G16+2×(2×1.5))	26.8
193264.1000	R*	RKL4341/010.0	10.0	(4G25+2×(2×1.5))	29.3
193117.1000	R*	RKL4342/010.0	10.0	(4G35+2×(2×1.5))	32.5

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Signal cables for C-tracks

According to Bosch Rexroth IKS/RKG standard

Application
- Signal cables
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	300 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Bosch Rexroth article designations are registered trademarks of Bosch Rexroth, and are for reference purposes only

Part No.		BOSCH REXROTH designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable					
193126.1000	A*	RKG0030/010.0	10.0	(2×1.0+4×2×0.25)	8.9
193171.1000	A*	RKG0036/010.0	10.0	(4×1.0 + 4×2×0.14 + (4×0.14))	9.5
193034.1000	A*	RKG4200/010.0	10.0	(2×0.5+4×2×0.25)	8.7
193088.1000	A*	RKG4202/010.0	10.0	(2×0.5+4×2×0.25)	8.7
193146.1000	A*	IKS4038/010.0	10.0	(4×1.0 + 4×2×0.14 + (4×0.14))	9.5
Extension					
193001.1000	A*	RKG4201/010.0	10.0	(2×0.5+4×2×0.25)	8.7

OCT hybrid cables for C-tracks

According to SIEMENS standard
Single-cable Hybrid SERVO motor lines

Application
- Combined power supply cable with motor supply, brake and digital feedback especially for SERVO drives in machine and plant construction, transport and conveyor technology
- Through full PUR jacket and TPE / HGI conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- High active and passive interference resistance (EMC)
- Braided shield optimised for continuous flexing use
- Very good alternating bending strength
- Low adhesion, abrasion-resistant, nick-resistant, tear-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- industrial- and salt water resistant
- Excellent coolant and lubricant resistance
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Halogen free
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Temperature range moving	-40 °C … +80 °C
Minimum bending radius fixed	5×D
Minimum bending radius moving	7.5×D
Burning behavior according to	DIN EN 60332-1-2 IEC 60332-1-2 UL VW1, FT1
Halogen free according to	IEC 60754-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
Base cable speed-connect					
198535.1000	A*	6FX8002-8QN04-1BA0	10.0	(4GAWG22+(2×AWG22)+(4×AWG26))	9.8
198536.1000	A*	6FX8002-8QN08-1BA0	10.0	(4G0,75+(2×0,5)+(4×0,2))	10.5
198553.1000	A*	6FX8002-8QN11-1BA0	10.0	(4G1,5+(2×1,5)+(4×0,2))	12.7
198554.1000	A*	6FX8002-8QN21-1BA0	10.0	(4G2,5+(2×1,5)+(4×0,2))	13.7

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies for fixed wiring

According to SIEMENS 6FX5002 standard
Base cable

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS, speed-connect / Booksize without brake pairs					
198406.1000	A*	6FX5002-5CN06-1BA0	10.0	(4G1.5)	8.4
198408.1000	A*	6FX5002-5CN26-1BA0	10.0	(4G1.5)	8.4
198411.1000	A*	6FX5002-5CS06-1BA0	10.0	(4G1.5)	8.4
198413.1000	A*	6FX5002-5CS26-1BA0	10.0	(4G1.5)	8.4
198422.1000	A*	6FX5002-5CN16-1BA0	10.0	(4G1.5)	8.4
198423.1000	A*	6FX5002-5CN36-1BA0	10.0	(4G2.5)	10.6
198425.1000	A*	6FX5002-5CS16-1BA0	10.0	(4G2.5)	10.6
198427.1000	A*	6FX5002-5CS36-1BA0	10.0	(4G2.5)	10.6
198438.1000	A*	6FX5002-5CN46-1BA0	10.0	(4G4)	11.5
198441.1000	A*	6FX5002-5CS46-1BA0	10.0	(4G4)	11.5
198447.1000	A*	6FX5002-5CN56-1BA0	10.0	(4G6)	13.2
198449.1000	A*	6FX5002-5CS56-1BA0	10.0	(4G6)	13.2
198456.1000	A*	6FX5002-5CN66-1BA0	10.0	(4G10)	16.5
198458.1000	A*	6FX5002-5CS17-1BA0	10.0	(4G10)	16.5
198463.1000	A*	6FX5002-5CS66-1BA0	10.0	(4G10)	16.5
SINAMICS, speed-connect / ooksize with brake pairs					
198407.1000	A*	6FX5002-5DN06-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198415.1000	A*	6FX5002-5DN26-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198417.1000	A*	6FX5002-5DS06-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198419.1000	A*	6FX5002-5DS26-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198429.1000	A*	6FX5002-5DN16-1BA0	10.0	(4G2.5+(2x1.5))	13.0
198432.1000	A*	6FX5002-5DN36-1BA0	10.0	(4G2.5+(2x1.5))	13.0
198434.1000	A*	6FX5002-5DS16-1BA0	10.0	(4G2.5+(2x1.5))	13.0
198436.1000	A*	6FX5002-5DS36-1BA0	10.0	(4G2.5+(2x1.5))	13.0
198443.1000	A*	6FX5002-5DN46-1BA0	10.0	(4G4+(2x1.5))	14.0
198445.1000	A*	6FX5002-5DS46-1BA0	10.0	(4G4+(2x1.5))	14.0
198452.1000	A*	6FX5002-5DN56-1BA0	10.0	(4G6+(2x1.5))	15.8
198454.1000	A*	6FX5002-5DS56-1BA0	10.0	(4G6+(2x1.5))	15.8
198465.1000	A*	6FX5002-5DN66-1BA0	10.0	(4G10+(2x1.5))	18.5
198467.1000	A*	6FX5002-5DS66-1BA0	10.0	(4G10+(2x1.5))	18.5
198469.1000	A*	6FX5002-5DS17-1BA0	10.0	(4G10+(2x1.5))	18.5

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies without brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Base cable

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	VDE 0482 Part 265-2 DIN EN 50265-2 IEC 60332-1 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS, speed-connect/Booksize					
198098.1000	A*	6FX5002-5CN01-1BA0	10.0	(4G1.5)	8.4
198103.1000	A*	6FX5002-5CN11-1BA0	10.0	(4G2.5)	10.6
198104.1000	A*	6FX5002-5CN21-1BA0	10.0	(4G1.5)	8.4
198106.1000	A*	6FX5002-5CN31-1BA0	10.0	(4G2.5)	10.6
198107.1000	A*	6FX5002-5CN41-1BA0	10.0	(4G4)	11.5
198108.1000	A*	6FX5002-5CN51-1BA0	10.0	(4G6)	13.2
198109.1000	A*	6FX5002-5CN61-1BA0	10.0	(4G10)	16.5
SINAMICS, full thread/Booksize					
198205.1000	A*	6FX5002-5CS01-1BA0	10.0	(4G1.5)	8.4
198124.1000	A*	6FX5002-5CS11-1BA0	10.0	(4G2.5)	10.6
198128.1000	A*	6FX5002-5CS13-1BA0	10.0	(4G10)	16.5
198129.1000	A*	6FX5002-5CS21-1BA0	10.0	(4G1.5)	8.4
198132.1000	A*	6FX5002-5CS31-1BA0	10.0	(4G2.5)	10.6
198133.1000	A*	6FX5002-5CS41-1BA0	10.0	(4G4)	11.5
198136.1000	A*	6FX5002-5CS51-1BA0	10.0	(4G6)	13.2
198139.1000	A*	6FX5002-5CS61-1BA0	10.0	(4G10)	16.5
SINAMICS, open end/Booksize					
198123.1000	A*	6FX5002-5CS02-1BA0	10.0	(4G1.5)	8.4
198126.1000	A*	6FX5002-5CS12-1BA0	10.0	(4G2.5)	10.6
198321.1000	A*	6FX5002-5CS42-1BA0	10.0	(4G4)	16.5
198322.1000	A*	6FX5002-5CS52-1BA0	10.0	(4G6)	14.0
198323.1000	A*	6FX5002-5CS62-1BA0	10.0	(4G10)	16.5

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies without brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Base cable

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SIMODRIVE, full thread/open end					
198042.1000	A*	6FX5002-5CA01-1BA0	10.0	(4G1.5)	8.4
198046.1000	A*	6FX5002-5CA11-1BA0	10.0	(4G2.5)	10.6
198048.1000	A*	6FX5002-5CA13-1BA0	10.0	(4G10)	16.5
198051.1000	A*	6FX5002-5CA21-1BA0	10.0	(4G1.5)	8.4
198052.1000	A*	6FX5002-5CA23-1BA0	10.0	(4G16)	21.2
198054.1000	A*	6FX5002-5CA31-1BA0	10.0	(4G2.5)	10.6
198059.1000	A*	6FX5002-5CA41-1BA0	10.0	(4G4)	11.5
198063.1000	A*	6FX5002-5CA51-1BA0	10.0	(4G6)	13.2
198066.1000	A*	6FX5002-5CA61-1BA0	10.0	(4G10)	16.5
SINAMICS, full thread/open end					
198068.1000	A*	6FX5002-5CG01-1BA0	10.0	(4G1.5)	8.4
198071.1000	A*	6FX5002-5CG11-1BA0	10.0	(4G2.5)	10.6
198292.1000	A*	6FX5002-5CG13-1BA0	10.0	(4G10)	16.5
198073.1000	A*	6FX5002-5CG21-1BA0	10.0	(4G1.5)	8.4
198293.1000	A*	6FX5002-5CG23-1BA0	10.0	(4G16)	21.2
198078.1000	A*	6FX5002-5CG31-1BA0	10.0	(4G2.5)	10.6
198083.1000	A*	6FX5002-5CG41-1BA0	10.0	(4G4)	11.5
198088.1000	A*	6FX5002-5CG51-1BA0	10.0	(4G6)	14.0
198093.1000	A*	6FX5002-5CG61-1BA0	10.0	(4G10)	16.5
198273.1000	A*	6FX5002-5CS14-1BA0	10.0	(4G10)	16.5
198294.1000	A*	6FX5002-5CS23-1BA0	10.0	(4G16)	21.2
198299.1000	A*	6FX5002-5CS54-1BA0	10.0	(4G6)	14.0
198309.1000	A*	6FX5002-5CS64-1BA0	10.0	(4G10)	16.5
198353.1000	A*	6FX5002-5CG32-1BA0	10.0	(4G2.5)	10.6

Servo cable assemblies with brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Base cable

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	VDE 0482 Part 265-2 DIN EN 50265-2 IEC 60332-1 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS, speed-connect/Booksize					
198340.1000	A*	6FX5002-5DN01-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198341.1000	A*	6FX5002-5DN11-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198342.1000	A*	6FX5002-5DN21-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198343.1000	A*	6FX5002-5DN31-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198344.1000	A*	6FX5002-5DN41-1BA0	10.0	(4G4+(2×1.5))	14.0
198345.1000	A*	6FX5002-5DN51-1BA0	10.0	(4G6+(2×1.5))	15.8
198346.1000	A*	6FX5002-5DN61-1BA0	10.0	(4G10+(2×1.5))	18.5
SINAMICS, full thread/Booksize					
198320.1000	A*	6FX5002-5DS01-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198325.1000	A*	6FX5002-5DS11-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198176.1000	A*	6FX5002-5DS13-1BA0	10.0	(4G10+(2×1.5))	18.5
198177.1000	A*	6FX5002-5DS21-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198245.1000	A*	6FX5002-5DS31-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198178.1000	A*	6FX5002-5DS41-1BA0	10.0	(4G4+(2×1.5))	14.0
198179.1000	A*	6FX5002-5DS51-1BA0	10.0	(4G6+(2×1.5))	15.8
198182.1000	A*	6FX5002-5DS61-1BA0	10.0	(4G10+(2×1.5))	18.5

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies with brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Base cable

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SIMODRIVE, full thread/open end					
198461.1000	A*	6FX5002-5DA01-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198481.1000	A*	6FX5002-5DA11-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198146.1000	A*	6FX5002-5DA13-1BA0	10.0	(4G10+(2×1.5))	18.5
198501.1000	A*	6FX5002-5DA21-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198871.1000	A*	6FX5002-5DA23-1BA0	10.0	(4G16+(2×1.5))	23.6
198531.1000	A*	6FX5002-5DA31-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198881.1000	A*	6FX5002-5DA33-1BA0	10.0	(4G25+(2×1.5))	28.5
198561.1000	A*	6FX5002-5DA41-1BA0	10.0	(4G4+(2×1.5))	14.0
198571.1000	A*	6FX5002-5DA51-1BA0	10.0	(4G6+(2×1.5))	15.8
198581.1000	A*	6FX5002-5DA61-1BA0	10.0	(4G10+(2×1.5))	18.5
SINAMICS, full thread/open end					
198076.1000	A*	6FX5002-5DG01-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198086.1000	A*	6FX5002-5DG11-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198287.1000	A*	6FX5002-5DG13-1BA0	10.0	(4G10+(2×1.5))	18.5
198081.1000	A*	6FX5002-5DG21-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198288.1000	A*	6FX5002-5DG23-1BA0	10.0	(4G16+(2×1.5))	23.6
198091.1000	A*	6FX5002-5DG31-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198289.1000	A*	6FX5002-5DG33-1BA0	10.0	(4G25+(2×1.5))	28.6
198096.1000	A*	6FX5002-5DG41-1BA0	10.0	(4G4+(2×1.5))	14.0
198101.1000	A*	6FX5002-5DG51-1BA0	10.0	(4G6+(2×1.5))	15.8
198116.1000	A*	6FX5002-5DG61-1BA0	10.0	(4G10+(2×1.5))	18.5
198296.1000	A*	6FX5002-5DS14-1BA0	10.0	(4G10+(2×1.5))	18.5
198264.1000	A*	6FX5002-5DS23-1BA0	10.0	(4G16+(2×1.5))	23.6
198297.1000	A*	6FX5002-5DS54-1BA0	10.0	(4G6+(2×1.5))	15.8
198298.1000	A*	6FX5002-5DS64-1BA0	10.0	(4G10+(2×1.5))	18.5

Servo cable assemblies without brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Extension

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS/SIMODRIVE, full thread					
198044.1000	A*	6FX5002-5CA05-1BA0	10.0	(4G1.5)	8.4
198049.1000	A*	6FX5002-5CA15-1BA0	10.0	(4G2.5)	10.6
198053.1000	A*	6FX5002-5CA28-1BA0	10.0	(4G1.5)	8.4
198058.1000	A*	6FX5002-5CA38-1BA0	10.0	(4G2.5)	10.6
198062.1000	A*	6FX5002-5CA48-1BA0	10.0	(4G4)	11.5
198064.1000	A*	6FX5002-5CA58-1BA0	10.0	(4G6)	13.2
198067.1000	A*	6FX5002-5CA68-1BA0	10.0	(4G10)	16.5

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies with brake pairs for fixed installation

According to SIEMENS 6FX5002 standard
Extension

Application
- Base cable for Siemens servo drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS/SIMODRIVE, full thread					
198731.1000	A*	6FX5002-5DA05-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198991.1000	A*	6FX5002-5DA15-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198791.1000	A*	6FX5002-5DA28-1BA0	10.0	(4G1.5+(2×1.5))	11.6
198801.1000	A*	6FX5002-5DA38-1BA0	10.0	(4G2.5+(2×1.5))	13.0
198006.1000	A*	6FX5002-5DA48-1BA0	10.0	(4G4+(2×1.5))	14.0
198011.1000	A*	6FX5002-5DA58-1BA0	10.0	(4G6+(2×1.5))	15.8
198026.1000	A*	6FX5002-5DA68-1BA0	10.0	(4G10+(2×1.5))	18.5
198184.1000	A*	6FX5002-5DX28-1BA0	10.0	(4G16+(2×1.5))	23.6
198186.1000	A*	6FX5002-5DX38-1BA0	10.0	(4G25+(2×1.5))	28.5

Signal cable for fixed wiring

According to SIEMENS 6FX5002 standard
Base cable DRIVE-CLIQ

Application
- Signal cable for SIEMENS SERVO drives
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	Special PVC
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	7.5×D
Minimum bending radius moving	15×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL VW-1 UL FT1
Certifications	cURus
Note	Permitted total cable length ≤ 100 m (6FX5…) or ≤ 75 m (6FX8…)
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198475.1000	A*	6FX5002-2DC40-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198477.1000	A*	6FX5002-2DC42-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198479.1000	A*	6FX5002-2DC44-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198484.1000	A*	6FX5002-2DD40-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198486.1000	A*	6FX5002-2DD42-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198488.1000	A*	6FX5002-2DD44-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198499.1000	A*	6FX5002-2DC48-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198504.1000	A*	6FX5002-2DD48-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2

* S Article from stock
A Available with a lead time
R Available on request

Signal cable for fixed wiring

According to SIEMENS 6FX5002
Base cable DRIVE-CLIQ

Application
- Signal cable for SIEMENS SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- PVC Flame-retardant, self-extinguishing
- Silicone free
- RoHS compliant

Construction

Jacket material	Special PVC
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	7.5×D
Minimum bending radius moving	15×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL VW-1 UL FT1
Certifications	cURus
Note	The total length of the DRIVE-CLIQ train does not exceed more than 30 m.
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198493.1000	A*	6FX5002-2DC46-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198495.1000	A*	6FX5002-2DC30-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2
198506.1000	A*	6FX5002-2DC36-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	7.2

Signal cable assemblies for fixed installation

According to SIEMENS 6FX5002 standard
Base cable DRIVE-CLIQ

Application
- Resolver cable
- For flexible applications without compulsory guide
- More cost-effective alternative to the cable chain version 6FX8002

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PVC
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +80 °C
Minimum bending radius fixed	7.5×D
Minimum bending radius moving	15×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198036.1000	A*	6FX5002-2DC00-1BA0	10.0	(2×2×0.15+1×2×0.38)	7.2
198037.1000	A*	6FX5002-2DC10-1BA0	10.0	(2×2×0.15+1×2×0.38)	7.2
198038.1000	A*	6FX5002-2DC20-1BA0	10.0	(2×2×0.15+1×2×0.38)	7.2

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Base cable for Siemens servo drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Very good alternating bending strength
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- Industrial and salt water resistant
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Construction

Jacket material	Special PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/ cross-section	Outer Ø mm	Conductor
SINAMICS, speed-connect / Booksize without brake pairs						
198398.1000	A*	6FX8002-5CN06-1BA0	10.0	(4G1.5)	8.4	CU-wire bare
198409.1000	A*	6FX8002-5CN26-1BA0	10.0	(4G1.5)	8.4	CU-wire bare
198412.1000	A*	6FX8002-5CS06-1BA0	10.0	(4G1.5)	8.4	CU-wire bare
198414.1000	A*	6FX8002-5CS26-1BA0	10.0	(4G1.5)	8.4	CU-wire bare
198399.1000	A*	6FX8002-5CN16-1BA0	10.0	(4G2.5)	10.6	CU-wire bare
198424.1000	A*	6FX8002-5CN36-1BA0	10.0	(4G2.5)	10.6	CU-wire bare
198426.1000	A*	6FX8002-5CS16-1BA0	10.0	(4G2.5)	10.6	CU-wire bare
198428.1000	A*	6FX8002-5CS36-1BA0	10.0	(4G2.5)	10.6	CU-wire bare
198439.1000	A*	6FX8002-5CN46-1BA0	10.0	(4G4)	12.2	CU-wire bare
198442.1000	A*	6FX8002-5CS46-1BA0	10.0	(4G4)	12.2	CU-wire bare
198448.1000	A*	6FX8002-5CN56-1BA0	10.0	(4G6)	14.0	CU-wire bare
198451.1000	A*	6FX8002-5CS56-1BA0	10.0	(4G6)	14.0	CU-wire bare
198401.1000	A*	6FX8002-5CN56-1BA0	10.0	(4G6)	13.2	CU-wire bare
198457.1000	A*	6FX8002-5CN66-1BA0	10.0	(4G10)	17.6	CU-wire bare
198459.1000	A*	6FX8002-5CS17-1BA0	10.0	(4G10)	17.6	CU-wire bare
198464.1000	A*	6FX8002-5CS66-1BA0	10.0	(4G10)	17.6	CU-wire bare
SINAMICS, speed-connect / Booksize with brake pairs						
198403.1000	A*	6FX8002-5DN06-1BA0	10.0	(4G1.5+(2×1.5))	11.4	CU-wire bare
198416.1000	A*	6FX8002-5DN26-1BA0	10.0	(4G1.5+(2×1.5))	11.4	CU-wire bare
198418.1000	A*	6FX8002-5DS06-1BA0	10.0	(4G1.5+(2×1.5))	11.4	CU-wire bare
198421.1000	A*	6FX8002-5DS26-1BA0	10.0	(4G1.5+(2×1.5))	11.4	CU-wire bare
198431.1000	A*	6FX8002-5DN16-1BA0	10.0	(4G2.5+(2x1.5))	12.9	CU-wire bare
198433.1000	A*	6FX8002-5DN36-1BA0	10.0	(4G2.5+(2x1.5))	12.9	CU-wire bare
198435.1000	A*	6FX8002-5DS16-1BA0	10.0	(4G2.5+(2x1.5))	12.9	CU-wire bare
198437.1000	A*	6FX8002-5DS36-1BA0	10.0	(4G2.5+(2x1.5))	12.9	CU-wire bare
198444.1000	A*	6FX8002-5DN46-1BA0	10.0	(4G4+(2x1.5))	14.5	CU-wire bare
198446.1000	A*	6FX8002-5DS46-1BA0	10.0	(4G4+(2x1.5))	14.5	CU-wire bare
198453.1000	A*	6FX8002-5DN56-1BA0	10.0	(4G6+(2x1.5))	16.1	CU-wire bare
198455.1000	A*	6FX8002-5DS56-1BA0	10.0	(4G6+(2x1.5))	16.1	CU-wire bare
198466.1000	A*	6FX8002-5DN66-1BA0	10.0	(4G10+(2x1.5))	19.5	CU-wire bare
198468.1000	A*	6FX8002-5DS66-1BA0	10.0	(4G10+(2x1.5))	19.5	CU-wire bare
198473.1000	A*	6FX8002-5DS17-1BA0	10.0	(4G10+(2x1.5))	19.5	CU-wire bare

Servo cable assemblies without brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Base cable for Siemens servo drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS, speed-connect/Booksize					
198326.1000	A*	6FX8002-5CN01-1BA0	10.0	(4G1.5)	8.6
198327.1000	A*	6FX8002-5CN11-1BA0	10.0	(4G2.5)	10.8
198328.1000	A*	6FX8002-5CN21-1BA0	10.0	(4G1.5)	8.6
198329.1000	A*	6FX8002-5CN31-1BA0	10.0	(4G2.5)	10.8
198330.1000	A*	6FX8002-5CN41-1BA0	10.0	(4G4)	12.2
198331.1000	A*	6FX8002-5CN51-1BA0	10.0	(4G6)	14.0
198332.1000	A*	6FX8002-5CN61-1BA0	10.0	(4G10)	17.6
SINAMICS, full thread/Booksize					
198300.1000	A*	6FX8002-5CS01-1BA0	10.0	(4G1.5)	8.6
198302.1000	A*	6FX8002-5CS11-1BA0	10.0	(4G2.5)	10.8
198214.1000	A*	6FX8002-5CS13-1BA0	10.0	(4G10)	17.6
198304.1000	A*	6FX8002-5CS21-1BA0	10.0	(4G1.5)	8.6
198305.1000	A*	6FX8002-5CS31-1BA0	10.0	(4G2.5)	10.8
198317.1000	A*	6FX8002-5CS41-1BA0	10.0	(4G4)	12.2
198318.1000	A*	6FX8002-5CS51-1BA0	10.0	(4G6)	14.0
198319.1000	A*	6FX8002-5CS61-1BA0	10.0	(4G10)	17.6
SINAMICS, open end/Booksize					
198303.1000	A*	6FX8002-5CS12-1BA0	10.0	(4G2.5)	10.6
198306.1000	A*	6FX8002-5CS42-1BA0	10.0	(4G4)	12.2

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies without brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Base cable for Siemens servo drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SIMODRIVE, full thread/open end					
198360.1000	A*	6FX8002-5CA01-1BA0	10.0	(4G1.5)	8.6
198380.1000	A*	6FX8002-5CA11-1BA0	10.0	(4G2.5)	10.8
198845.1000	A*	6FX8002-5CA13-1BA0	10.0	(4G10)	17.6
198400.1000	A*	6FX8002-5CA21-1BA0	10.0	(4G1.5)	8.6
198810.1000	A*	6FX8002-5CA23-1BA0	10.0	(4G16)	21.2
198410.1000	A*	6FX8002-5CA31-1BA0	10.0	(4G2.5)	10.8
198430.1000	A*	6FX8002-5CA41-1BA0	10.0	(4G4)	12.2
198440.1000	A*	6FX8002-5CA51-1BA0	10.0	(4G6)	14.0
198450.1000	A*	6FX8002-5CA61-1BA0	10.0	(4G10)	17.6
SINAMICS, full thread/open end					
198950.1000	A*	6FX8002-5CG01-1BA0	10.0	(4G1.5)	8.6
198040.1000	A*	6FX8002-5CG11-1BA0	10.0	(4G2.5)	10.8
198283.1000	A*	6FX8002-5CG13-1BA0	10.0	(4G10)	17.6
198035.1000	A*	6FX8002-5CG21-1BA0	10.0	(4G1.5)	8.6
198803.1000	A*	6FX8002-5CG23-1BA0	10.0	(4G16)	21.2
198045.1000	A*	6FX8002-5CG31-1BA0	10.0	(4G2.5)	10.8
198198.1000	A*	6FX8002-5CG32-1BA0	10.0	(4G2.5)	10.8
198050.1000	A*	6FX8002-5CG41-1BA0	10.0	(4G4)	12.2
198055.1000	A*	6FX8002-5CG51-1BA0	10.0	(4G6)	14.0
198060.1000	A*	6FX8002-5CG61-1BA0	10.0	(4G10)	17.6
198284.1000	A*	6FX8002-5CS14-1BA0	10.0	(4G10)	17.6
198285.1000	A*	6FX8002-5CS23-1BA0	10.0	(4G16)	21.2
198980.1000	A*	6FX8002-5CS54-1BA0	10.0	(4G6)	14.0
198286.1000	A*	6FX8002-5CS64-1BA0	10.0	(4G10)	17.6

Servo cable assemblies with brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Base cable for Siemens servo drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS, speed-connect/Booksize					
198333.1000	A*	6FX8002-5DN01-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198334.1000	A*	6FX8002-5DN11-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198335.1000	A*	6FX8002-5DN21-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198336.1000	A*	6FX8002-5DN31-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198337.1000	A*	6FX8002-5DN41-1BA0	10.0	(4G4+(2×1.5))	14.5
198338.1000	A*	6FX8002-5DN51-1BA0	10.0	(4G6+(2×1.5))	16.1
198339.1000	A*	6FX8002-5DN61-1BA0	10.0	(4G10+(2×1.5))	19.5
SINAMICS, full thread/Booksize					
198310.1000	A*	6FX8002-5DS01-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198311.1000	A*	6FX8002-5DS11-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198312.1000	A*	6FX8002-5DS21-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198313.1000	A*	6FX8002-5DS31-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198314.1000	A*	6FX8002-5DS41-1BA0	10.0	(4G4+(2×1.5))	14.5
198315.1000	A*	6FX8002-5DS51-1BA0	10.0	(4G6+(2×1.5))	16.1
198316.1000	A*	6FX8002-5DS61-1BA0	10.0	(4G10+(2×1.5))	19.5

Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies with brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Base cable for Siemens servo drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1 EN 60684-2
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SIMODRIVE, full thread/open end					
198460.1000	A*	6FX8002-5DA01-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198480.1000	A*	6FX8002-5DA11-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198840.1000	A*	6FX8002-5DA13-1BA0	10.0	(4G10+(2×1.5))	19.5
198500.1000	A*	6FX8002-5DA21-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198870.1000	A*	6FX8002-5DA23-1BA0	10.0	(4G16+(2×1.5))	23.6
198530.1000	A*	6FX8002-5DA31-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198880.1000	A*	6FX8002-5DA33-1BA0	10.0	(4G25+(2×1.5))	28.5
198560.1000	A*	6FX8002-5DA41-1BA0	10.0	(4G4+(2×1.5))	14.5
198349.1000	A*	6FX8002-5DA43-1BA0	10.0	(4G35+(2×1.5))	32.0
198570.1000	A*	6FX8002-5DA51-1BA0	10.0	(4G6+(2×1.5))	16.1
198580.1000	A*	6FX8002-5DA61-1BA0	10.0	(4G10+(2×1.5))	19.5
SINAMICS, full thread/open end					
198075.1000	A*	6FX8002-5DG01-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198085.1000	A*	6FX8002-5DG11-1BA0	10.0	(4G2.5+(2×1.5))	11.4
198275.1000	A*	6FX8002-5DG13-1BA0	10.0	(4G10+(2×1.5))	19.5
198080.1000	A*	6FX8002-5DG21-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198276.1000	A*	6FX8002-5DG23-1BA0	10.0	(4G16+(2×1.5))	23.6
198090.1000	A*	6FX8002-5DG31-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198277.1000	A*	6FX8002-5DG33-1BA0	10.0	(4G25+(2×1.5))	28.5
198095.1000	A*	6FX8002-5DG41-1BA0	10.0	(4G4+(2×1.5))	14.5
198278.1000	A*	6FX8002-5DG43-1BA0	10.0	(4G35+(2×1.5))	32.0
198100.1000	A*	6FX8002-5DG51-1BA0	10.0	(4G6+(2×1.5))	16.1
198279.1000	A*	6FX8002-5DG53-1BA0	10.0	(4G50+(2×1.5))	37.3
198115.1000	A*	6FX8002-5DG61-1BA0	10.0	(4G10+(2×1.5))	19.5
198263.1000	A*	6FX8002-5DS14-1BA0	10.0	(4G10+(2×1.5))	19.5
198267.1000	A*	6FX8002-5DS23-1BA0	10.0	(4G16+(2×1.5))	23.6
198259.1000	A*	6FX8002-5DS54-1BA0	10.0	(4G6+(2×1.5))	16.1
198262.1000	A*	6FX8002-5DS64-1BA0	10.0	(4G10+(2×1.5))	19.5

* S Article from stock
A Available with a lead time
R Available on request

Servo cable assemblies without brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Extension

Application
- Extension cable, for SIEMENS SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1 EN 60684-2
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS/SIMODRIVE, full thread					
198820.1000	A*	6FX8002-5CA05-1BA0	10.0	(4G1.5)	8.6
198985.1000	A*	6FX8002-5CA15-1BA0	10.0	(4G2.5)	10.8
198765.1000	A*	6FX8002-5CA28-1BA0	10.0	(4G1.5)	8.6
198995.1000	A*	6FX8002-5CA38-1BA0	10.0	(4G2.5)	10.8
198015.1000	A*	6FX8002-5CA48-1BA0	10.0	(4G4)	12.2
198020.1000	A*	6FX8002-5CA58-1BA0	10.0	(4G6)	14.0
198030.1000	A*	6FX8002-5CA68-1BA0	10.0	(4G10)	17.6
198216.1000	A*	6FX8002-5CX18-1BA0	10.0	(4G10)	17.6
198217.1000	A*	6FX8002-5CX28-1BA0	10.0	(4G16)	21.2
SINAMICS, speed-connect					
198204.1000	A*	6FX8002-5CN05-1BA0	10.0	(4G1.5)	8.6

Further product information at
www.luetze.com

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Servo cable assemblies with brake pairs for C-tracks

According to SIEMENS 6FX8002 standard
Extension

Application
- Extension cable, for SIEMENS SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	orange RAL 2003

Technical data

Rated voltage U_N	1000 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	10×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS/SIMODRIVE, full thread					
198730.1000	A*	6FX8002-5DA05-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198990.1000	A*	6FX8002-5DA15-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198790.1000	A*	6FX8002-5DA28-1BA0	10.0	(4G1.5+(2×1.5))	11.4
198800.1000	A*	6FX8002-5DA38-1BA0	10.0	(4G2.5+(2×1.5))	12.9
198005.1000	A*	6FX8002-5DA48-1BA0	10.0	(4G4+(2×1.5))	14.5
198010.1000	A*	6FX8002-5DA58-1BA0	10.0	(4G6+(2×1.5))	16.1
198025.1000	A*	6FX8002-5DA68-1BA0	10.0	(4G10+(2×1.5))	19.5
198248.1000	A*	6FX8002-5DX18-1BA0	10.0	(4G10+(2×1.5))	19.5
198249.1000	A*	6FX8002-5DX28-1BA0	10.0	(4G16+(2×1.5))	23.6
198252.1000	A*	6FX8002-5DX38-1BA0	10.0	(4G25+(2×1.5))	28.5
198187.1000	A*	6FX8002-5DX48-1BA0	10.0	(4G35+(2×1.5))	32.0
198254.1000	A*	6FX8002-5DX58-1BA0	10.0	(4G50+(2×1.5))	37.3
SINAMICS, speed-connect					
198735.1000	A*	6FX8002-5DN05-1BA0	10.0	(4G1.5+(2×1.5))	11.4

Signal cables for C-tracks

According to SIEMENS 6FX8002 standard
Base cable DRIVE-CLIQ

Application
- Signal cable for SIEMENS SERVO drives
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants
- Especially for industrial environments, machines and plants

Properties
- Very good alternating bending strength
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Weathering, ozone and UV resistant (normal lighting conditions)
- Industrial and salt water resistant
- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Construction

Jacket material	Special PUR
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL VW-1 UL FT1
Certifications	cURus
Note	Permitted total cable length ≤ 100 m (6FX5…) or ≤ 75 m (6FX8…)
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198476.1000	A*	6FX8002-2DC40-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198478.1000	A*	6FX8002-2DC42-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198483.1000	A*	6FX8002-2DC44-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198485.1000	A*	6FX8002-2DD40-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198487.1000	A*	6FX8002-2DD42-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198489.1000	A*	6FX8002-2DD44-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198503.1000	A*	6FX8002-2DC48-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198505.1000	A*	6FX8002-2DD48-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8

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A Available with a lead time
R Available on request

Signal cables for C-tracks

According to SIEMENS 6FX8002 standard
Base cable DRIVE-CLIQ

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- Signal cable for SIEMENS SERVO drives
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- Largely resistant to oils, greases, alcohol-free benzines and kerosene
- Silicone free
- RoHS compliant

Construction

Jacket material	Special PUR
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL VW-1 UL FT1
Certifications	cURus
Note	The total length of the DRIVE-CLIQ train does not exceed more than 30 m.
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198494.1000	A*	6FX8002-2DC46-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198496.1000	A*	6FX8002-2DC30-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8
198507.1000	A*	6FX8002-2DC36-1BA0	10.0	(2×2×AWG26+1×2×AWG22)	6.8

Signal cable assemblies for C-tracks

According to SIEMENS 6FX8002 standard
Base cable DRIVE-CLIQ

Application
- Resolver cable
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SINAMICS					
198890.1000	A*	6FX8002-2DC00-1BA0	10.0	(2×2×0.15+1×2×0.38)	6.8
198900.1000	A*	6FX8002-2DC10-1BA0	10.0	(2×2×0.15+1×2×0.38)	6.8
198910.1000	A*	6FX8002-2DC20-1BA0	10.0	(2×2×0.15+1×2×0.38)	6.8

Further product information at
www.luetze.com

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A Available with a lead time
R Available on request

Signal cable assemblies for C-tracks

According to SIEMENS 6FX8002 standard
Base cable

Application
- Resolver cable
- Through full PUR jacket and TPE conductor insulation optimally suited for c-tracks, extremely harsh operating conditions and aggressive coolants and lubricants

Properties
- Silicone free
- RoHS compliant

Construction

Jacket material	PUR
Surface	matte, adhesion-free
Jacket color	green RAL 6018

Technical data

Rated voltage U_N	30 V 80 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D
Burning behavior according to	IEC 60332-1 DIN EN 50265-2 VDE 0482 Part 265-2 UL 1581 part 1080 VW-1 UL FT1
Halogen free according to	EN 50267-2-1
Certifications	cURus
Note	* Siemens article designations are registered trademarks of Siemens AG, and are for reference purposes only

Part No.		SIEMENS designation*	Cable length m	Number of conductors/cross-section	Outer Ø mm
SIMODRIVE base cable					
198110.1000	A*	6FX8002-2AD00-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.14)	8.6
198830.1000	A*	6FX8002-2AH00-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198120.1000	A*	6FX8002-2CA11-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198130.1000	A*	6FX8002-2CA15-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.14)	8.6
198628.1000	A*	6FX8002-2CA31-1BA0	10.0	(2×0.5+4×0.23+3×(2×0.14) +4×0.14)	9.5
198850.1000	A*	6FX8002-2CA51-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.14)	8.6
198150.1000	A*	6FX8002-2CA61-1BA0	10.0	(3×(2×0.14)+2×0.5+4×0.14)	8.6
198191.1000	A*	6FX8002-2CB31-1BA0	10.0	(12×0.23)	7.4
198200.1000	A*	6FX8002-2CB51-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198210.1000	A*	6FX8002-2CC11-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198220.1000	A*	6FX8002-2CD01-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198240.1000	A*	6FX8002-2CF02-1BA0	10.0	(2×0.5+4×0.14+3×(2×0.14))	8.6
198170.1000	A*	6FX8002-2CG00-1BA0	10.0	(4×0.5+4×2×0.38)	9.0
198250.1000	A*	6FX8002-2CH00-1BA0	10.0	(2×0.5+4×0.14+3×(2×0.14))	8.6
198270.1000	A*	6FX8002-2EQ00-1BA0	10.0	(2×0.5+4×0.23+3×(2×0.14) +4×0.14)	9.8
198280.1000	A*	6FX8002-2EQ10-1BA0	10.0	(2×0.5+4×0.23+3×(2×0.14) +4×0.14)	9.5
198140.1000	A*	6FX8002-2CA21-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.14)	8.6
198260.1000	A*	6FX8002-2CE07-1BA0	10.0	(2×0.5+4×0.23+3×(2×0.14) +4×0.14)	9.0
SIMODRIVE extension					
198160.1000	A*	6FX8002-2CA34-1BA0	10.0	(2×0.5+4×0.23+3×(2×0.14) +4×0.14)	9.5
198740.1000	A*	6FX8002-2CF04-1BA0	10.0	(2×0.5+4×0.14+3×(2×0.14))	8.6
198700.1000	A*	6FX8002-2EQ14-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.23 +4×0.14)	9.5
198105.1000	A*	6FX8002-2AD04-1BA0	10.0	(2×0.5+3×(2×0.14)+4×0.14)	8.6
198295.1000	A*	6FX8002-2CB54-1BA0	10.0	(4×0.5+4×2×0.38)	9.0

* S Article from stock
A Available with a lead time
R Available on request

Pre-fabricated front-end plug S7

S7 Plug with screw termination

RoHS

Application
- Wiring from Siemens Simatic PLC/S7

Properties
- Cable core with S7 connector
- Completely wired, 2. cables run at 90° to connector

Construction
Jacket color: dark blue RAL 5010

Technical data
Packaging: 3 m or 5 m
Other lengths are available upon request

Part No.		Cable core	Cable length m	Number of conductors/cross-section
S7 Plug with screw termination				
197457	A*	20-pin	3.0	20x0.75
197458	A*	20-pin	5.0	20x0.75
S7 Plug with Easy-Connect				
197500	A*	40-pin	3.0	40x0.5
197501	A*	40-pin	5.0	40x0.5
197502	A*	40-pin	3.0	40x0.75
197503	A*	40-pin	5.0	40x0.75

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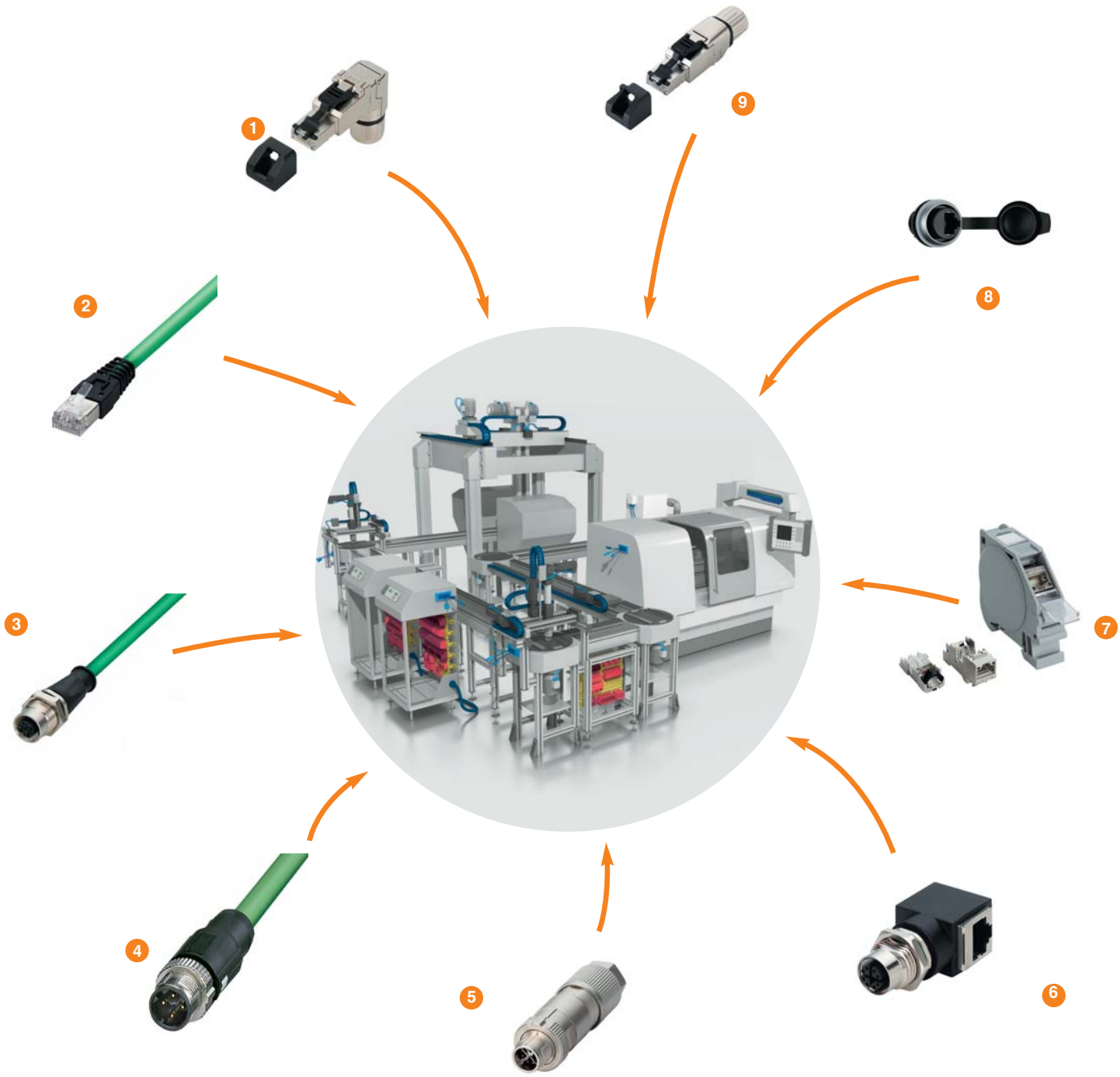
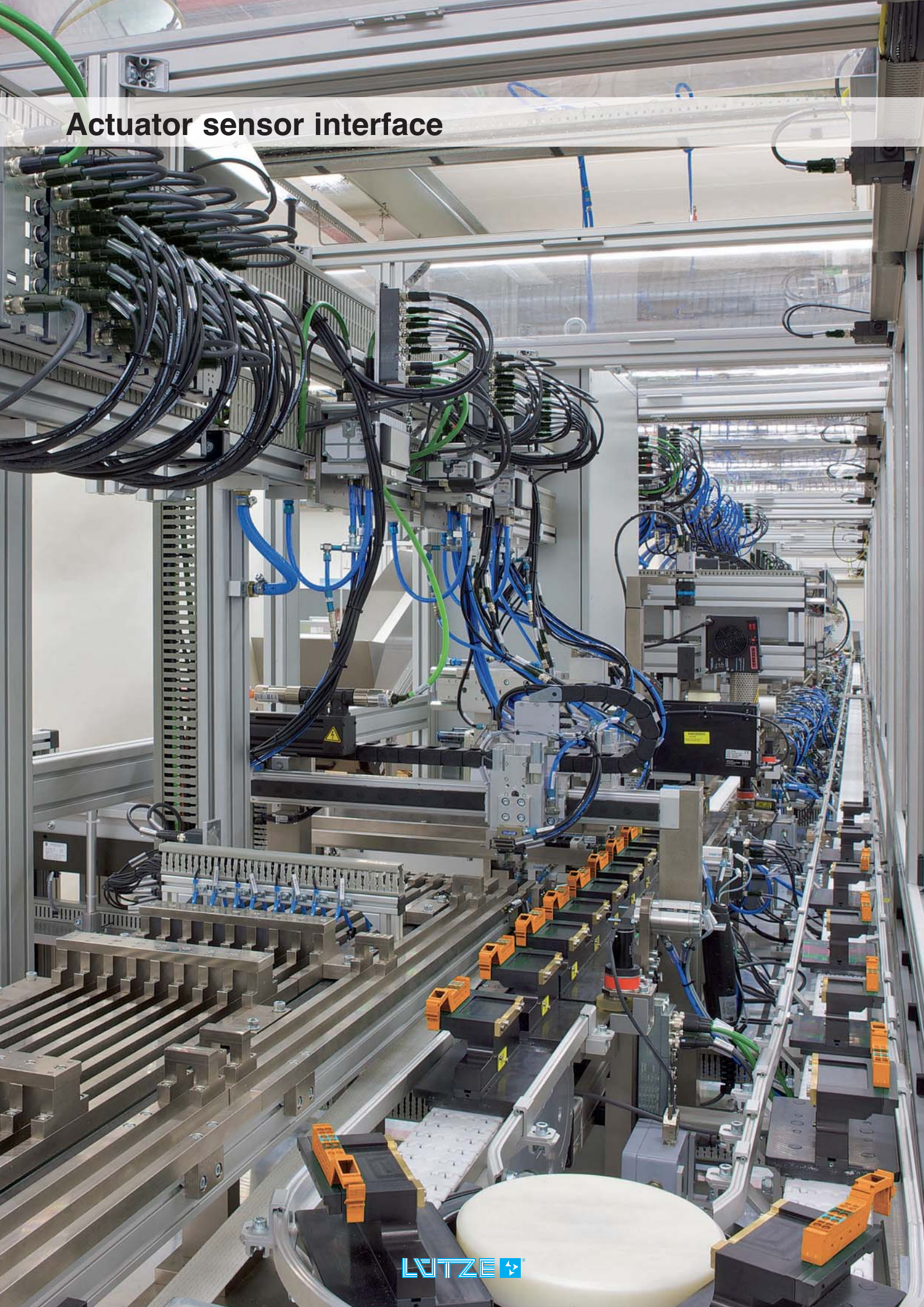
Notes

Internet of Things



1. RJ45 industrial connector, angled
2. RJ45 connector
3. M12 panel connector
4. M12 connector
5. M12 Male X-coded
6. M12 / RJ45 control cabinet bushing
7. RJ45 Module holder
8. RJ45 panel connector for front installation
9. RJ45 connector

Actuator sensor interface



Actuator sensor interface

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Product photos
The product photos are not to scale and do not accurately depict every single product detail.

CE: These products comply with the EU Low Voltage Directive 2014/35/EU
The Low Voltage Directive applies as of 50 V AC or 75 V DC

Male RJ45 straight to female M12 straight with PVC cable shielded, Cat 5e
Self-locking screw connection M12

Construction

Number of conductors/cross-section	(2×2×AWG22/7)
Number of conductors	4
Jacket material	PVC
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

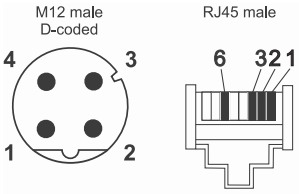
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45
Form male 2	M 12
Degree of protection	IP20
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-30 °C … +80 °C
Temperature range moving	-5 °C … +70 °C

Accessories

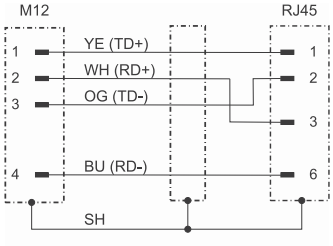
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	PU (units)
192014.0030	S*	STG4-RJ45/STG4-M12/ PN PVC 0,3M	4	D	0.3	6.5	1
192014.0060	S*	STG4-RJ45/STG4-M12/ PN PVC 0,6M	4	D	0.6	6.5	1
192014.0100	S*	STG4-RJ45/STG4-M12/ PN PVC 1,0M	4	D	1.0	6.5	1
192014.0150	S*	STG4-RJ45/STG4-M12/ PN PVC 1,5M	4	D	1.5	6.5	1
192014.0200	S*	STG4-RJ45/STG4-M12/ PN PVC 2,0M	4	D	2.0	6.5	1
192014.0500	S*	STG4-RJ45/STG4-M12/ PN PVC 5,0M	4	D	5.0	6.5	1
192014.1000	S*	STG4-RJ45/STG4-M12/ PN PVC 10,0M	4	D	10.0	6.5	1
192014.1500	A*	STG4-RJ45/STG4-M12/ PN PVC 15,0M	4	D	15.0	6.5	1
192014.2000	A*	STG4-RJ45/STG4-M12/ PN PVC 20,0M	4	D	20.0	6.5	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female RJ45 straight with PVC cable shielded, Cat 5e 4-pin

Construction

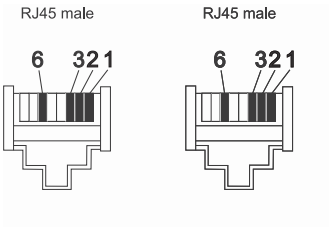
Number of conductors/cross-section	(2×2×AWG22/7)
Number of conductors	4
Jacket material	PVC
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

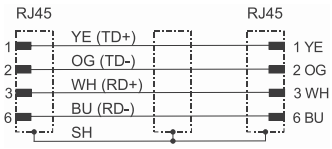
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	RJ45 male straight
Degree of protection	IP20
Color of the housing	black
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-30 °C … +80 °C
Temperature range moving	-5 °C … +70 °C

Part No.		Type	Pole number	Cable length m	Cable diameter mm	PU (units)
192016.0030	S*	STG4-RJ45/STG4-RJ45/PN PVC 0,3M	4	0.3	6.5	1
192016.0060	S*	STG4-RJ45/STG4-RJ45/PN PVC 0,6M	4	0.6	6.5	1
192016.0100	S*	STG4-RJ45/STG4-RJ45/PN PVC 1,0M	4	1.0	6.5	1
192016.0150	S*	STG4-RJ45/STG4-RJ45/PN PVC 1,5M	4	1.5	6.5	1
192016.0200	S*	STG4-RJ45/STG4-RJ45/PN PVC 2,0M	4	2.0	6.5	1
192016.0500	S*	STG4-RJ45/STG4-RJ45/PN PVC 5,0M	4	5.0	6.5	1
192016.1000	S*	STG4-RJ45/STG4-RJ45/PN PVC 10,0M	4	10.0	6.5	1
192016.1500	S*	STG4-RJ45/STG4-RJ45/PN PVC 15,0M	4	15.0	6.5	1
192016.2000	S*	STG4-RJ45/STG4-RJ45/PN PVC 20,0M	4	20.0	6.5	1

Pin layout



Circuit diagram



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female RJ45 straight with PVC cable shielded, Cat 5e 8-pin

Construction

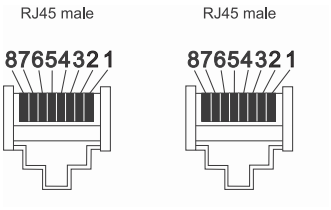
Number of conductors/cross-section	(4×2×AWG26/7)
Number of conductors	8
Jacket material	PVC
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

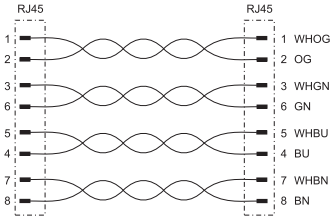
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	RJ45 male straight
Degree of protection	IP20
Color of the housing	black
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-30 °C … +70 °C
Temperature range moving	-5 °C … +70 °C

Part No.		Type	Pole number	Cable length m	Cable diameter mm	PU (units)
192018.0030	S*	STG8-RJ45/STG8-RJ45/ET PVC 0,3M	8	0.3	6.3	1
192018.0060	S*	STG8-RJ45/STG8-RJ45/ET PVC 0,6M	8	0.6	6.3	1
192018.0100	S*	STG8-RJ45/STG8-RJ45/ET PVC 1,0M	8	1.0	6.3	1
192018.0150	S*	STG8-RJ45/STG8-RJ45/ET PVC 1,5M	8	1.5	6.3	1
192018.0200	S*	STG8-RJ45/STG8-RJ45/ET PVC 2,0M	8	2.0	6.3	1
192018.0500	S*	STG8-RJ45/STG8-RJ45/ET PVC 5,0M	8	5.0	6.3	1
192018.1000	S*	STG8-RJ45/STG8-RJ45/ET PVC 10,0M	8	10.0	6.3	1
192018.1500	S*	STG8-RJ45/STG8-RJ45/ET PVC 15,0M	8	15.0	6.3	1
192018.2000	S*	STG8-RJ45/STG8-RJ45/ET PVC 20,0M	8	20.0	6.3	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Patch cable Cat.5e/Cat.6/Cat.6$_A$

RoHS

Application
- Ethernet network wiring

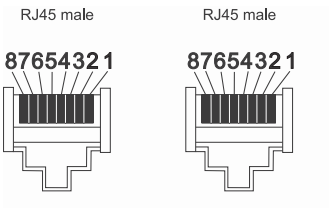
Properties
- Straight connector
- Assignment according to EIA/TIA 568B
- Moulded sleeve with length imprint (not suitable for drag chain and industrial design)
- Various colors available
- catch protection

Technical data

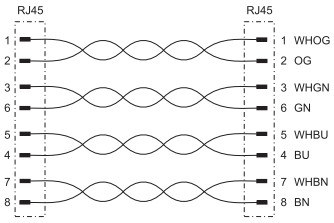
Operating voltage max.	50 V
Connector	Shielded RJ45, 1,27µm AU
Wiring	1:1
Compatibility	Fully plug compatible to IEC 60603-7
Ethernet Key	SF/UTP
Burning behavior according to	IEC 60332-1

Part No.		Number of conductors/cross-section	Jacket color	Sleeve color	Wiring	Temperature range fixed	Cable length m
Cat.5e PVC							
192000.0100	S*	(4x2xAWG26/7)	grey	grey	1:1	-5 °C … +70 °C	1.0
192022.0100	S*	(4x2xAWG26/7)	blue	blue	1:1	-5 °C … +70 °C	1.0
192030.0100	S*	(4x2xAWG26/7)	green	green	1:1	-5 °C … +70 °C	1.0
192050.0100	S*	(4x2xAWG26/7)	grey	red	Crossover	-5 °C … +70 °C	1.0
Cat.5e PVC UL							
192010.0100	S*	(4x2xAWG26/7)	grey	grey	1:1	-5 °C … +70 °C	1.0
Cat.6A LSZH							
192353.0100	S*	(4x2xAWG26/7)	grey	grey	1:1	-20 °C … +75 °C	1.0
192355.0100	S*	(4x2xAWG26/7)	blue	blue	1:1	-20 °C … +75 °C	1.0
192342.0100	S*	(4x2xAWG26/7)	yellow	yellow	1:1	-20 °C … +75 °C	1.0
192352.0100	S*	(4x2xAWG26/7)	green	green	1:1	-20 °C … +75 °C	1.0
192354.0100	S*	(4x2xAWG26/7)	red	red	1:1	-20 °C … +75 °C	1.0
Cat.6 industrial version PUR							
192201.0100	S*	(4x2xAWG27/7)	red	black	1:1	-30 °C … +75 °C	1.0

Pin layout



Circuit diagram



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight with PUR cable, shielded 360°, open end
Cat.5e, D-coded, self-locking screw connection
C-track compatible, halogen free

halogen free
flame retardant

LÜTZE SUPERFLEX® connected

Construction

Number of conductors/cross-section	1 × 4 × AWG 22/7
Number of conductors	4
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius moving	12×D

Technical data

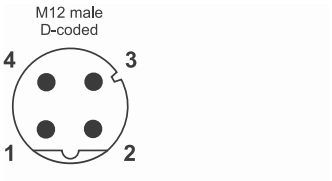
Rated voltage U_N	AC/DC 24 V
Operating voltage max.	60 V
Rated current	4 A
Form male 1	M 12 male straight
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Storage temperature range	-40 °C … +90 °C
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +70 °C
Temperature range moving	-30 °C … +70 °C

Accessories

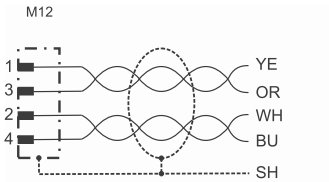
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	PU (units)
475300.0200	S*	STG4-M12/PN 2M-PUR	4	D	2.0	6.5	1
475300.0500	S*	STG4-M12/PN 5M-PUR	4	D	5.0	6.5	1
475300.1000	S*	STG4-M12/PN 10M-PUR	4	D	10.0	6.5	1
475300.1500	S*	STG4-M12/PN 15M-PUR	4	D	15.0	6.5	1
475300.2000	S*	STG4-M12/PN 20M-PUR	4	D	20.0	6.5	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight on male M12 straight with PUR cable, shielded 360° Cat.5e, D-coded, self-locking screw connection C-track compatible, halogen free

halogen free flame retardant

LÜTZE SUPERFLEX® connected

Construction

Number of conductors/cross-section	1 × 4 × AWG 22/7
Number of conductors	4
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius moving	12×D

Technical data

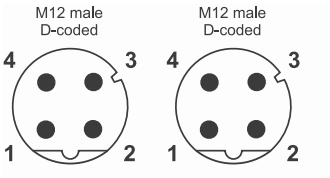
Rated voltage U_N	AC/DC 24 V
Rated voltage max.	30 V
Operating voltage max.	48 V
Rated current	4 A
Form male 1	M 12 male straight
Form male 2	M 12 male straight
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Storage temperature range	-30 °C … +90 °C
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Accessories

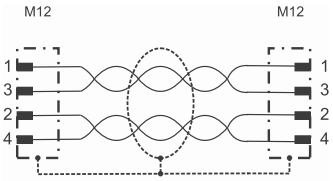
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	PU (units)
475400.0030	S*	STG4-M12/STG4-M12/ PN 0,3M PUR	4	D	0.3	6.5	1
475400.0060	S*	STG4-M12/STG4-M12/ PN 0,6M PUR	4	D	0.6	6.5	1
475400.0100	S*	STG4-M12/STG4-M12/ PN 1,0M PUR	4	D	1.0	6.5	1
475400.0150	S*	STG4-M12/STG4-M12/ PN 1,5M PUR	4	D	1.5	6.5	1
475400.0200	S*	STG4-M12/STG4-M12/ PN 2,0M PUR	4	D	2.0	6.5	1
475400.0500	S*	STG4-M12/STG4-M12/ PN 5,0M PUR	4	D	5.0	6.5	1
475400.1000	S*	STG4-M12/STG4-M12/ PN 10,0M PUR	4	D	10.0	6.5	1
475400.1500	S*	STG4-M12/STG4-M12/ PN 15,0M PUR	4	D	15.0	6.5	1
475400.2000	S*	STG4-M12/STG4-M12/ PN 20,0M PUR	4	D	20.0	6.5	1

Pin layout



Circuit diagram



Further product information at www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

M12 panel connectors using PG9 thread for rear panel installation, PUR cable, open end Cat.5e, female - D coded
C-track compatible, halogen free

halogen free
flame retardant

LÜTZE SUPERFLEX® connected

Construction

Number of conductors/cross-section	1×4×AWG22/7
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius moving	10×D

Technical data

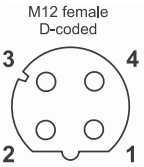
Rated voltage U_N	AC/DC 24 V
Rated voltage max.	30 V
Operating voltage max.	48 V
Rated current	4 A
Form male 1	M 12 female
Degree of protection	IP65/67
Storage temperature range	-40 °C … +90 °C
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Accessories

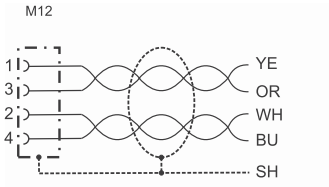
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	PU (units)
475500.0200	S*	KUGE4-M12/PN 2M PUR	4	D	2.0	6.5	1
475500.0500	S*	KUGE4-M12/PN 5M PUR	4	D	5.0	6.5	1
475500.1000	S*	KUGE4-M12/PN 10M PUR	4	D	10.0	6.5	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female M12 straight with PUR cable shielded 360°
Cat.5e, D-coded, self-locking screw connection
C-track compatible, halogen free

Construction

Number of conductors/cross-section	(2×2×AWG22/7)
Number of conductors	4
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

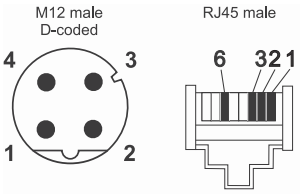
Rated voltage U_N	DC 24 V
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	M 12 male straight
Degree of protection	IP20
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Accessories

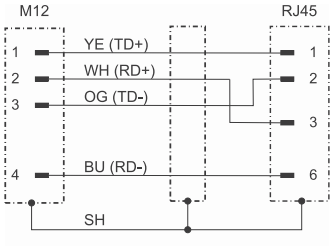
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	PU (units)
192013.0030	S*	STG4-RJ45/STG4-M12/ PN PUR 0,3M	4	D	0.3	6.5	1
192013.0060	S*	STG4-RJ45/STG4-M12/ PN PUR 0,6M	4	D	0.6	6.5	1
192013.0100	S*	STG4-RJ45/STG4-M12/ PN PUR 1,0M	4	D	1.0	6.5	1
192013.0150	S*	STG4-RJ45/STG4-M12/ PN PUR 1,5M	4	D	1.5	6.5	1
192013.0200	S*	STG4-RJ45/STG4-M12/ PN PUR 2,0M	4	D	2.0	6.5	1
192013.0500	S*	STG4-RJ45/STG4-M12/ PN PUR 5,0M	4	D	5.0	6.5	1
192013.1000	S*	STG8-RJ45/STG4-M12/ PN CAT5 10,0M PUR	4	D	10.0	6.5	1
192013.1500	S*	STG4-RJ45/STG4-M12/ PN PUR 15,0M	4	D	15.0	6.5	1
192013.2000	S*	STG4-RJ45/STG4-M12/ PN PUR 20,0M	4	D	20.0	6.5	1

Pin layout



Circuit diagram



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female RJ45 straight with PUR cable shielded, Cat.5e C-track compatible, halogen free

Construction

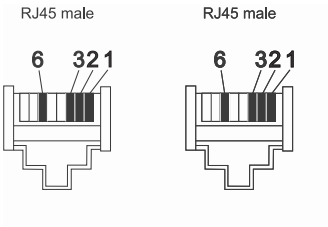
Number of conductors/cross-section	(2×2×AWG22/7)
Number of conductors	4
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

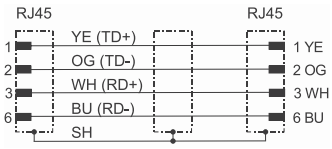
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	RJ45 male straight
Degree of protection	IP20
Color of the housing	black
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-30 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Part No.		Type	Pole number	Cable length m	Cable diameter mm	PU (units)
192015.0030	S*	STG4-RJ45/STG4-RJ45/PN PUR 0,3M	4	0.3	6.5	1
192015.0060	S*	STG4-RJ45/STG4-RJ45/PN PUR 0,6M	4	0.6	6.5	1
192015.0100	S*	STG4-RJ45/STG4-RJ45/PN PUR 1,0M	4	1.0	6.5	1
192015.0150	S*	STG4-RJ45/STG4-RJ45/PN PUR 1,5M	4	1.5	6.5	1
192015.0200	S*	STG4-RJ45/STG4-RJ45/PN PUR 2,0M	4	2.0	6.5	1
192015.0500	S*	STG8-RJ45/STG8-RJ45/PN 5,0M PUR	4	5.0	6.5	1
192015.1000	S*	STG8-RJ45/STG8-RJ45/PN CAT5 10,0M PUR	4	10.0	6.5	1
192015.1500	S*	STG8-RJ45/STG8-RJ45/PN 15,0M PUR	4	15.0	6.5	1
192015.2000	S*	STG8-RJ45/STG8-RJ45/PN 20,0M PUR	4	20.0	6.5	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female RJ45 straight with PUR cable shielded 360°, Cat.5e C-track compatible, halogen free

LÜTZE SUPERFLEX® connected

Construction

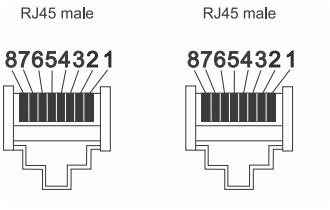
Number of conductors/cross-section	(4×2×AWG26/19)
Number of conductors	8
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius fixed	6×D
Minimum bending radius moving	12×D

Technical data

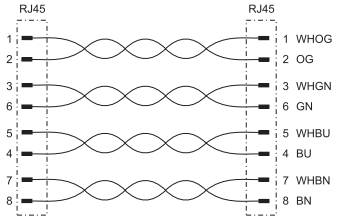
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	RJ45 male straight
Degree of protection	IP20
Color of the housing	black
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Part No.		Type	Pole number	Cable length m	Cable diameter mm	PU (units)
192017.0030	S*	STG8-RJ45/STG8-RJ45/ET PUR 0,3M	8	0.3	6.7	1
192017.0060	S*	STG8-RJ45/STG8-RJ45/ET PUR 0,6M	8	0.6	6.7	1
192017.0100	S*	STG8-RJ45/STG8-RJ45/ET PUR 1,0M	8	1.0	6.7	1
192017.0150	S*	STG8-RJ45/STG8-RJ45/ET PUR 1,5M	8	1.5	6.7	1
192017.0200	S*	STG8-RJ45/STG8-RJ45/ET PUR 2,0M	8	2.0	6.7	1
192017.0500	S*	STG8-RJ45/STG8-RJ45/ET PUR 5,0M	8	5.0	6.7	1
192017.1000	S*	STG8-RJ45/STG8-RJ45/ET PUR 10,0M	8	10.0	6.7	1
192017.1500	S*	STG8-RJ45/STG8-RJ45/ET PUR 15,0M	8	15.0	6.7	1
192017.2000	S*	STG8-RJ45/STG8-RJ45/ET PUR 20,0M	8	20.0	6.7	1

Pin layout



Circuit diagram



Further product information at www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male RJ45 straight to female RJ45 straight with PUR cable shielded 360°, Cat.6 C-track compatible, halogen free, flame-retardant

Construction

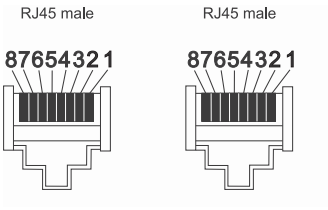
Number of conductors/cross-section	(4×2×AWG26/19)StC
Number of conductors	8
Jacket material	PUR
Jacket color	green RAL 6018
Minimum bending radius fixed	4×D
Minimum bending radius moving	12×D

Technical data

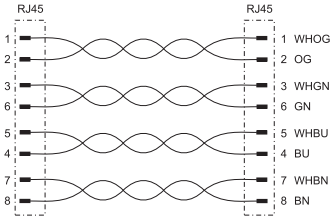
Operating voltage max.	50 V
Rated current	1.5 A
Form male 1	RJ45 male straight
Form male 2	RJ45 male straight
Degree of protection	IP20
Color of the housing	black
Temperature range connector	-25 °C … +85 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-30 °C … +70 °C

Part No.		Type	Pole number	Cable length m	Cable diameter mm	PU (units)
192766.0030	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 0,3M	8	0.3	7.9	1
192766.0060	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 0,6M	8	0.6	7.9	1
192766.0100	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 1,0M	8	1.0	7.9	1
192766.0150	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 1,5M	8	1.5	7.9	1
192766.0200	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 2,0M	8	2.0	7.9	1
192766.0500	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 5,0M	8	5.0	7.9	1
192766.1000	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 10,0M	8	10.0	7.9	1
192766.1500	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 15,0M	8	15.0	7.9	1
192766.2000	S*	STG8-RJ45/STG8-RJ45/ET CAT6 PUR GN 20,0M	8	20.0	7.9	1

Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male M8 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

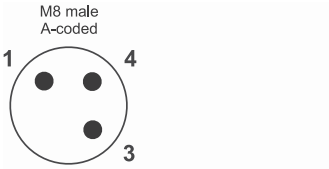
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 male straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

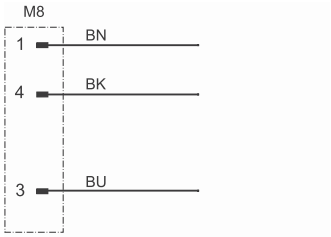
Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
486020	S*	STG3-M8 2M PUR	3	A	2.0	3.6	48	4	1
486050	S*	STG3-M8 5M PUR	3	A	5.0	3.6	48	4	1
486100	S*	STG3-M8 10M PUR	3	A	10.0	3.6	48	4	1
4 × 0.25 mm² (32 × 0.1)									
447020	S*	STG4-M8 2M PUR	4	A	2.0	3.9	48	4	1
447050	S*	STG4-M8 5M PUR	4	A	5.0	3.9	48	4	1
447100	S*	STG4-M8 10M PUR	4	A	10.0	3.9	48	4	1

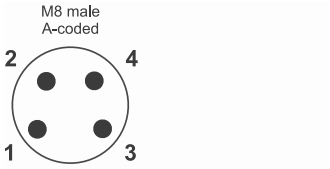
Pin layout



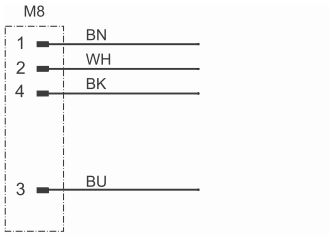
Circuit diagram



Pin layout



Circuit diagram



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Female M8 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

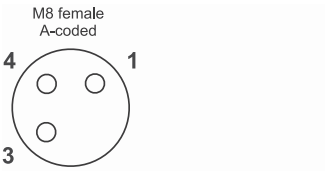
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 female straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

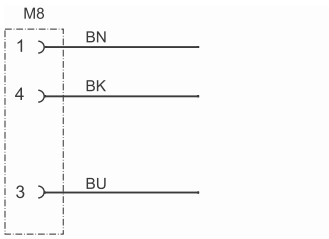
Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
481020	S*	KUG3-M8 2M PUR	3	A	2.0	3.6	48	4	1
481050	S*	KUG3-M8 5M PUR	3	A	5.0	3.6	48	4	1
481100	S*	KUG3-M8 10M PUR	3	A	10.0	3.6	48	4	1
4 × 0.25 mm² (32 × 0.1)									
415020	S*	KUG4-M8 2,0M PUR	4	A	2.0	3.9	48	4	1
415050	S*	KUG4-M8 5,0M PUR	4	A	5.0	3.9	48	4	1
415100	S*	KUG4-M8 10,0M PUR	4	A	10.0	3.9	48	4	1

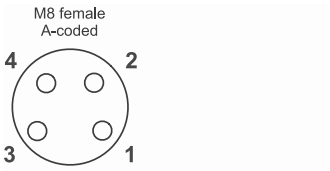
Pin layout



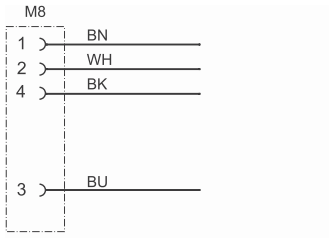
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M8 straight with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

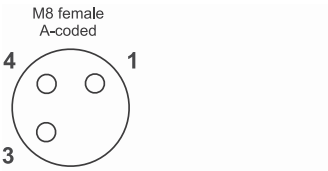
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 female straight
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

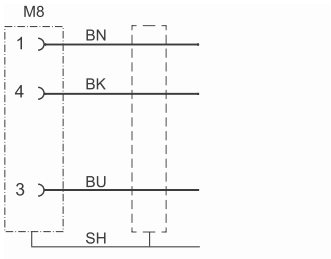
Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
458302	S*	KUG3-M8(C) 2M PUR	3	A	2.0	4.3	48	4	1
458305	S*	KUG3-M8(C) 5M PUR	3	A	5.0	4.3	48	4	1
458310	S*	KUG3-M8(C) 10M PUR	3	A	10.0	4.3	48	4	1
4 × 0.25 mm² (32 × 0.1)									
458402	S*	KUG4-M8(C) 2,0M PUR	4	A	2.0	4.7	48	4	1
458405	S*	KUG4-M8(C) 5,0M PUR	4	A	5.0	4.7	48	4	1
458410	S*	KUG4-M8(C) 10M PUR	4	A	10.0	4.7	48	4	1

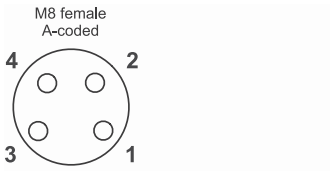
Pin layout



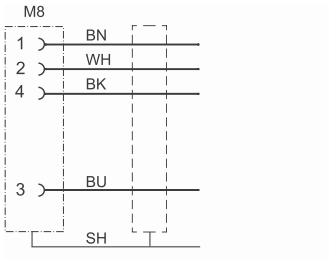
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M8 angled with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

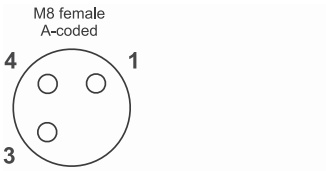
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 female angle connector
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

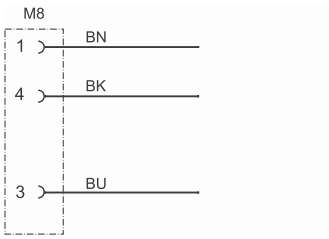
Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
474020	S*	KUW3-M8 2M PUR	3	A	2.0	3.6	48	4	1
474050	S*	KUW3-M8 5M PUR	3	A	5.0	3.6	48	4	1
474100	S*	KUW3-M8 10M PUR	3	A	10.0	3.6	48	4	1
4 × 0.25 mm² (32 × 0.1)									
416020	S*	KUW4-M8 2,0M PUR	4	A	2.0	3.9	48	4	1
416050	S*	KUW4-M8 5,0M PUR	4	A	5.0	3.9	48	4	1
416100	S*	KUW4-M8 10,0M PUR	4	A	10.0	3.9	48	4	1

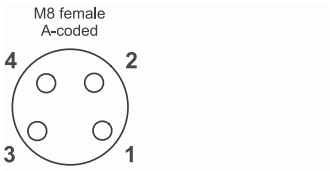
Pin layout



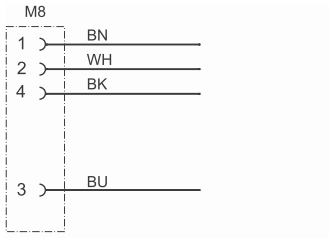
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Male M8 straight to female M8 straight with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

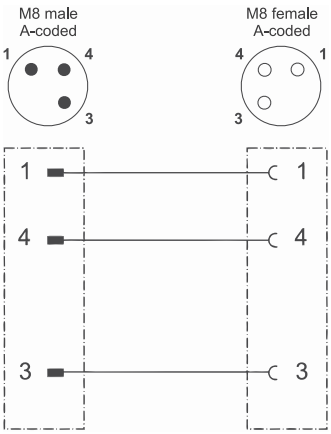
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 male straight
Form male 2	M 8 female straight
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
487003	S*	STG3-M8/KUG3-M8 0,3M PUR	3	A	0.3	3.6	48	4	1
487006	S*	STG3-M8/KUG3-M8 0,6M PUR	3	A	0.6	3.6	48	4	1
487010	S*	STG3-M8/KUG3-M8 1,0M PUR	3	A	1.0	3.6	48	4	1
487015	S*	STG3-M8/KUG3-M8 1,5M PUR	3	A	1.5	3.6	48	4	1
487020	S*	STG3-M8/KUG3-M8 2,0M PUR	3	A	2.0	3.6	48	4	1
487050	S*	STG3-M8/KUG3-M8 5,0M PUR	3	A	5.0	3.6	48	4	1

PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Male M8 straight to female M8 straight with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

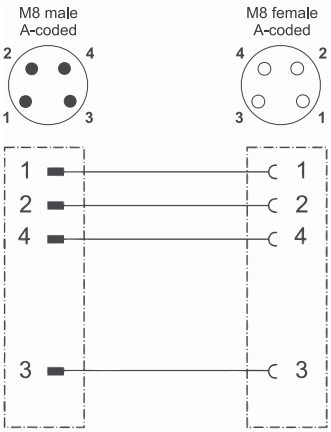
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 male straight
Form male 2	M 8 female straight
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
4 × 0.25 mm² (32 × 0.1)									
410003	S*	STG4-M8/KUG4-M8 0,3m PUR	4	A	0.3	3.9	48	4	1
410006	S*	STG4-M8/KUG4-M8 0,6m PUR	4	A	0.6	3.9	48	4	1
410010	S*	STG4-M8/KUG4-M8 1,0m PUR	4	A	1.0	3.9	48	4	1
410015	S*	STG4-M8/KUG4-M8 1,5m PUR	4	A	1.5	3.9	48	4	1
410020	S*	STG4-M8/KUG4-M8 2,0m PUR	4	A	2.0	3.9	48	4	1
410050	S*	STG4-M8/KUG4-M8 5,0m PUR	4	A	5.0	3.9	48	4	1

PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Male M8 straight to female M8 angled with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

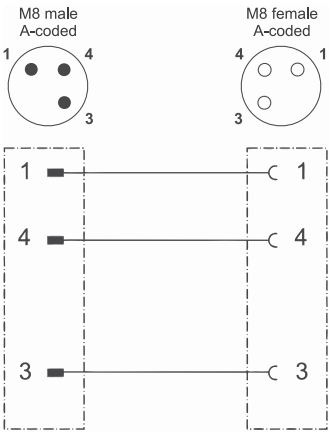
Rated voltage U_N	AC/DC 24 V
Form male 1	M 8 male straight
Form male 2	M 8 female angle connector
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.2 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 8: Part-No. 490090 | DM-SET M8 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.25 mm² (32 × 0.1)									
488003	S*	STG3-M8/ KUW3-M8 0,3M PUR	3	A	0.3	3.6	48	4	1
488006	S*	STG3-M8/ KUW3-M8 0,6M PUR	3	A	0.6	3.6	48	4	1
488010	S*	STG3-M8/ KUW3-M8 1,0M PUR	3	A	1.0	3.6	48	4	1
488015	S*	STG3-M8/ KUW3-M8 1,5M PUR	3	A	1.5	3.6	48	4	1
488020	S*	STG3-M8/ KUW3-M8 2,0M PUR	3	A	2.0	3.6	48	4	1
488050	S*	STG3-M8/ KUW3-M8 5,0M PUR	3	A	5.0	3.6	48	4	1

PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

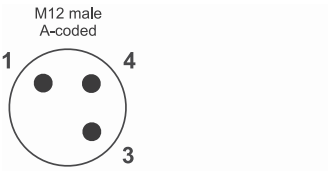
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

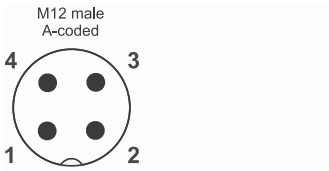
Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.34 mm² (42 × 0.1)									
471020	S*	STG3-M12 2M PUR	3	A	2.0	3.8	250	4	1
471050	S*	STG3-M12 5M PUR	3	A	5.0	3.8	250	4	1
471100	S*	STG3-M12 10M PUR	3	A	10.0	3.8	250	4	1
4 × 0.34 mm² (42 × 0.1)									
472020	S*	STG4-M12 2M PUR	4	A	2.0	4.1	250	4	1
472050	S*	STG4-M12 5M PUR	4	A	5.0	4.1	250	4	1
472100	S*	STG4-M12 10M PUR	4	A	10.0	4.1	250	4	1

Pin layout

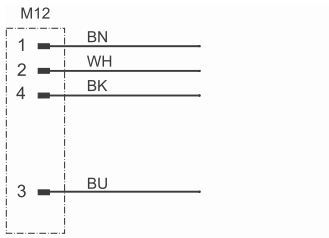


PIN assignment

Pin layout



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

c UL us LISTED

halogen free flame retardant

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

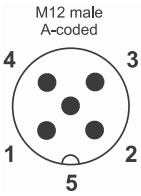
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

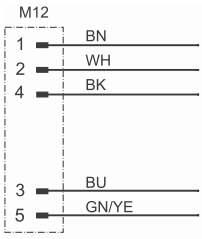
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
473020	S*	STG5-M12 2M PUR	5	A	2.0	4.5	48	4	1
473050	S*	STG5-M12 5M PUR	5	A	5.0	4.5	48	4	1
473100	S*	STG5-M12 10M PUR	5	A	10.0	4.5	48	4	1
8 × 0.25 mm² (32 × 0.1)									
482020	S*	STG8-M12 2M PUR	8	A	2.0	5.9	30	2	1
482050	S*	STG8-M12 5M PUR	8	A	5.0	5.9	30	2	1
482100	S*	STG8-M12 10M PUR	8	A	10.0	5.9	30	2	1

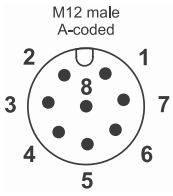
Pin layout



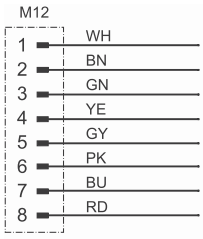
PIN assignment



Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

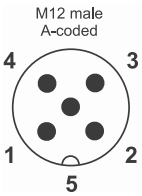
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

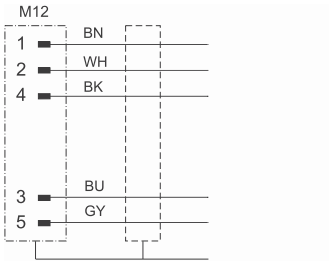
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
456202	S*	STG5-M12(C)2m PUR	5	A	2.0	5.3	60	4	1
456205	S*	STG5-M12(C)5m PUR	5	A	5.0	5.3	60	4	1
456210	S*	STG5-M12(C) 10m PUR	5	A	10.0	5.3	60	4	1
8 × 0.25 mm² (32 × 0.1)									
458702	S*	STG8-M12(C) 2M PUR	8	A	2.0	5.9	30	2	1
458705	S*	STG8-M12(C) 5M PUR	8	A	5.0	5.9	30	2	1
458710	S*	STG8-M12(C) 10M PUR	8	A	10.0	5.9	30	2	1

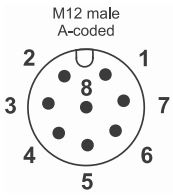
Pin layout



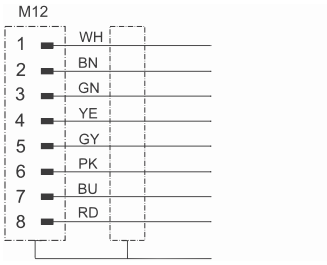
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M12 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

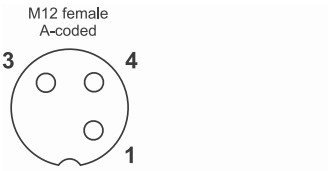
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

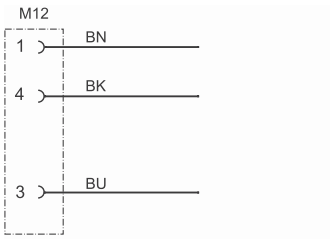
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.34 mm² (42 × 0.1)									
465020	A*	KUG3-M12 2M PUR	3	A	2.0	3.8	250	4	1
465050	S*	KUG3-M12 5M PUR	3	A	5.0	3.8	250	4	1
465100	A*	KUG3-M12 10M PUR	3	A	10.0	3.8	250	4	1
4 × 0.34 mm² (42 × 0.1)									
466020	S*	KUG4-M12 2M PUR	4	A	2.0	4.1	250	4	1
466050	S*	KUG4-M12 5M PUR	4	A	5.0	4.1	250	4	1
466100	S*	KUG4-M12 10M PUR	4	A	10.0	4.1	250	4	1

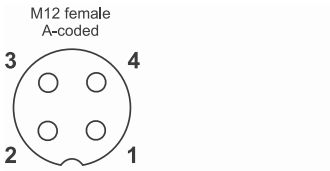
Pin layout



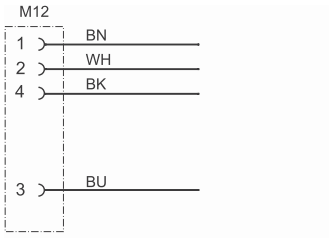
PIN assignment



Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Female M12 straight with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

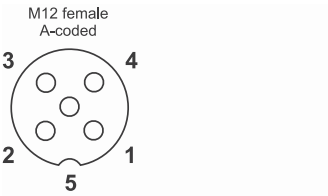
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female straight
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

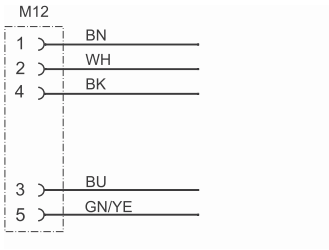
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
477020	S*	KUG5-M12 2M PUR	5	A	2.0	4.5	60	4	1
477050	S*	KUG5-M12 5M PUR	5	A	5.0	4.5	60	4	1
477100	S*	KUG5-M12 10M PUR	5	A	10.0	4.5	60	4	1
8 × 0.25 mm² (32 × 0.1)									
478020	S*	KUG8-M12 2M PUR	8	A	2.0	5.9	30	2	1
478050	S*	KUG8-M12 5M PUR	8	A	5.0	5.9	30	2	1
478100	S*	KUG8-M12 10M PUR	8	A	10.0	5.9	30	2	1

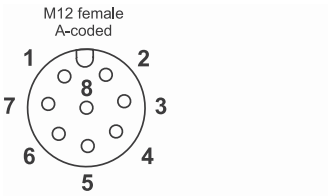
Pin layout



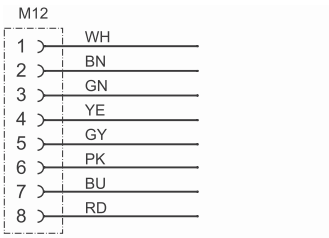
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M12 straight with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

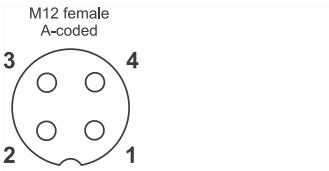
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female straight
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

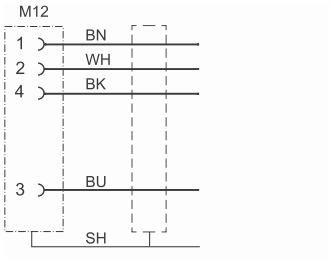
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
4 × 0.34 mm² (42 × 0.1)									
456402	S*	KUG4-M12(C) 2m PUR	4	A	2.0	4.9	250	4	1
456405	S*	KUG4-M12(C) 5m PUR	4	A	5.0	4.9	250	4	1
456410	S*	KUG4-M12(C) 10m PUR	4	A	10.0	4.9	250	4	1

Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Female M12 straight with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

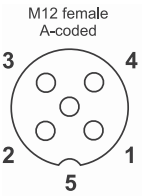
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female straight
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

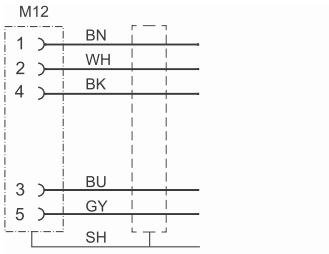
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
456502	S*	KUG5-M12(C) 2m PUR	5	A	2.0	5.3	60	4	1
456505	S*	KUG5-M12(C) 5m PUR	5	A	5.0	5.3	60	4	1
456510	S*	KUG5-M12(C) 10m PUR	5	A	10.0	5.3	60	4	1
8 × 0.25 mm² (32 × 0.1)									
458802	S*	KUG8-M12(C) 2M PUR	8	A	2.0	5.9	30	2	1
458805	S*	KUG8-M12(C) 5M PUR	8	A	5.0	5.9	30	2	1
458810	S*	KUG8-M12(C) 10M PUR	8	A	10.0	5.9	30	2	1

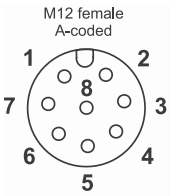
Pin layout



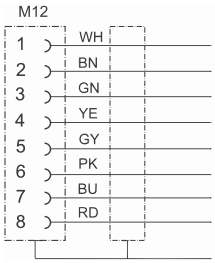
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M12 angled with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

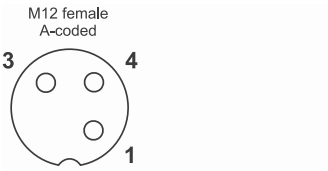
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female angle connector
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

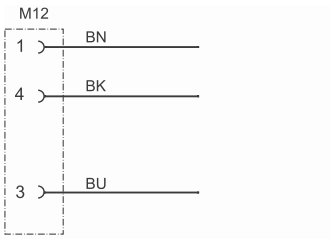
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.34 mm² (42 × 0.1)									
462020	S*	KUW3-M12 2M PUR	3	A	2.0	3.8	250	4	1
462050	S*	KUW3-M12 5M PUR	3	A	5.0	3.8	250	4	1
462100	S*	KUW3-M12 10M PUR	3	A	10.0	3.8	250	4	1
4 × 0.34 mm² (42 × 0.1)									
464020	S*	KUW4-M12 2M PUR	4	A	2.0	4.1	250	4	1
464050	S*	KUW4-M12 5M PUR	4	A	5.0	4.1	250	4	1
464100	S*	KUW4-M12 10M PUR	4	A	10.0	4.1	250	4	1

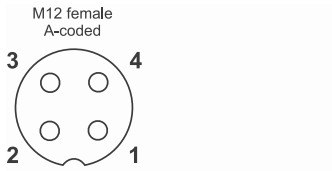
Pin layout



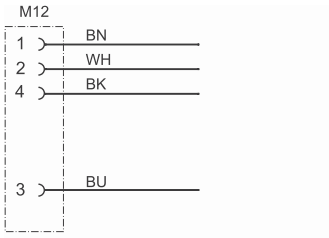
PIN assignment



Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Female M12 angled with PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

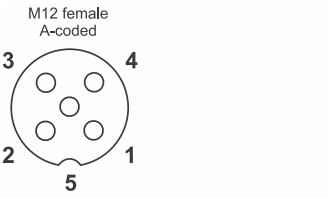
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female angle connector
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

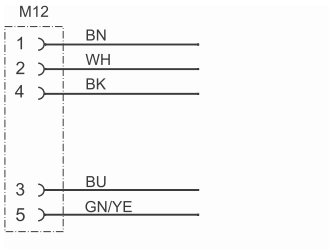
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
443020	S*	KUW5-M12 2M PUR	5	A	2.0	4.5	60	4	1
443050	S*	KUW5-M12 5M PUR	5	A	5.0	4.5	60	4	1
443100	S*	KUW5-M12 10M PUR	5	A	10.0	4.5	60	4	1
8 × 0.25 mm² (32 × 0.1)									
479020	S*	KUW8-M12 2M PUR	8	A	2.0	5.9	30	2	1
479050	S*	KUW8-M12 5M PUR	8	A	5.0	5.9	30	2	1
479100	S*	KUW8-M12 10M PUR	8	A	10.0	5.9	30	2	1

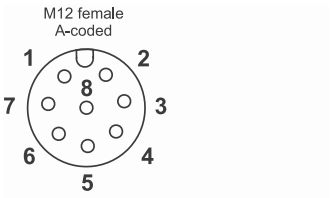
Pin layout



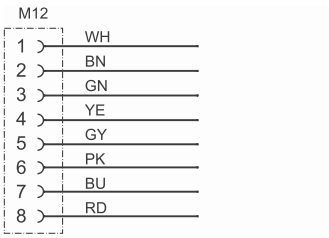
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M12 angled with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

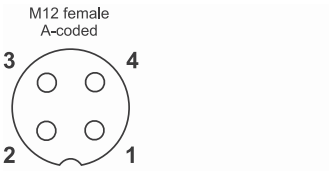
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female angle connector
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

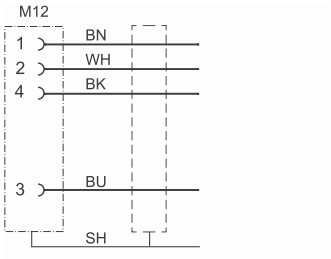
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
4 × 0.34mm2 (42 × 0.1)									
456702	S*	KUW4-M12(C) 2m PUR	4	A	2.0	4.9	250	4	1
456705	S*	KUW4-M12(C) 5m PUR	4	A	5.0	4.9	250	4	1
456710	S*	KUW4-M12(C) 10m PUR	4	A	10.0	4.9	250	4	1

Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Female M12 angled with PUR cable, shielded 360°, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

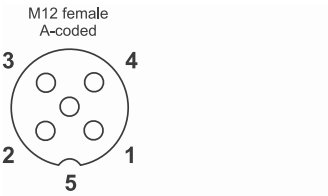
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 female angle connector
Form male 2	line end open
Degree of protection	IP65/67
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

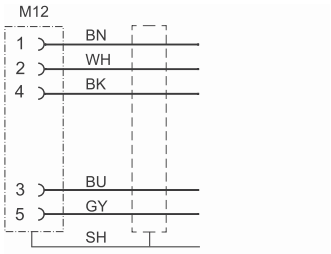
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
456802	S*	KUW5-M12(C) 2m PUR	5	A	2.0	5.3	60	4	1
456805	S*	KUW5-M12(C) 5m PUR	5	A	5.0	5.3	60	4	1
456810	S*	KUW5-M12(C) 10m PUR	5	A	10.0	5.3	60	4	1
8 × 0.25 mm² (32 × 0.1)									
458902	S*	KUW8-M12(C) 2M PUR	8	A	2.0	5.9	30	2	1
458905	S*	KUW8-M12(C) 5M PUR	8	A	5.0	5.9	30	2	1
458910	S*	KUW8-M12(C) 10M PUR	8	A	10.0	5.9	30	2	1

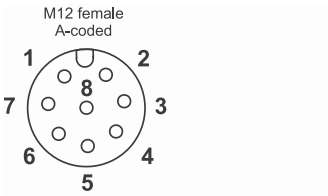
Pin layout



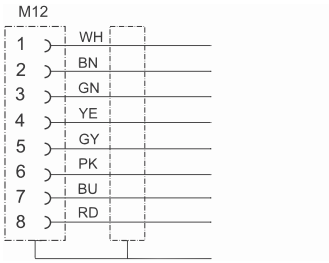
Circuit diagram



Pin layout



Circuit diagram



* S Article from stock
A Available with a lead time
R Available on request

Female M12 angled, with LEDs and PUR cable, open end
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

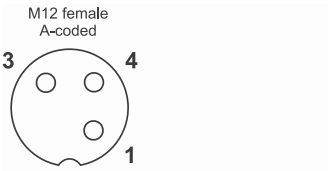
Rated voltage U_N	DC 24 V
Form male 1	M 12 female angle connector
Form male 2	line end open
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

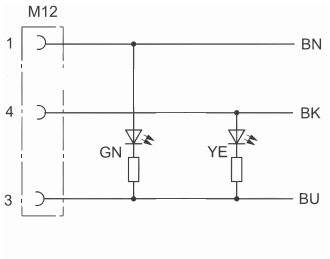
Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.34 mm² (42 × 0.1)									
468020	S*	KUW/LED A-M12 2M PUR	3	A	2.0	3.8	28	4	1
468050	S*	KUW/LED A-M12 5M PUR	3	A	5.0	3.8	28	4	1
468100	S*	KUW/LED A-M12 10M PUR	3	A	10.0	3.8	28	4	1
4 × 0.34 mm² (42 × 0.1)									
469020	S*	KUW/LED P-M12 2M PUR	4	A	2.0	4.1	28	4	1
469050	S*	KUW/LED P-M12 5M PUR	4	A	5.0	4.1	28	4	1
469100	S*	KUW/LED P-M12 10M PUR	4	A	10.0	4.1	28	4	1

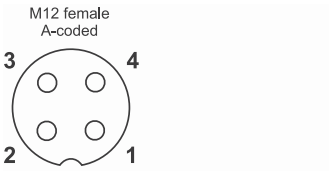
Pin layout



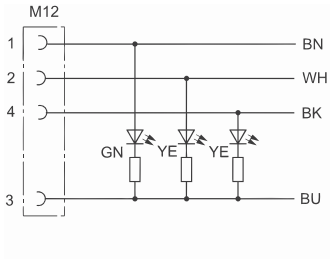
Circuit diagram



Pin layout



Circuit diagram



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight to female M12, straight with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

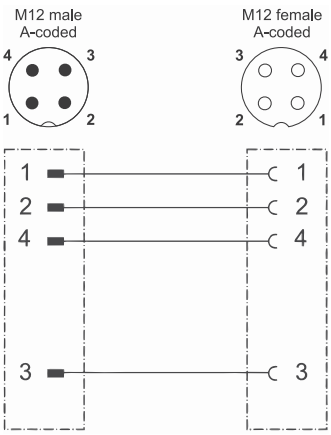
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	M 12 female straight
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
4 × 0.34 mm² (42 × 0.1)									
429003	S*	STG4-M12/ KUG4-M12 0,3M PUR	4	A	0.3	4.1	250	4	1
429006	S*	STG4-M12/ KUG4-M12 0,6mPUR	4	A	0.6	4.1	250	4	1
429010	S*	STG4-M12/ KUG4-M12 1,0M PUR	4	A	1.0	4.1	250	4	1
429015	S*	STG4-M12/ KUG4-M12 1,5M PUR	4	A	1.5	4.1	250	4	1
429020	S*	STG4-M12/ KUG4-M12 2,0M PUR	4	A	2.0	4.1	250	4	1
429050	S*	STG4-M12/ KUG4-M12 5,0M PUR	4	A	5.0	4.1	250	4	1

PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight to female M12 straight with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

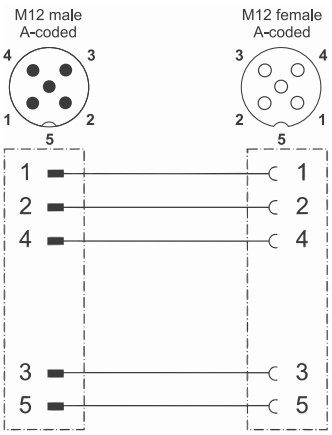
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	M 12 female straight
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
5 × 0.34 mm² (42 × 0.1)									
442003	S*	STG5-M12/ KUG5-M12 0,3M PUR	5	A	0.3	4.5	30	4	1
442006	S*	STG5-M12/ KUG5-M12 0,6M PUR	5	A	0.6	4.5	30	4	1
442010	S*	STG5-M12/ KUG5-M12 1,0M PUR	5	A	1.0	4.5	30	4	1
442015	S*	STG5-M12/ KUG5-M12 1,5M PUR	5	A	1.5	4.5	30	4	1
442020	S*	STG5-M12/ KUG5-M12 2,0M PUR	5	A	2.0	4.5	30	4	1
442050	S*	STG5-M12/ KUG5-M12 5,0M PUR	5	A	5.0	4.5	30	4	1

PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight to female M12 straight with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

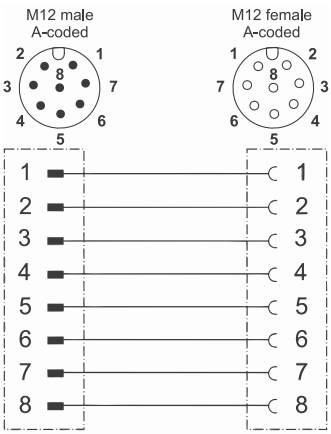
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	M 12 female straight
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
8 × 0.25 mm² (32 × 0.1)									
420003	A*	STG8-M12/ KUG8-M12 0,3M PUR	8	A	0.3	5.9	30	2	1
420006	A*	STG8-M12/ KUG8-M12 0,6M PUR	8	A	0.6	5.9	30	2	1
420010	A*	STG8-M12/ KUG8-M12 1,0M PUR	8	A	1.0	5.9	30	2	1
420015	A*	STG8-M12/ KUG8-M12 1,5M PUR	8	A	1.5	5.9	30	2	1
420020	A*	STG8-M12/ KUG8-M12 2,0M PUR	8	A	2.0	5.9	30	2	1
420050	S*	STG8-M12/ KUG8-M12 5,0M PUR	8	A	5.0	5.9	30	2	1

PIN assignment



Male M12 straight to female M12 angled with PUR cable
Self-locking screw connection
C-track compatible, halogen free

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

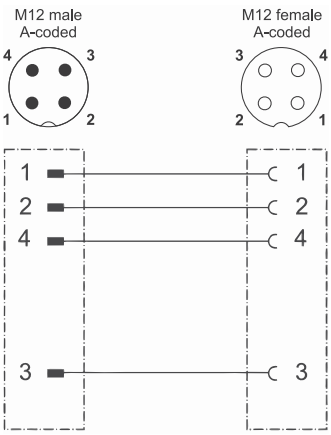
Rated voltage U_N	AC/DC 24 V
Form male 1	M 12 male straight
Form male 2	M 12 female angle connector
Degree of protection	IP65/67/68
Color of the housing	black
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-25 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Accessories

Torque setting tool M 12: Part-No. 490091 | DM-SET M12 | PU: 1 unit

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
4 × 0.34 mm² (42 × 0.1)									
418003	A*	STG4-M12/ KUW4-M12 0,3M PUR	4	A	0.3	4.1	250	4	1
418006	A*	STG4-M12/ KUW4-M12 0,6M PUR	4	A	0.6	4.1	250	4	1
418010	A*	STG4-M12/ KUW4-M12 1,0M PUR	4	A	1.0	4.1	250	4	1
418015	A*	STG4-M12/ KUW4-M12 1,5M PUR	4	A	1.5	4.1	250	4	1
418020	A*	STG4-M12/ KUW4-M12 2,0M PUR	4	A	2.0	4.1	250	4	1
418050	A*	STG4-M12/ KUW4-M12 5,0M PUR	4	A	5.0	4.1	250	4	1

PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Actuator sensor interface · M12 / valve suppressor

Male M12 straight to valve connector form A
With protection device and LED status indication
C-track compatible, halogen free

halogen free
flame retardant

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

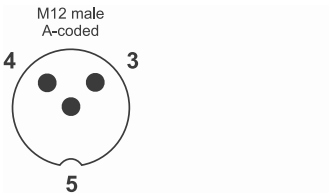
Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

Technical data

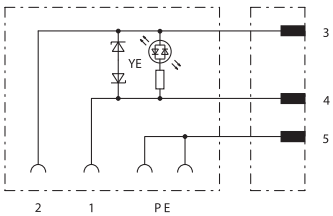
Rated voltage U_N	AC/DC 24 V
Protection device	Z-diode + LED
Cut-off peak	≤52 V
Holding Capacity	100 VA
Form male 1	M 12 male straight
Form male 2	Valve connector form A
Degree of protection	IP65/67
Color of the housing	black / transparent
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-20 °C … +85 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-20 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Standards	EN 175301-803
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB
Accessories	**Torque setting tool M 12:** Part-No. 490091 | DM-SET M12 | PU: 1 unit
Comments	Silicone free, Free from paint wetting impairment substances, resistant to microbes and hydrolysis Very good resistance to acids, alkalines and solvents. The material resistance is based on the application for use with aggressive media.

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.5 mm²									
435003	S*	STG3-M12/LZ-A 0,3M PUR	3	A	0.3	4.5	28	4	1
435006	S*	STG3-M12/LZ-A 0,6M PUR	3	A	0.6	4.5	28	4	1
435010	S*	STG3-M12/LZ-A 1,0M PUR	3	A	1.0	4.5	28	4	1
435015	S*	STG3-M12/LZ-A 1,5M PUR	3	A	1.5	4.5	28	4	1
435020	S*	STG3-M12/LZ-A 2,0M PUR	3	A	2.0	4.5	28	4	1
435050	S*	STG3-M12/LZ-A 5,0M PUR	3	A	5.0	4.5	28	4	1

Pin layout



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Male M12 straight to valve suppressor form B / form BI
With protection device and LED status indication
C-track compatible, halogen free

halogen free
flame retardant

Properties
- Silicone free
- Free from paint wetting disruptive substances (LABS-free)
- Hydrolysis-resistant, microbe-resistant, and rot-resistant
- Resistance to acids, alkalines and watery solutions

Construction

Jacket material	PUR
Jacket color	black
Minimum bending radius moving	10×D

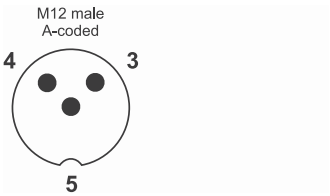
Technical data

Rated voltage U_N	AC/DC 24 V
Protection device	Z-diode + LED
Cut-off peak	≤52 V
Holding Capacity	100 VA
Form male 1	M 12 male straight
Form male 2	Valve connector form B Ind.
Degree of protection	IP65/67

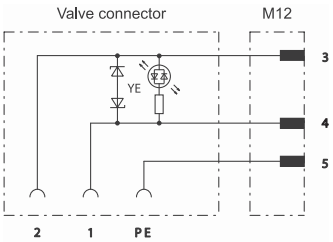
Color of the housing	black / transparent
Mounting	Breakaway torque 0.4 Nm
Temperature range connector	-25 °C … +90 °C
Temperature range fixed	-40 °C … +80 °C
Temperature range moving	-20 °C … +80 °C
UV-resistant according to	DIN EN ISO 4892-2-A
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB
Accessories	**Torque setting tool M 12:** Part-No. 490091 | DM-SET M12 | PU: 1 unit
Comments	Silicone free, Free from paint wetting impairment substances, resistant to microbes and hydrolysis Very good resistance to acids, alkalines and solvents. The material resistance is based on the application for use with aggressive media.

Part No.		Type	Pole number	Coding	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
3 × 0.5 mm²									
439003	A*	STG3-M12/LZ-BI 0° 0,3M PUR	3	A	0.3	4.5	28	4	1
439010	A*	STG3-M12/LZ-BI 0° 1,0M PUR	3	A	1.0	4.5	28	4	1
439006	A*	STG3-M12/LZ-BI 0° 0,6M PUR	3	A	0.6	4.5	28	4	1
439015	A*	STG3-M12/LZ-BI 0° 1,5M PUR	3	A	1.5	4.5	28	4	1
439020	A*	STG3-M12/LZ-BI 0° 2,0M PUR	3	A	2.0	4.5	28	4	1
439050	A*	STG3-M12/LZ-BI 0° 5,0M PUR	3	A	5.0	4.5	28	4	1

Pin layout



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

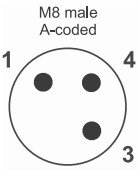
Field wireable connector, M8 straight
Male / female
IDC quick-connect technology

Technical data

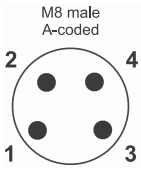
Rated voltage U_N	AC/DC 24 V	Cable diameter	2.5 mm – 5 mm
Connection type	IDC 0.25 mm² – 0.5 mm²	Temperature range connector	-40 °C … +80 °C
		Mechanical service life	>100 insertion cycles
Mounting	Breakaway torque 0.2 Nm	Certifications	
Degree of protection	IP67		cURus (E256031)
Color of the housing	black	Flamability according to UL 94	HB

Part No.		Type	Pole number	Operating voltage max. V	Rated current A	PU (units)
M 8 male straight						
490123	S*	STGK-M8 3 POL. SNK	3	60	4	1
490124	S*	STGK-M8 4POL. SNK	4	60	4	1
M 8 female straight						
490125	S*	KUGK-M8 3 POL. SNK	3	60	4	1
490126	S*	KUGK-M8 4POL. SNK	4	60	4	1

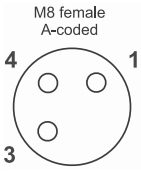
Pin layout



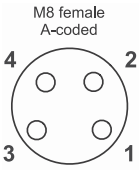
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M8 straight
Male / female
Screw terminal

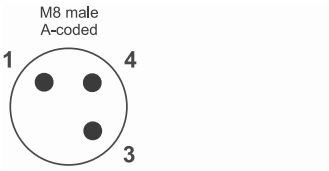
c UL us LISTED

Technical data

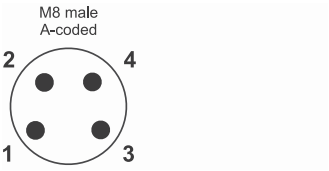
Rated voltage U_N	AC/DC 24 V
Connection type	Screw terminal 0.14 mm² – 0.5 mm²
Mounting	Breakaway torque 0.2 Nm
Degree of protection	IP67
Color of the housing	black
Cable diameter	3.5 mm – 5 mm
Temperature range connector	-25 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E224249)
Flamability according to UL 94	HB

Part No.		Type	Pole number	Operating voltage max. V	Rated current A	PU (units)
M 8 male straight						
490035	S*	STGK-M8 3 POL. SK	3	60	4	1
490057	S*	STGK-M8 4 POL. SK	4	60	4	1
M 8 female straight						
490037	S*	KUGK-M8 3 POL. SK	3	60	4	1
490059	S*	KUGK-M8 4 POL. SK	4	60	4	1

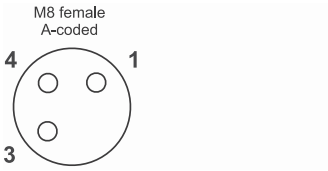
Pin layout



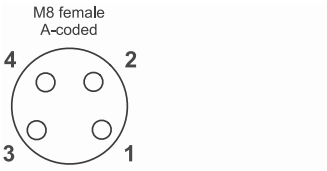
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 straight
Male A-coded / Female A-coded
Spring terminal: Push-in connection technology

c UL us LISTED

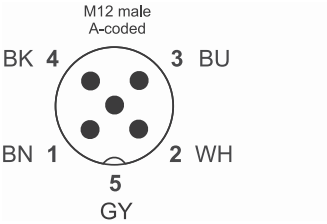
Technical data

Rated voltage U_N	AC/DC 24 V
Connection type	Spring terminal Push-In
Degree of protection	IP65, IP67 inserted and tightened
Color of the housing	black
Cross-section, metric	without ferrule: 0.14–0.75 mm² with ferrule: 0.08–0.5 mm²
Cross-section AWG	without ferrule: AWG26–AWG18 with ferrule: AWG28–AWG20
Cable diameter	4 mm – 8 mm
Tightening torque	M12-knurled nut: 0.4 Nm sleeve housing: 0.4 Nm pressure nut: 1.5 Nm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E224249)
Standards	IEC 61076-2-101 EN 50155 (2001) vibration and shock
Flamability according to UL 94	V0

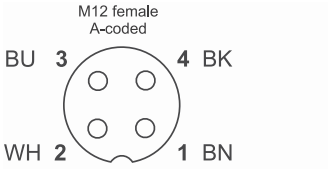
Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male straight							
490190	S*	STGK-M12 4-POL-A FK	4	A	250	4	1
490191	S*	STGK-M12 5-POL-A FK	5	A	60	4	1
M 12 female straight							
490192	S*	KUGK-M12 4-POL-A FK	4	A	250	4	1
490193	S*	KUGK-M12 5-POL-A FK	5	A	60	4	1

Pin layout

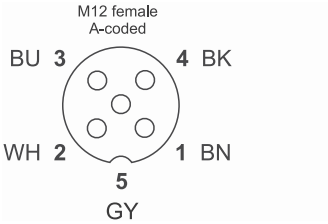
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 angled
Male A-coded / Female A-coded
Spring terminal: Push-in connection technology

c UL us LISTED

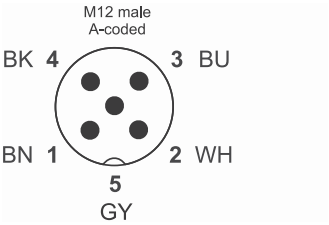
Technical data

Rated voltage U_N	AC/DC 24 V
Connection type	Spring terminal Push-In
Mounting	Coding can be rotated in the 45° increments
Degree of protection	IP65, IP67 inserted and tightened
Color of the housing	black
Cross-section, metric	without ferrule: 0.14–0.75 mm² with ferrule: 0.08–0.5 mm²
Cross-section AWG	without ferrule: AWG26–AWG18 with ferrule: AWG28–AWG20
Cable diameter	4 mm – 8 mm
Tightening torque	M12-knurled nut: 0.4 Nm sleeve housing: 0.4 Nm pressure nut: 1.5 Nm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E224249)
Standards	IEC 61076-2-101 EN 50155 (2001) vibration and shock
Flamability according to UL 94	V0

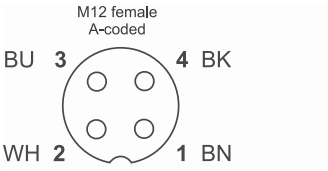
Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male angle connector							
490194	S*	STWK-M12 4-POL-A FK	4	A	250	4	1
490195	S*	STWK-M12 5-POL-A FK	5	A	60	4	1
M 12 female angle connector							
490196	S*	KUWK-M12 4-POL-A FK	4	A	250	4	1
490197	S*	KUWK-M12 5-POL-A FK	5	A	60	4	1

Pin layout

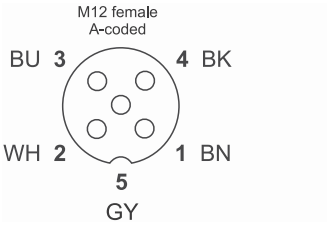
Pin layout



Pin layout



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 straight
Male A-coded / Female A-coded
Fast connection method, IDC termination

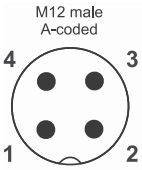
c UL us LISTED

Technical data

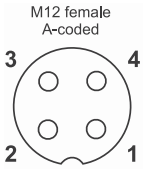
Rated voltage U_N	AC/DC 24 V	Cross-section, metric	0.75 mm²
Connection type	Compliant terminal IDC	Cable diameter	4 mm – 7.5 mm
		Temperature range connector	-25 °C … +80 °C
		Mechanical service life	>100 insertion cycles
Mounting	Breakaway torque 0.4 Nm	Certifications	
Degree of protection	IP67		cULus Listed (E224249)
Color of the housing	black	Flamability according to UL 94	V0

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male straight							
490028	S*	STGK-M12 4POL.SNK	4	A	250	4	1
M 12 female straight							
490029	S*	KUGK-M12 4POL. SNK	4	A	250	4	1

Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

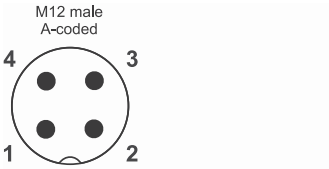
Field wireable connector, M12 straight
Male - A coded
Screw terminal

Technical data

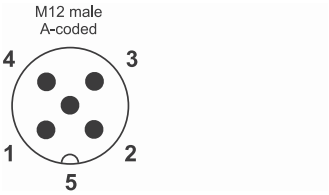
Rated voltage U_N	AC/DC 24 V	Color of the housing	black
Connection type	Screw terminal max. 0.75 mm²	Temperature range connector	-25 °C … +85 °C
		Mechanical service life	>100 insertion cycles
Mounting	Breakaway torque 0.4 Nm	Certifications	cURus (E224249)
Degree of protection	IP67	Flamability according to UL 94	HB

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	Cable diameter	Cross-section, metric mm²	PU (units)
M 12 male straight									
490017	S*	STGK-M12 4POL.SK PG7	4	A	250	4	4 mm – 6 mm	0.75	1
490018	S*	STGK M12 5 POL. SK PG7	5	A	250	4	4 mm – 6 mm	0.75	1
490070	S*	STGK M12 8 POL. SK PG9	8	A	60	2	6 mm – 8 mm	0.5	1

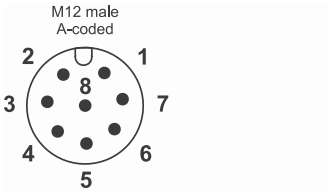
Pin layout



Pin layout



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

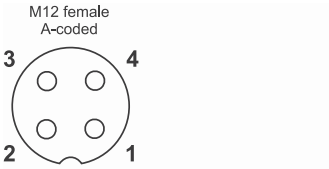
Field wireable connector, M12 straight
Female - A coded
Screw terminal

Technical data

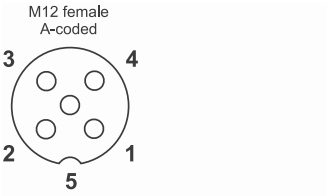
Rated voltage U_N	AC/DC 24 V	Color of the housing	black
Connection type	Screw terminal max. 0.75 mm²	Temperature range connector	-25 °C … +85 °C
		Mechanical service life	>100 insertion cycles
Mounting	Breakaway torque 0.4 Nm	Certifications	cURus (E224249)
Degree of protection	IP67	Flamability according to UL 94	HB

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	Cable diameter	Cross-section, metric mm²	PU (units)
M 12 female straight									
490011	S*	KUGK-M12 4POL. SK PG7	4	A	250	4	4 mm – 6 mm	0.75	1
490012	S*	KUGK-M12 5pol. SK PG7	5	A	60	4	4 mm – 6 mm	0.75	1
490071	S*	KUGK-M12 8POL. SK PG9	8	A	30	2	6 mm – 8 mm	0.5	1

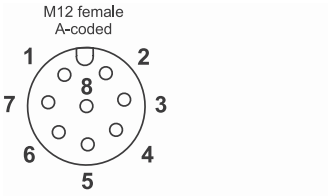
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Splitter
Male M12 to 2× female M12, 5pin PIN 2+4 bridged + PE
Male M12 4pin to 2× female M8, 3pin

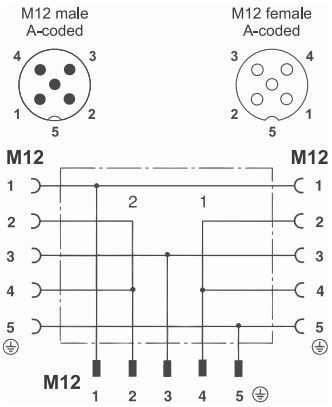
c UL us LISTED

Technical data

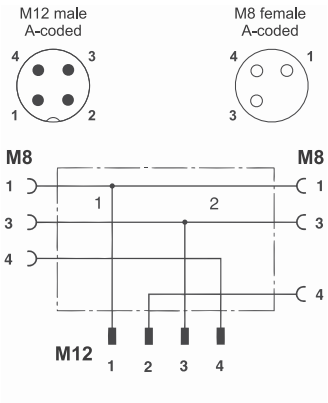
Rated voltage U_N	AC/DC 24 V	Temperature range connector	-25 °C … +90 °C
Mounting	M 12: 0,4 Nm M 8: 0,2 Nm	Mechanical service life	>100 insertion cycles
		Certifications	cULus Listed (E224249)
Color of the housing	black	Flamability according to UL 94	HB

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12/M 12							
490026	S*	AST M 12/2×M 12	5	A	60	4	1
M 12/M 8							
490038	S*	T-VERTEILER M12 AUF 2× M8	3	A	30	3	1

PIN assignment



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 straight, shielded
Female / Male A-coded (CAN), B-coded (Profibus, Interbus)
Spring terminal: Push-in connection technology

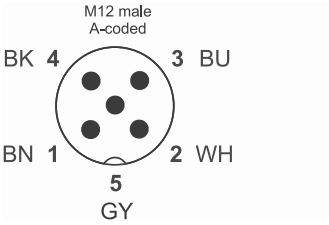
c UL us LISTED

Technical data

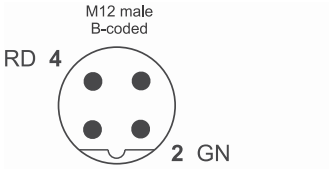
Rated voltage U_N	AC/DC 24 V
Connection type	Spring terminal Push-In
Degree of protection	IP65, IP67 inserted and tightened
Color of the housing	silver
Cross-section, metric	without ferrule: 0.14–0.75 mm² with ferrule: 0.08–0.5 mm²
Cross-section AWG	without ferrule: AWG26–AWG18 with ferrule: AWG28–AWG20
Cable diameter	4 mm – 8 mm
Tightening torque	M12-knurled nut: 0.4 Nm sleeve housing: 0.8 Nm pressure nut: 3 Nm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E224249)
Standards	IEC 61076-2-101 EN 50155 (2001) vibration and shock
Flamability according to UL 94	V0

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male straight							
490200	S*	STGK5-M12 (C)-A FK	5	A	60	4	1
490210	S*	STGK2-M12 (C)-B FK	2	B	60	4	1
M 12 female straight							
490201	S*	KUGK5-M12 (C)-A FK	5	A	60	4	1
490211	S*	KUGK2-M12 (C)-B FK	2	B	60	4	1

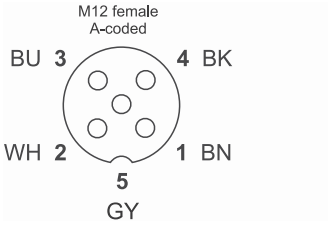
Pin layout



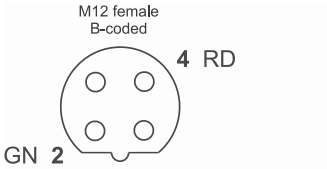
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 straight, shielded
Female / Male D-coded (Ethernet, Profinet)
Spring terminal: Push-in connection technology

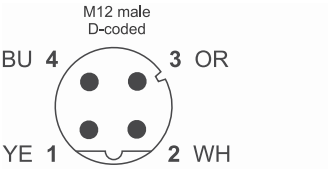
c UL us LISTED

Technical data

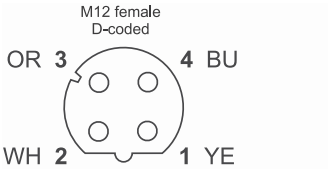
Rated voltage U_N	AC/DC 24 V
Connection type	Spring terminal Push-In
Degree of protection	IP65, IP67 inserted and tightened
Color of the housing	silver
Cross-section, metric	without ferrule: 0.14–0.75 mm² with ferrule: 0.08–0.5 mm²
Cross-section AWG	without ferrule: AWG26–AWG18 with ferrule: AWG28–AWG20
Cable diameter	4 mm – 8 mm
Tightening torque	M12-knurled nut: 0.4 Nm sleeve housing: 0.8 Nm pressure nut: 3 Nm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E224249)
Standards	IEC 61076-2-101 EN 50155 (2001) vibration and shock
Flamability according to UL 94	V0

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male straight							
490212	S*	STGK4-M12 (C)-D FK	4	D	60	4	1
M 12 female straight							
490213	S*	KUGK4-M12 (C)-D FK	4	D	60	4	1

Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Field wireable connector, M12 angled, shielded
Female / Male A-coded (CAN), D-coded (Ethernet, Profinet)
Spring terminal: Push-in connection technology

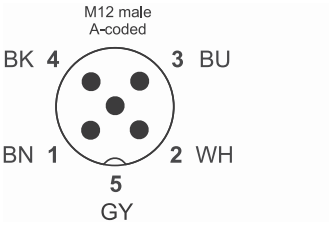
c UL us LISTED

Technical data

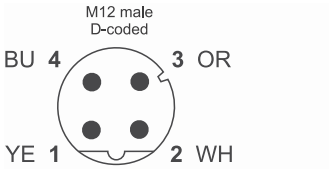
Rated voltage U_N	AC/DC 24 V
Connection type	Spring terminal Push-In
Mounting	Coding can be rotated in the 45° increments
Degree of protection	IP65, IP67 inserted and tightened
Color of the housing	silver
Cross-section, metric	without ferrule: 0.14–0.75 mm² with ferrule: 0.08–0.5 mm²
Cross-section AWG	without ferrule: AWG26–AWG18 with ferrule: AWG28–AWG20
Cable diameter	4 mm – 8 mm
Tightening torque	M12-knurled nut: 0.4 Nm sleeve housing: 0.8 Nm pressure nut: 3 Nm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus (E224249)
Standards	IEC 61076-2-101 EN 50155 (2001) vibration and shock
Flamability according to UL 94	V0

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12 male angle connector							
490202	S*	STWK5-M12 (C)-A FK	5	A	60	4	1
490214	S*	STWK4-M12 (C)-D FK	4	D	60	4	1
M 12 female angle connector							
490203	S*	KUWK5-M12 (C)-A FK	5	A	60	4	1
490215	S*	KUWK4-M12 (C)-D FK	4	D	60	4	1

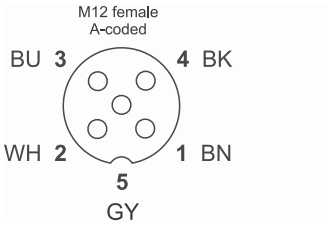
Pin layout



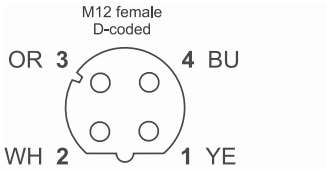
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

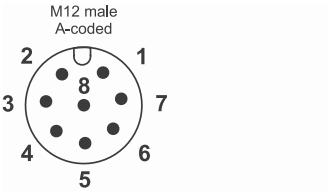
Field wireable connector, M12 straight shielded
Male / female - A coded
Screw terminal

Technical data

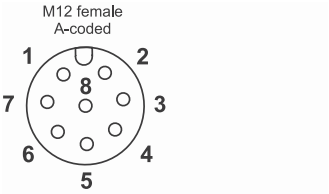
Rated voltage U_N	AC/DC 24 V
Connection type	Screw terminal max. 0.75 mm²
Mounting	Breakaway torque 0.4 Nm
Degree of protection	IP67
Temperature range connector	-25 °C … +85 °C
Mechanical service life	>100 insertion cycles
Certifications	cURus (E224249)
Flamability according to UL 94	HB

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	Cable diameter	Cross-section, metric mm²	PU (units)
M 12 male straight									
490054	S*	STGK8-M12(C) 8-POL. A-cod. SK	8	A	30	2	6 mm – 8 mm	0.5	1
M 12 female straight									
490077	S*	KUGK8-M12(C) 8-POL. A-cod. SK	8	A	30	2	6 mm – 8 mm	0.5	1

Pin layout



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

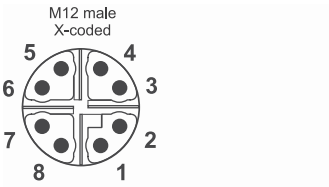
Field wireable connector, M12 straight shielded
Male - X coded Cat.6$_A$ (Ethernet, Profinet)
Fast connection method, IDC termination

Technical data

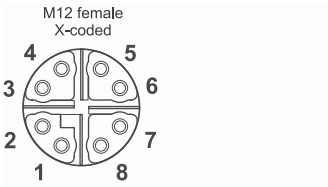
Rated voltage U_N	AC/DC 24 V
Connection type	Compliant terminal IDC
Degree of protection	IP65/67
Cross-section AWG	26-22
Cable diameter	5 mm – 9.7 mm
Temperature range connector	-40 °C … +85 °C
Mechanical service life	>100 insertion cycles
Flamability according to UL 94	V0
Comments	Suitable cables, see overview assi-gnment Ethernet cables to connectors

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	PU (units)
M 12							
490167	S*	STGK8-M12(C) 8pol. X-kod. Cat.6A	8	X	60	0.5	1
490168	S*	KUGK8-M12(C) 8pol. X-kod. Cat.6A	8	X	60	0.5	1

Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Industrial connector RJ45
Solid metal housing, quick-connect technology AWG 27–22
Cat.6$_A$, protective cover pre-assembled

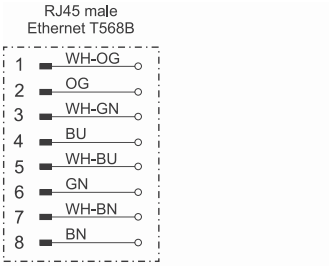
c UL us LISTED

Technical data

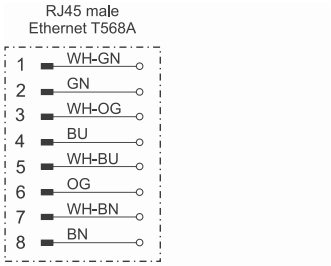
Rated voltage U_N	30 V
Connection type	8-pin RJ45 Push-through contacts IPC
Rated current	≤1 A per contact
Design	RJ45
Degree of protection	IP20
Color of the housing	silver
Cable diameter	5.5 mm – 10 mm
Operation temperature range	-40 °C … +85 °C
Mechanical service life	>750 insertion cycles
Dimensions (w × h × d)	13.9 mm × 16.3 mm × 53.8 mm
Certifications	cULus Listed (E326112)
Flamability according to UL 94	V0
Comments	Suitable for Profinet, SERCOS3, Ethercat, Ethernet/IP, Powerlink, VARAN, Power over Ethernet+ (PoE+IEEE 802.3at) Suitable cables, see overview assignment Ethernet cables to connectors

Part No.		Type	Pole number	Bandwidth	Transfer rate	Category	Strand diameter	Cross-section AWG	PU (units)
8-pin RJ45 Push-through contacts IPC									
490174	S*	RJ45-M 8pol. Cat.6A T568B	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1
490175	S*	RJ45-M 8pol. Cat.6A T568A	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1
490176	S*	RJ45-M 8pol. Cat.6A T568B AWG 26	8	500 MHz	10 Gbit/s	Cat.6$_A$	0.85 mm – 1.1 mm	26-24/1, 27-24/7, 26/19	1
4-pin RJ45 Push-through contacts IPC									
490177	S*	RJ45-MS 4pol. PROFINET	4	100 MHz	1 Gbit/s	Cat.5e	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1

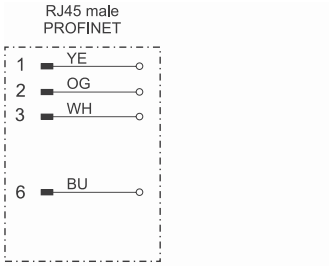
Connection assignment



Connection assignment



Connection assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

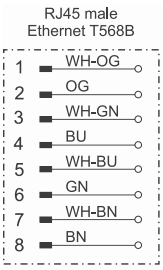
Industrial connector RJ45
Solid metal housing, quick-connect technology AWG 27–22
Cat.6$_A$, 4 levels cable clamp, protective cover pre-assembled

Technical data

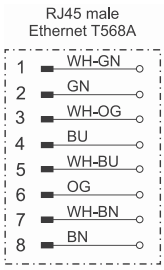
Rated voltage U_N	30 V
Connection type	8-pin RJ45 Push-through contacts IPC
Rated current	≤1 A
Contact type	Penetration contact
Design	RJ45
Degree of protection	IP20
Color of the housing	silver
Cable diameter	5 mm – 9 mm
Operation temperature range	-40 °C … +70 °C
Mechanical service life	>750 insertion cycles
Dimensions (w × h × d)	13.8 mm × 16.2 mm × 53.1 mm
Certifications	cULus Listed (E326112)
Flamability according to UL 94	V0
Comments	Suitable for Profinet, SERCOS3, Ethercat, Ethernet/IP, Powerlink, VARAN, Power over Ethernet+ (PoE+IEEE 802.3at) Suitable cables, see overview assignment Ethernet cables to connectors

Part No.		Type	Pole number	Bandwidth	Transfer rate	Category	Strand diameter	Cross-section AWG	PU (units)
8-pin RJ45 Push-through contacts IPC									
490128	S*	RJ45-M 8pol. Cat.6A T568B	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24/1-22/1, 27/7-22/7	1
490129	S*	RJ45-M 8pol. Cat.6A T568A	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24/1-22/1, 27/7-22/7	1
490138	S*	RJ45-M 8pol. Cat.6A T568B AWG 26/19	8	500 MHz	10 Gbit/s	Cat.6$_A$	0.85 mm – 1.1 mm	26/1, 26/7, 26/19	1

Connection assignment



Connection assignment



* S Article from stock
A Available with a lead time
R Available on request

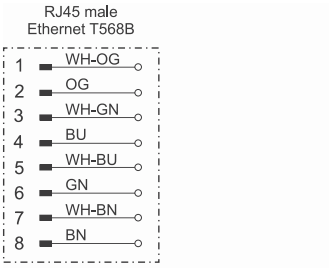
Industrial connector RJ45, angled
Solid metal housing, quick-connect technology AWG 27–22
Cat.6$_A$ / Cat 5e

Technical data

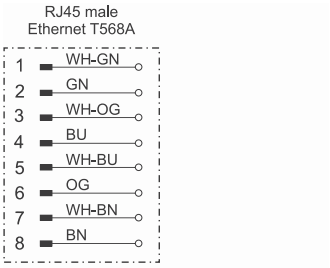
Rated voltage U_N	30 V
Connection type	8-pin RJ45 Push-through contacts IPC
Rated current	≤1 A per contact
Design	RJ45 angle connector
Degree of protection	IP20
Color of the housing	silver
Cable diameter	5.5 mm – 10 mm
Operation temperature range	-40 °C … +85 °C
Mechanical service life	>750 insertion cycles
Dimensions (w × h × d)	13.9 mm × 38.0 mm × 45.7 mm
Certifications	cULus Listed (E326112)
Flamability according to UL 94	V0
Comments	Suitable for Profinet, SERCOS3, Ethercat, Ethernet/IP, Powerlink, VARAN, Power over Ethernet+ (PoE+IEEE 802.3at) Suitable cables, see overview assignment Ethernet cables to connectors

Part No.		Type	Pole number	Bandwidth	Transfer rate	Category	Strand diameter	Cross-section AWG	PU (units)
8-pin RJ45 Push-through contacts IPC									
490151	S*	RJ45-MR 8pol. Cat.6A T568B	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1
490152	S*	RJ45-MR 8pol. Cat.6A T568A	8	500 MHz	10 Gbit/s	Cat.6$_A$	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1
490153	S*	RJ45-MR 8pol. Cat.6A T568B AWG 26/19	8	500 MHz	10 Gbit/s	Cat.6$_A$	0.85 mm – 1.1 mm	26-24/1, 27-24/7, 26/19	1
4-pin RJ45 Push-through contacts IPC									
490178	S*	RJ45-MR 4pol. PROFINET	4	100 MHz	1 Gbit/s	Cat.5e	1 mm – 1.6 mm	24-22/1, 24-22/7,19	1

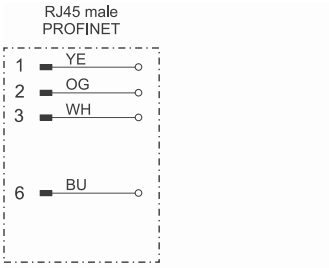
Connection assignment



Connection assignment



Connection assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Module holder, RJ45, female / IDC
For TS35 DIN rail
Cat.6$_A$

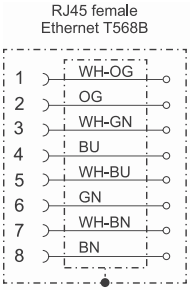
c UL us LISTED

Technical data

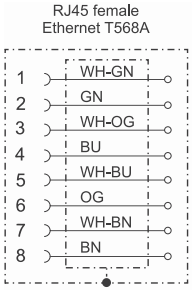
Rated voltage U_N	AC/DC 24 V
Connection type	Compliant terminal
Rated current	≤1 A per contact
Contact type	IDC
Design	RJ45 female
Degree of protection	IP20 (EN 60529)
Color of the housing	grey
Operation temperature range	-40 °C … +70 °C
Mechanical service life	>750 insertion cycles
Dimensions (w × h × d)	18.0 mm × 70.5 mm × 65.7 mm
Certifications	cULus Listed (E326112)
Flamability according to UL 94	V0
Comments	Suitable cables, see overview assi-gnment Ethernet cables to connectors

Part No.		Type	Pole number	Bandwidth	Transfer rate	Category	Strand diameter	Cross-section AWG	PU (units)
Compliant terminal									
490209	S*	MDT-RJ45 F 8pol. Cat.6A TIA 568B	8	500 MHz	10 Gbit/s	Cat.6$_A$	0.9 mm – 1.6 mm	27-22/7, 26-22/1	1
Compliant terminal AWG 27-22/7 AWG 26-22/1									
490238	S*	MDT-RJ45 F 8pol. Cat.6A TIA 568A	8	500 MHz	10 Gbit/s	Cat.6$_A$	0.9 mm – 1.6 mm	27-22/7	1

PIN assignment



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

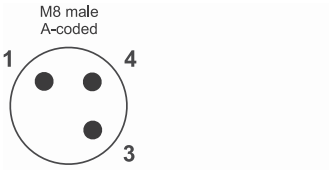
M8 panel connectors using M8 thread
Male / female
0.5 m TPE wire

Technical data

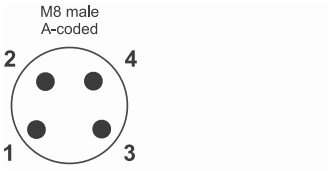
Mounting	Front installation Fastening thread M8 × 0,5
Cable length	0.5 m
Degree of pollution	3
Insulation resistance	>100 MΩ
Contact resistance	<3 mΩ
Degree of protection	IP67
Housing material	Zinc die-casting
Contact material	CuZn, gold-plated
Thread material	CuZn nickel-plate
Conductor insulation	TPE
Storage temperature range	-40 °C … +85 °C
Temperature range connector	-25 °C … +85 °C
Connection type	M 8
Mechanical service life	>100 insertion cycles
PU (units)	1
Flamability according to UL 94	HB
Accessories	Included in the delivery: M8 lock nut
Comments	**Connection assignment Pole / wire color:** 1/ BN (Brown) – 2/ WH (White) – 3/ BU (Blue) – 4/ BK (Black) 1/ BN (Brown) – 2/ WH (White) – 3/ BU (Blue) – 4/ BK (Black)

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	Cross-section, metric mm²	PU (units)
M 8×1 male								
490062	A*	STGE-M8 3pol. 0,5m Litze	3	A	60	4	0.25	1
490063	A*	STGE-M8 4pol. 0,5m Litze	4	A	30	4	0.25	1
M 8×1 female								
490060	S*	KUGE-M8 3pol. 0,5m Litze	3	A	60	4	0.25	1
490061	S*	KUGE-M8 4pol. 0,5m Litze	4	A	30	4	0.25	1

Pin layout



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

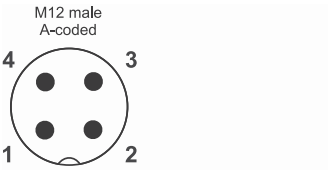
M12 connectors panel mounted using M16 thread
Male A-coded / Female A-coded
0.5 m TPE wire

Technical data

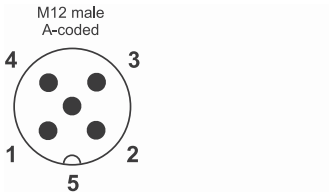
Mounting	Front installation Fastening thread M16 × 1,5
Cable length	0.5 m
Degree of pollution	3
Insulation resistance	>100 MΩ
Contact resistance	<3 mΩ
Degree of protection	IP67
Housing material	Zinc die-casting
Contact material	CuZn, gold-plated
Thread material	CuZn nickel-plate
Conductor insulation	TPE
Storage temperature range	-40 °C … +85 °C
Temperature range connector	-25 °C … +85 °C
Connection type	M 16
Mechanical service life	>100 insertion cycles
PU (units)	1
Flamability according to UL 94	V0
Accessories	**Counter nut M16:** Part-No. 600361 | GMS M16 | PU: 100 units
Comments	**Connection assignment Pole / wire color:** 1/ BN (Brown) – 2/ WH (White) – 3/ BU (Blue) – 4/ BK (Black)

Part No.		Type	Pole number	Coding	Operating voltage max. V	Rated current A	Cross-section, metric mm²	PU (units)
M 12×1								
490067	S*	STGE-M12 4pol. 0,5m Litze	4	A	250	4	0.34	1
490068	S*	STGE-M12 5pol. 0,5m Litze	5	A	60	4	0.34	1
490069	S*	STGE-M12 8pol. 0,5m Litze	8	A	30	2	0.25	1
490064	S*	KUGE-M12 4pol. 0,5m Litze	4	A	250	4	0.34	1
490065	S*	KUGE-M12 5pol. 0,5m Litze	5	A	60	4	0.34	1
490066	S*	KUGE-M12 8pol. 0,5m Litze	8	A	30	2	0.25	1

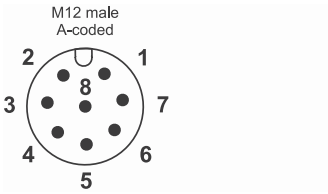
Pin layout



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

USB 3.0 panel connector with M22 thread for front installation
USB connector Type A on straight USB plug Type A with PVC cable

c UL us LISTED

Construction

Jacket material	PVC
Jacket color	black

Technical data

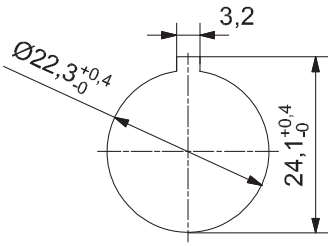
Rated voltage U_N	AC/DC 5 V
Transfer rate	5 Gbit/s
USB standard	3.0
Contact type	1 : 1
Form male 1	USB 3.0 female Type A
Form male 2	USB 3.0 male Type A
Degree of protection	IP65 UL50E Typ 2, 3R, 4, 4X, 12, 13 in closed and IP20 in inserted position
Cover	TPU
Mounting	Front installation
Temperature range fixed	-25 °C … +80 °C
Temperature range moving	-5 °C … +70 °C
Operation temperature range	-5 °C … +70 °C
Mechanical service life	1500 insertion cycles
Certifications	cULus Listed (E326112)

Accessories

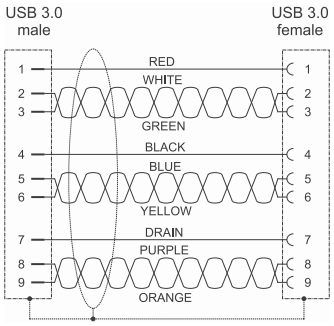
Included in the delivery: attached safety cap

Part No.		Type	Pole number	Cable length m	Cable diameter mm	Operating voltage max. V	Rated current A	PU (units)
USB-A								
490113.0030	S*	USB-3.0 A/A F/M 0,3m PVC	9	0.3	6.1	30	0.9	1
490113.0060	S*	USB-3.0 A/A F/M 0,6m PVC	9	0.6	6.1	30	0.9	1
490113.0080	S*	USB-3.0 A/A F/M 0,8m PVC	9	0.8	6.1	30	0.9	1
490113.0150	S*	USB-3.0 A/A F/M 1,5m PVC	9	1.5	6.1	30	0.9	1
490113.0200	S*	USB-3.0 A/A F/M 2,0m PVC	9	2.0	6.1	30	0.9	1
490113.0300	S*	USB-3.0 A/A F/M 3,0m PVC	9	3.0	6.1	30	0.9	1
490113.0500	S*	USB-3.0 A/A F/M 5,0m PVC	9	5.0	6.1	30	0.9	1
490113.0100	S*	USB-3.0 A/A F/M 1,0m PVC	9	1.0	6.1	30	0.9	1

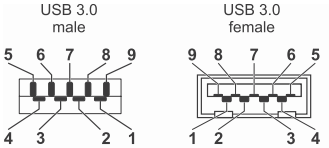
Mounting diagram



PIN assignment



Pin layout



Further product information at www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

USB 3.0 panel connector with M22 thread for front installation
USB 3.0 female / female Type A/A
Type: USB-3.0 A/A F/F

c UL us LISTED

Technical data

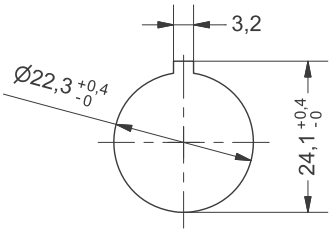
Rated voltage U_N	AC/DC 5 V
Transfer rate	5 Gbit/s
USB standard	3.0
Contact type	1 : 1
Degree of protection	IP65 UL50E Typ 2, 3R, 4, 4X, 12, 13 in closed and IP20 in inserted position
Cover	TPU
Mounting	Front installation
Operation temperature range	-20 °C … +70 °C
Mechanical service life	>100 insertion cycles
Certifications	cULus Listed (E326112)

Accessories

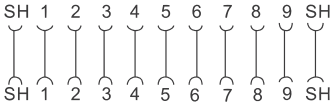
Included in the delivery: attached safety cap

Part No.		Type	Pole number	Operating voltage max. V	Rated current A	PU (units)
USB 3.0 female/female type A/A						
490112	S*	USB-3.0 A/A F/F	9	30	0.9	1

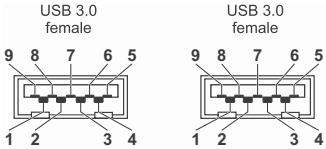
Mounting diagram



PIN assignment



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

RJ45 panel connector with M22 thread for front installation
Female/female 1:1
Cat.6$_A$ / Cat 5e

c UL us LISTED

Technical data

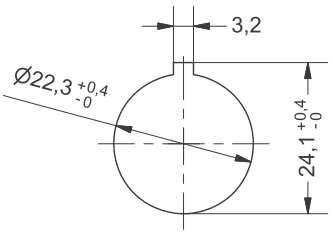
Rated voltage U_N	AC 24 V
Operating voltage max.	50 V
Rated current	1.5 A
Contact type	1 : 1
Shielding	connected through
Form male 1	RJ45
Degree of pollution	3
Insulation resistance	>100 MΩ
Contact resistance	<30 mΩ
Degree of protection	IP65 UL50E Typ 2, 3R, 4, 4X, 12, 13 in closed and IP20 in inserted position
Housing material	PA, PBT
Cover	TPU
Contact material	CuSn, gold-plated
Mounting	Front installation
Installation depth	approx.70 mm
Temperature range connector	-25 °C … +70 °C
Operation temperature range	-25 °C … +70 °C
Storage temperature range	-25 °C … +80 °C
PU (units)	1
Mechanical service life	>750 insertion cycles
Certifications	cULus Listed (E326112)

Accessories

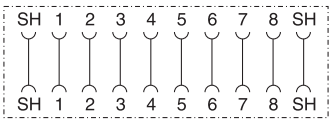
Included in the delivery: attached safety cap

Part No.		Type	Pole number	Bandwidth	Transfer rate	Category	PU (units)
RJ45							
492075	S*	RJ45 F/F 8/8 Cat.5e	8	100 MHz	1 Gbit/s	Cat.5e	1
492076	S*	RJ45 F/F 8/8 Cat.6A	8	500 MHz	10 Gbit/s	Cat.6$_A$	1

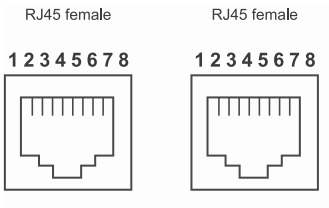
Mounting diagram



Circuit diagram



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

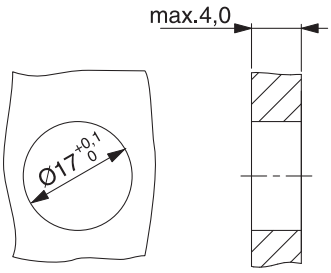
Control cabinet bushing M12 - RJ45
Female/female 1:1
Cat 5e (Ethernet, Profinet)

Technical data

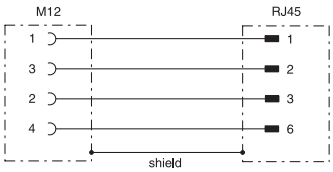
Rated voltage U_N	24 V
Operating voltage max.	50 V
Contact type	1 : 1
Shielding	360°
Form male 1	RJ45 M 12 female
Insulation resistance	>100 MΩ
Contact resistance	<30 mΩ
Degree of protection	IP67
Housing material	PA
Contact material	Phosphor Bronze, gold-plated
Mounting	Rear wall assembly Fastening thread M16 × 1,5
Installation depth	approx.70 mm
Temperature range connector	-25 °C … +85 °C
Operation temperature range	-25 °C … +85 °C
Storage temperature range	-25 °C … +85 °C
PU (units)	1
Mechanical service life	>750 insertion cycles
Flamability according to UL 94	V0

Part No.		Type	Pole number	Coding	Bandwidth	Transfer rate	Category	PU (units)
RJ45/M 12×1								
490105	S*	M12-RJ45 F/F 90° 4/4 Cat.5e Profinet	4	D	100 MHz	1 Gbit/s	Cat.5e	1
490106	S*	M12-RJ45 F/F 180° 4/4 Cat.5e Profinet	4	D	100 MHz	1 Gbit/s	Cat.5e	1

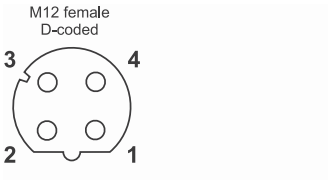
Mounting diagram



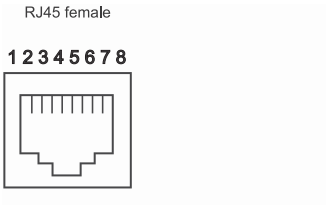
Circuit diagram



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

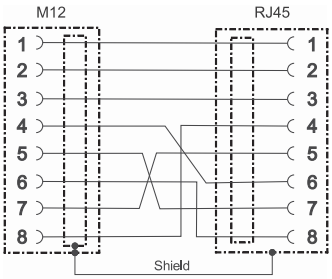
Control cabinet bushing M12 CAT6A X encoded - RJ45 Female/female 1:1 Cat.6$_A$ (Ethernet, Profinet)

Technical data

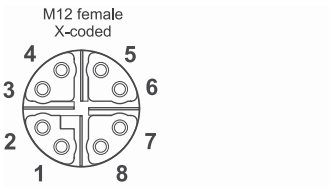
Operating voltage max.	60 V
Shielding	360°
Form male 1	RJ45 M 12 female
Insulation resistance	>100 MΩ
Contact resistance	<5 mΩ
Degree of protection	IP67 IP68
Contact material	CuSnZn
Mounting	Rear wall assembly Fastening thread M16 × 1,5
Installation depth	approx.47 mm
Temperature range connector	-40 °C … +85 °C
Operation temperature range	-40 °C … +85 °C
Storage temperature range	-40 °C … +85 °C
PU (units)	1
Mechanical service life	>500 insertion cycles

Part No.	Type	Pole number	Coding	Bandwidth	Transfer rate	Category	PU (units)
RJ45/M 12×1							
490230	M12-RJ45 F/F 90° 8/8 Cat.6A	8	X	500 MHz	10 Gbit/s	Cat.6$_A$	1
490231	M12-RJ45 F/F 180° 8/8 Cat.6A	8	X	500 MHz	10 Gbit/s	Cat.6$_A$	1

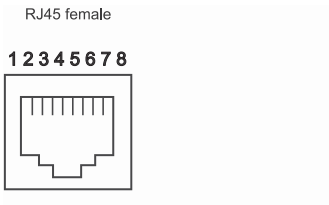
Circuit diagram



Pin layout



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

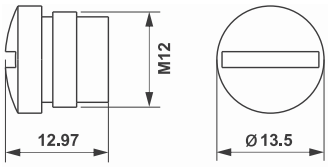
Protective coverage
M12
Color: black

Technical data

Connection type	M 12 × 1
Housing material	PA
Color	black
Temperature range connector	-20 °C … +80 °C
Operation temperature range	-20 °C … +80 °C
Storage temperature range	-20 °C … +80 °C
PU (units)	100
Flamability according to UL 94	V0

Part No.		Type	PU (units)
499994	S*	SK M12 FUER BUCHSE	100

Dimensions



* S Article from stock
A Available with a lead time
R Available on request

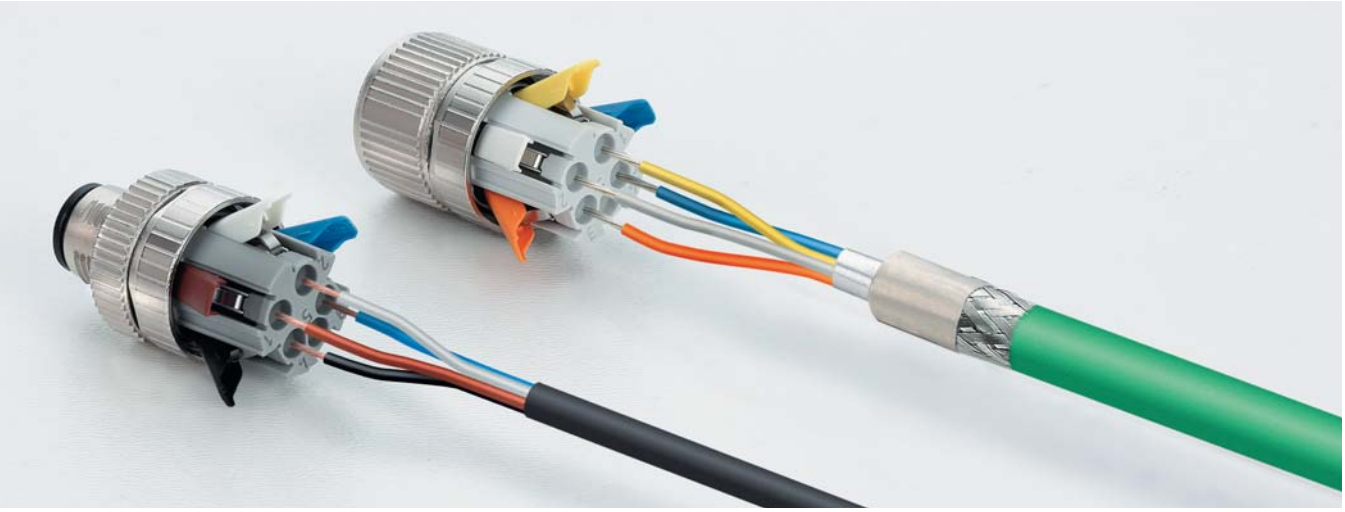
Notes

Customizable M12 connectors for data and signals

The customizable M12 connectors provide you with the best possible connection technology for every single application. The push-in connectors simplify the field installation of flexible conductors.

Your advantages:
• always the best connection technology for your M12 application
• Simple and tool-free connection with push-in technology
• Up to 30% time saving compared to the conventional screw terminal connection
• Better contact in case of vibration and shock load due to permanent spring pressure
• No conductor sleeves required

Main features:
• Shielded and unshielded versions
• male straight and angled



The LÜTZE M12 connectors with Push-In connection technology meet the needs of control cabinet, machine and equipment designers for safe, fault-free and therefore inexpensive wiring technology. Rigid conductors and conductors with ferrules can be wired quickly and without tools by direct insertion without having to first open the contact point. To connect the fire-wire strands without ferrules, the terminal point is opened by a coloured lever without tools, and then closed again.

Depending on the application, the LÜTZE M12 connectors are suitable for transferring signals, data and output, for shielded and unshielded applications. Thanks to the new Push-In-Technology, the insertion forces are very low which greatly simplifies the connection. In contrast, the pull-out forces are higher so that all connections guarantee a high level of wiring security. LÜTZE supplies the M12 connectors with Push-In-Technology for the same price as the screw terminal technology.

Improving the wiring efficiency

The LÜTZE Push-In-Technology makes full use of its benefits when prefabricated cables and cable harnesses are used. It can be operated intuitively and in only a few steps, whilst ensuring the highest contact security at the same time. LÜTZE uses a clear colour coding system for the wires during assembly. All colours in the connection block are assigned, for the actuator sensor area and for the field bus wiring such as CAN-Bus, Profibus, Ethernet and Profinet, according to the corresponding standards EN 60947-5-2. This means that firstly, it is almost impossible to confuse the PINS, and secondly there is no need for any more time-consuming and error-prone recoding of the individual colour codes.
A permanent spring pushes each wire back so that even in the event of heavy vibration, and after numerous operating years with possible material fatigue in the copper wires, a constant pressure and therefore optimum, safe and uninterrupted contact is guaranteed.

The new M12 Push-In connectors by LÜTZE are available in various versions, either with a straight or angled connector, with the option of shielded or unshielded. The angled version allows the cable outlet to be positioned in 45° steps compared to the pole pattern. The LÜTZE M12 connectors with Push-In Technology have the same design as the screw terminal technology and are designed for more than 100 plug cycles.

Product Overview:
Classification Etherne t Cables and Connectors

Ethernet cables

Art.no	Description	C-track compatible	Cat	Jacket	490128 - 490174 - 490151 AWG 27 - 22	490129 - 490175 - 490152 AWG 27 - 22	490138 - 490176 - 490153 AWG 26	490177 - 490178 - AWG 27 - 22	490209, 490238 - AWG 27-22	4490212- 490215 AWG 26 - 18	490167 - 490168 AWG 26 - 22	PROFINET	EtherCAT® / POWERLINK	SERCOS	CC-Link IE Field™	EtherNet/IP™
104301	Prof. (2X2XAWG22/1) UL		Type A	PVC				•	•	•		•	•	•		
104302	Prof. (2X2XAWG22/19) UL	•	Type C	PUR				•	•	•		•	•	•		
104303	Prof. (2X2XAWG22/7) UL	•	Type C	PUR				•	•	•		•	•	•		
104307	Prof. (2X2XAWG22/7) UL		Type B	PVC				•	•	•		•	•	•		
104331	Eth. (4X(2XAWG26/7) UL		7	PVC			•				•					•
104335	Eth. (4X2XAWG26/7) UL		5e	PVC			•									•
104336	Eth. (4X2XAWG24/7) UL		5e	PVC	•	•			•						•	•
104337	Eth. (4X2XAWG24/19) UL	•	5e	PUR	•	•			•						•	•
104338	Eth. (4X(2XAWG26/7) UL		6_A	PVC			•		•		•					•
104347	Eth. (4X2XAWG26/19) UL	•	6	PUR			•		•		•					•
104350	Eth. (4X2XAWG22/7) UL		5e	PVC	•	•			•							•
104379	Prof. (2X2XAWG26/19) UL	•	5e	PUR			•			•		•	•	•		
104396	Eth. (4X2XAWG26/19) UL	•	5e	PUR			•									•
104397	Eth. (4X(2XAWG22/1) UL		6_A	PVC	•	•			•		•	•			•	•
104401	Eth. (4X(2XAWG24/7) UL	•	6_A	PUR	•	•			•		•	•				•
104404	Eth. (4x(2xAWG24/7) UL	•	7	PUR	•	•			•		•	•				•

Ethernet connector RJ45 / M12

RJ45 T568B

490128 with cable clamp | 490174 with cable fitting | 490151 with cable fitting

1 white / orange
2 orange
3 white / green
4 blue
5 white / blue
6 green
7 white / brown
8 brown

RJ45 T568A

490129 with cable clamp | 490175 with cable fitting | 490152 with cable fitting

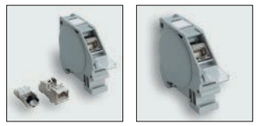
1 white / green
2 green
3 white / orange
4 blue
5 white / blue
6 orange
7 white / brown
8 brown

RJ45 T568B AWG26

490138 with cable clamp | 490176 with cable fitting | 490153 with cable fitting

1 white / orange
2 orange
3 white / green
4 blue
5 white / blue
6 green
7 white / brown
8 brown

RJ45 T568A/B



490238 Module holder | 490209 Module holder

	T568A	T568B
1		
2		
3		
4		
5		
6		
7		
8		

M12

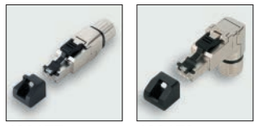
490212 D-cod. pin | 490213 D-cod. female | 490167 X-cod. pin | 490168 X-cod. female

490214 D-cod. pin | 490215 D-cod. female

1 yellow
2 white
3 orange
4 blue

1 white/orange
2 orange
3 white / green
4 green
5 white / brown
6 brown
7 white / blue
8 blue

Profinet RJ45



490177 straight | 490178 angled

1 yellow
2 orange
3 white
4
5
6 blue
7
8

Notes

Suppression Technology

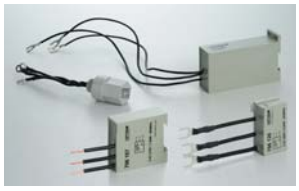
Suppression technology

Suppressor for switch gear, universal suppressor module	
Enclosure: S1, S2	127
Enclosure: V1	128
Enclosure: V2	129
Enclosure: S6 (SIEMENS, AEG, EATON)	130

Valve connector with cable	
Valve connector Deutsch DT06-2S, with or without jacket	131 - 132
Valve connector AMP Junior Timer, with or without jacket	133 - 134
Design A (18 mm)	135 - 139
Design A (18 mm) with special function	140 - 142
Design B (10 mm)	143
Design BI (11 mm)	144
Design C (8 mm)	145
Design CI (9,4 mm)	146

Valve connector, adjustable	
Design A (18 mm)	147
Design A (18 mm) with special function	148 - 149
Design BI (11 mm)	150
Design B (10 mm) and BI (11 mm) with special function	151

Valve suppression	
Design A (18 mm)	152 - 153
Design BI (11 mm)	154



Motor suppression	
Installation in the motor terminal board	155 - 158
For DIN rail mounting	159
Attachment to contactor	160
Mounting under contactor	161

Product photos
The product photos are not to scale and do not accurately depict every single product detail.

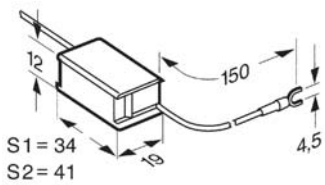
Universal Suppressor Module
Enclosure type: S1, S2
Protection device: Diode / Varistor / RC module

Technical data

Type of function	Switching device suppression	Degree of protection	IP67
Type of connecting lead	0.5 mm² LIY	Mounting	Attachment to contactor with holder DIN rail mounting
Cable length	0.15 m		
Connection type	Fork-type cable lug M 4	Operation temperature range	-20 °C … +60 °C
		Certifications	
Color of the housing	grey		cURus (E135145)

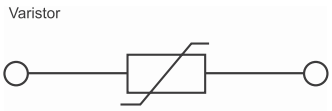
Part No.		Type	Conductor color	Rated voltage U_N	Cut-off peak V	Rated frequency f_N	Holding Capacity VA	Design	PU (units)
Diode									
700445	S*	LD-S1-0445 DC 24-230V 1A	blue, red	DC 24–230 V	≤1		25	S1	10
700446	S*	LD-S1-0446 DC 24-230V 3A	blue, red	DC 24–230 V	≤1		70	S1	10
Varistor									
700440	S*	LV-S1-0440 AC/DC 24V 60VA	black	AC/DC 24 V	≤52	50 Hz / 60 Hz	60	S1	10
RC module									
700414	S*	LRC-S2-0414 AC 230V 10VA	black	AC 115–230 V		50 Hz / 60 Hz	10	S2	10
700413	S*	LRC-S2-0413 AC 230V 20VA	black	AC 115–230 V		50 Hz / 60 Hz	20	S2	10

Dimensions



PIN assignment

PIN assignment



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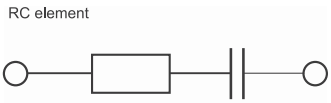
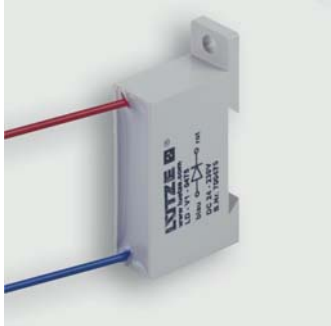


* S Article from stock
A Available with a lead time
R Available on request

Universal Suppressor Module
Enclosure type: V1
Protection device: Diode / Varistor / RC module

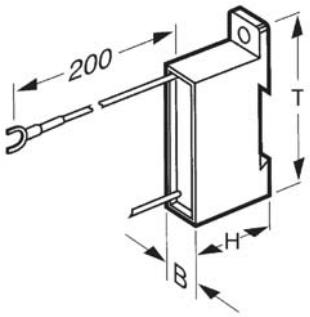


Technical data

Type of function	Switching device suppression
Type of connecting lead	0.5 mm² LIY
Cable length	0.2 m
Connection type	Fork-type cable lug M 4
Color of the housing	grey
Degree of protection	IP67
Mounting	DIN rail mounting 1 snap-on socket Attachment hole m 4
Dimensions (w × h × d)	12.5 mm × 25.0 mm × 48.0 mm
Operation temperature range	-20 °C … +60 °C
Certifications	cURus (E135145)

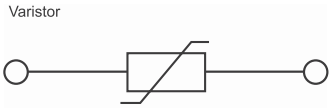
Part No.		Type	Conductor color	Rated voltage U_N	Cut-off peak V	Rated frequency f_N	Holding Capacity VA	PU (units)
Diode								
700476	S*	LD-V1-0476 DC 24-230V 3A	blue, red	DC 24–230 V	≤1		70	10
Varistor								
700577	S*	LV-V1-0577 AC/DC 24V 200VA	black	AC/DC 24 V	≤52	50 Hz / 60 Hz	200	10
700568	A*	LV-V1-0568 AC/DC 115V 200VA	black	AC/DC 115 V	≤250	50 Hz / 60 Hz	200	10
700435	S*	LV-V1-0435 AC/DC 230V 200VA	black, blue	AC/DC 230 V	≤475	50 Hz / 60 Hz	200	10
RC module								
700466	S*	LRC-V1-0466 AC 230V 30VA	black	AC 115–230 V		50 Hz / 60 Hz	30	10

Dimensions



PIN assignment

PIN assignment



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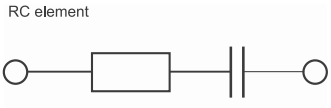


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

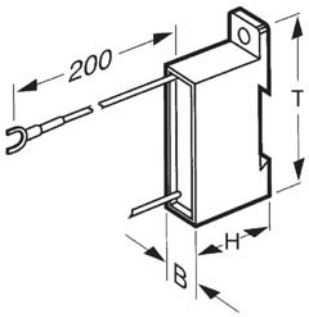
Universal Suppressor Module
Enclosure type: V2
Protection device: RC module

Technical data

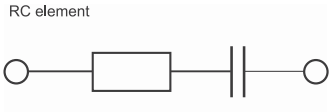
Type of function	Switching device suppression
Type of connecting lead	0.5 mm² LIY
Cable length	0.2 m
Connection type	Fork-type cable lug M 4
Color of the housing	grey
Degree of protection	IP67
Mounting	DIN rail mounting 1 snap-on socket Attachment hole m 4
Dimensions (w × h × d)	15.0 mm × 30.0 mm × 58.0 mm
Operation temperature range	-20 °C … +60 °C
Certifications	cURus (E135145)

Part No.		Type	Conductor color	Rated voltage U_N	Rated frequency f_N	Holding Capacity VA	PU (units)
RC module							
700464	S*	LRC-V2-0464 AC 400V 10VA	black	AC 230–400 V	50 Hz / 60 Hz	10	10
701583	S*	LRC-V2-1583 AC 400V 60VA	black	AC 230–400 V	50 Hz / 60 Hz	60	10

Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Universal suppressor module - for Siemens-, AEG-, EATON contactors
Enclosure type S6
Protection device: Diode / Varistor / RC module

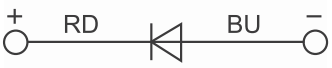
Technical data

Type of function	Switching device suppression
Type of connecting lead	0.5 mm² LIY
Cable length	0.15 m
Connection type	Fork-type cable lug M 4
Color of the housing	grey
Degree of protection	IP20
Mounting	Attachment to contactor
Dimensions (w × h × d)	32.5 mm × 27.0 mm × 11.5 mm
Operation temperature range	-20 °C … +60 °C
Certifications	cURus (E135145)

Part No.		Type	Conductor color	Rated voltage U_N	Cut-off peak V	Rated frequency f_N	Holding Capacity VA	PU (units)
Diode								
700323	S*	LD-S6-0323 DC 24-230V 1A	blue, red	DC 24–230 V	≤1		25	10
Varistor								
700324	S*	LV-S6-0324 AC/DC 24V 200VA	black	AC/DC 24 V	≤52	50 Hz / 60 Hz	200	10
RC module								
700321	S*	LRC-S6-0321 AC 230V 10VA	black	AC 115–230 V		50 Hz / 60 Hz	10	10

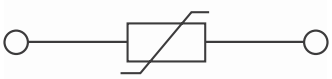
PIN assignment

Diode



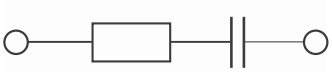
PIN assignment

Varistor



PIN assignment

RC element



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Suppression Technology · Valve suppressors Deutsch DT06-2S

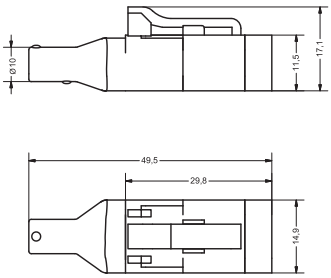
With integrated protection device + LED
2pin version, protected against reverse polarity, moulded PUR connecting cable 2 × 0.75 mm²
On cable outlet can be directly mounted to a protective hose

Technical data

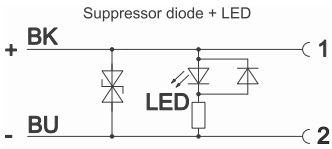
Type of function	Valve suppressor	Operation temperature range	Protective hose possible
Cut-off peak	≤52 V	Dimensions (w × h × d)	-30 °C … +80 °C
Holding Capacity	100 VA	Pole number	14.9 mm × 17.1 mm × 49.5 mm
Type of connecting lead	2×0.75 mm² PUR	Mechanical service life	2
Status indication	LED yellow	Comments	>100 insertion cycles
Jacket color	black		Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!
Color of the housing	translucent black		
Degree of protection	IP67		
Mounting	plug-in		

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709442.0250	S*	LS-DT06 9442.0250 2,5mPUR	2.5	DC 12/24 V	≤2	1
709442.0500	S*	LS-DT06 9442.0500 5,0mPUR	5.0	DC 12/24 V	≤2	1
709442.0750	S*	LS-DT06 9442.0750 7,5mPUR	7.5	DC 12/24 V	≤2	1
709442.1000	S*	LS-DT06 9442.1000 10mPUR	10.0	DC 12/24 V	≤2	1
709442.1500	S*	LS-DT06 9442.1500 15mPUR	15.0	DC 12/24 V	≤2	1
709442.2000	A*	LS-DT06 9442.2000 20mPUR	20.0	DC 12/24 V	≤2	100

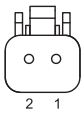
Dimensions



PIN assignment



Pin layout



* S Article from stock
A Available with a lead time
R Available on request

Suppression Technology · Valve suppressors, Deutsch DT06-2S - outdoor

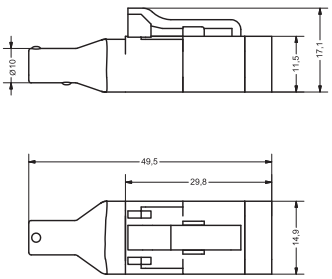
With integrated protection device + LED
Protection against reverse polarity, moulded single conductor PVC FLRY 2 × 0.75 mm²
On cable outlet can be directly mounted to a protective hose

Technical data

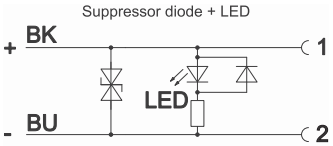
Type of function	Valve suppressor	Operation temperature range	Protective hose possible
Cut-off peak	≤52 V	Dimensions (w × h × d)	-30 °C … +80 °C
Holding Capacity	100 VA	Pole number	14.9 mm × 17.1 mm × 49.5 mm
Type of connecting lead	2×0.75 mm² FLRY	Mechanical service life	2
Status indication	LED yellow	Comments	>100 insertion cycles
Color of the housing	translucent black		Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!
Degree of protection	IP67		
Mounting	plug-in		

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709441.0250	A*	LS-DT06-9441.0250 2,5m FLRY	2.5	DC 12/24 V	≤2	100
709441.0500	A*	LS-DT06 9441.0500 5,0m FLRY	5.0	DC 12/24 V	≤2	100
709441.0750	S*	LS-DT06 9441.0750 7,5m FLRY	7.5	DC 12/24 V	≤2	100
709441.1000	S*	LS-DT06 9441.1000 10,0m FLRY	10.0	DC 12/24 V	≤2	100
709441.1500	S*	LS-DT06 9441.1500 15m FLRY	15.0	DC 12/24 V	≤2	100
709441.2000	A*	LS-DT06 9441.2000 20,0m FLRY	20.0	DC 12/24 V	≤2	100

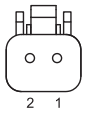
Dimensions



PIN assignment



Pin layout



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

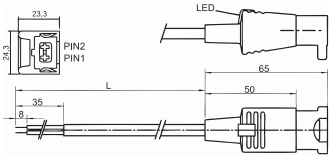
With integrated protection device + LED
2-pin style, protection against reverse polarity
Moulded PUR connecting cable 2 × 0.75 mm²

Technical data

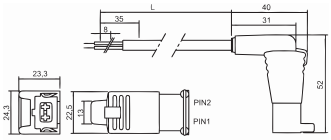
Type of function	Valve suppressor	Degree of protection	IP65
Protection device	Suppressor diode + LED	Mounting	plug-in
Cut-off peak	≤75 V	Operation temperature range	-25 °C … +80 °C
Holding Capacity	100 VA	Pole number	2
Type of connecting lead	2×0.75 mm² PUR	Mechanical service life	>100 insertion cycles
Status indication	LED yellow	Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!
Jacket color	black		
Color of the housing	black		

Part No.		Type	Design	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED							
709482	S*	LS-AMP 9482 2,5m PUR	straight	2.5	AC/DC 24 V	≤4	1
709483	S*	LS-AMP 9483 5m PUR	straight	5.0	AC/DC 24 V	≤4	1
709484	S*	LS-AMP 9484 7,5m PUR	straight	7.5	AC/DC 24 V	≤4	1
709485	S*	LS-AMP 9485 10m PUR	straight	10.0	AC/DC 24 V	≤4	1
709486	S*	LS-AMP 9486 15m PUR	straight	15.0	AC/DC 24 V	≤4	1
709487	R*	LS-AMP 9487 20m PUR	straight	20.0	AC/DC 24 V	≤4	100
709472	S*	LS-AMP 9472 2,5m PUR	angle connector	2.5	AC/DC 24 V	≤4	1
709473	R*	LS-AMP 9473 5m PUR	angle connector	5.0	AC/DC 24 V	≤4	100
709474	R*	LS-AMP 474 7,5m PUR	angle connector	7.5	AC/DC 24 V	≤4	100
709475	R*	LS-AMP 475 10m PUR	angle connector	10.0	AC/DC 24 V	≤4	100
709476	R*	LS-AMP 9476 15m PUR	angle connector	15.0	AC/DC 24 V	≤4	100
709477	R*	LS-AMP 9477 20m PUR	angle connector	20.0	AC/DC 24 V	≤4	100

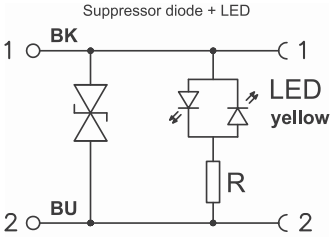
Dimensions



Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

Suppression Technology · AMP Junior Timer Connector

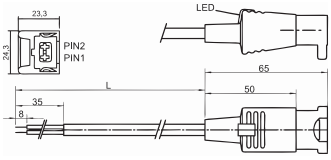
2-pole straight
Protection device suppressor diode + status indication LED
With moulded vehicle cable Type FLRY as single conductor 0.75 mm²

Technical data

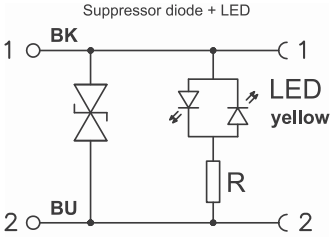
Type of function	Valve suppressor
Cut-off peak	≤75 V
Holding Capacity	100 VA
Type of connecting lead	2×0.75 mm² FLRY
Status indication	LED yellow
Color of the housing	black
Degree of protection	IP65
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	24.3 mm × 22.3 mm × 65.0 mm
Pole number	2
Mechanical service life	>100 insertion cycles
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709443.0250	A*	LS-AMP 9443.0250 2,5m PVC	2.5	AC/DC 18–30 V	≤4	100
709443.0500	A*	LS-AMP 9443.0500 5,0m PVC	5.0	AC/DC 18–30 V	≤4	100
709443.0750	A*	LS-AMP 9443.0750 7,5m PVC	7.5	AC/DC 18–30 V	≤4	100
709443.1000	A*	LS-AMP 9443.1000 10m PVC	10.0	AC/DC 18–30 V	≤4	100
709443.1500	A*	LS-AMP 9443.1500 15m PVC	15.0	AC/DC 18–30 V	≤4	100
709443.2000	R*	LS-AMP 9443.2000 20m PVC	20.0	AC/DC 18–30 V	≤4	100

Dimensions



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

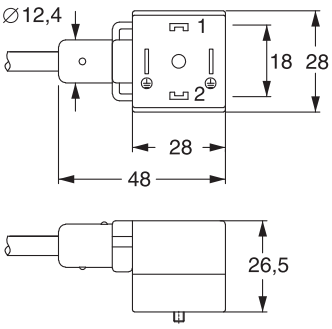
Design A (18 mm), 2-pin without PE
Protection device suppressor diode + LED, with stainless steel screw
Moulded PUR connecting cable 2 × 0.75 mm², 0°/180° mounting possible

Technical data

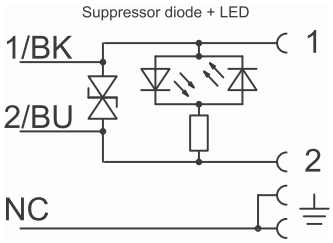
Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	100 VA
Type of connecting lead	2×0.75 mm² PUR
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Pole number	2
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709469	S*	LS-A-9469 1,0mPUR AC/DC 24V	1.0	AC/DC 12–24 V	≤4	1
709459	S*	LS-A-9459 2,5mPUR AC/DC 24V	2.5	AC/DC 12–24 V	≤4	1
709460	S*	LS-A-9460 5,0mPUR AC/DC 24V	5.0	AC/DC 12–24 V	≤4	1
709462	S*	LS-A-9462 10mPUR AC/DC 24V	10.0	AC/DC 12–24 V	≤4	1

Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

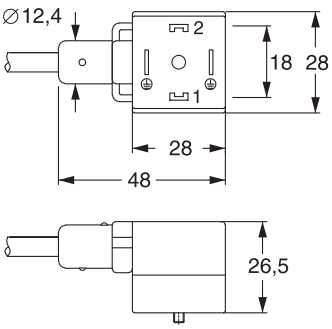
Design A (18 mm), 2-pin without PE
Protection device suppressor diode + LED, with stainless steel screw
Moulded vehicle cable Type FLRY single conductor 2×0.75mm², 0°/180° mounting possible

Technical data

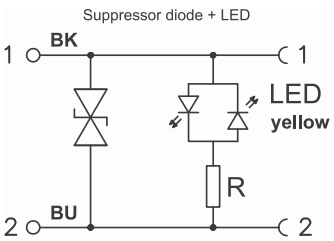
Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	100 VA
Type of connecting lead	2×0.75 mm² FLRY
Status indication	LED yellow
Color of the housing	transparent
Fixing	Fixing screw stainless steel 1.4567
Degree of protection	IP65
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +90 °C
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Pole number	2
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709428.0500	A*	LS-A 5,0 m FLRY AC/DC 12-24 V	5.0	AC/DC 12–24 V	≤7	100
709428.0250	A*	LS-A 2,5 m FLRY AC/DC 12-24 V	2.5	AC/DC 12–24 V	≤7	100
709428.0750	A*	LS-A 10m FLRY AC/DC 12-24 V	7.5	AC/DC 12–24 V	≤7	100
709428.1000	A*	LS-A 10m FLRY AC/DC 12-24 V	10.0	AC/DC 12–24 V	≤7	100
709428.1500	A*	LS-A 15m FLRY AC/DC 12-24 V	15.0	AC/DC 12–24 V	≤7	100
709428.2000	A*	LS-A 20m FLRY AC/DC 12-24 V	20.0	AC/DC 12–24 V	≤7	100

Dimensions



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

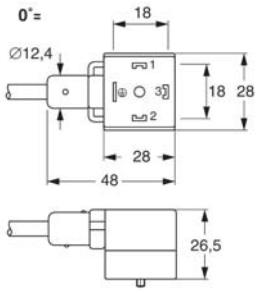
Design A (18mm), 3-pin without PE, 0°
Without circuit, with stainless steel screw
With moulded vehicle cable Type FLRY single conductor 3×0.75mm²

Technical data

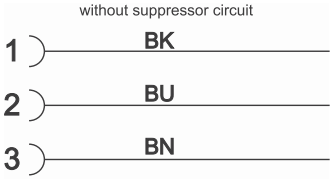
Type of function	Valve suppressor
Holding Capacity	100 VA
Type of connecting lead	0.75 mm² FLRY
Color of the housing	black
Fixing	Fixing screw stainless steel 1.4567
Degree of protection	IP65
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +90 °C
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
None protection device						
709427.0250	A*	L-A 2,5 m FLRY 0° AC/DC 0-230 V	2.5	AC/DC 0–230 V	≤7	100
709427.0500	A*	L-A 5,0 m FLRY 0° AC/DC 0-230 V	5.0	AC/DC 0–230 V	≤7	100
709427.0750	A*	L-A 7,5 m FLRY 0° AC/DC 0-230 V	7.5	AC/DC 0–230 V	≤7	100
709427.1000	A*	L-A 10m FLRY 0° AC/DC 0-230 V	10.0	AC/DC 0–230 V	≤7	100
709427.1500	A*	L-A 10m FLRY 0° AC/DC 0-230 V	15.0	AC/DC 0–230 V	≤7	100
709427.2000	A*	L-A 10m FLRY 0° AC/DC 0-230 V	20.0	AC/DC 0–230 V	≤7	100

Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

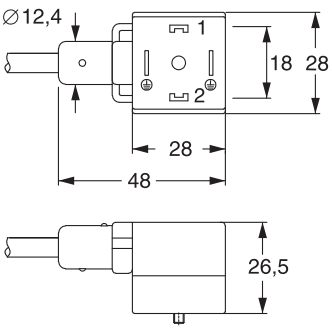
Design A (18mm), 2-pin + 2×PE
PVC connecting lead 3×0,5mm²
With bridged ground conductor (PE), 0°/180° mounting possible

Technical data

Type of function	Valve suppressor
Type of connecting lead	3×0.5 mm² PVC
Jacket color	black
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Pole number	3
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

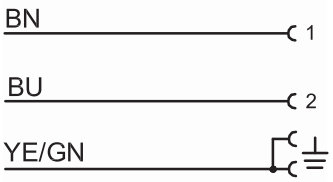
Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	Cut-off peak V	Status indication	Color of the housing	PU (units)
None protection device									
709600	S*	L-A-9600 2,5mPVC up to 230 V	2.5	AC/DC 0–230 V	≤7			black	1
709601	S*	L-A-9601 5mPVC up to 230 V	5.0	AC/DC 0–230 V	≤7			black	1
709608	S*	L-A-9608 10m PVC 0-230V	10.0	AC/DC 0–230 V	≤7			black	1
Suppressor diode + LED									
709605	S*	LS-A-9605 2.5m PVC 24V	2.5	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
709606	S*	LS-A-9606 5m PVC 24V	5.0	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
709607	S*	LS-A-9607 10m PVC 24V	10.0	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
Varistor + LED									
709673	S*	LV-A-9673 2.5m PVC 230V	2.5	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1
709674	S*	LV-A-9674 5m PVC 230V	5.0	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1
709675	S*	LV-A-9675 10m PVC 230V	10.0	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1

Dimensions



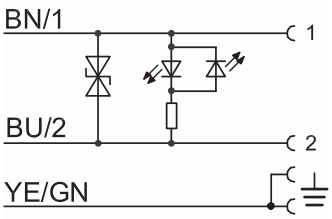
PIN assignment

without suppressor circuit



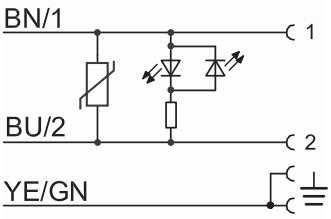
PIN assignment

Suppressor diode + LED



PIN assignment

Varistor + LED



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

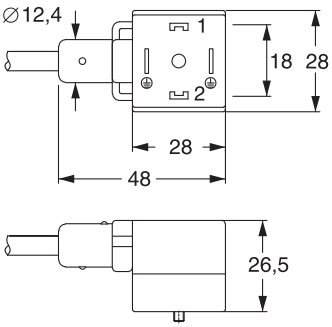
Design A (18mm), 2-pin + 2×PE
PUR connecting lead 3×0,5mm²
With bridged ground conductor (PE), 0°/180° mounting possible

Technical data

Type of function	Valve suppressor
Type of connecting lead	3×0.5 mm² PUR
Jacket color	black
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Pole number	3
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

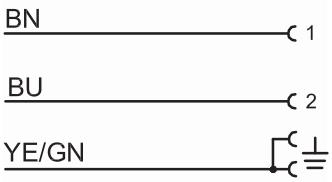
Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	Cut-off peak V	Status indication	Color of the housing	PU (units)
None protection device									
709700	A*	L-A-9700 2,5mPUR up to 230 V	2.5	AC/DC 0–230 V	≤7			black	100
709701	A*	L-A-9701 5mPUR up to 230 V	5.0	AC/DC 0–230 V	≤7			black	100
709708	A*	L-A-9708 10m PUR 0-230V	10.0	AC/DC 0–230 V	≤7			black	100
Diode + LED									
709526	A*	LD-A-9526 2,0m PUR 24V	2.5	DC 24 V	≤4	≤1	LED yellow	transparent	100
709527	A*	LD-A-9527 5,0m PUR 24V	5.0	DC 24 V	≤4	≤1	LED yellow	transparent	100
Suppressor diode + LED									
709705	S*	LS-A-9705 2.5m PUR 24V	2.5	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
709706	S*	LS-A-9706 5m PUR 24V	5.0	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
709707	S*	LS-A-9707 10m PUR 24V	10.0	AC/DC 24 V	≤4	≤52	LED yellow	transparent	1
Varistor + LED									
709773	S*	LV-A-9773 2.5m PUR 230V	2.5	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1
709774	S*	LV-A-9774 5m PUR 230V	5.0	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1
709775	S*	LV-A-9775 10m PUR 230V	10.0	AC/DC 230 V	≤0.5	≤475	LED yellow	transparent	1

Dimensions



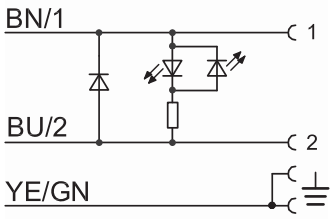
PIN assignment

without suppressor circuit



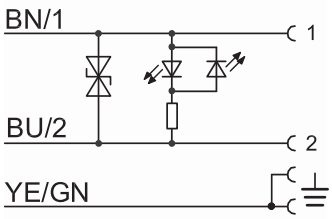
PIN assignment

Diode + LED



PIN assignment

Suppressor diode + LED



* S Article from stock
A Available with a lead time
R Available on request

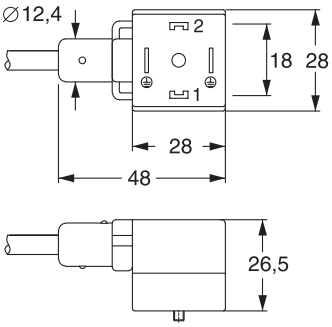
Energy reducer, construction A (18 mm), PUR cable 3×0,5mm²
Energy reduction approx. 50 %, protection device, LED status indication
Open cable end, 0°/180° mounting possible

Technical data

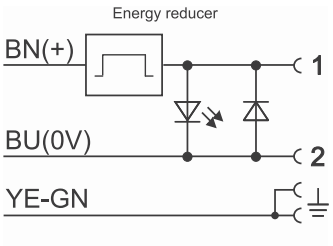
Type of function	Energy reducer
Switching frequency	Max. 2 Hz
Energy reduction	Reduction factor approx. 50 %
Cut-off peak	≤1 V
Holding Capacity	50 VA
Type of connecting lead	3×0.5 mm² PUR
Status indication	LED yellow
Conductor insulation	PVC
Jacket color	black
Color of the housing	translucent black
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm
	Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	22.0 mm × 26.5 mm × 50.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Energy reducer						
709709.0250	S*	LER-A-9709 2,5m PUR DC 24V	2.5	DC 24 V	≤2	1
709709.0500	S*	LER-A-9709 5,0m PUR DC 24V	5.0	DC 24 V	≤2	1
709709.1000	S*	LER-A-9709 10m PUR DC 24V	10.0	DC 24 V	≤2	1

Dimensions



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

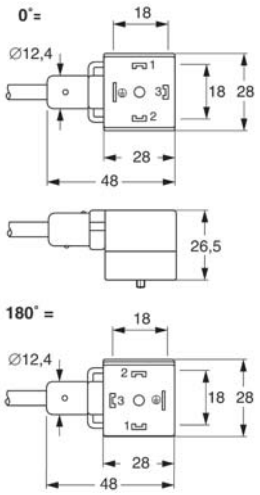
Design A (18mm), 3-pin + 1×PE
PUR connecting lead 5×0,5mm²
Pressure switch / fill level monitor

Technical data

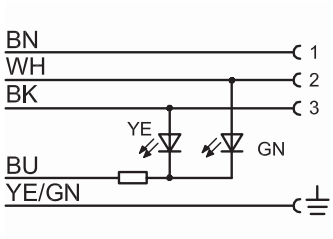
Type of function	Pressure switch
Type of connecting lead	5×0.5 mm² PUR
Status indication	LED yellow + LED green
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Connection type	0°, PE at the entry point
Pole number	4
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
0°, PE at the entry point						
709772	S*	LDS-A-9772 5m PUR DC 24V	5.0	DC 24 V	≤4	1
709771	S*	LDS-A-9771 10mPUR DC 24V	10.0	DC 24 V	≤4	1
180°, PE across from the cable entry point						
709782	S*	LDS-A-9782 5m PUR DC 24V	5.0	DC 24 V	≤4	1
709789	A*	LDS-A-9789 10m PUR DC 24V	10.0	DC 24 V	≤4	1

Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
R Available on request

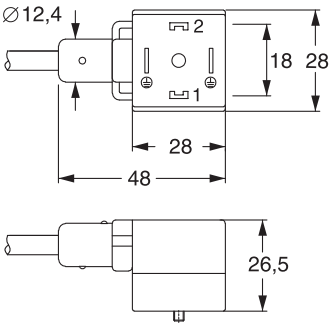
Design A (18mm), 2-pin + 2×PE
PUR connecting lead 4×0,75mm²
Switching amplifier, short-circuit-proof, 0°/180° mounting possible

Technical data

Type of function	Switching amplifier
Switching frequency	Max. 20 Hz
Switch-on delay	<100 µs
Switch-off delay	<200 µs
Cut-off peak	≤52 V
Holding Capacity	100 VA
Type of connecting lead	4×0.75 mm² PUR
Short-circuit protection	Short circuit protected
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm
	Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	28.0 mm × 26.5 mm × 48.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 4400
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Switching amplifier						
709790	S*	LVER-A-9790 2,5m PUR DC 24V	2.5	DC 24 V	≤2	1
709791	S*	LVER-A-9791 5m PUR DC 24V	5.0	DC 24 V	≤2	1
709792	S*	LVER-A-9792 10m PUR DC 24V	10.0	DC 24 V	≤2	1

Dimensions



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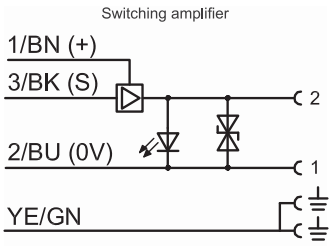


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

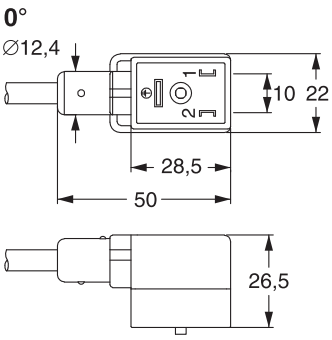
Design B (10mm), 2pol. + 1×PE
PUR connecting lead 3×0,5mm²
Protection device: suppressor diode + LED

Technical data

Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	100 VA
Type of connecting lead	3×0.5 mm² PUR
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	22.0 mm × 26.5 mm × 50.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 6952
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709715	S*	LS-B-9715 2.5m PUR 0° 24V	2.5	AC/DC 24 V	≤4	1
709716	S*	LS-B-9716 5m PUR 0° 24V	5.0	AC/DC 24 V	≤4	1
709717	S*	LS-B-9717 10m PUR 0° 24V	10.0	AC/DC 24 V	≤4	1
709725	S*	LS-B-9725 2.5m PUR 180°24V	2.5	AC/DC 24 V	≤4	1
709726	S*	LS-B-9726 5m PUR 180° 24V	5.0	AC/DC 24 V	≤4	1
709727	S*	LS-B-9727 10m PUR 180° 24V	10.0	AC/DC 24 V	≤4	1

Dimensions



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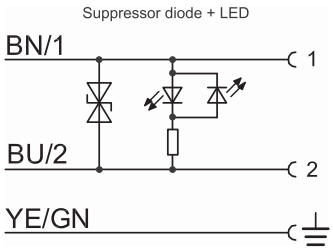


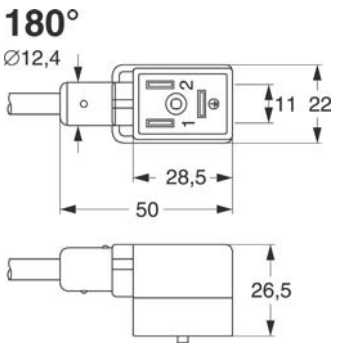
Design BI (11mm), 2pol. + 1×PE
PUR/PVC connecting lead 3×0,5mm²
Protection device: suppressor diode + LED

Technical data

Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	100 VA
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	22.0 mm × 26.5 mm × 50.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709635	S*	LS-BI-9635 2,5m PVC 0° 24 V	2.5	AC/DC 24 V	≤4	1
709636	S*	LS-BI-9636 5m PVC 0° 24V	5.0	AC/DC 24 V	≤4	1
709637	S*	LS-BI-9637 10m PVC 0° 24V	10.0	AC/DC 24 V	≤4	1
709645	S*	LS-BI-9645 2.5m PVC 180° 24V	2.5	AC/DC 24 V	≤4	1
709646	S*	LS-BI-9646 5m PVC 180° 24V	5.0	AC/DC 24 V	≤4	1
709647	S*	LS-BI-9647 10m PVC 180° 24V	10.0	AC/DC 24 V	≤4	1
709735	S*	LS-BI-9735 2.5m PUR 0° 24V	2.5	AC/DC 24 V	≤4	1
709736	S*	LS-BI-9736 5m PUR 0° 24V	5.0	AC/DC 24 V	≤4	1
709737	S*	LS-BI-9737 10m PUR 0° 24V	10.0	AC/DC 24 V	≤4	1
709745	S*	LS-BI-9745 2.5m PUR 180° 24V	2.5	AC/DC 24 V	≤4	1
709746	S*	LS-BI-9746 5m PUR 180° 24V	5.0	AC/DC 24 V	≤4	1
709747	S*	LS-BI-9747 10m PUR 180° 24V	10.0	AC/DC 24 V	≤4	1

Dimensions



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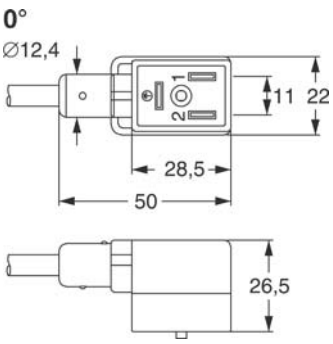

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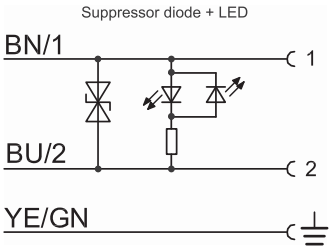


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

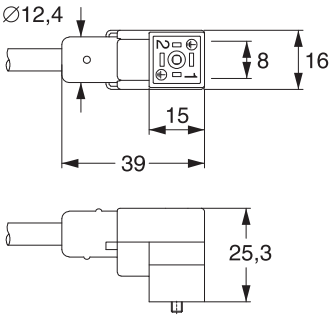
Design C (8mm), 2-pin + 2×PE
PUR/PVC connecting lead 3×0,5mm²
with bridged ground conductor (PE)

Technical data

Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	70 VA
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	16.0 mm × 25.3 mm × 39.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Standards	EN 175301-803 ISO 6952
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709653	S*	LS-C-9653 2.5m PVC 24V	2.5	AC/DC 24 V	≤3	1
709654	S*	LS-C-9654 5m PVC 24V	5.0	AC/DC 24 V	≤3	1
709659	S*	LS-C-9659 10m PVC 24V	10.0	AC/DC 24 V	≤3	1
709753	S*	LS-C-9753 2.5m PUR 24V	2.5	AC/DC 24 V	≤3	1
709754	S*	LS-C-9754 5m PUR 24V	5.0	AC/DC 24 V	≤3	1
709759	S*	LS-C-9759 10m PUR 24V	10.0	AC/DC 24 V	≤3	1

Dimensions



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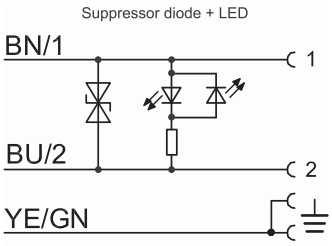


* S Article from stock
A Available with a lead time
R Available on request

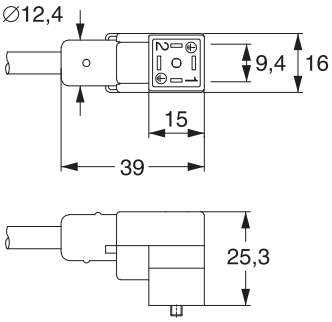
Design CI (9,4mm), 2pol. + 2×PE
PUR/PVC connecting lead 3×0,5mm²
with bridged ground conductor (PE), 0°/180° mounting possible

Technical data

Type of function	Valve suppressor
Cut-off peak	≤52 V
Holding Capacity	70 VA
Status indication	LED yellow
Jacket color	black
Color of the housing	transparent
Degree of protection	IP67
Mounting	Breakaway torque 0.4 Nm Protective hose possible
Operation temperature range	-25 °C … +80 °C
Dimensions (w × h × d)	16.0 mm × 25.3 mm × 39.0 mm
Pole number	3
Mechanical service life	>100 insertion cycles
Accessories	**Tag holder 7×20 mm, white**: Part-No. 760968 | BZT-0720 | PU: 100 units
Comments	Very good chemical and oil resistance. The material resistance must be checked based on the application for use with aggressive media!

Part No.		Type	Cable length m	Rated voltage U_N	Amperage range A	PU (units)
Suppressor diode + LED						
709666	S*	LS-CI-9666 2.5m PVC 24V	2.5	AC/DC 24 V	≤3	1
709667	S*	LS-CI-9667 5m PVC 24V	5.0	AC/DC 24 V	≤3	1
709668	S*	LS-CI-9668 10m PVC 24V	10.0	AC/DC 24 V	≤3	1
709766	A*	LS-CI-9766 2.5m PUR 24V	2.5	AC/DC 24 V	≤3	100
709767	A*	LS-CI-9767 5m PUR 24V	5.0	AC/DC 24 V	≤3	100
709768	S*	LS-CI-9768 10m PUR 24V	10.0	AC/DC 24 V	≤3	1

Dimensions



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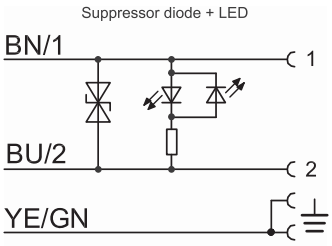


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

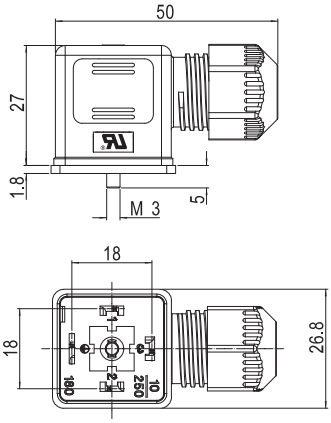
Adjustable male, design A (18 mm), IP67
Ground wire terminator (PE) adjustable in 90° steps
Protection device: without circuit / Z-Diode+LED / Varistor+LED

Technical data

Type of function	Valve suppressor	Connection type	Screw terminal
Degree of protection	IP67	Connection cross-section	max. 1.5 mm²
Mounting	Breakaway torque 0.4 Nm	Connection cross-section	max. AWG 16
Operation temperature range	-40 °C … +90 °C	Mechanical service life	>100 insertion cycles
Dimensions (w × h × d)	26.8 mm × 28.8 mm × 50.0 mm	Certifications	cURus (E256031)

Part No.		Type	Rated voltage U_N	Amperage range A	Connecting lead Ø	Color of the housing	Pole number	Design	PU (units)
None protection device									
705800	S*	L-V20-5800 AC/ DC 0-230V	AC/DC 0–230 V	≤10	4 – 9 mm	black	2	A (18 mm)	1
705801	S*	L-V20-5801 AC/ DC 0-230V	AC/DC 0–230 V	≤10	4 – 9 mm	black	3	A (18 mm)	1
Suppressor diode + LED									
705810	S*	LS-V20-5810 AC/DC 24V	AC/DC 24 V	≤4	4 – 9 mm	transparent	2	A (18 mm)	1
Varistor + LED									
705830	S*	LV-V20-5830 AC/ DC 110-230V	AC/DC 110–230 V	≤1	4 – 9 mm	transparent	2	A (18 mm)	1

Dimensions



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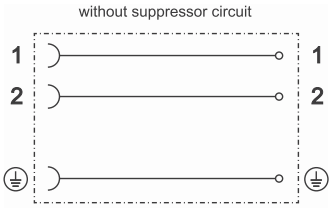

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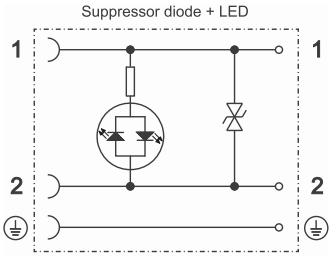

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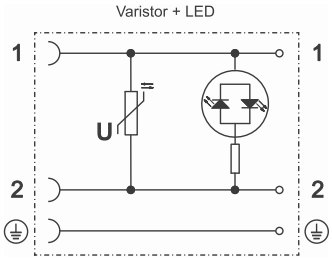


* S Article from stock
A Available with a lead time
R Available on request

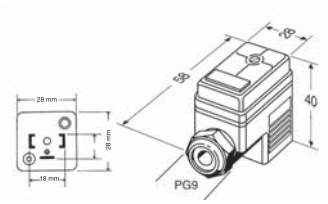
Adjustable male, form A (18 mm) 2pol. + 2×PE, IP65
Switching amplifier without galvanic insulation
Ground wire terminator, short-circuit-proof, 0°/180° mounting possible

Technical data

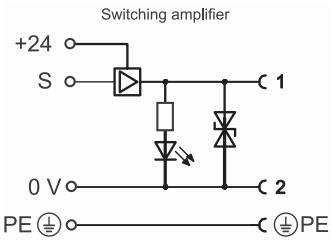
Type of function	Switching amplifier
Control current	10 mA
Cut-off peak	≤52 V
Switching frequency	Max. 20 Hz
Switch-on delay	<100 µs
Switch-off delay	<200 µs
Short-circuit protection	Short circuit protected
Status indication	LED yellow
Degree of protection	IP65
Mounting	Breakaway torque 0.4 Nm
Operation temperature range	-25 °C … +60 °C
Dimensions (w × h × d)	28.0 mm × 40.0 mm × 58.0 mm
Connection type	Screw terminal
Connection cross-section	0.5 – 1.5 mm²
Connection cross-section	AWG 20 – AWG 16
Mechanical service life	>100 insertion cycles
Accessories	**Marker holder BZT, white**: Part-No. 681315 | BZT 0920 | PU: 100 units

Part No.		Type	Rated voltage U_N	Amperage range A	Connecting lead Ø	Color of the housing	Pole number	Design	PU (units)
Switching amplifier									
705509	S*	LVER-V10-5509 DC 24V	DC 24 V	≤2	5 – 9 mm	black	3	A (18 mm)	10

Dimensions



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

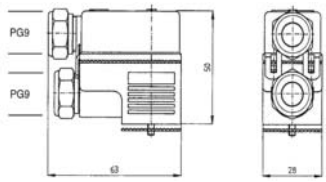
Adjustable male, form A (18 mm) 2pol. + 2×PE, IP65
- two cable entry points
Ground wire terminator (PE) adjustable in 180° steps, 0°/180° mounting possible

Technical data

Type of function	Double valve suppressor
Rated frequency f_N	50 Hz / 60 Hz
Degree of protection	IP65
Mounting	Breakaway torque 0.4 Nm
Operation temperature range	-25 °C … +60 °C
Dimensions (w × h × d)	28.0 mm × 50.0 mm × 63.0 mm
Connection type	Screw terminal
Connection cross-section	0.5 – 1.5 mm²
Connection cross-section	AWG 20 – AWG 16
Mechanical service life	>100 insertion cycles
Accessories	**Marker holder BZT, white**: Part-No. 681315 | BZT 0920 | PU: 100 units

Part No.		Type	Rated voltage U_N	Amperage range A	Connecting lead Ø	Color of the housing	Pole number	Design	PU (units)
None protection device									
707514	S*	LPG-V10-7514 up to 230 V	AC/DC 0–230 V	≤4	5 – 9 mm	black	3	A (18 mm)	10

Dimensions



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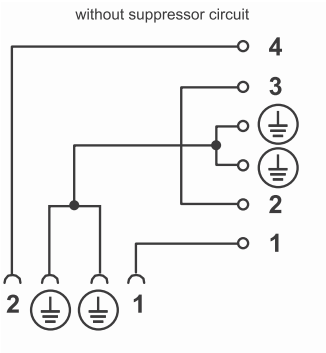


* S Article from stock
A Available with a lead time
R Available on request

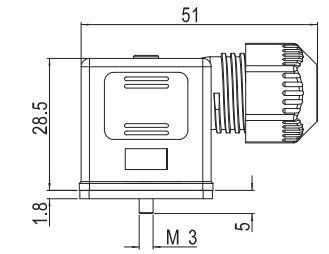
Adjustable male, form BI (11 mm)
Ground wire terminator (PE) adjustable in 180° steps
Protection device: without circuit / Z-Diode+LED / Varistor+LED

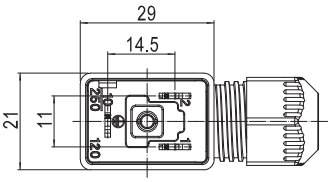
Technical data

Type of function	Valve suppressor	Connection type	Screw terminal
Status indication	LED yellow	Connection cross-section	max. 1.5 mm²
Degree of protection	IP67	Connection cross-section	max. AWG 16
Mounting	Breakaway torque 0.4 Nm	Mechanical service life	>100 insertion cycles
Operation temperature range	-40 °C … +90 °C	Certifications	cURus (E256031)
Dimensions (w × h × d)	21.0 mm × 30.3 mm × 51.0 mm		

Part No.		Type	Rated voltage U_N	Amperage range A	Connecting lead Ø	Color of the housing	Pole number	Design	PU (units)
None protection device									
705803	S*	L-V22-5803 AC/ DC 0-230V	AC/DC 0–230 V	≤10	4 – 9 mm	black	3	BI Ind. (11 mm)	1
Suppressor diode + LED									
705812	S*	LS-V22-5812 AC/DC 24V	AC/DC 24 V	≤4	4 – 9 mm	transparent	3	BI Ind. (11 mm)	1
Varistor + LED									
705832	S*	LV-V22-5832 AC/ DC 110-230V	AC/DC 110–230 V	≤1	4 – 9 mm	transparent	3	BI Ind. (11 mm)	1

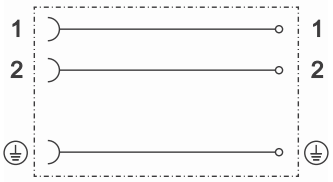
Dimensions





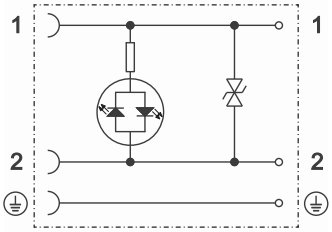
PIN assignment

without suppressor circuit



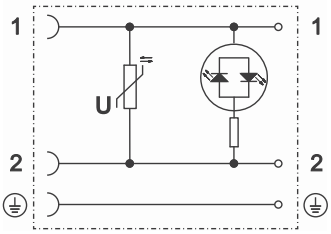
PIN assignment

Suppressor diode + LED



PIN assignment

Varistor + LED



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

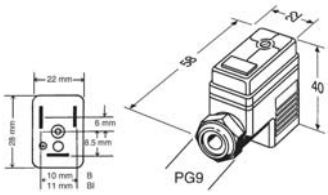
Adjustable connector, Construction B (10 mm), Construction BI (11 mm) 2pol. + PE, IP65
Switching amplifier without galvanic insulation short circuit protection
Ground wire terminator (PE) adjustable in 180° steps

Technical data

Type of function	Switching amplifier
Control current	8 mA
Cut-off peak	≤52 V
Switching frequency	Max. 20 Hz
Switch-on delay	<100 µs
Switch-off delay	<200 µs
Short-circuit protection	Short circuit protected
Status indication	LED green
Degree of protection	IP65
Mounting	Breakaway torque 0.4 Nm
Operation temperature range	-20 °C … +60 °C
Dimensions (w × h × d)	22.0 mm × 40.0 mm × 58.0 mm
Connection type	Screw terminal
Connection cross-section	0.5 – 1.5 mm²
Connection cross-section	AWG 20 – AWG 16
Mechanical service life	>100 insertion cycles
Accessories	**Marker holder BZT, white**: Part-No. 681315 | BZT 0920 | PU: 100 units

Part No.		Type	Rated voltage U_N	Amperage range A	Connecting lead Ø	Color of the housing	Pole number	Design	PU (units)
Switching amplifier									
705610	S*	LVER-V11-5610 DC 24V	DC 24 V	≤2	5 – 9 mm	black	3	B DIN (10 mm)	10
705709	S*	LVER-V12-5709 DC 24V	DC 24 V	≤2	5 – 9 mm	black	3	BI Ind. (11 mm)	10

Dimensions



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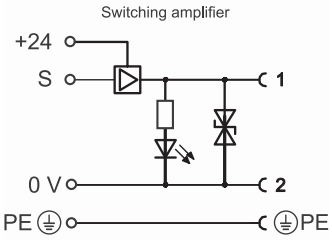


* S Article from stock
A Available with a lead time
R Available on request

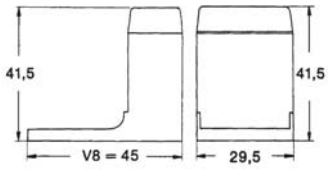
Plug adapter for valve suppressors type A (18mm)
Protection device + LED
Mounting, plug seal not applicable

Technical data

Type of function	Plug adapter
Rated voltage U_N	DC 24 V
Color of the housing	black
Degree of protection	IP65
Mounting	plug-in Plug seal not applicable
Operation temperature range	-20 °C … +60 °C
Dimensions (w × h × d)	29.5 mm × 41.5 mm × 45.0 mm
Connection type	Male contacts
Pole number	2
Standards	EN 175301-803 ISO 4400

Part No.		Type	Rated voltage U_N	Cut-off peak V	Holding Capacity VA	Status indication	PU (units)
Diode + LED							
700861	S*	LD-V8-0861 DC 24V	DC 24 V	≤1	100	LED green	10
Z-diode + LED							
700897	S*	LZ-V8-0897 AC/DC 24V	AC/DC 24 V	≤52	15	LED green	10
Varistor + LED							
700881	S*	LV-V8-0881N AC/DC 24V	AC/DC 24 V	≤100	200	LED green	10

Dimensions



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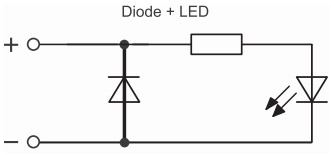

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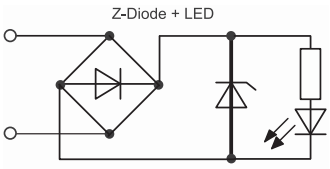

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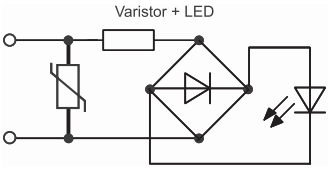


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

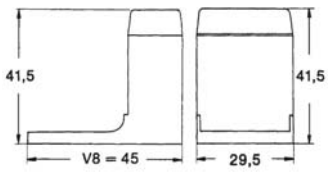
Plug adapter for valve suppressors type A (18mm)
Protection device + LED
Mounting, plug seal not applicable

Technical data

Type of function	Plug adapter	Operation temperature range	-20 °C … +60 °C
Rated voltage U_N	DC 24 V	Dimensions (w × h × d)	29.5 mm × 41.5 mm × 45.0 mm
Color of the housing	black	Connection type	Male contacts
Degree of protection	IP65	Pole number	2
Mounting	plug-in Plug seal not applicable	Standards	EN 175301-803 ISO 4400

Part No.		Type	Rated voltage U_N	Cut-off peak V	Holding Capacity VA	Status indication	PU (units)
Varistor + Capacitor + LED							
700867	S*	LCV-V8T-0867 DC 24V	DC 24 V	≤100	50	LED green	10
RC module + glow lamp							
700910	S*	LRC-V8-0910 AC 115V	AC 115 V	≤250	10	Glow lamp yellow	10
700857	S*	LRC-V8-0857 AC 230V	AC 230 V	≤300	10	Glow lamp yellow	10

Dimensions



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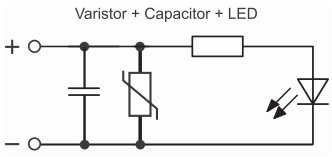

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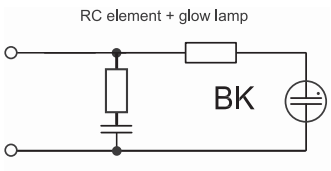
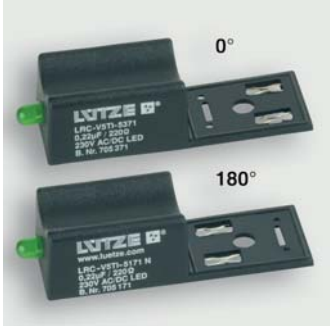


* S Article from stock
A Available with a lead time
R Available on request

Plug adaptor for valve suppressors type BI (11 mm)
Contact arrangement in 0° and 180° construction
Mounting, plug seal not applicable

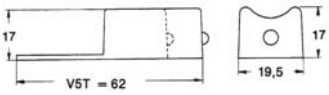


Technical data

Type of function	Plug adapter	Operation temperature range	Plug seal not applicable
Rated voltage U_N	AC/DC 24 V	Dimensions (w × h × d)	-20 °C … +60 °C
Color of the housing	black	Connection type	19.5 mm × 17.0 mm × 62.0 mm
Degree of protection	IP65	Pole number	Male contacts
Mounting	plug-in		2

Part No.		Type	Rated voltage U_N	Cut-off peak V	Holding Capacity VA	Status indication	PU (units)
Varistor + LED							
705341	S*	LV-V5TI-5341 0° AC/DC 24V	AC/DC 24 V	≤100	200	LED green	10
705141	S*	LV-V5TI-5141 180° AC/DC 24V	AC/DC 24 V	≤100	200	LED green	10

Dimensions



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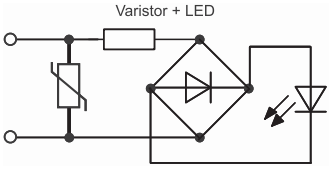


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

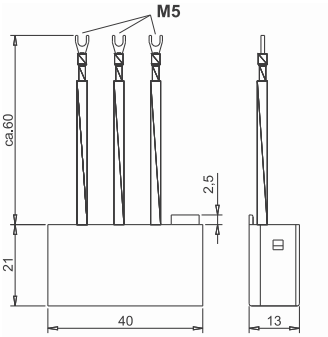
Motor suppression for the direct installation in the motor junction plate
5.5 kW to 7.5 kW, 3 AC x 500 V
Protection device: Varistor

Technical data

Type of function	Motor suppression
Cut-off peak	≤1075 V
Type of connecting lead	1.5 mm² PVC
Color of the housing	grey
Degree of protection	IP67
Mounting	Motor terminal board inside
Operation temperature range	-20 °C … +60 °C
Dimensions (w × h × d)	40.0 mm × 21.0 mm × 13.0 mm
Certifications	cURus (E135145)

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	PU (units)
Varistor								
706120	S*	LV-S10-6120 3 AC 500V 5,5kW	3× AC 500 V	5.5	10 – 400 Hz	0.06	Fork-type cable lug M 5	10
706121	S*	LV-S10-6121 3 AC 500V 7,5kW	3× AC 500 V	7.5	10 – 400 Hz	0.06	Fork-type cable lug M 5	10

Dimensions



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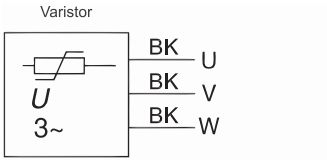


* S Article from stock
A Available with a lead time
R Available on request

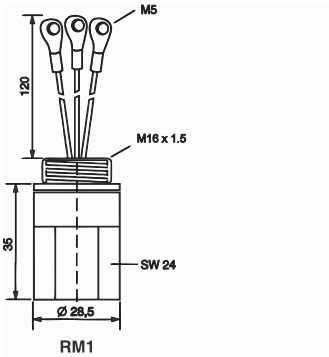
Motor suppression for the screwing into the motor terminal box
Also suitable for frequency converters up to 7.5 kW, 3 AC x 575 V
Protection device: Varistor

Technical data

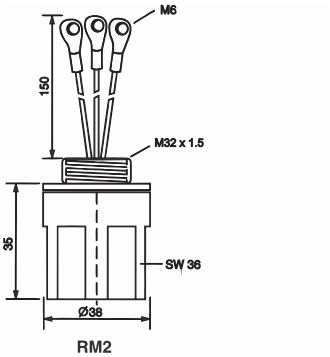
Type of function	Motor suppression
Cut-off peak	≤1075 V
Type of connecting lead	1.5 mm² PVC
Color of the housing	grey
Degree of protection	IP67
Mounting	screwed into terminal housing
Operation temperature range	-20 °C … +60 °C
Certifications	cURus (E135145)

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	Fitting	PU (units)
Varistor									
701533	S*	LV-RM1-1533 3AC 575V 4kW	3× AC 575 V	4	10 – 400 Hz	0.12	Ring termination M 5	M 16 × 1.5	10
701534	S*	LV-RM2-1534 3AC 575V 7,5kW	3× AC 575 V	7.5	10 – 400 Hz	0.15	Ring termination M 6	M 32 × 1.5	10

Dimensions



Dimensions



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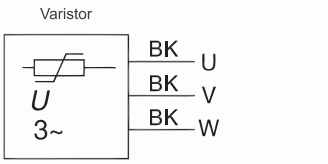


Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Motor suppression for the direct installation in the motor junction plate
7.5 kW, 3 AC x 500 V
Protection device: RC module

Technical data

Type of function	Motor suppression
Type of connecting lead	1.0 mm² PVC
Color of the housing	grey
Degree of protection	IP67
Mounting	DIN rail mounting 2 snap-on sockets
Operation temperature range	-20 °C … +60 °C
Dimensions (w × h × d)	15.0 mm × 40.0 mm × 48.0 mm
Certifications	cURus (E135145)

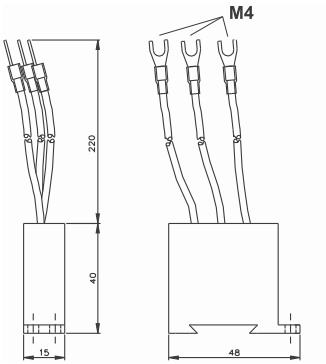
Accessories

Motor terminal board inside

Snap-on socket type 2, grey: Part-No. 700499 | DIN rail mounting | PU: 10 units

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	PU (units)
RC module								
706115	S*	LRC-VM1-6115 3AC 500V 7,5kW	3× AC 500 V	7.5	50 Hz / 60 Hz	0.22	Fork-type cable lug M 4	20

Dimensions



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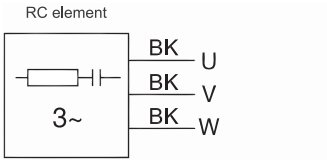


* S Article from stock
A Available with a lead time
R Available on request

Motor suppression for the screwing into the motor terminal box (PG9)
Up to 7.5 kW, 3 AC x 575 V
Protection device: RC module

Technical data

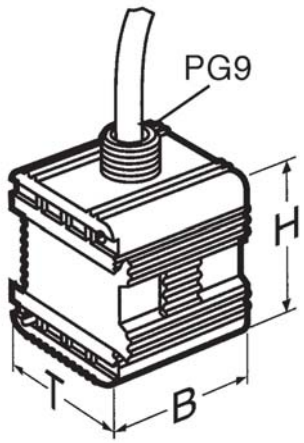
Type of function	Motor suppression
Type of connecting lead	3×1.0 mm² PVC
Connecting lead Ø	6.3 mm
Color of the housing	black
Degree of protection	IP67
Mounting	Motor terminal board outside
Operation temperature range	-20 °C … +60 °C
Dimensions (w × h × d)	40.0 mm × 40.0 mm × 40.0 mm

Accessories

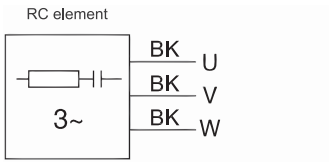
Cable tie on the supply cable
DIN rail mounting
2 snap-on sockets
Snap-on socket type 2, grey: Part-No. 700499 | DIN rail mounting | PU: 10 units

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	Fitting	PU (units)
RC module									
700374	S*	LRC-M5-0374 3AC 500V 4kW	3× AC 500 V	4	50 Hz / 60 Hz	0.5	Line end open	PG 9	10
700379	S*	LRC-M5-0379 3AC 575V 7,5kW	3× AC 575 V	7.5	50 Hz / 60 Hz	0.5	Line end open	PG 9	10

Dimensions



PIN assignment



Further product information at
www.luetze.com

* S Article from stock
A Available with a lead time
R Available on request

Motor suppression for DIN rail mounting
For AC motors up to 30 kW, 3 AC x 500 V
Protection device: RC module

Technical data

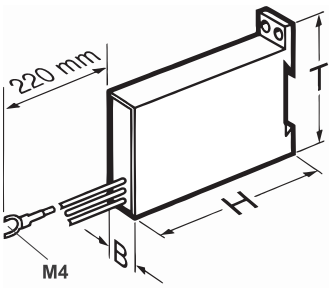
Type of function	Motor suppression
Type of connecting lead	1.0 mm² PVC
Color of the housing	grey
Degree of protection	IP67
Mounting	DIN rail mounting 2 snap-on sockets
	Attachment hole m 4
Operation temperature range	-20 °C … +60 °C
Certifications	cURus (E135145)

Accessories

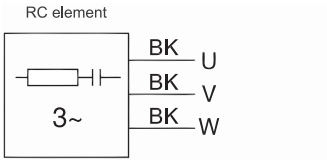
Snap-on socket type 2, grey: Part-No. 700499 | DIN rail mounting | PU: 10 units

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	PU (units)
RC module								
700490	S*	LRC-M1-0490 3AC 500V 4kW	3× AC 500 V	4	50 Hz / 60 Hz	0.22	Fork-type cable lug M 4	10
700491	S*	LRC-M2-0491 3AC 500V 7,5kW	3× AC 500 V	7.5	50 Hz / 60 Hz	0.22	Fork-type cable lug M 4	10
700492	S*	LRC-M2-0492 3AC 500V 15kW	3× AC 500 V	15	50 Hz / 60 Hz	0.22	Fork-type cable lug M 4	10
700493	S*	LRC-M3-0493 3AC 500V 30kW	3× AC 500 V	30	50 Hz / 60 Hz	0.22	Fork-type cable lug M 4	10

Dimensions



PIN assignment



* S Article from stock
A Available with a lead time
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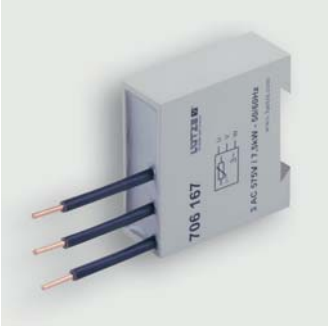
Universal motor suppression: direct attachment to the switch, e.g. Siemens SIRIUS 3RT 10
Also suitable for frequency converters up to 7.5 kW, 3 AC x 575 V
Protection device: Varistor

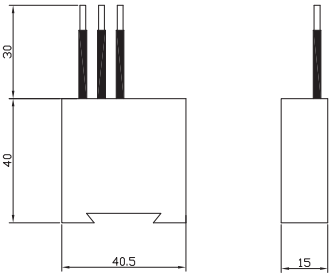


Technical data

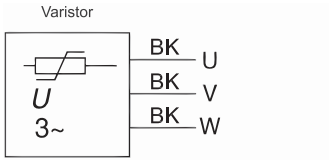
Type of function	Motor suppression	Mounting	Attachment to contactor
Cut-off peak	≤1075 V	Operation temperature range	-20 °C … +60 °C
Type of connecting lead	1.5 mm² PVC	Dimensions (w × h × d)	15.0 mm × 40.0 mm × 40.5 mm
Color of the housing	grey	Certifications	cURus (E135145)
Degree of protection	IP67		

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	PU (units)
Varistor								
706167	S*	LV-VM1-6167 3AC 575V 7,5kW	3× AC 575 V	7.5	10 – 400 Hz	0.03	stripped cable ends	10

Dimensions



PIN assignment



Further product information at
www.luetze.com

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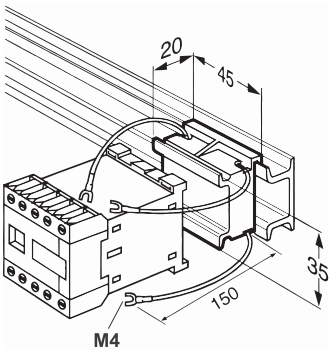
As substructure for protection types up to 45 mm wide, for DIN rail mounting
For AC motors up to 2.5 kW, 3 AC x 400 V
Protection device: Varistor

Technical data

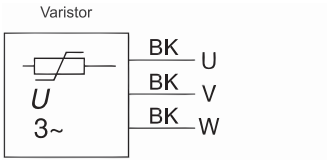
Type of function	Motor suppression	Degree of protection	IP20
Cut-off peak	≤745 V	Mounting	DIN rail mountable TS35
Type of connecting lead	1.0 mm² PVC	Operation temperature range	-20 °C … +60 °C
Color of the housing	grey	Dimensions (w × h × d)	40.0 mm × 20.0 mm × 35.0 mm

Part No.		Type	Rated voltage U_N	Engine power kW	Rated frequency f_N	Cable length m	Connection type	PU (units)
Varistor								
700217	S*	LV-S9-0217 3AC 400V 2,5KW	3× AC 400 V	2.5	10 – 400 Hz	0.15	Fork-type cable lug M 4	10

Dimensions



PIN assignment



* S Article from stock
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Notes

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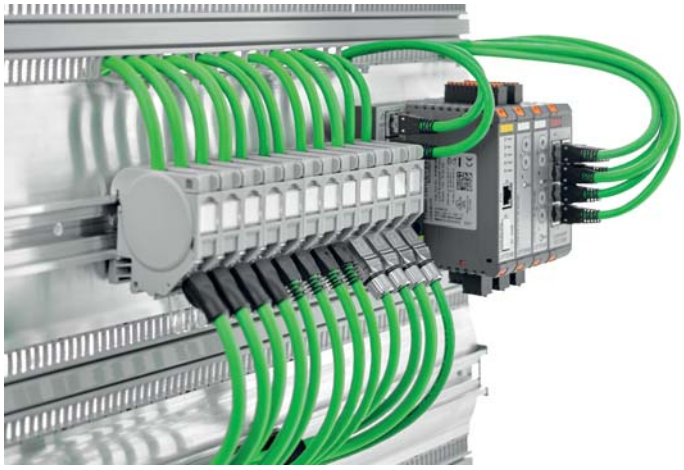
BUS and Network



Bus- and Network cables

Bus-Systems have become a very vital part of factory automation and it's hard to imagine automation without it.
Besides hardware and software components, passive components such as bus cables and connectors play an important role for reliable function of the system. Bus cables must comply with all electrical parameters of the particular system. There is no universally applicable bus cable as the individual requirements are to diverse. LÜTZE offers robust, industrial grade Bus- and Network cables for the most common used systems worldwide. These cables are being offered for fixed and flexible application as well as continuous moving application in drag chains.

Applications

ASI - Actuator-Sensor-Interface

The AS-Interface per EN 50295 is a serial Actuator Sensor Network being used for digital signals in the lower field levels. It works in accordance to the Master Slave Principle and presents a cost effective alternative to other serial bus systems.

Profibus

Profibus ist he most common Bus-System used in Europe in the area of automated manufacturing.

Profibus PA

The engineering of these cables per IEC 61158-2 fulfills the requirements in process automation and also offers intrinsically safe connection to the field devices. Profibus PA is a synchronous protocol with DC-current flow free transmission, which is also often designated as H1. The IEC 61158-2 Technique is applied at the PROFIBUS-PA.

Profibus DP

This Profibus variant, optimized through increased transmission speed and low installation cost, was especially designed for the communication between automation systems and decentralized peripheral devices in the field range. Profibus-DP substitutes the conventional parallel data communication with 24V or 0-20 mA. Lütze Profibus cables meet the specification for Profibus-DP type A according to EN 50254. Profibus-DP und Profibus FMS use the same transmission technology as well as a unified Bus protocol. Both variants can be operated simultaneously on one cable.

Profibus Fast Connect®

These cables have an optimized radial, symmetrical construction and can facilitate the application of special tools. Thereby, bus connector plugs are able to be assembled in a fast and installation-friendly way.

CAN-Bus

Can-Bus is specified according to ISO 11898. Primarily designed for automotive applications Can-Buses are used today for the exchange of digital information, Controller Area Network (CAN) for faster data transfer/data exchange.

Interbus

The Interbus-S was published in 1987 as an open sensor/actuator bus protocol. As a typical sensor/actuator fieldbus, it is configured for the cyclic processing of process data and hence differentiates significantly from data orientated field buses. The main application area of Interbus-S lays in production engineering,, process engineering, as well as transport and logistics. Here the main focus is both the automotive industry and the drive technology.

DeviceNet

DeviceNet is a service related Network, based on the proven CAN-Technology for fast data exchange. The configuration consists of thick cable (aka Trunk cable) and thin cable (aka drop cable). The use of high flexing cables in drag chains is likewise possible. DeviceNet has been standardized by Open DeviceNet Vendor Association (ODVA) and is the leading bus system for industrial automation in North America.

Industrial Ethernet

Ethernet ist the most commonly used communication technology. The Ethernet Standard allows for a remarkable increase in the bandwidth, from 12 Mbits/s for a bus system, to up to 10 Gbit/s. In the office world the Ethernet Standard has already established itself as the standard technology, however the requirements for wiring systems and active components in the industrial environment differ greatly from those in an office environment. On one hand the infrastructure must be more robust; and on the other hand criteria such as real time application require special IT solutions. Consequently, this has resulted in the development of various proprietary systems such as ProfiNet, EtherCAT, Modbus TCP and Powerlink with system specific components which may not be compatible with others. A structured Ethernet cabling according to EN 50173-3 should support each proprietary system.
While LÜTZE offers a large number of industrial Ethernet cable solutions we are pleased to have a special innovation with our drag chain suitable Cat6 Ethernet cable.

ETHERNET – Overview

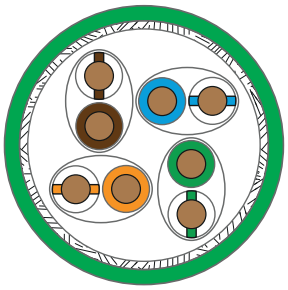
1. Correct Handling and Installation of Network Copper Cable

Do not subject cable to tension
Do not kink the cable
Do not bend the cable more than 90° (See individual specifications for bending radius)
Strip the cable as short as possible
Do not crush cable when fastening
Do not untwist the conductor pairs by more than 15 mm
Terminate the shielding on both ends

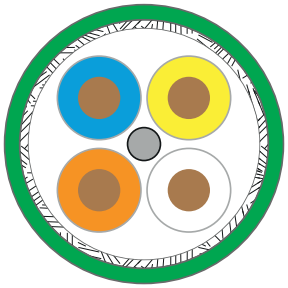
2. LÜTZE ETHERNET Cables

We recommend shielded industrial Ethernet cable, such as LÜTZE ETHERNET cable, for use in industrial environment to ensure secure connectivity. Motors and other electrical noise producing devices are often located in close proximity to network cabling. EMI (Electro Magnetic Interference) and RFI (Radio Frequency Interference) can distort data transmission on copper-based network cable. To lessen or eliminate interference, called alien-crosstalk, the use of shielded industrial cable and connectors is recommended.

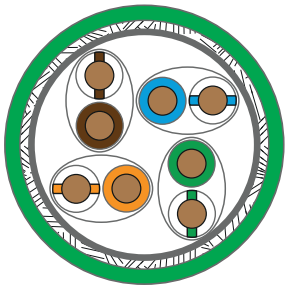
Available LÜTZE ETHERNET Cables:



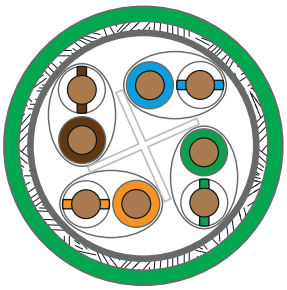
S/UTP



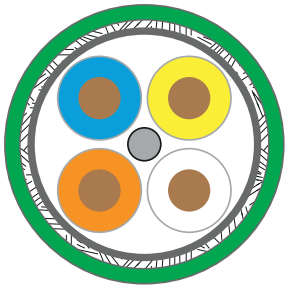
S/UTQ (Quad)



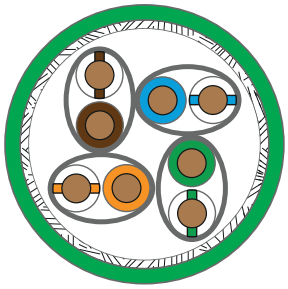
SF/UTP



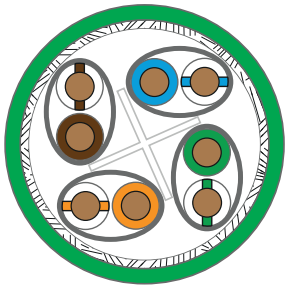
SF/UTP
with cross element



SF/UTQ (Quad)



S/FTP



S/FTP
with cross element

Susceptibility for Interference

S/UTP	S/UTQ (Quad)	SF/UTP	SF/UTP with cross element	SF/UTQ (Quad)	S/FTP	S/FTP with cross element
Susceptibility for Interference						
some	some	low	low	low	low	low

3. Key for twisted pair cables according to ISO/IEC-11801 (2002)E

XX/YZZ

XX – outer jacket	/ **Y** – for the pair shielding	**ZZ** – wire paring
U = unshielded	/ **U** = unshielded	**TP** = twisted pair (regular)
F = foiled shield	/ **F** = foiled shield	**TQ** = quad pair (star quad)
S = braided shield	/ **S** = braided shield	
SF = braided and foiled shield		

In order to utilize EMI/RFI shielding, the shield must be properly terminated at both ends!

ETHERNET – Overview

ETHERNET cable selection tool

Category	Use	2- or 4- pair	Part number	Shielding	AWG	AD (mm)	UL Recognized	UL Listed Type
Cat. 5e	high flexing	2-pair	104050	SF/UTQ	22	6,5	cURus	
Cat. 5	high flexing	2-pair	104303	S/UTQ	22	6,5		CMX
Cat. 5e	high flexing	2-pair	104302	S/UTQ	22	6,6		CMX
Cat. 5e	high flexing	2-pair	104379	SF/UTQ	26	5,3	cURus	
Cat. 5e	high flexing	4-pair	104337	S/UTP	24	7,8	cURus	
Cat. 5e	high flexing	4-pair	104396	SF/UTP	26	6,7	cURus	
Cat. 5e	static	2-pair	104301	SF/UTQ	22-single wire	6,5	cURus	PLTC, CMG
Cat. 5e	static	2-pair	104307	SF/UTQ	22	6,5	cURus	PLTC, CMG
Cat. 5e	static	4-pair	104335	SF/UTP	26	6,3		CMG
Cat. 5e	static	4-pair	104336	SF/UTP	24	7,3		CMG
Cat. 5e	static	4-pair	104350	SF/UTP	22	8,6	cURus	PLTC, CMG, CMX Outdoor
Cat. 6	high flexing	4-pair	104347	SF/UTP	26	7,9		CMX
Cat. 6_A	high flexing	4-pair	104401	SF/UTP	24	8,9	cURus	
Cat. 6_A	static	4-pair	104397	S/FTP	22-single wire	9,6	cURus	PLTC, CMG
Cat. 6_A	static	4-pair	104338	S/FTP	26	6,4		CMG
Cat. 7	high flexing	4-pair	104404	S/FTP	24	9,4		CMX
Cat. 7	static	4-pair	104331	S/FTP	26	6,4		CMG
Cat. 7	static	4-pair	104110	S/FTP	23	8,7	cURus	

ETHERNET – Overview

4. ProfiNet – Star Quad Design and Termination

The star quad is a specific low-impedance cable configuration.
Four conductors are twisted on a common axis. The conductors across from each other make a pair.

In Image 1 the pairs are as follows:

Pair 1:
Conductor A ⟷ Conductor D

Pair 2:
Conductor B ⟷ Conductor C

Other terminations than in Figure 1 lead to interferences, decreased connectivity or no connectivity at all.

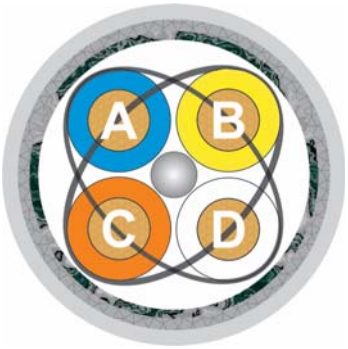


Image 1

5. Pin Assignment and Installation

RJ45 is the most common Ethernet connector and is available both shielded and unshielded.
All pins of the RJ45 connector are used for 1000 Mbit/s (4-pair transmission). Four pins are used for 10/100 Mbit/s (2-pair transmission).

According to the EN 50173 standard, two color codes are defined for installation: T568A and T568B. It makes no difference which color code is used, however the same code should be used consistently throughout the entire installation. Mixing up the two color codes will result in malfunctions.

Pin assignement RJ45 – Color code according to EN 50173 – hard wiring:

ETHERNET cables							
	Star Quad (ProfiNet)			Paired			
Pin#	**100BASE-TX**	**Colorcode**	**10 BASE-T, 100BASE-TX**	**1000BASE-T**		**Colorcode T568A**	**Colorcode T568B**
1	Transmit+	yellow	Transmit+	BI_DA+	(bidirectional)	WH/GN	WH/OR
2	Transmit-	orange	Transmit-	BI_DA-	(bidirectional)	GN	OR
3	Receive+	white	Receive+	BI_DB+	(bidirectional)	WH/OR	WH/GN
4	–		–	BI_DC+	(bidirectional)	BL	BL
5	–		–	BI_DC-	(bidirectional)	WH/BL	WH/BL
6	Receive-	blue	Receive-	BI_DB-	(bidirectional)	OR	GN
7	–		–	BI_DD+	(bidirectional)	WH/BN	WH/BN
8	–		–	BI_DD-	(bidirectional)	BN	BN

6. ETHERNET Categories and Classes

	ProfiNet®	Ca.t 5	Cat. 5e	Cat. 6	Cat. 6_A	Cat. 7
Class	D	D	De	E	Ea	F
Construction	2 pair (AWG 22)	2 pair (AWG22, AWG24, AWG26)	4 pair (AWG 24, AWG 26)	4 pair (26 AWG)	4 pair (AWG22, AWG24, AWG26)	4 pair (AWG22, AWG24, AWG26)
Speed	10/100 Mbit/s	10/100 Mbit/s	10/100/1000 Mbit/s	10/100/1000 Mbit/s	10/100/1000/10000 Mbit/s	10/100/1000/10000 Mbit/s
LAN Applications (max.)	10BASE-T (2 pair) 100BASE-TX (2 pair)	10BASE-T (2 pair) 100BASE-TX (2 pair)	10BASE-T (2 pair) 100BASE-TX (2 pair) 1000BASE-T (4 pair)	10BASE-T 100BASE-TX 1000BASE-T 10BASE-T	10BASE-T 100BASE-TX 1000BASE-T 10GBASE-T	10BASE-T 100BASE-TX 1000BASE-T 10GBASE-T
Nominal Impedance	100 Ohm	100 Ohm	100 Ohm	100 Ohm	100 Ohm	100 Ohm
Bandwidth	100 MHz	100 MHz	100 MHz	250 MHz	500 MHz	600 MHz
max. lenght	100 m (10BASE-T) 100 m (100BASE-TX)	100 m (10BASE-T) 100 m (100BASE-TX)	100 m (10BASE-T) 100 m (100BASE-TX) 100 m (1000BASE-T)	100 m (10BASE-T) 100 m (100BASE-TX) 100 m (1000BASE-T)	100 m (10BASE-T) 100 m (100BASE-TX) 100 m (1000BASE-T) 100 m (10GBASE-T)	100 m (10BASE-T) 100 m (100BASE-TX) 100 m (1000BASE-T) 100 m (10GBASE-T)
Cat. compatibility	Cat. 5	Cat. 5	Cat. 5	Cat. 5, Cat. 5e	Cat. 5, Cat. 6	Cat. 5, Cat. 6, Cat. 6_A
ISO/IEC standard	–	ISO/IEC 11801	ISO/IEC 11801	ISO/IEC 11801	Modification 1 ISO/IEC 11801	ISO/IEC 11801
ANSI/TIA standard	–	ANSI/TIA-568-B	ANSI/TIA-568-C.2	ANSI/TIA-568-C.2	ANSI/TIA-568-C.2	Not recognized

Conductor structure according to DIN VDE 0295 / IEC 60228 and AWG

Conductor structure according to DIN VDE 0295 / IEC 60228

Cross section mm²	Multi-stranded conductor class 2 VDE 0295	Many-stranded conductor	Finely stranded conductor class 5 VDE 0295	Superfine strand conductor class 6 VDE 0295			
			Number of strands and individual strand mm				
0,14				18 x 0,10	18 x 0,10	36 x 0,07	72 x 0,05
0,25			14 x 0,15	32 x 0,10	32 x 0,10	65 x 0,07	128 x 0,05
0,34		7 x 0,25	19 x 0,15	42 x 0,10	42 x 0,10	88 x 0,07	174 x 0,05
0,38		7 x 0,27	12 x 0,20	21 x 0,15	48 x 0,10	100 x 0,07	194 x 0,05
0,50	7 x 0,30	7 x 0,30	16 x 0,20	28 x 0,15	64 x 0,10	131 x 0,07	256 x 0,05
0,75	7 x 0,37	7 x 0,37	24 x 0,20	42 x 0,15	96 x 0,10	195 x 0,07	384 x 0,05
1,00	7 x 0,43	7 x 0,43	32 x 0,20	56 x 0,15	128 x 0,10	260 x 0,07	512 x 0,05
1,50	7 x 0,52	7 x 0,52	30 x 0,25	84 x 0,15	192 x 0,10	392 x 0,07	768 x 0,05
2,50	7 x 0,67	19 x0,41	50 x 0,25	140 x 0,15	320 x 0,10	651 x 0,07	1280 x 0,05
4	7 x 0,85	19 x 0,52	56 x 0,30	224 x 0,15	512 x 0,10	1040 x 0,07	
6	7 x 1,05	19 x 0,64	84 x 0,30	192 x 0,20	768 x 0,10	1560 x 0,07	
10	7 x 1,35	49 x 0,51	80 x 0,40	320 x 0,20	1280 x 0,10	2600 x 0,07	
16	7 x 1,70	49 x 0,65	128 x 0,40	512 x 0,20	2048 x 0,10		
25	7 x 2,13	84 x 0,62	200 x 0,40	800 x 0,20	3200 x 0,10		
35	7 x 2,52	133 x 0,58	280 x 0,40	1120 x 0,20			
50	19 x 1,83	133 x 0,69	400 x 0,40	705 x 0,30			
70	19 x 2,17	189 x 0,69	356 x 0,50	990 x 0,30			
95	19 x 2,52	259 x 0,69	485 x 0,50	1340 x 0,30			
120	37 x 2,03	336 x 0,67	614 x 0,50	1690 x 0,30			
150	37 x 2,27	392 x 0,69	765 x 0,50	2123 x 0,30			
185	37 x 2,52	494 x 0,69	944 x 0,50	1470 x 0,40			
240	61 x 2,24	627 x 0,70	1225 x 0,50	1905 x 0,40			
300	61 x 2,50	790 x 0,70	1530 x 0,50	2385 x 0,40			
400	61 x 2,89		2035 x 0,50				
500	61 x 3,23		1768 x 0,60				

The number of the strands is non-binding. The VDE 0295 determines only the maximum diameter of the single wire that is required for compliance with the maximum wire resistance at 20 °C.

Conductor structure according to AWG

Cross section mm²	AWG	Copper wire	Braid copper not insulated — Wire structure flexible		very flexible		highly flexible			Standard values A max.	Cu weight
		mm Ø		mm Ø		mm Ø		mm Ø	Ω/km	at 20 °C	kg/km
0,08		0,32	10 x 0,10	0,37			40 x 0,05	0,37	210	0,5	0,71
(0,09)	**28**	0,32	7 x 0,13	0,38			19 x 0,08	0,40	195		0,75
0,10		0,36	14 x 0,10	0,44	28 x 0,07	0,44	51 x 0,05	0,42	190	1,0	0,98
0,14	**26**	0,39	18 x 0,10	0,49	36 x 0,07	0,49	72 x 0,05	0,50	138	1,5	1,27
(0,13)		0,40	7 x 0,16	0,49	10 x 0,13	0,53	19 x 0,10	0,51	130		1,30
(0,21)	**24**	0,51	7 x 0,20	0,61	19 x 0,13	0,61	41 x 0,08	0,58	85		2,00
0,25		0,57	14 x 0,15	0,66	32 x 0,10	0,66	128 x 0,05	0,75	77	2,5	2,27
(0,32)	**22**	0,64	7 x 0,25	0,76	19 x 0,16	0,80	26 x 0,13	0,76	56		3,00
0,34		0,64	7 x 0,25	0,75	42 x 0,10	0,74	180 x 0,05	0,80	56	4,5	3,10
0,50		0,80	16 x 0,20	0,95	28 x 0,15	0,95	256 x 0,05	1,00	39	6,0	4,50
(0,52)	**20**	0,81	7 x 0,32	0,90	19 x 0,20	0,94	41 x 0,13	0,91	33		5,00
0,75		0,98	24 x 0,20	1,20	42 x 0,15	1,20	385 x 0,05	1,20	26	10,0	6,90
(0,82)	**18**	1,02	7 x 0,40	1,22	19 x 0,25	1,27	65 x 0,13	1,20	21		8,00
1,00		1,15	32 x 0,20	1,30	57 x 0,15	1,30	511 x 0,05	1,40	20	15,0	9,20
(1,31)	**16**	1,30	7 x 0,51	1,52	19 x 0,30	1,47	105 x 0,13	1,50	16		11,00
1,50		1,40	30 x 0,25	1,60	85 x 0,15	1,85	196 x 0,10	1,85	14	20,0	14,10
(2,08)	**14**	1,62	7 x 0,64	1,85	19 x 0,36	1,85	105 x 0,16	1,85	11		19,00
2,50		1,80	51 x 0,25	2,10	142 x 0,15	2,25	322 x 0,10	2,40	8	25,0	23,20
(3,31)	**12**	2,05	7 x 0,80	2,50	19 x 0,46	2,35	165 x 0,16	2,41	6		28,00
(5,26)	**10**	2,60	37 x 0,40	2,80					3,8		42,00

Color code tables

Conductor color according to DIN VDE 0293-308

Cable and cables without green-yellow conductor

Number of conductor	Colors of the conductor				
2	blue	brown	-	-	-
3	-	brown	black	grey	-
4	blue	brown	black	grey	-
5	blue	brown	black	grey	black

Cable and cables without green-yellow conductor

Number of conductor	Colors of the conductor				
	Ground conductor	Active conductor			
3	green-yellow	blue	brown	-	-
4	green-yellow	-	brown	black	grey
5	green-yellow	blue	brown	black	grey

Not insulated concentric conductors, such as metallized jackets, armoring or shields are not considered as conductors in this table. A concentric conductor is identified by its arrangement and thus does not need to be identified by its color.

Conductor colors according to DIN 47100

Electronic data cables and computer cables with stranding with color repetition after 45 strands. The first color is the base colour of the strand. For multiple color strands, the identification marking consists of a base color and a ring color. The second or third color respectively is applied as ring identification marking. Ring width approx. 2 – 3 mm. A certain amount of blur of the identification colour at the edges and a small offset of both half rings is permitted. The manner of counting occurs from outside to inside through all layers consecutively.

No.	Base/ring colors	No.	Base/ring colors
1	white	32	yellow/blue
2	brown	33	green/red
3	green	34	yellow/red
4	yellow	35	green/black
5	grey	36	yellow/black
6	pink	37	grey/blue
7	blue	38	pink/blue
8	red	39	grey/red
9	black	40	pink/red
10	violet	41	grey/black
11	grey/pink	42	pink/black
12	red/blue	43	blue/black
13	white/green	44	red/black
14	brown/green	45	white
15	white/yellow	46	brown
16	yellow/brown	47	green
17	white/grey	48	yellow
18	grey/brown	49	grey
19	white/pink	50	pink
20	pink/brown	51	blue
21	white/blue	52	red
22	brown/blue	53	black
23	white/red	54	violet
24	brown/red	55	grey/pink
25	white/black	56	red/blue
26	brown/black	57	white/green
27	grey/green	58	brown/green
28	yellow/grey	59	white/yellow
29	pink/green	60	yellow/brown
30	yellow/pink	61	white/grey
31	green/blue		

Conductor color according to IEC for electronic cables with AWG design

Conductor no.	Color
1	black
2	brown
3	red
4	orange
5	yellow
6	green
7	blue
8	violet
9	grey
10	white
11	white-black
12	white-brown

The double color green-yellow may only be used for the grounding conductor (yellow is the base color). For the remaining double colors, the base color is white respectively.

For possibly required additional double colors, grey or brown are recommended as additional base colors.

Conductor marking acc. to DIN 47100 pairs and jacket colors acc. to RAL

Pair identification colour repetition after 45 pairs

Electronic data cables and computer cables with paired stranding. The first colour is the base colour of the strand. For multiple colour strands of the pair, the identification consists of a base colour and a ring colour. The second colour is applied as ring marking, ring width approx. 2 – 3 mm. A certain amount of blur of the identification colour at the edges and a small offset of both half rings are permitted from a manufacturing technique perspective.

The manner of counting occurs from outside to inside through all layers pairwise consecutively.

Paired stranding

Pair no.			a-strand	b-strand
1	23	45	white	brown
2	24	46	green	yellow
3	25	47	grey	pink
4	26	48	blue	red
5	27	49	black	violet
6	28	50	grey/pink	red/blue
7	29	51	white/green	brown/green
8	30	52	white/yellow	yellow/brown
9	31	53	white/gray	grey/brown
10	32	54	white/pink	pink/brown
11	33	55	white/blue	brown/blue

Pair no.			a-strand	b-strand
12	34	56	white/red	brown/red
13	35	57	white/black	brown/black
14	36	58	grey/green	yellow/grey
15	37	59	pink/green	yellow/pink
16	38	60	green/blue	yellow/blue
17	39	61	green/red	yellow/red
18	40		green/black	yellow/black
19	41		grey/blue	pink/blue
20	42		grey/red	pink/red
21	43		grey/black	pink/black
22	44		blue/black	red/black

Colour table according to RAL

Colour abbreviation according to HD 457

Colour	Short abbreviation	RAL	DESINA Outer jacket colour	DIN 47002 German	IEC 757 English
black	sw	9005	Power cable	sw	BK
brown	bn	8003		br	BN
red	rt	3000		rt	RD
orange	org	2003	Power cable	or	OG
yellow	ge	1021	Sensor/-actor cables	ge	YE
green	gn	6018	Signal cable	gn	GN
blue	bl	5015		bl	BU
violet	vio	4001	Bus/Fiber optic cable	vi	VT
silvergrey	gr	7001		gr	GY
pebble grey		7032			
window grey		7040	Control cable		
white	ws	9010		ws	WH
pink	rs	3015		pk	PK
turquoise (teal)	tk	5018		tq	TQ
green/yellow	gnge	6018/1021		gnye	GNYE
silver		-			SR
dark blue	dbl	5010		dbl	
dark brown	dbn	8014		dbn	
transparent	tr	-		tr	

Properties of insulation materials

Material	Abb.	Short abbreviation	Service temperature	Dielectric constant	spec. contact	Tensile strength	Elongation at break	Absorption of water	Weathering resistance	Fuel resistance	Oil resistance	Flammability
			°C	10^3	Ohm x cm	N/mm²	%	(20 °C) %				
Polyvinyl chloride	PVC	Y	– 30/+ 70	4 - 7	10^{12} – 10^{15}	10 – 25	150 – 300	0.4	moderate	moderate	good	self-extinguishing
Polyvinyl chloride heat resistant	PVC	Y	– 20/+ 90	3.5	10^{12} – 10^{15}	10 – 25	150 – 300	0.4	moderate	moderate	good	self-extinguishing
High pressure polyethelyne	LDPE	2Y	– 50/+ 70	2.3	10^{17}	20 – 30	500	0.1	good	low	moderate	flammable
Low pressure polyethelyne	HDPE	2Y	– 50/+ 100	2.3	10^{17}	30	800	0.1	moderate	low	moderate	flammable
Polyurethane	PUR	11Y	– 40/ + 90/100	4.0 – 6.0	10^{12}	30 – 45	300 – 600	1.5	very good	good	good	self-extinguishing
Polyamide	PA	4Y	– 40/+ 80	3.5 – 7.0	10^{14}	50 – 180	200 – 300	1 – 2	good	moderate	good	flammable
Polybutylene terephthalate	PBTP	-	– 60/+ 110	3.0 – 4.0	10^{16}	50 – 100	50 – 300	0.5	good	good	good	flammable
Polytetrafluoro--ethylene	PTFE	5Y	– 190/+ 260	2.1	10^{18}	14 – 40	240 – 400	0.01	very good	very good	very good	not flammable
tetrafluoroethylene hexafluoro-propylene Copolymer	FEP	6Y	– 100/+ 200	2.1	10^{18}	20 – 25	250 – 350	0.01	very good	very good	very good	not flammable
Ethylene tetrafluoroethylene	ETFE	7Y	– 100/+ 150	2.6	10^{16}	40 – 50	100 – 300	0.01	very good	very good	very good	not flammable
Perfluoroalkoxy polymer	PFA	–	– 190/+ 260	2.1	10^{15}	30	300	0.01	very good	very good	good	not flammable
Chloroprene rubber	CR	5G	– 40/+ 100	6.0 – 8.0	10^{13}	25	450	1.0	very good	low	good	self-extinguishing
Silicon rubber	SI	2G	– 60/+ 180	2.8 – 3.2	10^{15}	5 – 10	200 – 350	1.0	very good	low	moderate	flame flammable
Ethylene vinyl acetate	EVA	4G	– 30/+ 125	5 – 7	10^{13}	5	200	0.01	good	low	low	flammable
Ethylene propylene rubber	EPM/ EPDM	3G	– 30/+ 120	3.2	10^{14}	5 – 25	200 – 450	0.02	good	low	low	flammable
Thermoplastic polyolefin Elastomer	TPE-O	18Y	– 40/+ 120	2.7 – 3.6	5 x 10^{14}	>6	>400	1.5	very good	moderate	moderate	flammable
Thermoplastic polyester Elastomer	TPE-E	12Y	– 70/+ 125	3.7 – 5.1	10^{12}	3 – 25	280 – 650	0.3 – 0.6	very good	good	very good	flammable
Styrol triblock Copolymer	TPE-S	–	– 75/ + 105/140	2.2 – 2.6	10^{16}	9 – 25	500 – 700	1 – 2	moderate	good	low	flammable

Only for basic materials, deviations are possible depending on the indented use/design.

Current loads

Current rating of cables with rated voltage up to 1000 V and of heat-resistant cables. (cf. VDE 0298-4, 2003-08, Table 11)

	Group 1	Group 2		Group 3
	Single-wire cables • Insulated with rubber • Insulated with PVC • Insulated with TPE • Heat resistant	Multi-wire cables for household appliances and hand tools • Insulated with rubber • Insulated with PVC • Insulated with TPE		Multi-wire cables not for household appliances and hand tools • Insulated with rubber • Insulated with PVC • Insulated with TPE
Installation type	**Free in air**	**On or at the surface**		
Number of current carrying conductors	**1**	**2**	**3**	**2 oder 3**
Nominal cross section in mm²		Current rating in Ampere		
0,14 *	3	-	-	2
0,25 *	5	-	-	4
0,34 *	8	-	-	6
0,5 *	12	3	3	9
0,75	15	6	6	12
1,0	19	10	10	15
1,5	24	16	16	18
2,5	32	25	20	26
4	42	32	25	34
6	54	40	-	44
10	73	63	-	61
16	98	-	-	82
25	129	-	-	108
35	158	-	-	135
50	198	-	-	168
70	245	-	-	207
95	292	-	-	250
120	344	-	-	292
150	391	-	-	335
185	448	-	-	382
240	528	-	-	453
Based on DIN VDE 0298-4 2003-08	Table 11 column 1 e.g. H07V-K, LÜTZE SUPERFLEX® PLUS PUR single-conductor	Table 11 column 3 and 4		Table 11 column 5 z.B. LÜTZE SILFLEX® and LÜTZE SUPERFLEX® cables
Conversion factor for				
Deviating ambient temperature	Temperature	-		Temperature
Multi-conductor cables	-	-		Number of conductors

* not offical part of VDE 0298-4 2003-08. Current rating in accordance with 0891-1 or 0298-4 2003-08.

Note 1:
This table deviates from the table in VDE 0298-4. If there is uncertainty, the latest version of DIN VDE 0298-4 is valid. The actual current rating is also influenced by deviating ambient temperature, as well as the number of conductors in a cable. In this case the derating factors from table “Temperature“ and “Number of conductors“ must be used.

Note 2:
The descriptions shown here are reference values and in simplified form taken from VDE 0298-4 2003-8. If necessary additional conversion factors for accumulation, installation in tubes or cable racks must be taken from the entire version of VDE 0298-4 2003-8. Should there be newer versions available after printing deadline, these must be considered. LÜTZE assumes no guarantee for the completeness or the correctness of any information provided here.

Current loads

Temperature

Conversion factors for deviating ambient temperature (see VDE 0298-4 2003-08 Table 17, column 4, 5 and 7)

Ambient temperature	Factor 70 °C at the conductor	Factor 80 °C at the conductor	Factor 90 °C at the conductor
10 °C	1,22	1,18	1,15
15 °C	1,17	1,14	1,12
20 °C	1,12	1,10	1,08
25 °C	1,06	1,05	1,04
30 °C	1,00	1,00	1,00
35 °C	0,94	0,95	0,96
40 °C	0,87	0,89	0,91
45 °C	0,79	0,84	0,87
50 °C	0,71	0,77	0,82
55 °C	0,61	0,71	0,76
60 °C	0,50	0,63	0,71
65 °C	0,35	0,55	0,65
70 °C	-	0,45	0,58
75 °C	-	0,32	0,50
80 °C	-	-	0,41
85 °C	-	-	0,29

Number of conductors

Conversion factors for multi-conductor cable with a nominal cross section up to 10 mm² (see VDE 0298-4 2003-08 Table 26, column 2)

Number of loaded conductors	Factor
5	0,75
7	0,65
10	0,55
14	0,50
19	0,45
24	0,40
40	0,35
61	0,30

Note:
If necessary additional conversion factors for accumulation, installation in tubes or cable racks must be taken from the entire version of VDE 0298-4 2003-8. LÜTZE assume no guarantee for the completeness or the correctness of any information provided here.

Chemical resistance of PVC, TPE and PUR cables jackets

Anorganic	Concentration	PVC	TPE	PUR
Alaune	c.s.	+	+	
Aluminium salts	ec.	+	+	+
Ammonia, a	10 %	+	+	+
Ammonium acetate, a	ec.	+	+	
Ammonium carbonate, a	ec.	+	+	–
Ammonium chloride, a	ec.	+	+	+
Barium salts	ec.	+	+	+
Boric acid	100 %	+	+	O
Calcium chlorid, a	c.s.	+	+	O
Calcium chlorid, a	10 % and 40 %			+
Calcium nitrate, a	c.s.	+	+	
Chrom salts, a	c.s.	+	+	+
Calium carbonate, a (potash)		+	+	
Potassium chlorate, a	c.s.	+	+	
Potassium chloride, a	c.s.	+	+	O
Calcium dichromate, a		+	+	
Calcium iodide, a		+	+	
Calcium nitrate, a	c.s.	+	+	+
Potassium permanganate , a		O	O	–
Potassium sulfate, a		+	+	+
Copper salts, a	c.s.	+	+	+
Magnesium salts, a	c.s.	+	+	O
Sodium carbonate, a (Natron)		+	+	O
Sodium bisulfate, a		+	+	
Sodium chloride , a (common salt)		+	+	+
Sodium thiosulfate, a (fixing salt)		+	+	O
Nickel salts, a	c.s.	+	+	+
Phosphoric acid	50 %	+	+	–
Mercury	100 %	+	+	+
Mercury salts, a	c.s.	+	+	+
Nitric acid	30 %	–	–	–
Hydrochloric acid	concentration	–	–	–
Sulfur	100 %	+	+	+
Sulfur dioxide,	gaseous	+	+	O
Carbon disulfide		–	–	–
Hydrogen sulfide		+	+	–
Sea water		+	+	+
Silver salts, a		+	+	+
Hydrogen peroxide, a	3 %	+	+	+
Zinc salts, a		+	+	–
Tin(II) chloride		+	+	–

Organic	Concentration	PVC	TPE	PUR
Ethyl alcohol	100 %	–	–	–
Formic acid	30 %	–	–	–
Benzine/Benzene		–	O	+
Succinic acid, a	c.s.	+	+	–
Acetic acid	20 %	O	O	O
Hydraulic oil		–	*	O*
Isopropyl alcohol	100 %	–	-	O
Kerosene			O	O
Machine oil		O*	O*	+*
Methyl alcohol, a	100 %	O	O	O
Mineral oil, depending on type (ASTM)			*	*
Oxalic acid, a	c.s.	+	+	
Paraffin oil			+	+
Plant oils and greases		O/+*	+*	O/+*
Cutting oil		O*	O/+*	+*
Tartaric acids, a		+	+	
Citric acid		+	+	

Legend:
ec. = each concentration
c.s. = cold saturated
O = conditionally resistant
* = depending on the additives in oil
a = aqueous
+ = resistant
– = unstable

All specification refer to room temperature!

Disclaimer: This information shall only serve as support for choosing a suitable material for use with chemical substances. Prior to the final installation a test of the material should performed with the chemical substances under prospective conditions of use. Lütze assumes no guarantee for the completeness or the correctness of this content, and declines all liability claims, which relate to loss or damage, which was caused by the use of the presented information or recommendations.

Design of the protection class designation according to EN 60529

The protection of electrical equipment through corresponding enclosure is specified with code letters and code numbers. This protection class designation consists of the letters "IP" and two code numbers from 0 to 8. The first code number stands for the protection against contact and foreign substances, the second number specifies the degree of protection against water.
The higher the respective code number is, the higher is the offered protection. The valid protection class for each product is specified in the technical data.

For example the designation:			
IP 65	**Code letter IP**	**IP**	
	First code number	**6**	**corresponds to: Protection against entrance of dust**
	Second code number	**5**	**corresponds to: Protection against sprayed water**

For protection against contact and foreign substances		
First code number	**Protection scope designation**	**Explanation**
0	No protection	No special protection of persons from accidental contact with standing or moving parts under voltage. No protection of the equipment against entry of solid foreign substances.
1	Protection against foreign substances > 50 mm	Protection against accidental contact of large area surfaces of standing and internally moving parts under voltage, e.g. with the hand, but no protection against intentional access to these parts. Protection against entry of solid foreign substances with a diameter larger than 50 mm.
2	Protection against foreign substances > 12 mm	Protection against contact by the fingers of standing or internally moving parts under voltage. Protection against entry of solid foreign substances with a diameter larger than 12 mm.
3	Protection against foreign substances > 2.5 mm	Protection against contact of standing or internally moving parts under voltage with tools, wires or similar of a thickness larger than 2.5 mm. Protection against entry of solid foreign substances with a diameter larger than 2.5 mm.
4	Protection against foreign substances > 1 mm	Protection against contact of standing or internally moving parts under voltage with tools, wires or similar of a thickness larger than 1 mm. Protection against entry of solid foreign substances with a diameter larger than 1 mm.
5	Protection against dust accumulation	Full protection against contact of standing or internally moving parts under voltage moving parts under voltage. Protection against dust accumulation. The entry of dust is not fully prevented but the dust may not enter in such quantities that the functioning is impaired.
6	Protection against dust accumulation	Full protection against contact of standing or internally moving parts under voltage moving parts under voltage. Protection against entry of dust.

For water protection		
Second code number	**Protection scope designation**	**Explanation**
0	No protection	No special protection
1	Protection from vertically falling dripping water	Water drops that fall vertically may not have any damaging effect.
2	Protection from dripping water falling at an angle	Water drops that fall at an arbitrary angle of up to 15° to vertical may not have any damaging effect.
3	Protection from sprayed water	Water that falls in an arbitrary angle up to 60° to vertical may not have a damaging effect.
4	Protection from splashed water	Water that is splashed from all directions against the equipment may not have a damaging effect.
5	Protection from water projected from a nozzle	Water projected from a nozzle that is aimed at the equipment from all directions may not have any damaging effect.
6	Protection against flooding	Water may not enter into the equipment in damaging amounts during temporary flooding (e.g. by heavy seas)
7	Protection against immersion	Water may not enter in damaging amounts if the equipment is immersed in water for the defined pressure and time conditions.
8	Protection against submersion	Water may not enter in damaging amounts if the equipment is submerged in water for the defined pressure and indefinite amount of time.

You can find the valid protection class for the respective product in the technical data.

Technical Terms

A	Ampere – unit of electric current
NEC	National Electric Code (USA)
NEMA	National Electrical Manufactureres Association (USA)
Rated voltage	Electric voltage in stranded operation
NFPA	National Fire and Protection Agency (USA)
Optical coverage	Degree of coverage by the copper braid shield (how dense the shield is braided)
Ozone resistance	Ability of the material to withstand ozone radiation
Paired	There are 2 conductors twisted with each other in the cable
PE	Protective Earth – Protection conducter
PiMF	Pairs in Metal Foil – twisted pair cabled pairs of conductors are shielded separately
Polyethylen (PE)	Insulation material with very good electric characteristics, low water-absorption, high viscosity and excellent dielectric values
Polyolefin	Insulation material with good electric characteristics, good chemical resistance as well as high viscosity and ultimate elongation. Belongs to the Group of semi-crystalline thermoplastics
Polypropylen (PP)	Insulation material with good electric characteristics as well as high strength and stability. Belongs to the group of semi-crystalline thermoplastics
Polyurethan (PUR)	Thermoplastic Polyurethane – High-quality jacket-material for the usage in cable tracks and harsh environmental conditions
Polyvinylchlorid (PVC)	Popular jacket material for industrial control cable, allowed due to compounds with additives high flexibility and improved oil resistance
Test voltage	Represents the voltage with which the cable has been tested
RAL-Number	Numbered color system for definite identification of a color type
RoHS	Restriction of Hazardous Substances
Layer pitch optimized	The lay length of the cabled conductors will be optimized for the application shorter lay lengths for higher alternating bending
Loop resistance	In the transmission technique the loop resistance is the resistance of a at the end short-circuit pair of conductors am (Forward- and return cable e.g. of a BUS- cable)
Protective conductor	Grounding conductor
Self-extinguishing	The characteristic of a material to extinguish flames by itself (eg. PVC)
Servo	The name of a supply- and motor connection cable
Zero potential	High quality stranding technique for cabled conductor without mechanical back twist. Especially important for high-flexible cables for the use in cable tracks
StC	Double shielded (Static shiel/foil+braid)
Star quad	Four conductors are cabled around a common axis
Control pair	Twisted conductor pairs for signal transmission in motor cables
Interfering signal	Cable- or fieldbound interferences
Radiation resistance	Resistance agaist radiation
Talcum	Talcum is used in powder as a release agent between the jacket and the conductor cable core. This allows the jacket to be removed easier later on
Temperature range	The recommended temperature range for the use of a cable
Thermoplastics	Thermoplastics can be transferred in a plastic state by heat supply
TI	Classification of characteristics of PVC Insulation material according to EN 50363
TM	Classification of characteristics of PVC jacket material according to EN 50363
Torsion	Here: The rotation of a cable around the logitudinal axis Specification for cable in °/m
TP	Twisted pair
TPE	Thermoplastic elastomere – High-quality material with good mechanical stress characteristics. Divided into various subgroups
U0/U	Rated volatge/Operating voltage
UL	Underwriters Laboratories
V	Volt
VDE	Association of Electrical, Electronic and Information Technologies
Rotproof	Increased resistance to rotting
Fleece wrap	A fleece wrapped around the conductors to protect the conductors and for better gliding characteristics.
VW-1	Flam test of UL (Vertical Wire Flame Test)
Wall thickness	The thickness of the jacket
Bend strength	The ability of a material not to break during permanent bending
Tear-resistant	The ability of a material to resists further cracking after a tear occurred
Characteristic impedance	Complex input resistance of infinite cable.
x	Ground conductor is not existing (like OZ, OB)
XLPE	Cross-linked polyethylene = XLPE
Tensile strenght	The maximum tension (pulling)
Tension	Tension which is built up in the direction of the external load in the interior of an object
Sub jacket	Between conductor and shield introduced separation layer to protect the wires
Ω	Ohm

Certificates

CERTIFICATE

This is to certify that

Friedrich Lütze GmbH
Bruckwiesenstraße 17-19
71384 Weinstadt
Germany

with the organizational units/sites as listed in the annex

has implemented and maintains an **Environmental Management System**.

Scope:
Development, production and distribution of electrical and electronic components and solutions for the automation technology

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 14001 : 2015

Certificate registration no.	001737 UM15
Valid from	2021-04-18
Valid until	2024-04-17
Date of certification	2021-04-10

DQS GmbH

Markus Bleher
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main, Germany

CERTIFICATE

This is to certify that

Friedrich Lütze GmbH
Bruckwiesenstraße 17-19
71384 Weinstadt
Germany

with the organizational units/sites as listed in the annex

has implemented and maintains a **Quality Management System**.

Scope:
Development, production and distribution of electrical and electronic components and solutions for the automation technology

Through an audit, documented in a report, it was verified that the management system fulfills the requirements of the following standard:

ISO 9001 : 2015

Certificate registration no.	001737 QM15
Revision date	2021-04-30
Valid from	2021-06-14
Valid until	2024-06-13
Date of certification	2021-04-29

DQS GmbH

Markus Bleher
Managing Director

Accredited Body: DQS GmbH, August-Schanz-Straße 21, 60433 Frankfurt am Main, Germany

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Germany
Friedrich Lütze GmbH
Postfach 12 24 (PLZ 71366)
Bruckwiesenstraße 17-19
D-71384 Weinstadt
Tel.: +49 71 51 60 53-0
Fax: +49 71 51 60 53-277(-288)
info@luetze.de

United Kingdom
LÜTZE Ltd.
Unit 3 Sandy Hill Park
Sandy Way, Amington
Tamworth, Staffs, B77 4DU
Tel.: +44 1827 313330
Fax: +44 1827 313332
sales.gb@lutze.co.uk

Austria
LÜTZE Elektrotechnische Erzeugnisse Ges.m.b.H.
office@luetze.at

Switzerland
LÜTZE AG
info@luetze.ch

France
LUTZE SASU
info@lutze.fr

Spain
LUTZE, S.L.
info@lutze.es

China
Luetze Trading (Shanghai) Co.Ltd.
info@luetze.cn

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