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Connector, PROFINET CAT5 (100 Mbps), 4-position, halogen-free, shielded, Plug straight M12 SPEEDCON, Coding: D, Crimp connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5.5 mm ... 10 mm, with crimp contacts

### Your advantages

- ${\ensuremath{\,^{\scriptstyle\blacksquare}}}$  Safe use in the field, thanks to a high degree of protection
- Flexible: connectors for on-site assembly
- Save time, thanks to installation with SPEEDCON fast locking system
- Interference Reliable signal transmission 360° shielding in environments with electromagnetic interference



## Key Commercial Data

Packing unit	1 pc
GTIN	4 0 5 5 6 2 6 0 1 8 8 8 1
GTIN	4055626018881
Weight per Piece (excluding packing)	20.000 g
Custom tariff number	85366990
Country of origin	China

### Technical data

#### Dimensions

Wrench size, union nut	15 mm
Diameter housing	16 mm
Length	51 mm
External cable diameter	5.5 mm 10 mm
Stripping length of the sheath	26 mm
Stripping length of the individual wire	4 mm +0,5 mm



### Technical data

#### Ambient conditions

Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
Degree of protection	IP65
	IP67

#### General

Note	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	4
Insulation resistance	$\geq$ 100 MΩ
Coding	D - data
Standards/regulations	M12 connector IEC 61076-2-101
	Shock, vibration EN 50155:2001
Signal type/category	PROFINET CAT5 (on the basis of IEC 11801), 100 Mbps
Status display	No
Overvoltage category	11
Degree of pollution	3
Connection method	Crimp connection
Conductor cross section	0.34 mm <sup>2</sup> 1 mm <sup>2</sup> (flexible)
Conductor cross section AWG	22 18 (flexible)
Wire diameter incl. insulation	≤ 2.3 mm
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 knurl)
	$\leq$ 5 Nm (Screw plug insert with sleeve housing as far it will go)
	5 Nm (Pressure nut with coupling sleeve)
Assembly instructions	This connector includes one seal for small and one seal for large outer cable diameters.
Transmission characteristics (category)	CAT5

### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au



## Technical data

#### Material

Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM
Additional material specifications	Zinc die-cast (Housing)
	nickel-plated (Housing surface)
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

### Standards and Regulations

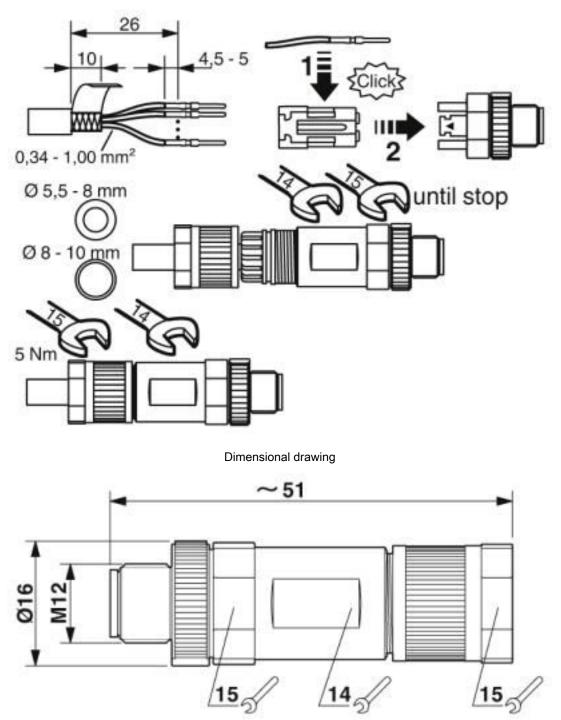
Standards/specifications	M12 connector IEC 61076-2-101
	Shock, vibration EN 50155:2001
Flammability rating according to UL 94	V0

### Environmental Product Compliance

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings



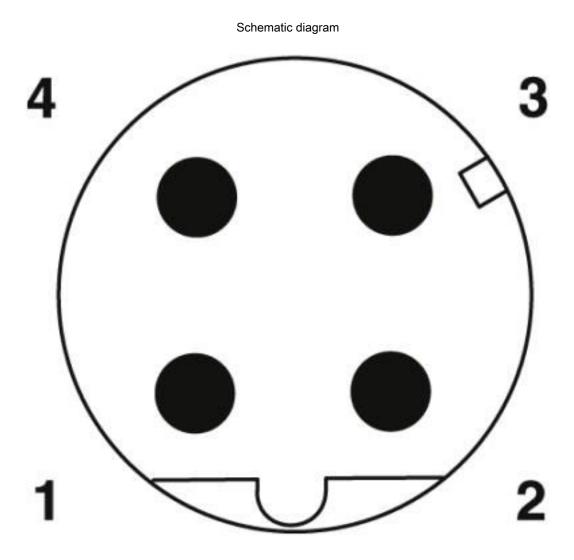


Functional drawing

Plug, M12 x 1, straight, shielded

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Pin assignment M12 male connector, 4-pos., D-coded, male side

# Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104

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### Classifications

eCl@ss

eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

### ETIM

ETIM 5.0	EC002635
ETIM 6.0	EC002635
ETIM 7.0	EC002635

### Approvals

#### Approvals

EAC

#### Ex Approvals

#### Approval details

EAC EAC RU C-DE.BL08.B.00511

### Accessories

Accessories

Crimp contact

Crimp contact - CC1,0-T-1,0-M AU PU100 - 1414275



Crimp contact, contact diameter: 1 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.34 mm<sup>2</sup> ... 1 mm<sup>2</sup> AWG 22 ... 18

Crimping tool



### Accessories

Crimping pliers - CRIMPFOX-TC MP - 1212510



Crimping pliers, for turned contacts, universal cross section setting, up to a maximum of 2.5 mm<sup>2</sup>, digital display with 0.01 mm increments, pressure lock can be unlocked, including positioning tool

#### Data cable by the meter

Network cable - VS-OE-OE-93R/... - 1417388



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PUR halogen-free, green RAL 6018, shielded, free cable end, on free cable end, cable length: Free input (0.5 ... 100 m), For robots

Network cable - VS-OE-OE-936/... - 1417375



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PE-X halogen-free, black RAL 9005, shielded, free cable end, on free cable end, cable length: Free input (0.5 ... 100 m), For railway applications

Network cable - VS-OE-OE-937/... - 1402687



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PE-X halogen-free, black RAL 9005, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m), For railway applications

**Electronics pliers** 

Diagonal cutter - MICROFOX-SB - 1212489



Electronic diagonal cutter, round head, without chamfer, with opening spring, mirror-polished and oiled, 2-component grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; hard 0.5 mm diameter

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### Accessories

Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



Screwdriver tools

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600

Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

#### Stripping tool

Stripping tool - WIREFOX-D 40 - 1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

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### Accessories

Stripping tool - WIREFOX 2,5 - 1212368



Stripping tool, for conductors and cables with a conductor cross section from 0.08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6 mm<sup>2</sup> stranded/1.5 mm<sup>2</sup> solid

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Shielding foil - VS-08-RJ45-FOLIEN-SET - 1417184

Shielding foil set, 25 pieces, replacement for RJ45 and M12 Quickon connector



Stripping tool - VS-CABLE-STRIP-VARIO - 1657407



Stripping tool, for the multi-level stripping of shielded cables

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