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Bus system connector, 5-position, shielded, Plug straight M12, A-coded, Screw connection, Knurl material: Zinc die-cast, nickel-plated, External cable diameter 6.5 mm ... 8.5 mm

#### Why buy this product

- ${\ensuremath{\,^{\scriptstyle\blacksquare}}}$  Safe use in the field, thanks to a high degree of protection
- Flexible: connectors for on-site assembly
- Screw connection: proven connection technology for a large selection of different conductors
- ☑ Reliable signal transmission 360° shielding in environments with electromagnetic interference

### RoHS

DeviceNet CANOpen

### Key Commercial Data

Packing unit	1 STK
GTIN	4 017918 900465
GTIN	4017918900465
Weight per Piece (excluding packing)	45.570 g
Custom tariff number	85366990
Country of origin	Germany

# Technical data

#### Dimensions

External diameter	6.5 mm 8.5 mm
Stripping length of the sheath	33 mm (for outside cable diameter < 5.5 mm, strip 21 mm off and fold the cable shield back over the cable sheath)
Stripping length of the individual wire	5 mm
Ambient conditions	
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
Degree of protection	IP67
General	
Rated current at 40°C	4 A



# Technical data

#### General

Rated voltage	60 V DC
	48 V AC
Number of positions	5
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Screw connection
Conductor cross section	0.25 mm <sup>2</sup> 0.75 mm <sup>2</sup>
Conductor cross section AWG	24 18
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	0.8 Nm 1 Nm (Pressure nut with 4 mm 8 mm external cable diameter)
	1 Nm 1.4 Nm (Pressure nut with 8 mm 12 mm external cable diameter)
Tightening torque	Screw plug insert with sleeve housing as far it will go
Assembly instructions	The wires can be connected both with ferrules and without ferrules

#### Material

Flammability rating according to UL 94	НВ
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 66
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Connection in acc. with standard	CUL
Flammability rating according to UL 94	НВ

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Drawings



Schematic diagram

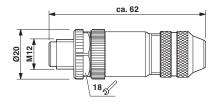
Cable connection side M12 (screw connection)

#### Schematic diagram



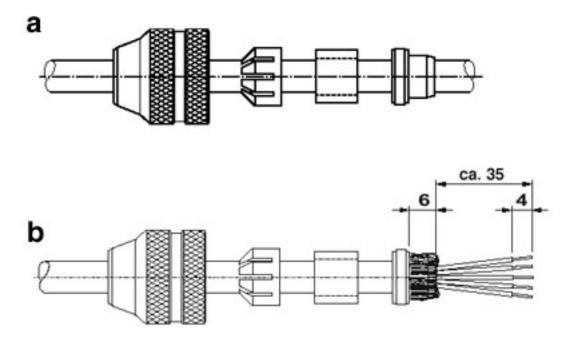
Pin assignment M12 male connector, 5-pos., A-coded, male side

#### Dimensional drawing



Plug, M12 x 1, straight, shielded

Functional drawing



Assembly steps for M12 male/female plug and conductor

a = Slide on parts

b= Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh. Slide cores through the housing. Mount shielding ring, gasket and clamping cage. Tighten pressure screw to fix the cable. Screw down cores. Mount male/female part. Tighten pressure screw.



# Classifications

### eCl@ss

eCl@ss 4.0	27140815
eCl@ss 4.1	27140815
eCl@ss 5.0	27260701
eCl@ss 5.1	27260701
eCl@ss 6.0	27279221
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

#### ETIM

ETIM 2.0	EC001121
ETIM 3.0	EC002062
ETIM 4.0	EC002062
ETIM 5.0	EC002062
ETIM 6.0	EC002062

#### UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	39121413

# Approvals

#### Approvals

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EAC / EAC / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

### Approval details

EAC	EAC	EAC-Zulassung
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# Approvals

EAC	EAC	7	/500651.22.01.00246
UL Recognized	<b>FL</b> http	p://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		60 V	
cUL Recognized	c <b>AL</b> http	p://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
New Sector and the			
Nominal current IN Nominal voltage UN		4 A 60 V	
Accessories Accessories			
Protective cap			
Sealing cap - PROT-M12 FS	-PA-CHAIN - 143087	73	
Μ	12 sealing cap made of	plastic with fixing band, for sensor cables, for free M12 sockets	
Screwdriver tools			
Tool - SACC BIT M12-D20 -	1208445		



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



### Accessories

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

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

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