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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

- 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



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 900465
Weight per Piece (excluding packing)	48.6 GRM
Country of origin	Germany
Note	Made to Order (non-returnable)

#### 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
Rated voltage	60 V DC
	48 V AC



# Technical data

## General

Number of positions	5
Insulation resistance	$\geq$ 100 M $\Omega$
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 mm² 0.75 mm²
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 ()
	1 Nm 1.4 Nm ()
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

## 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



# Classifications

eCl@ss
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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

#### **UNSPSC**

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

# Approvals

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Approvals

UL Recognized / cUL Recognized / EAC / EAC

Ex Approvals

Approvals submitted

Approval details

UL Recognized **5** 

cUL Recognized **51** 

EAC



# Approvals

EAC

#### Accessories

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 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

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



#### Accessories

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



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

# Drawings

Schematic diagram



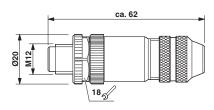
Schematic diagram



Cable connection side M12 (screw connection)

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

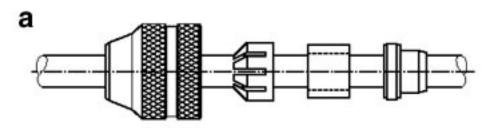
#### Dimensional drawing

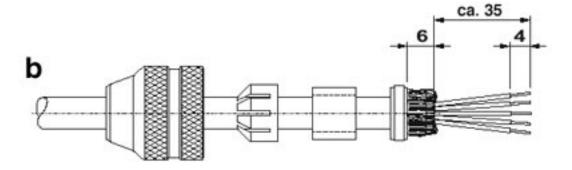


Plug, M12 x 1, straight, shielded



#### 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.

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