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Connector, Universal, 8-position, Socket straight M12, Coding: A, Screw connection, knurl material: Zinc diecast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

#### Your advantages

- 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



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 910921
GTIN	4017918910921
Weight per Piece (excluding packing)	27.440 g
Weight per piece (including packing)	27.780 g
Custom tariff number	85366990
Country of origin	Germany

#### Technical data

#### **Dimensions**

Diameter housing	20 mm
Length	54 mm
External cable diameter	6 mm 8 mm
Stripping length of the sheath	20 mm
Stripping length of the individual wire	5 mm

#### Ambient conditions

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



## Technical data

### General

Rated voltage  30 V AC 30 V DC  Number of positions  8 Insulation resistance  ≥ 100 MΩ  Coding  A - standard  Standards/regulations  M12 connector IEC 61076-2-101  Signal type/category  Universal  Status display  No  Overvoltage category  II  Degree of pollution  3  Connection method  Screw connection  Conductor cross section  0.25 mm² 0.5 mm² (with out ferrule)  0.14 mm² 0.34 mm² (with ferrule)  0.25 mm² 0.5 mm² (solid)  Conductor cross section AWG  24 20 (without ferrule)  Insertion/withdrawal cycles  Torque  0.4 Nm (M12 knurl)  0.2 Nm (Screw terminal blocks)  0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Note	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.
30 ∨ DC	Rated current at 40°C	2 A
Number of positions       8         Insulation resistance       ≥ 100 MΩ         Coding       A - standard         Standards/regulations       M12 connector IEC 61076-2-101         Signal type/category       Universal         Status display       No         Overvoltage category       II         Degree of pollution       3         Connection method       Screw connection         Conductor cross section       0.25 mm² 0.5 mm² (without ferrule)         0.14 mm² 0.34 mm² (with ferrule)       0.25 mm² 0.5 mm² (solid)         Conductor cross section AWG       24 20 (without ferrule)         Insertion/withdrawal cycles       ≥ 100         Torque       0.4 Nm (M12 knurl)         0.2 Nm (Screw terminal blocks)       0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Rated voltage	30 V AC
Standards/regulations   ≥ 100 MΩ   A - standard		30 V DC
Coding         A - standard           Standards/regulations         M12 connector IEC 61076-2-101           Signal type/category         Universal           Status display         No           Overvoltage category         II           Degree of pollution         3           Connection method         Screw connection           Conductor cross section         0.25 mm² 0.5 mm² (without ferrule)           0.14 mm² 0.34 mm² (with ferrule)         0.25 mm² 0.5 mm² (solid)           Conductor cross section AWG         24 20 (without ferrule)           26 22 (with ferrule)         26 22 (with ferrule)           Insertion/withdrawal cycles         ≥ 100           Torque         0.4 Nm (M12 knurl)           0.2 Nm (Screw terminal blocks)         0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Number of positions	8
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Connection method       Screw connection         Conductor cross section       0.25 mm² 0.5 mm² (without ferrule)         0.14 mm² 0.34 mm² (with ferrule)       0.25 mm² 0.5 mm² (solid)         Conductor cross section AWG       24 20 (without ferrule)         26 22 (with ferrule)       26 22 (with ferrule)         Insertion/withdrawal cycles       ≥ 100         Torque       0.4 Nm (M12 knurl)         0.2 Nm (Screw terminal blocks)       0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Overvoltage category	II II
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0.2 Nm (Screw terminal blocks) 0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Insertion/withdrawal cycles	≥ 100
0.8 Nm 1 Nm (Pressure screw with sleeve housing)	Torque	0.4 Nm (M12 knurl)
,		0.2 Nm (Screw terminal blocks)
Coroughly in torque		0.8 Nm 1 Nm (Pressure screw with sleeve housing)
Tightening torque Screw plug insert with sleeve housing as far it will go	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	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
Material of grip body	PA
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

### Standards and Regulations

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

**Environmental Product Compliance** 



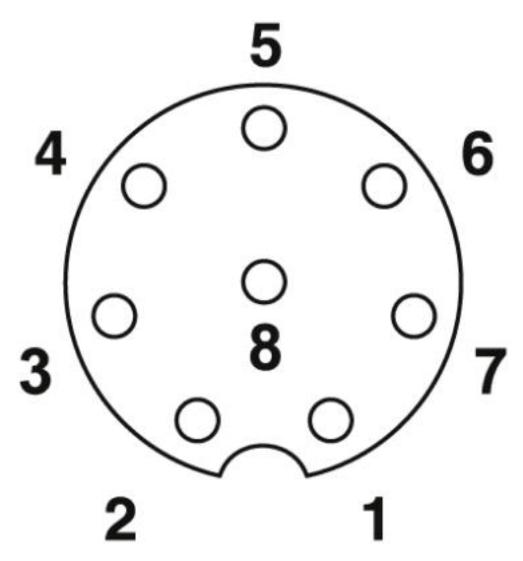
## Technical data

### **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

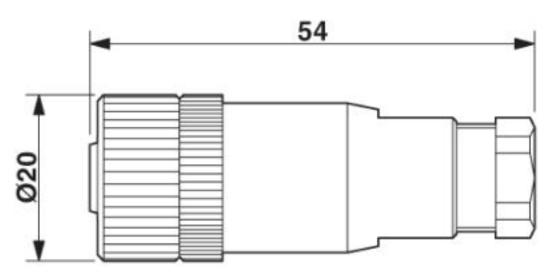
#### Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side



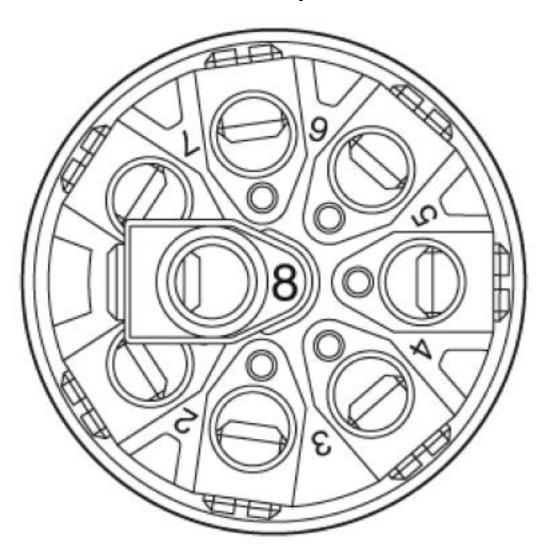
### Dimensional drawing



M12 x 1 socket, straight



Schematic diagram



Cable connection side M12 (screw connection)

### 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
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

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## Classifications

### **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
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

# **Approvals**

### Approvals

Approvals

UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

## Approval details

UL Recognized	<i>7</i> .1	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
Nominal voltage UN			60 V	
Nominal current IN		-	2 A	

cUL Recognized	. <b>5</b> \(\alpha\)	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
Nominal voltage UN			60 V	



## Approvals

Nominal current IN	2 A

cULus Recognized



#### Accessories

Accessories

Cable by the meter

Cable reel - SAC-8P-100,0-PUR/0,25 - 1550630



Cable ring, halogen-free PUR, black, 8-pos., conductor colors: White / brown / green / yellow / gray / pink / blue / red, cable length: 100 m

#### Cable end sleeve

Ferrule - A 0,25-5 - 3202465



Ferrule, length: 5 mm, color: silver

#### Crimping tool

Crimping pliers - CRIMPFOX 6H - 1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4,  $0.14 \text{ mm}^2 \dots 6 \text{ mm}^2$ , unlockable pressure lock, lateral entry

Plug for cable screw gland



#### Accessories

Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



#### Screwdriver tools

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

#### 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

#### Screwdriver - SZS 0,4X2,0 - 1205202



Micro screwdriver, bladed, size:  $0.4 \times 2.0 \times 60$  mm, 2-component grip, with non-slip grip and twist cap

#### Stripping tool

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from  $\emptyset$  of 4.4 to 7 mm, any stripping length

#### Torque tool



#### Accessories

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

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



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

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