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Connector, Universal, 5-position, Socket straight M12, Coding: A, Screw connection, knurl material: Plastic, cable gland Pg11-DUO, external cable diameter 2.1 mm ... 3 mm / 4 mm ... 5.2 mm

#### Your advantages

- Safe use in the field, thanks to a high degree of protection
- Screw connection: proven connection technology for a large selection of different conductors
- Save space: connect two sensors to one connector with a multiple grommet



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 017918 457099
GTIN	4017918457099
Sales Key	02

#### Technical data

### Dimensions

Diameter housing	20 mm	
Length	58 mm	
External cable diameter	2x 2.1 mm 3 mm (when using the seal for small outer cable diameters)	
	2x 4 mm 5.2 mm (when using the seal for large outer cable diameters)	
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)
	-40 °C 85 °C (Plug / socket)
Degree of protection	IP67



## Technical data

### General

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.
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	5
Color handle area	black
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 II
Degree of pollution	3
Connection method	Screw connection
Conductor cross section	0.25 mm² 0.75 mm² (without ferrule)
	0.14 mm² 0.75 mm² (with ferrule)
	0.25 mm² 0.75 mm² (solid)
Conductor cross section AWG	24 18 (without ferrule)
	26 20 (with ferrule)
Insertion/withdrawal cycles	≥ 50
Torque	0.4 Nm (M12 knurl)
	0.8 Nm 1 Nm
	0.2 Nm (Screw terminal blocks)
Tightening torque	Screw plug insert with sleeve housing as far it will go
Assembly instructions	This connector includes one seal for small and one seal for large outer cable diameters.

### Material

Contact material	CuZn
Contact surface material	CuSnZn
Contact carrier material	PA
Material of grip body	PA
Material, knurls	Plastic
Sealing material	NBR

### Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
Connection in acc. with standard	CUL
Standards/specifications	M12 connector IEC 61076-2-101

**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"	

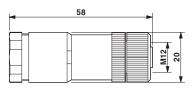
## **Drawings**

#### Schematic diagram



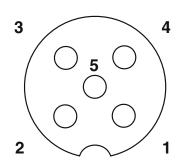
Cable connection side M12 (screw connection)

#### Dimensional drawing



M12 x 1 socket, straight

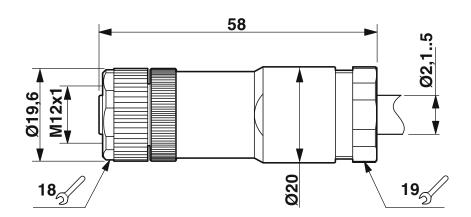
#### Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view



### Dimensional drawing



M12 x 1 socket, straight

### Classifications

## eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 11.0	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 9.0	27440102

### **ETIM**

ETIM 2.0	EC001121
ETIM 3.0	EC002062
ETIM 4.0	EC002062
ETIM 6.0	EC002062
ETIM 7.0	EC002635

### **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



## Classifications

### **UNSPSC**

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			125 V	
Nominal current IN			4 A	

cUL Recognized	. <b>71</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 221474
Nominal voltage UN			125 V	
Nominal current IN			4 A	

cULus Recognized

### Accessories

Accessories

Cable by the meter



#### Accessories

Cable reel - SAC-3P-100,0-PUR/0,25 - 1501689



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 3-wire, color single wire: brown, blue, black, cable length: 100 m

Cable reel - SAC-3P-100,0-PUR/0,34 - 1501650



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 3-wire, color single wire: brown, blue, black, cable length: 100 m

Cable reel - SAC-4P-100,0-PUR/0,25 - 1501692



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

Cable reel - SAC-4P-100,0-PUR/0,34 - 1501663



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

Cable reel - SAC-5P-100,0-PUR/0,34 - 1501676



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 5-wire, color single wire: brown, white, blue, black, green-yellow, cable length: 100 m

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 - SZF 1-0,6X3,5 - 1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size:  $0.6 \times 3.5 \times 100$  mm, 2-component grip, with non-slip grip

#### 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

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