

Please be informed that the data shown in this PDF Document is generated from our Online Catalog. Please find the complete data in the user's documentation. Our General Terms of Use for Downloads are valid (http://phoenixcontact.com/download)



Connector, Universal, 8-position, shielded, Socket straight M12, Coding: A, Screw connection, knurl material: Zinc die-cast, 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
- 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 908621
GTIN	4017918908621

#### Technical data

### Dimensions

Diameter housing	20 mm
Length	56 mm
External cable diameter	6 mm 8 mm
Stripping length of the sheath	35 mm
Stripping length of the individual wire	5 mm

#### Ambient conditions

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

#### General

Note	NOTE: Observe the permissible bending radii when laying conductors,
NOIC	since the degree of protection may be put in jeopardy if the bending



## Technical data

### General

	forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
Rated current at 40°C	2 A
Rated voltage	30 V AC
	30 V DC
Number of positions	8
Insulation resistance	$\geq$ 100 M $\Omega$
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 mm <sup>2</sup> 0.34 mm <sup>2</sup> (with ferrule)
	0.25 mm² 0.5 mm² (solid)
Conductor cross section AWG	24 20 (without 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 nut with coupling sleeve)
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
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

## Standards and Regulations

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

## **Environmental Product Compliance**

REACh SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years



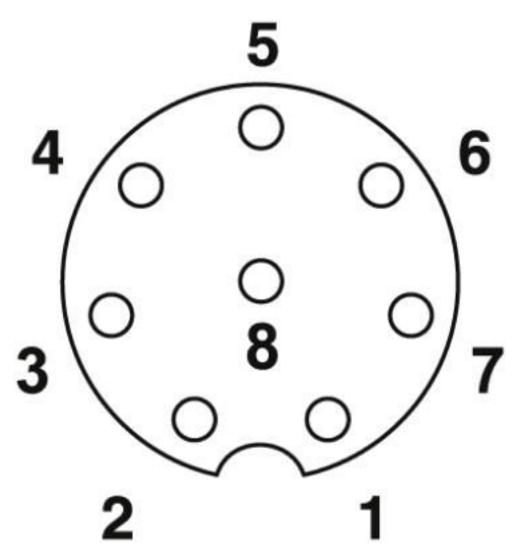
## Technical data

**Environmental Product Compliance** 

For details about hazardous substances go to tab "Downloads",
Category "Manufacturer's declaration"

# Drawings

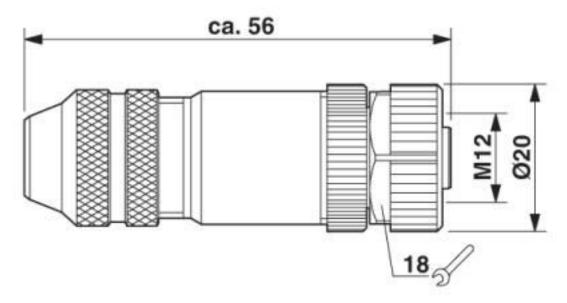
Schematic diagram



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



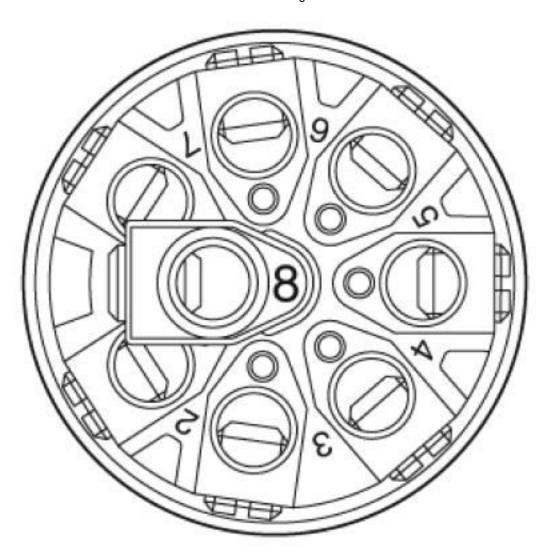
### Dimensional drawing



M12 x 1 socket, straight, shielded



Schematic diagram



Cable connection side M12 (screw connection)

### Classifications

## eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

09/11/2020 Page 5 / 9



## 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 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 mm<sup>2</sup> ... 6 mm<sup>2</sup>, unlockable pressure lock, lateral entry

#### Data cable by the meter

Network cable - VS-OE-OE-94B-100,0 - 1416567



Network cable, Ethernet CAT5 (1 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded, free cable end, on free cable end, cable length: 100 m

Network cable - VS-OE-OE-94C-100,0 - 1416318



Network cable, Ethernet CAT5 (1 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded, free cable end, on free cable end, cable length: 100 m, For drag chains



### Accessories

Network cable - VS-OE-OE-94F-100,0 - 1416347



Network cable, Ethernet  $CAT6_A$  (10 Gbps), 8-position, PUR halogen-free, water blue RAL 5021, shielded, free cable end, on free cable end, cable length: 100 m

Plug for cable screw gland

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

M12 sealing cap 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

Screwdriver - SZS 0,4X2,0 - 1205202



 $\label{eq:microscrewdriver} \mbox{Micro screwdriver, bladed, size: 0.4 x 2.0 x 60 mm, 2-component grip, with non-slip grip and twist cap}$ 

Stripping tool



### Accessories

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

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

Phoenix Contact 2020 © - all rights reserved http://www.phoenixcontact.com

PHOENIX CONTACT GmbH & Co. KG Flachsmarktstr. 8 32825 Blomberg Germany

Tel. +49 5235 300 Fax +49 5235 3 41200

http://www.phoenixcontact.com

# **Mouser Electronics**

**Authorized Distributor** 

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Phoenix Contact: 1511860