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Flush-type socket, Ethernet hybrid CAT5 (IEC 11801:2002) (100 Mbps), 8-position, Socket, M12-SPEEDCON, Y - hybrid, Rear mounting, M16 x 1.5, Contacts with connected litz wires, cable length: 0.5 m, 0.14 mm², TPE litz wire

M12 panel feed-through, rear mounting

### Your advantages

- ☑ Pre-assembled with litz wires for immediate use
- MI standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- For high transmission safety: shield connection to the housing with optional EMC nut



## **Key Commercial Data**

Packing unit	1 pc
GTIN	4 046356 807913
GTIN	4046356807913

### Technical data

### **Dimensions**

Length of cable	0.5 m
Ambient conditions	

#### Ambient conditions

Ambient temperature (operation)	-25 °C 85 °C
	-40 °C 85 °C (without mechanical actuation)
Degree of protection	IP67

#### General

Note	The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	0.5 A (Data)

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## Technical data

## General

	6 A (Power)
Rated voltage	60 V AC (Power and data)
	60 V DC (Power and data)
Rated surge voltage	0.8 kV
Number of positions	8
Insulation resistance	> 100 MΩ
Coding	Y - hybrid
Standards/regulations	M12 connector IEC 61076-2-113
Signal type/category	Ethernet hybrid CAT5 (IEC 11801:2002), 100 Mbps
Overvoltage category	III
Degree of pollution	3
Connection method	Contacts with connected litz wires
Insertion/withdrawal cycles	> 100
Torque	3 Nm 4 Nm (Installation-side)
Mounting type	Rear mounting M16 x 1.5
Transmission characteristics (category)	CAT5 (IEC 11801:2002)

### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PPA
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM

## Cable

Cable type	TPE litz wire
Conductor cross section	0.14 mm²
	0.5 mm²
AWG signal line	26
AWG power supply	20
Conductor structure signal line	1.10 mm
Conductor structure, voltage supply	1.50 mm
Thickness, insulation	0.25 mm
Wire colors	Signal: orange/white, orange, green/white, green Power: blue, white, brown, black
Material conductor insulation	TPE
Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector IEC 61076-2-113
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	$\leq$ 142 m $\Omega$ /m
	$\leq 40.1 \text{ m}\Omega/\text{m}$



## Technical data

## Cable

Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Nominal voltage, cable	300 V
Test voltage, cable	3000 V AC
Ambient temperature (operation)	-40 °C 105 °C (cable, fixed installation)
	-30 °C 90 °C (cable, flexible installation)

## Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-113
Flammability rating according to UL 94	V0
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.
	WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.
	WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.
	The products are suitable for applications in plant, controller, and electrical device engineering.
	When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	Assembled products may not be manipulated or improperly opened.
	Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).
	When using the product in direct connection with third-party manufacturers, the user is responsible.
	• For operating voltages > 50 V AC, conductive connector housings must be grounded
	Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product
	Only use tools recommended by Phoenix Contact
	Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products
	Ensure that the protective or functional ground has been properly connected.
	VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector



## Technical data

## Standards and Regulations

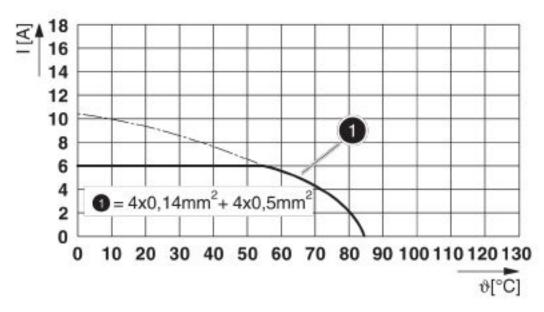
	The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
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### **Environmental 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

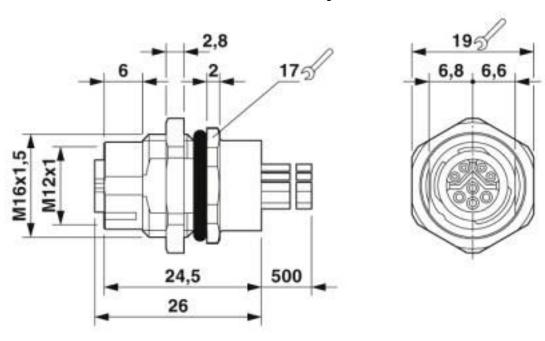
### Diagram



I = current strength, T = ambient temperature

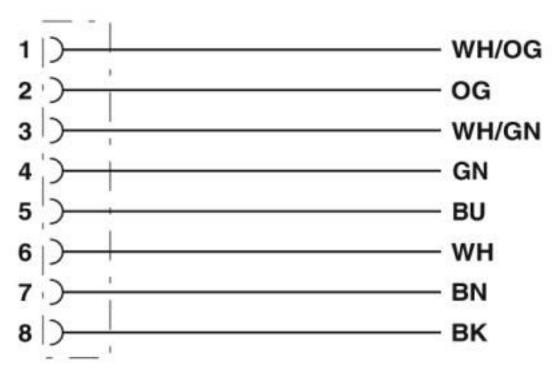


Dimensional drawing



M12 flush-type socket, rear mounting, M16 fastening thread

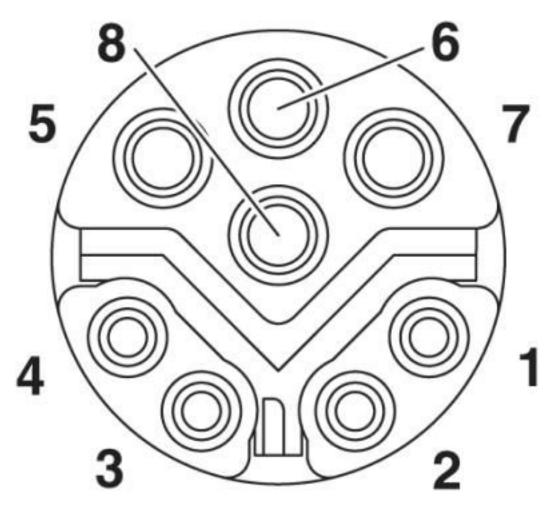
Circuit diagram



Contact assignment of the M12 connector







Pin assignment of socket, 8-pos., Y-coded, socket side view

## 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	27440103
eCl@ss 8.0	27440103
eCl@ss 9.0	27440102

## **ETIM**

ETIM 3.0	EC002061



## Classifications

## **ETIM**

ETIM 4.0	EC002061
ETIM 5.0	EC002061
ETIM 6.0	EC002061

### **UNSPSC**

UNSPSC 6.01	31261501
UNSPSC 7.0901	31261501
UNSPSC 11	31261501
UNSPSC 12.01	31261501
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 / EAC / cULus Recognized

Ex Approvals

## Approval details

UL Recognized	<i>5</i> /1	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E335024-20120308	
Nominal voltage UN			30 V
Nominal current IN			4.5 A

cUL Recognized	<b>.71</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E335024-20120308	
Nominal voltage UN			30 V
Nominal current IN			4.5 A



## Approvals

EAC

EHE

B.01687

cULus Recognized



#### Accessories

Accessories

Plug for cable screw gland

Screw plug - PROT-M12 - 1680539



An M12 screw plug for the unoccupied M12 sockets of the sensor/actuator cable, boxes and flush-type connectors

Screw plug - PROT-M12 SH - 1503302



An M12 screw plug for the unoccupied M12 sockets of the shielded sensor/actuator cable, boxes and flush-type connectors

Screw plug - PROT-M12 FB - 1555538



M12 high-grade steel screw plug, for unoccupied M12 sockets of the sensor/actuator cables, boxes and flush-type connectors for the food industry



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