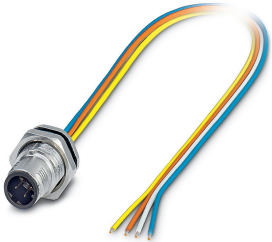


Bus system flat-type plug - SACC-DSI-M12MSD-4CON-M16/0,5 - 1419603

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Bus system flat-type plug, PROFINET CAT5 (IEC 11801:2002), 4-position, Plug, M12, D-coded, Rear mounting, M16 x 1.5, Individual wires, cable length: 0.5 m, 0.34 mm², TPE litz wire

Your advantages

- ✓ Pre-assembled with litz wires for immediate use
- ✓ Customer-specific assemblies and litz wire lengths available
- ✓ Sealed on the litz wire side for optimum leak-tightness
- ✓ All 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
- ✓ SPEEDCON fast locking system reduces cabling times



Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 533454
GTIN	4046356533454
Weight per Piece (excluding packing)	20.000 g
Custom tariff number	85444290
Country of origin	Germany

Technical data

Dimensions

Length of cable	0.5 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
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Technical data

Ambient conditions

	-25 °C ... 85 °C (Plug / socket)
Degree of protection	IP67 (When plugged in)
	IP65 (When plugged in)

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.
	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
Rated current at 40°C	4 A
Rated voltage	250 V
Rated surge voltage	2.5 kV
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	D - data
Standards/regulations	M12 connector according to IEC 61076-2-101
Signal type/category	PROFINET CAT5 (IEC 11801:2002)
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Individual wires
Insertion/withdrawal cycles	> 100
Torque	3 Nm ... 4 Nm (Installation-side)
Mounting type	Rear mounting M16 x 1.5 With flat nut
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Thread type	M16 x 1.5

Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM

Cable

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Technical data

Cable

Cable type	TPE litz wire
Conductor cross section	0.34 mm ²
AWG signal line	22
Conductor structure signal line	7x 0.25 mm
Core diameter including insulation	1.2 mm ±0.07 mm
Thickness, insulation	0.21 mm
Wire colors	Yellow, orange, white, blue
Material conductor insulation	TPE
Conductor material	Tin-plated Cu litz wires
Standards/specifications	M12 connector according to IEC 61076-2-101
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	≤ 57.6 mΩ/m
Transmission characteristics (category)	CAT5 (IEC 11801:2002)
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Ambient temperature (operation)	-40 °C ... 85 °C (cable, fixed installation)
	-25 °C ... 85 °C (cable, flexible installation)

Standards and Regulations

Standards/specifications	M12 connector according to IEC 61076-2-101
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.
	<ul style="list-style-type: none"> • 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.
	<ul style="list-style-type: none"> • 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.
	<ul style="list-style-type: none"> • The products are suitable for applications in plant, controller, and electrical device engineering.
	<ul style="list-style-type: none"> • When operating the connectors in outdoor applications, they must be separately protected against environmental influences.
	<ul style="list-style-type: none"> • Assembled products may not be manipulated or improperly opened.
	<ul style="list-style-type: none"> • 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).

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Technical data

Standards and Regulations

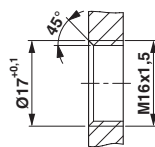
	<ul style="list-style-type: none"> When using the product in direct connection with third-party manufacturers, the user is responsible.
	<ul style="list-style-type: none"> For operating voltages > 50 V AC, conductive connector housings must be grounded
	<ul style="list-style-type: none"> Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.
	<ul style="list-style-type: none"> Observe the corresponding technical data. You will find information: <ul style="list-style-type: none"> On the product On the packing label In the supplied documentation Online at phoenixcontact.com/products under the product
	<ul style="list-style-type: none"> Only use tools recommended by Phoenix Contact
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> Ensure that the protective or functional ground has been properly connected.
	<ul style="list-style-type: none"> 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
	<ul style="list-style-type: none"> 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).

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"

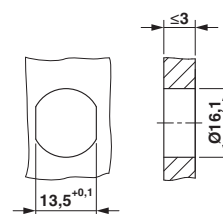
Drawings

Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with thread

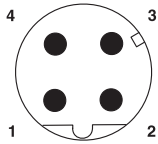
Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with area as anti-rotation protection for panel thicknesses > 2 mm up to max. 4.5 mm)

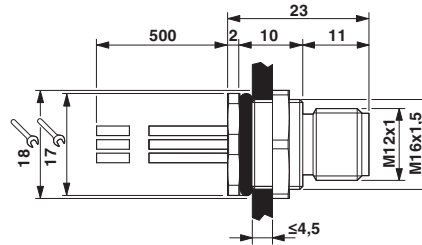
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Schematic diagram



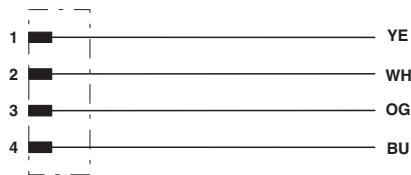
Pin assignment M12 male connector, 4-pos., D-coded, male side

Dimensional drawing



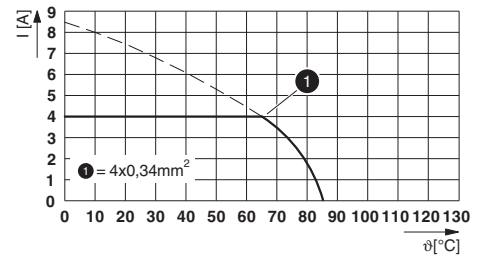
M12 flush-type plug

Circuit diagram



Contact assignment of the M12 connector

Diagram



I = current strength, T = ambient temperature

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 11.0	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 9.0	27440102

ETIM

ETIM 2.0	EC001297
ETIM 3.0	EC002061
ETIM 4.0	EC000830
ETIM 6.0	EC002061

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Classifications

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 / EAC / cULus Recognized

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 118976
Nominal voltage UN	250 V		
Nominal current IN	4 A		
mm ² /AWG/kcmil	22		

EAC		B.01687
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Approvals

cULus Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	E221474-20140616
Nominal voltage UN	250 V		
Nominal current IN	4 A		
mm ² /AWG/kcmil	22-20		

Accessories

Accessories

Protective cap

Sealing cap - PROT-M12 FS - 1560251



M12 sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

Sealing cap - PROT-M12 FS-M - 1430488



M12 metal sealing cap for unoccupied M12 plugs of the sensor/actuator cable, flush-type plugs and I/O devices in the field

Seal

Flat gasket - SACC-M16-SEAL CLM - 1430394



M16 flat gasket, for rear mounting of M12 flush-type connectors with M16 fastening thread