

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

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>)



Bus system flush-type socket, VARAN, 6-pos., M12, shielded, rear/screw mounting with M16 thread, with 1 m bus cable

## Your advantages

- ✓ Pre-assembled with cables in various standard lengths for immediate use
- ✓ Customer-specific assemblies and cable lengths can be supplied
- ✓ Sealed on the cable side for optimum tightness of seal
- ✓ Cable designs for all common networks and fieldbuses
- ✓ For high transmission safety: shield connection to the housing with optional EMC nut



## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356323062

## Technical data

### Dimensions

Length of cable	1 m
-----------------	-----

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 85 °C (Plug / socket)
	-40 °C ... 85 °C (without mechanical actuation)
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
------	---

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

## Technical data

### General

	a protective cap > IP54. Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.
Rated current at 40°C	2 A
Rated voltage	30 V
Rated surge voltage	0.8 kV
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	> 100
Torque	2 Nm ... 3 Nm (Installation-side)

### Material

Flammability rating according to UL 94	V0
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material, knurls	Nickel-plated brass
Sealing material	FKM

### Standards and Regulations

Flammability rating according to UL 94	V0
--	----

### Cable

Cable type	VARAN
Cable type (abbreviation)	970
Signal type/category	VARAN CAT5 (IEC 11801), 100 Mbps
Cable structure	1x2xAWG22/19 + 1x4xAWG24/19
Conductor cross section	4x 0.25 mm <sup>2</sup> (Signal line) 2x 0.38 mm <sup>2</sup> (Power supply)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	19x 0.16 mm
Core diameter including insulation	1.35 mm (Signal line) 1.5 mm (Power supply)
Wire colors	Brown, blue, white/orange, white/green, green, orange
Type of pair shielding	Tinned copper braided shield, 95 % covering
Overall twist	1 star quad and 2 wires with 2 fillers

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

## Technical data

### Cable

Shielding	Tinned copper-braided shield, approx. 85% covering
External sheath, color	black RAL 9005
External cable diameter D	7.8 mm ±0.2 mm
Smallest bending radius, fixed installation	≥ 93 mm
Smallest bending radius, movable installation	≥ 93 mm
Number of bending cycles	3000000
Bending radius	93 mm
Traversing path	2 m
Traversing rate	1 m/s
Acceleration	2 m/s <sup>2</sup>
Cable weight	81 kg/km
Outer sheath, material	SANTOPRENE halogen-free
Material, inner sheath	TPE
Material, filler	Yarn
Material conductor insulation	PP
Conductor material	Bare Cu litz wires
Insulation resistance	5 GΩ*km (Data cable)
Conductor resistance	77 Ω/m (Data cable)
Working capacitance	50 nF (Data cable)
Wave impedance	100 Ω ±15 %
Nominal voltage, cable	125 V (Data cable)
	48 V (Power supply)
Test voltage, cable	2000 V (Power supply)
	max. 700 V AC (Data cable)
Halogen-free	in accordance with DIN EN 50267-2-1
Ambient temperature (operation)	-20 °C ... 80 °C (Cable)
Ambient temperature (installation)	0 °C ... 50 °C

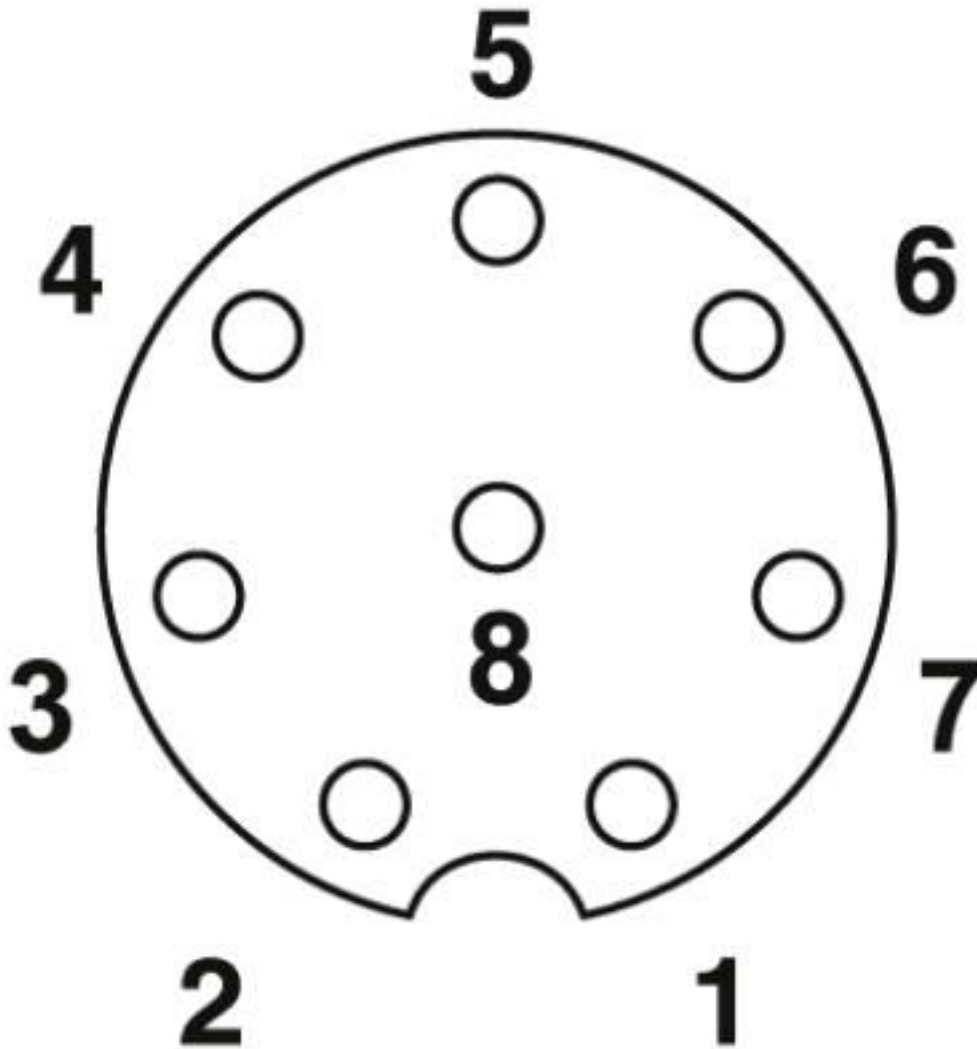
### Environmental Product Compliance

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

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

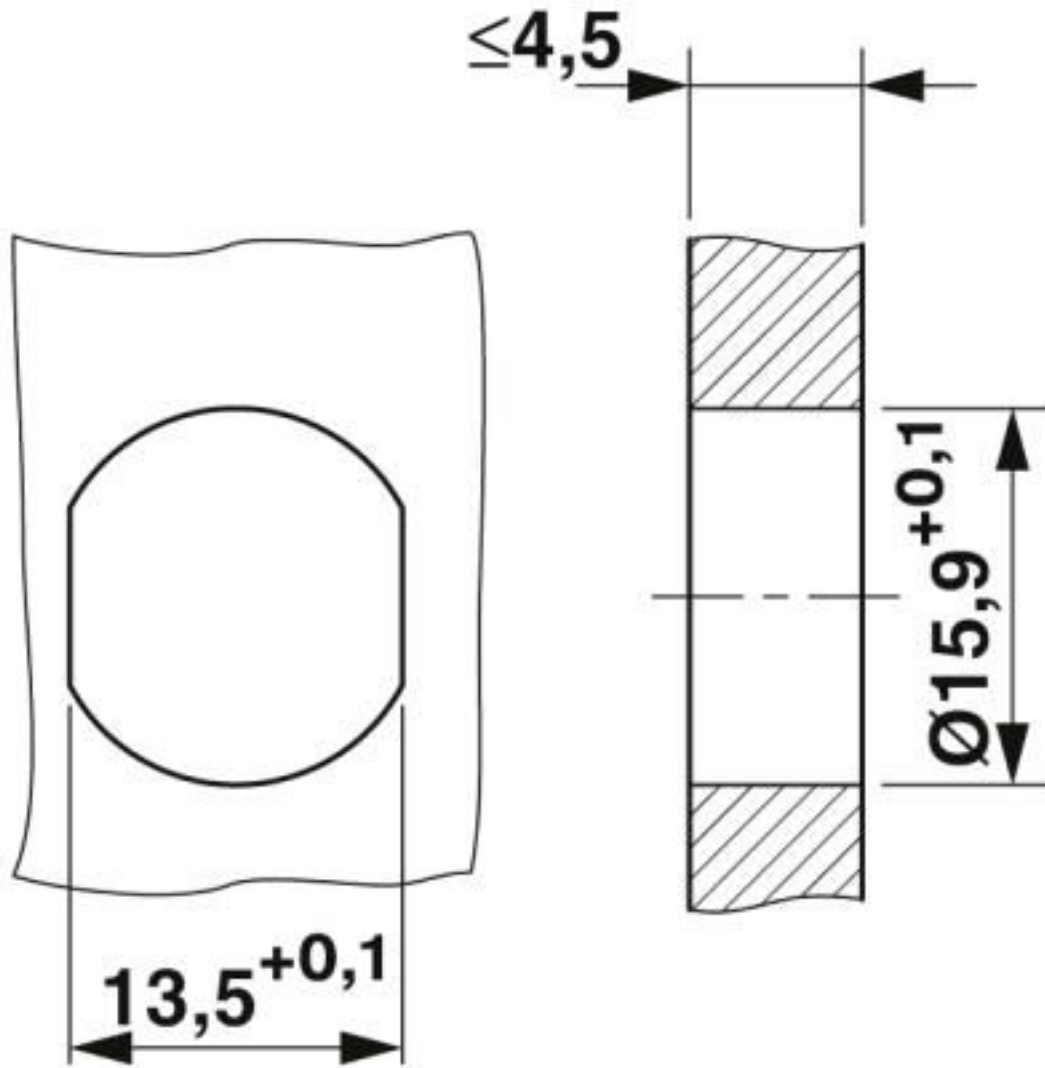
Schematic diagram



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

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

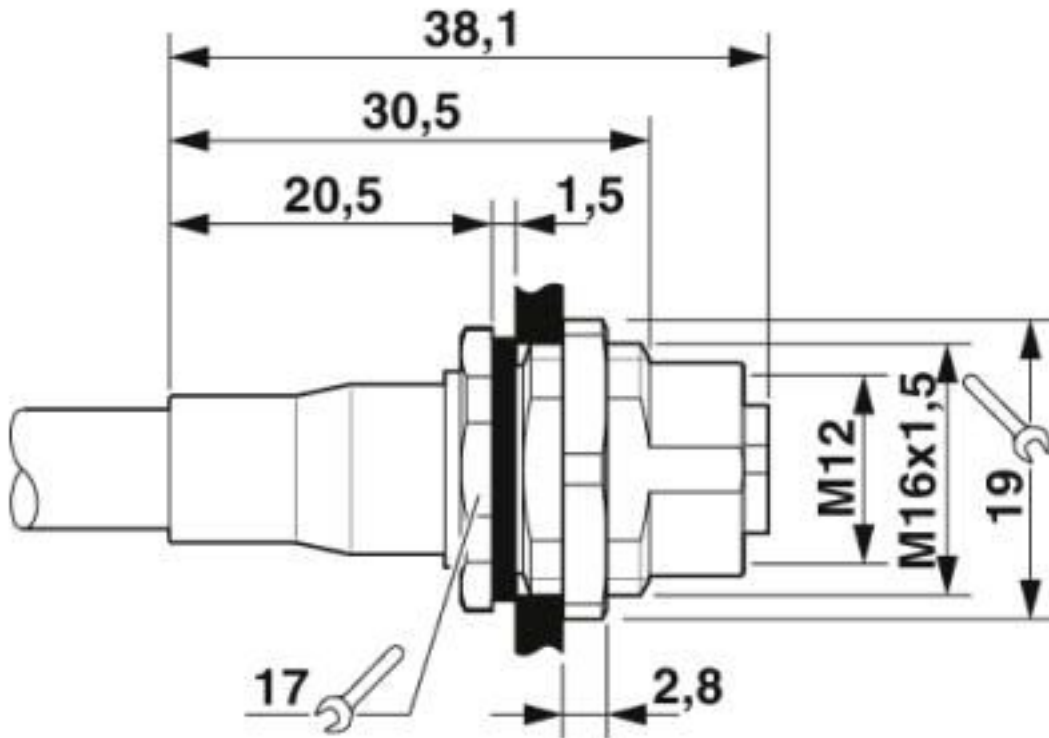
Dimensional drawing



Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

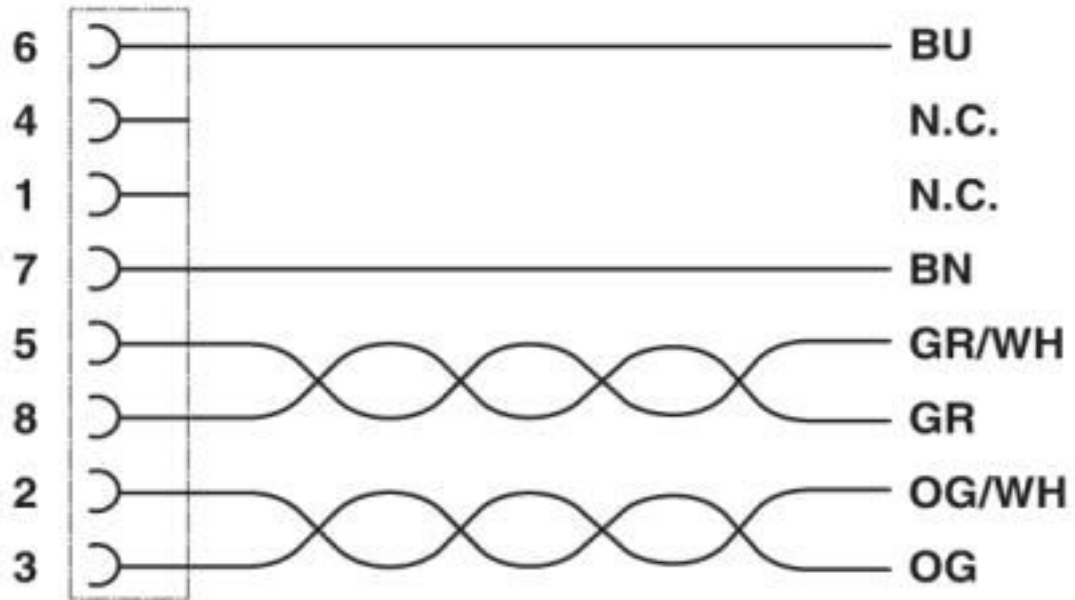
Dimensional drawing



M12 flush-type connector

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

Circuit diagram



Contact assignment of the M12 socket

# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

Cable cross section



VARAN [970]

## 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



# Bus system flat-type plug - SACCBP-M12FS-6CON-M16/1,0-970 - 1429101

## Classifications

### ETIM

ETIM 3.0	EC002061
ETIM 4.0	EC000830
ETIM 5.0	EC002061
ETIM 6.0	EC002061

### 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


EAC

---

Ex Approvals

---

### Approval details

EAC		B.01687
-----	---	---------

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>

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Sensor Cables / Actuator Cables](#) category:*

*Click to view products by [Phoenix Contact](#) manufacturer:*

Other Similar products are found below :

[60963](#) [60964](#) [703000D02F2002](#) [703001D02F0602](#) [703001D02F300](#) [704000D02F120](#) [773032K02F030](#) [802027107404-1](#) [802027213811-1](#)  
[804001A09M150](#) [805001A09M0502](#) [84914-0235](#) [84914-0237](#) [885030A09M020](#) [1200651332](#) [1200651713](#) [1200660844](#) [1200660845](#)  
[1200661173](#) [1200680071](#) [1200720053](#) [1200720081](#) [1200720099](#) [1200720217](#) [1200800231](#) [1200860125](#) [1200870123](#) [1200980102](#)  
[1200650267](#) [1200650298](#) [1200660183](#) [1200660782](#) [1200660849](#) [1200661295](#) [1200661297](#) [1200661342](#) [1200661343](#) [1200670080](#)  
[1200670220](#) [1200680331](#) [1200720252](#) [1200730184](#) [1200860344](#) [1200870359](#) [1200870643](#) [1200980008](#) [1200980031](#) [1210502211](#)  
[1210400542](#) [1211810021](#)