

# Bus system flat-type plug - SACCBP-M12FS-8CON-M16/1,0-940 - 1553378

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, Ethernet, 8-pos., M12, shielded, rear/screw mounting with M16 thread, with 1 m bus cable, 4 x 2 x 0.26 mm<sup>2</sup>



**Ethernet**

## Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356162357

## Technical data

### Dimensions

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

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP67

### General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Overvoltage category	II
Degree of pollution	3

### Material

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

# Bus system flat-type plug - SACCBP-M12FS-8CON-M16/1,0-940 - 1553378

## Technical data

### Material

Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material, knurls	Nickel-plated brass
Sealing material	NBR

### Standards and Regulations

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

### Cable

Cable type	Ethernet, flexible, CAT5
Cable type (abbreviation)	94B
UL AWM style	20963 (80°C/30 V)
Signal type/category	Ethernet CAT5 (IEC 11801), 1 Gbps
Cable structure	4x2xAWG26/7; SF/UTP
Conductor cross section	4x 2x 0.14 mm <sup>2</sup>
AWG signal line	26
Conductor structure signal line	7x 0.16 mm
Core diameter including insulation	0.96 mm
Wire colors	white/blue-blue, white/orange-orange, white/green-green, white/brown-brown
Twisted pairs	2 cores to the pair
Overall twist	4 pairs for core
Shielding	Aluminum-coated foil, tinned copper braided shield
Optical shield covering	70 %
External sheath, color	water blue RAL 5021
Outer sheath thickness	1.05 mm
External cable diameter D	6.4 mm ±0.2 mm
Minimum bending radius, fixed installation	4 x D
Minimum bending radius, flexible installation	8 x D
Tensile strength GRP	≤ 100 N
Cable weight	47 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 500 MΩ*km
Loop resistance	≤ 290.00 Ω/km
Cable capacity	48 nF/km (at 1 kHz)
Wave impedance	100 Ω ±5 Ω (at 100 MHz)
Near end crosstalk attenuation (NEXT)	71.3 dB (with 1 MHz)
	62.3 dB (at 4 MHz)

# Bus system flat-type plug - SACCBP-M12FS-8CON-M16/1,0-940 - 1553378

## Technical data

### Cable

	56.3 dB (at 10 MHz)
	53.2 dB (at 16 MHz)
	51.8 dB (at 20 MHz)
	48.9 dB (at 31.25 MHz)
	44.4 dB (at 62.5 MHz)
	41.3 dB (at 100 MHz)
Power-summated near end crosstalk attenuation (PSNEXT)	62.3 dB (with 1 MHz)
	53.3 dB (at 4 MHz)
	47.3 dB (at 10 MHz)
	44.2 dB (at 16 MHz)
	42.8 dB (at 20 MHz)
	39.9 dB (at 31.25 MHz)
	35.4 dB (at 62.5 MHz)
	32.3 dB (at 100 MHz)
Attenuation	3.2 dB (with 1 MHz)
	6 dB (at 4 MHz)
	9.5 dB (at 10 MHz)
	12.1 dB (at 16 MHz)
	13.6 dB (at 20 MHz)
	17.1 dB (at 31.25 MHz)
	24.8 dB (at 62.5 MHz)
	32 dB (at 100 MHz)
Return loss (RL)	23 dB (at 4 MHz)
	24.1 dB (at 8 MHz)
	25 dB (at 10 MHz)
	25 dB (at 16 MHz)
	25 dB (at 20 MHz)
	23.6 dB (at 31.25 MHz)
	21.5 dB (at 62.5 MHz)
	20.1 dB (at 100 MHz)
Signal runtime	5.3 ns/m
Coupling resistance	≤ 100.00 mΩ/m (at 10 MHz)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	700 V (50 Hz, 1 min.)
Test voltage Core/Shield	700 V (50 Hz, 1 min.)
Flame resistance	according to IEC 60332-1-2
Halogen-free	according to IEC 60754-1
Resistance to oil	according to EN 60811-2-1
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

# Bus system flat-type plug - SACCBP-M12FS-8CON-M16/1,0-940 - 1553378

## Technical data

### Cable

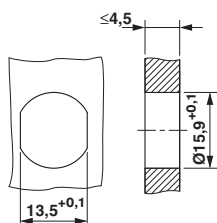
	-20 °C ... 80 °C (cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 80 °C
Ambient temperature (storage/transport)	-20 °C ... 80 °C

### Environmental Product Compliance

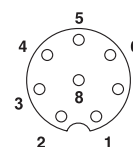
China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Dimensional drawing



Schematic diagram



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

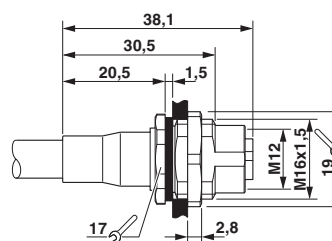
Housing cutout for M16 fastening thread, mounting panel with feed-through hole (alternatively with surface as protection against rotation)

Cable cross section



Ethernet, flexible, CAT5 [94B]

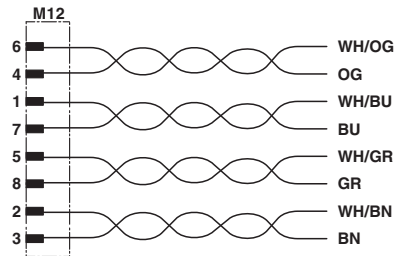
Dimensional drawing



M12 flush-type connector

# Bus system flat-type plug - SACCBP-M12FS-8CON-M16/1,0-940 - 1553378

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

## Approvals

Approvals

Approvals

UL Recognized / EAC

Ex Approvals

## Approval details

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 118976
Nominal voltage UN	30 V		
Nominal current IN	2 A		
mm <sup>2</sup> /AWG/kcmil	24		

EAC		B.00767
-----	--	---------

Phoenix Contact 2019 © - 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>