

# SACC-M12MSD-4CT-CM SH PN - Data connector



1422846

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Data connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Plug straight M12, coding: D, Crimp connection, knurl material: Zinc die-cast, tin-plated, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

## Your advantages

- Extremely compact, thanks to the small wiring space and high contact density
- Safe use in the field, thanks to a high degree of protection
- Safely shielded: reliable shield connection even under extreme mechanical strain
- Robust connection: suitable for railway applications with high shock and vibration loads

## Commercial data

Item number	1422846
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	BF2CJN
Catalog page	Page 27 (C-2-2019)
GTIN	4055626357737
Weight per piece (including packing)	20.59 g
Weight per piece (excluding packing)	20 g
Customs tariff number	85366990
Country of origin	DE

1422846

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## Technical data

### Notes

General	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)
Assembly note	<b>NOTE:</b> Observe the permissible bending radii when routing cables, since the degree of protection may be at risk if the bending forces are too high. Reduce mechanical loads upstream of the connector, e.g., by using cable ties.

### Mounting

Assembly note	Contacts can be clipped in place and unclipped without tools
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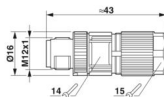
### Product properties

Product type	Circular connector (cable-side)
Application	Data
Sensor type	PROFINET
Number of positions	4
No. of cable outlets	1
Shielded	yes
Coding	D
Cable outlet	straight

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	43 mm
Wrench size, union nut	15 mm
Wrench size, counter nut	14 mm

### External dimensions

Outside diameter	4.5 mm ... 7.5 mm
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### Housing

Diameter housing	16 mm
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### Material specifications

Flammability rating according to UL 94	V0
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Seal material	FKM
Material of grip body	Zinc die-cast, nickel-plated
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, tin-plated
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

## Connection data

### Conductor connection

Connection method	Crimp connection
Connection cross section	0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup> (flexible)
Connection cross section AWG	26 ... 18 (flexible)
Stripping length of the individual wire	4 mm +0,5 mm
Tightening torque	0.4 Nm (M12 knurl) 4 Nm (Pressure nut with coupling sleeve)

### Pin assignment

Contact   Color (signal designation)   Contact (optional)	1 = YE
	2 = WH
	3 = OG
	4 = BU

## Electrical properties

Rated surge voltage	2.5 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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## Connector

### Connection 1

Head design	Plug
Head cable outlet	straight
Head thread type	M12
Coding	D

## Cable/line

Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
Stripping length of the individual wire	4 mm +0,5 mm

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## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C ... 50 °C

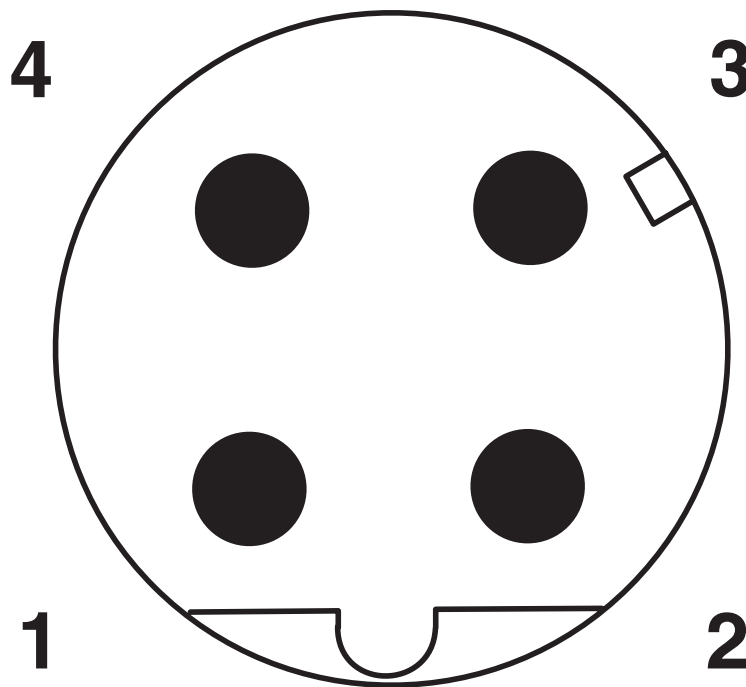
## Standards and regulations

### Testing

Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

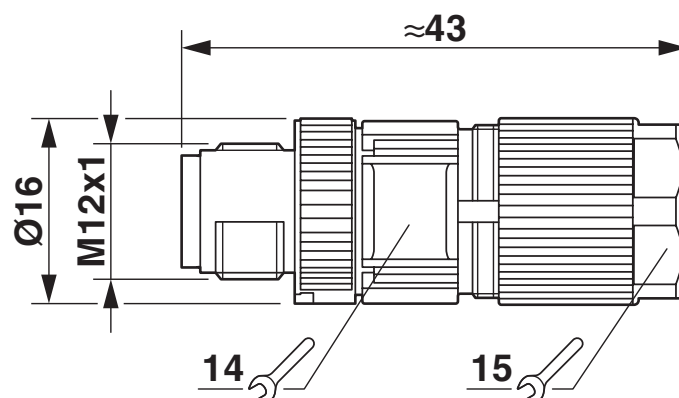
## Drawings

Schematic diagram



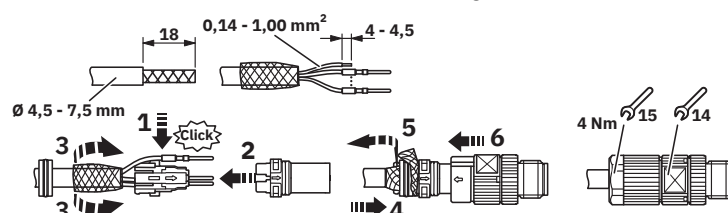
Pin assignment M12 male connector, 4-pos., D-coded, male side

Dimensional drawing



Plug, M12 x 1, straight, shielded

Functional drawing



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## Classifications

### ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

### ETIM

ETIM 9.0	EC002635
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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### EF3.0 Climate Change

CO2e kg	1.226 kg CO2e
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