

# SACC-M12MRD-4CT-CM SH PN - Data connector

1422847

<https://www.phoenixcontact.com/us/products/1422847>



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Data connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Plug angled 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	1422847
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	AF2CJN
GTIN	4055626357744
Weight per piece (including packing)	34.2 g
Weight per piece (excluding packing)	34.2 g
Customs tariff number	85366990
Country of origin	DE

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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
	The pin assignment can be rotated in a 30° pitch to the cable outlet

### 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	angled

### Insulation characteristics

Ovvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	52 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

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Diameter housing	16 mm
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## Material specifications

Flammability rating according to UL 94	V0
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

## 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) 1.5 Nm (Screw plug insert with sleeve housing as far it will go) 4 Nm (Pressure nut with coupling sleeve)

### Connection assignment

Contact   Color (signal designation)   Contact (optional)	1 = YE 2 = WH 3 = OG 4 = BU
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## 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
Transmission speed	100 Mbps

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 100
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## Connector

### Connection 1

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

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## Cable/line

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

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-40 °C ... 85 °C (Plug / socket)

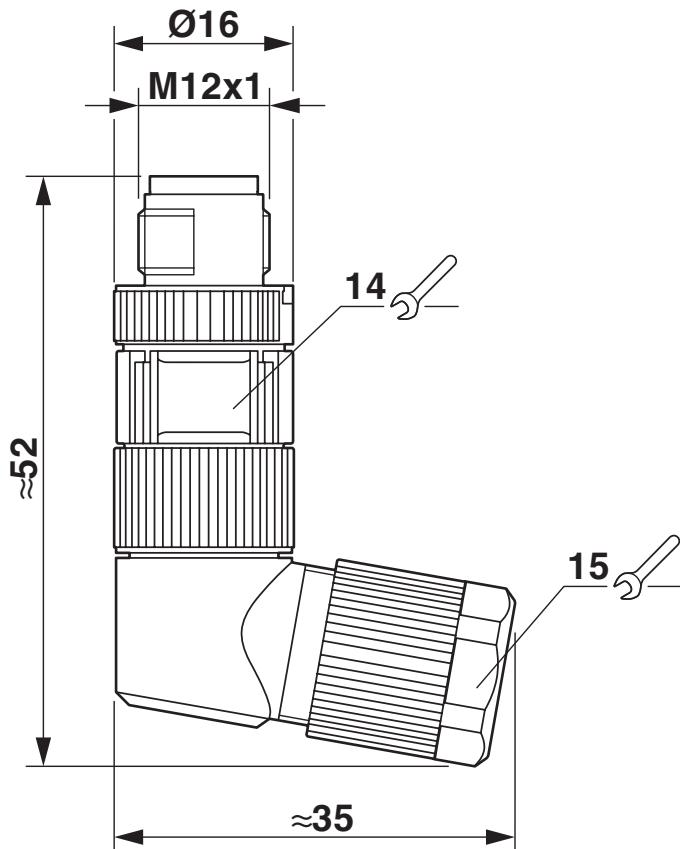
## Standards and regulations

### 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

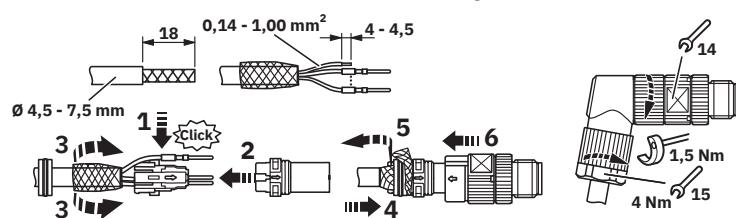
## Drawings

Dimensional drawing



M12 x 1 male plug, angled, shielded

Functional drawing



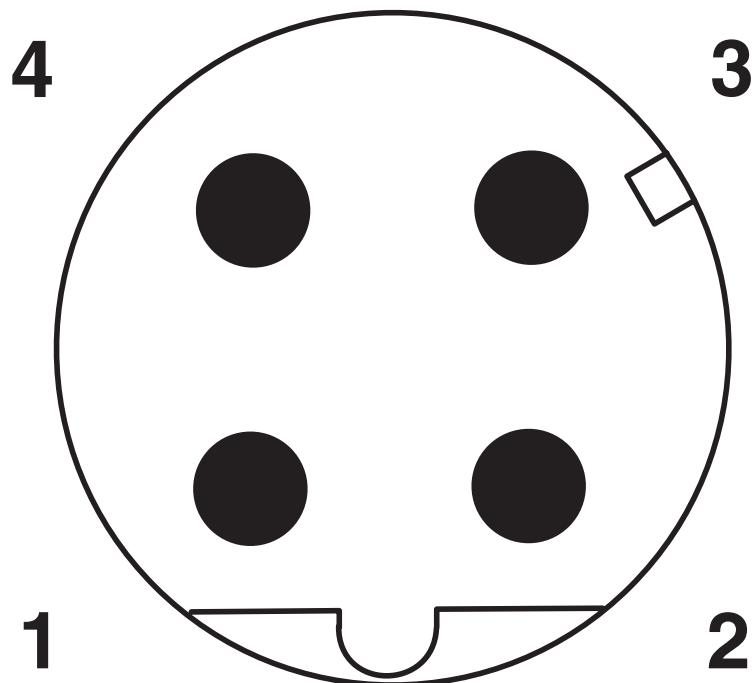
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Schematic diagram



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

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## Classifications

### ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	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	2.446 kg CO2e
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