

# SACC-M12FRD-4CT-CM SH PN - Data connector



1422849

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Data connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Socket 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
- Protected seal in the M12 socket

## Commercial data

Item number	1422849
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	AF2CJN
GTIN	4055626357768
Weight per piece (including packing)	36 g
Weight per piece (excluding packing)	36 g
Customs tariff number	85366990
Country of origin	DE

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## Technical data

### 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

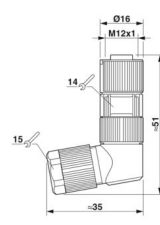
### Product properties

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

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	
Length	51 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
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

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Standards/regulations	PA 6.6
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## 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

## 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	Socket
Head cable outlet	angled
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

## Environmental and real-life conditions

### Ambient conditions

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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)
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### M12

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

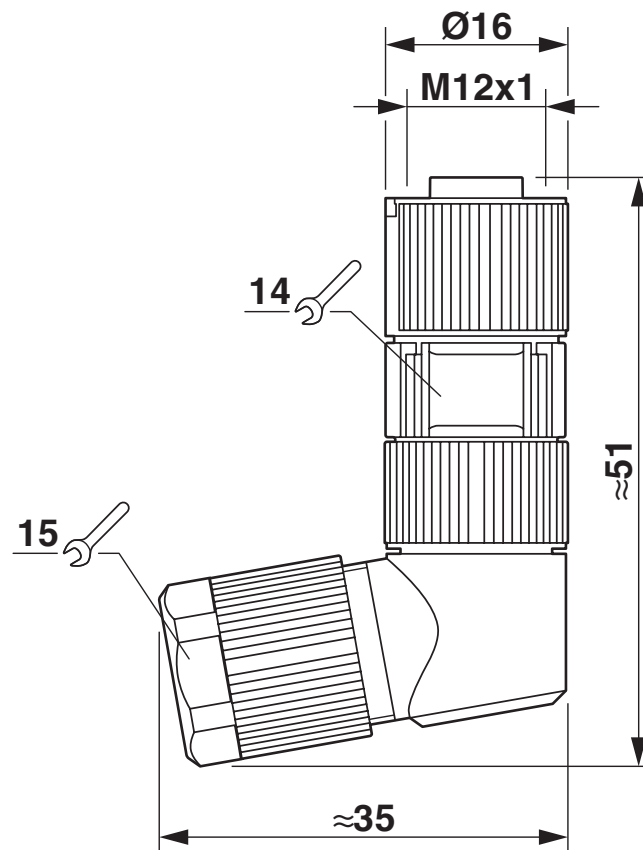
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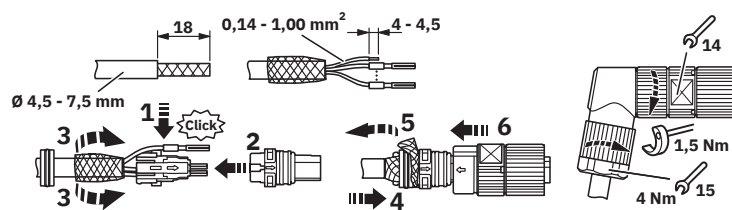
## Drawings

Dimensional drawing



M12 x 1 socket, angled, shielded

Functional drawing



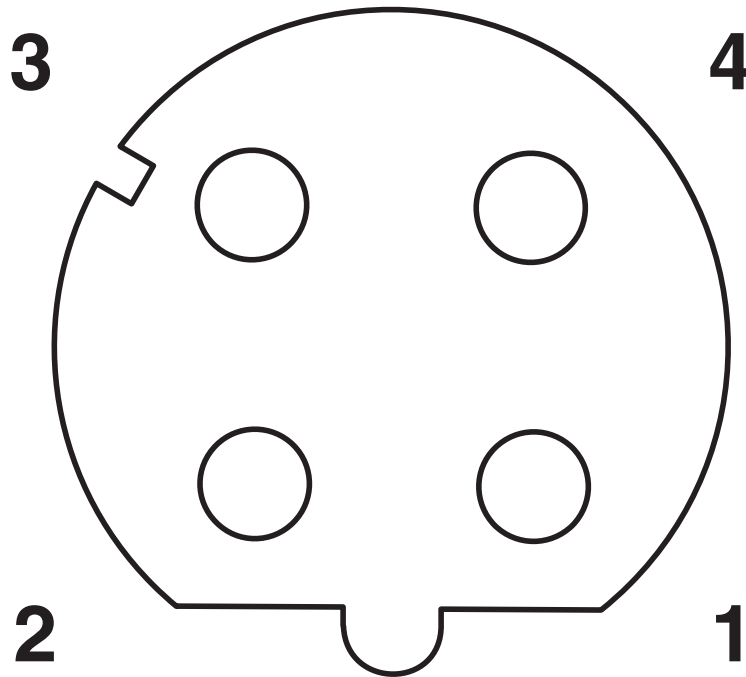
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Schematic diagram



Pin assignment M12 socket, 4-pos., D-coded, female side

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## Classifications

### ECLASS

ECLASS-13.0	27440116
ECLASS-15.0	27440116

### ETIM

ETIM 10.0	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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### EF3.1 Climate Change

CO2e kg	2.708 kg CO2e
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