

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



1422849

<https://www.phoenixcontact.com/us/products/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	BF2CJN
Catalog page	Page 27 (C-2-2019)
GTIN	4055626357768
Weight per piece (including packing)	36 g
Weight per piece (excluding packing)	36 g
Customs tariff number	85366990
Country of origin	DE

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	NOTE: 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

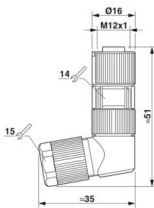
Data management status

Article revision	04
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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

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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
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 ² ... 1 mm ² (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)

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 _N	48 V AC
	60 V DC
Nominal current I _N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Connector

Connection 1

Head design	Socket
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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

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-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

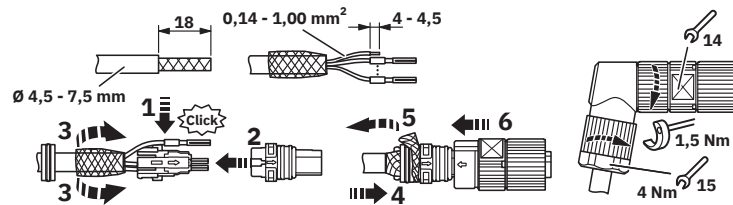
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

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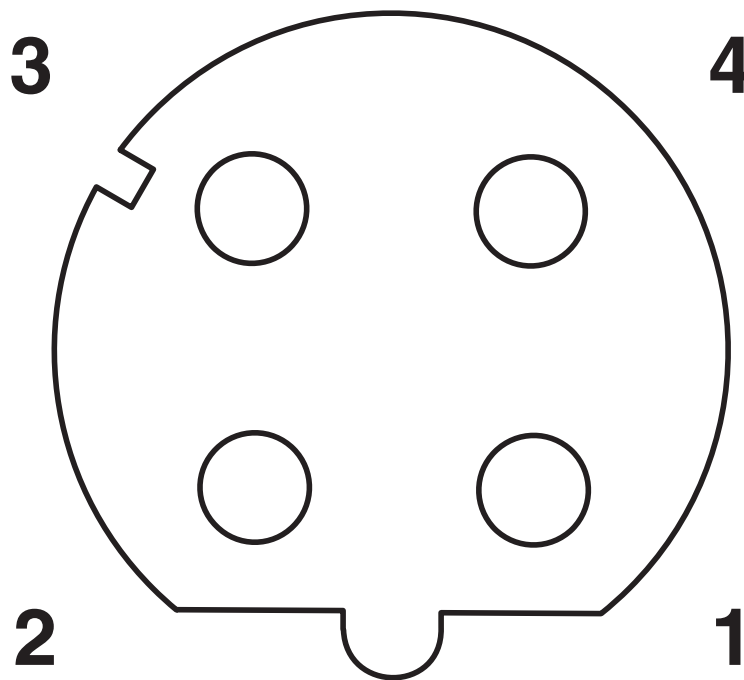
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Drawings

Functional drawing



Schematic diagram



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

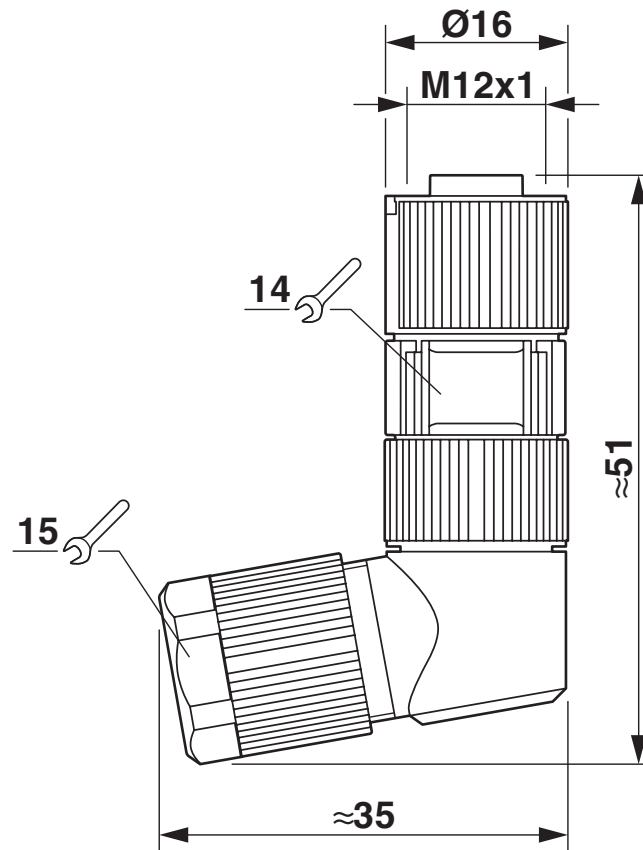
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Dimensional drawing



M12 x 1 socket, angled, shielded

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Approvals

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EAC

Approval ID: RU C-DE.BL08.B.00511

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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
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%
EF3.0 Climate Change	
CO2e kg	2.708 kg CO2e