

Data connector - SACC-M12FRD-4CT-CM SH PN - 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, nickel-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
- ✓ Automated processing possible
- ✓ Protected seal in the M12 socket



Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 357768
GTIN	4055626357768

Technical data

Dimensions

Wrench size, union nut	15 mm
Diameter housing	16 mm
Length	51 mm
External cable diameter	4.5 mm ... 7.5 mm
Stripping length of the sheath	18 mm
Stripping length of the individual wire	4 mm +0,5 mm

Ambient conditions

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

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Technical data

General

Note	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)
	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	4
Insulation resistance	≥ 100 MΩ
Coding	D - data
Standards/regulations	M12 connector IEC 61076-2-101
	Shock, vibration EN 50155:2001
Signal type/category	PROFINET CAT5 (IEC 11801), 100 Mbps
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Crimp connection
Conductor cross section	0.14 mm² ... 1 mm² (flexible)
Conductor cross section AWG	26 ... 18 (flexible)
Wire diameter incl. insulation	≤ 2.55 mm
Insertion/withdrawal cycles	≥ 100
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)
Assembly instructions	The pin assignment can be rotated in a 30° pitch to the cable outlet
Transmission characteristics (category)	CAT5

Material

Flammability rating according to UL 94	V0
Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	FKM
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)

Standards and Regulations

Standards/specifications	M12 connector IEC 61076-2-101
	Shock, vibration EN 50155:2001
Flammability rating according to UL 94	V0

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Technical data

Standards and Regulations

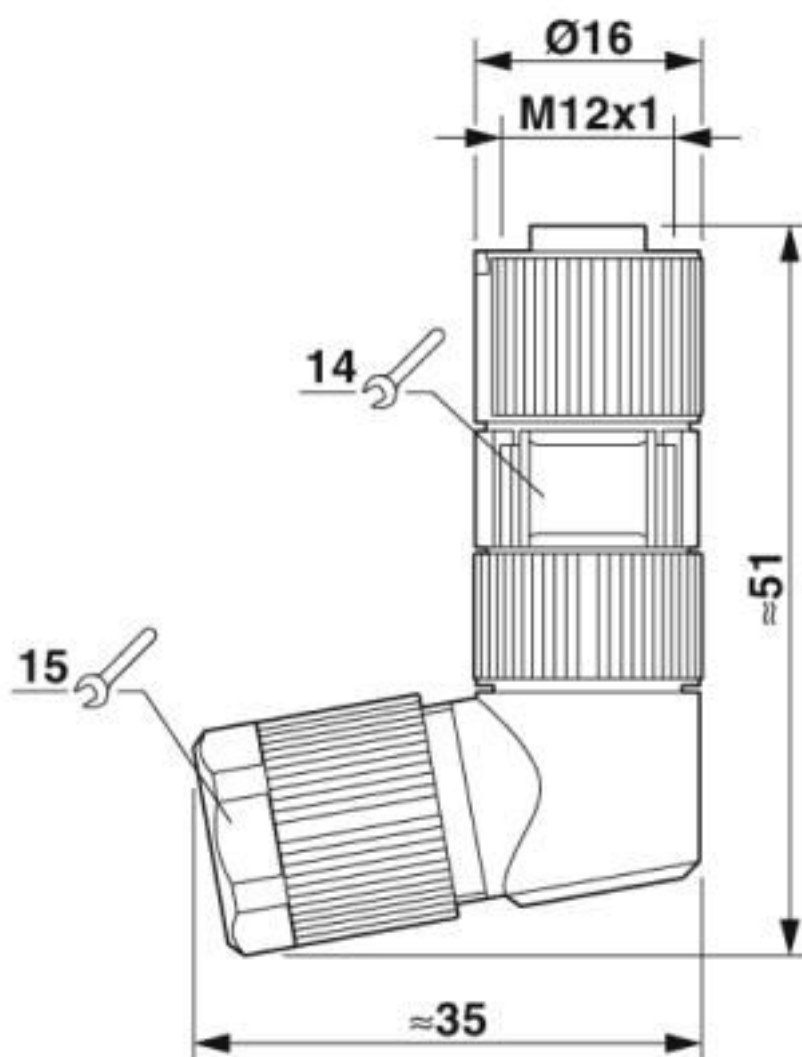
Standards/regulations	acc. to DIN EN 45545-2
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

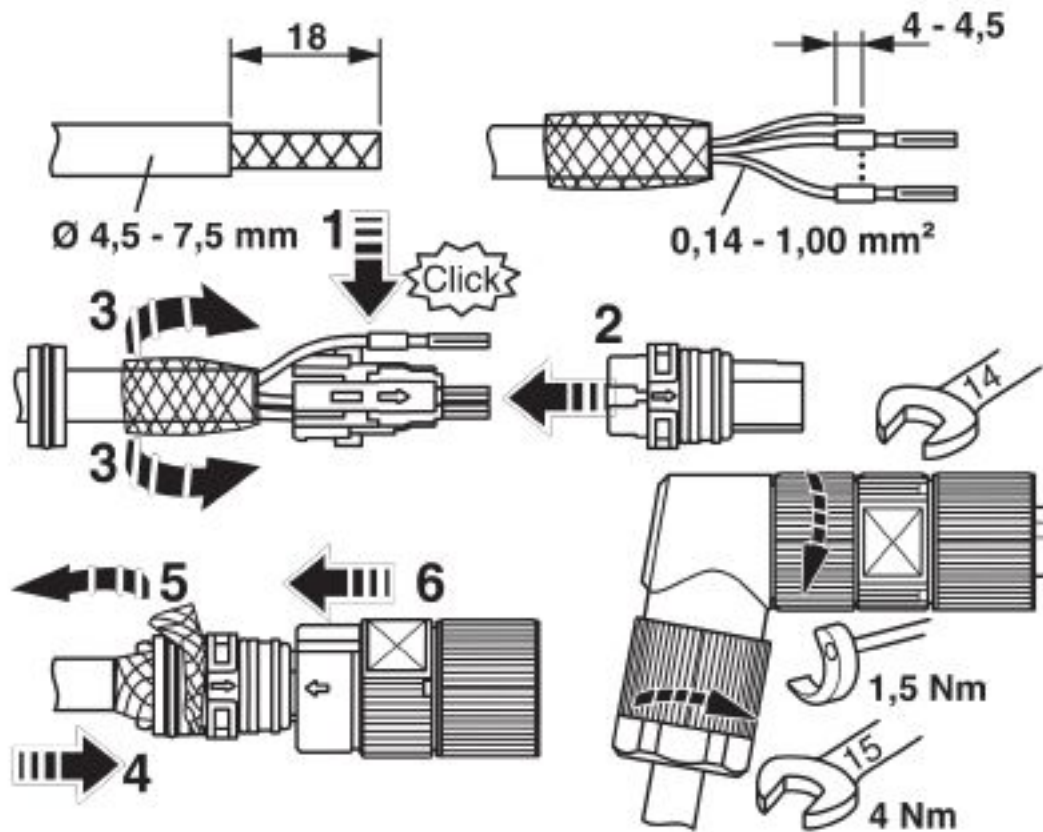
Dimensional drawing



M12 x 1 socket, angled, shielded

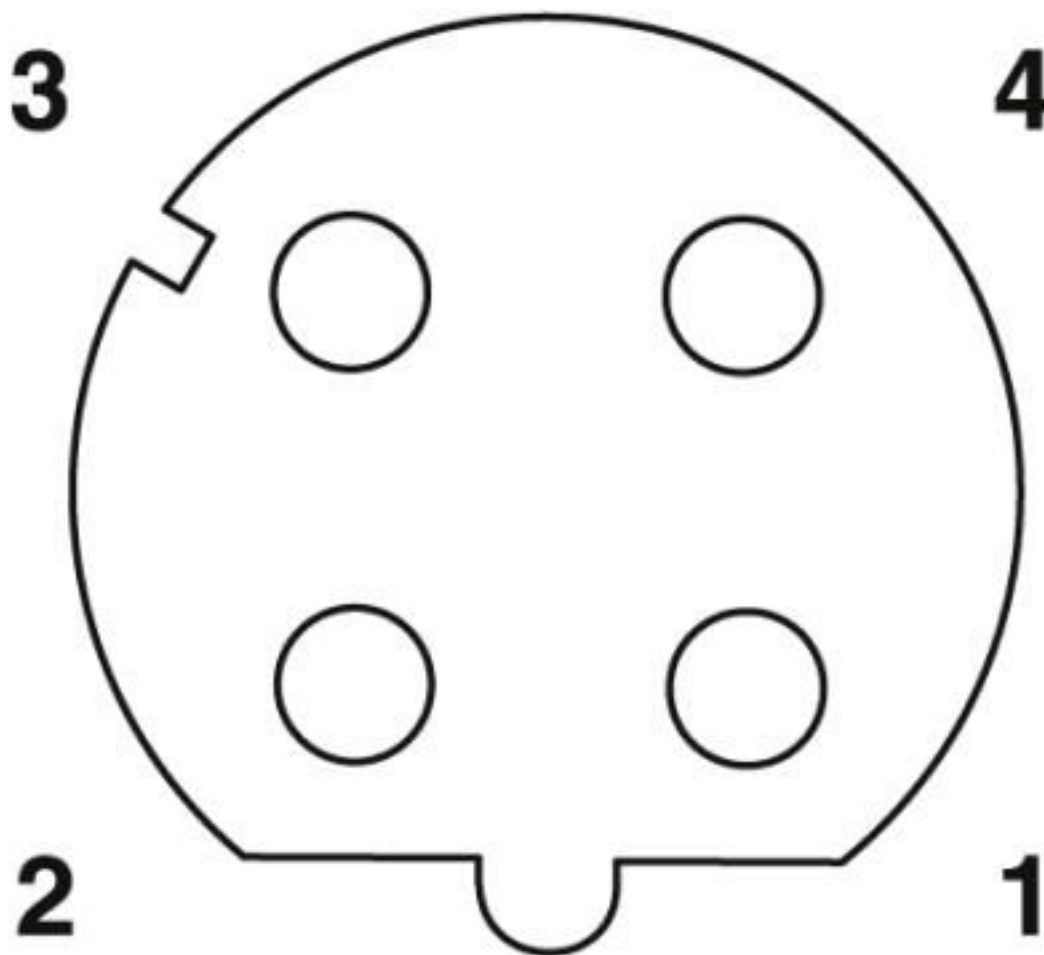
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Functional drawing



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Schematic diagram



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

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 5.1	27260701
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104
eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

ETIM

ETIM 5.0	EC002635
ETIM 6.0	EC002635
ETIM 7.0	EC002635

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Approvals

Approvals

Approvals

EAC / EAC

Ex Approvals

Approval details

EAC		EAC-Zulassung
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EAC		RU C- DE.BL08.B.00511
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Accessories

Accessories

Crimp contact

Crimp contact - CC1,0-TS-0,34F AU - 1064041



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.14 mm² ... 0.34 mm² AWG 26 ... 22

Crimp contact - CC1,0-TS-1,00F AU - 1423646



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.34 mm² ... 1 mm² AWG 22 ... 18

Crimping tool

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Accessories

Crimping pliers - CRIMPFOX-TC MP - 1212510



Crimping pliers, for turned contacts, universal cross section setting, up to a maximum of 2.5 mm², digital display with 0.01 mm increments, pressure lock can be unlocked, including positioning tool

Data cable by the meter

Network cable - VS-OE-OE-93R/... - 1417388



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PUR halogen-free, green RAL 6018, shielded, free cable end, on free cable end, cable length: Free input (0.5 ... 100 m), For robots

Network cable - VS-OE-OE-936/... - 1417375



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PE-X halogen-free, black RAL 9005, shielded, free cable end, on free cable end, cable length: Free input (0.5 ... 100 m), For railway applications

Network cable - VS-OE-OE-937/... - 1402687



Network cable, PROFINET CAT5 (100 Mbps), 4-position, PE-X halogen-free, black RAL 9005, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m), For railway applications

Electronics pliers

Diagonal cutter - MICROFOX-SB - 1212489



Electronic diagonal cutter, round head, without chamfer, with opening spring, mirror-polished and oiled, 2-component grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; hard 0.5 mm diameter

Screwdriver tools

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Accessories

Tool - SAC BIT M12-D16 - 1200305



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, knurl diameter: 16 mm, for 4 mm hexagonal drive

Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

Stripping tool

Stripping tool - WIREFOX-D 13 - 1212162



Stripping tool, for stripping installation lines of Ø 8 - 13 mm , e.g. NYM 3 x 1.5 mm² to 5 x 2.5 mm², single line stripping 0.2 mm² - 4 mm² , with longitudinal cut blade and sliding knife

Stripping tool - WIREFOX SAC - 1212623



Stripping pliers, for halogen-free sensor/actuator cables (SAC cables), with PUR and PVC insulation, from Ø of 4.4 to 7 mm, any stripping length

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

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Accessories

Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

Necessary add-on products

Crimp contact - CC1,0-TS-0,34F AU - 1064041



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.14 mm² ... 0.34 mm² AWG 26 ... 22

Crimp contact - CC1,0-TS-1,00F AU - 1423646



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.34 mm² ... 1 mm² AWG 22 ... 18

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