

Data connector - SACC-M12MRX-8CT-CL SH



1422845

<https://www.phoenixcontact.com/pc/products/1422845>

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Data connector, Ethernet CAT6_A (10 Gbps), PROFINET CAT6_A (10 Gbps), 8-position, shielded, Plug angled M12, Coding: X, Crimp connection, knurl material: Zinc die-cast, tin-plated, external cable diameter 6.5 mm ... 10 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

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Commercial Data

Item number	1422845
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Product Key	BF2CJJ
Catalog Page	Page 27 (C-2-2019)
GTIN	4055626381893
Weight per Piece (including packing)	36.53 g
Weight per Piece (excluding packing)	36.53 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 instruction:	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.

Product properties

Product type	Circular connector (cable-side)
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	X - data
Cable outlet	angled

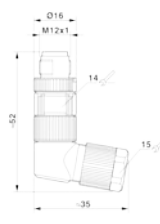
Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Ambient conditions

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

Dimensions

Dimensional drawing	
Length	52 mm

External dimensions

Outside diameter	6.5 mm ... 10 mm
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Housing

Diameter housing	16 mm
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Connector

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Insertion/withdrawal cycles	≥ 100
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Header 1

Head design	Plug
Head cable outlet	angled
Head thread type	M12
Coding	X-coded

Electrical properties

Rated surge voltage	0.8 kV
Insulation resistance	≥ 100 Ω
Nominal voltage U _N	48 V AC 60 V DC
Nominal current I _N	0.5 A

Material specifications

Flammability rating according to UL 94	V0
Sealing material	FKM
Material of grip body	Zinc die-cast, nickel-plated
Contact carrier material	PA 6.6
Cable gland material	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 ... 0.34 mm ² (flexible)
Connection cross section AWG	26 ... 22 (flexible)
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 = WHOG (D1+) 2 = OG (D1-) 3 = WHGN (D2+) 4 = GN (D2-) 5 = WHBN (D4+) 6 = BN (D4-) 7 = WHBU (D3-) 8 = BU (D3+)
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Mounting

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Assembly instructions	Contacts can be clipped in place and unclipped without tools
	The pin assignment can be rotated in a 30° pitch to the cable outlet

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

Standards/specifications	IEC 61076-2-109
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M12

Standards/specifications	EN 50155:2001
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Cable / line

Cable structure

Signal type/category	Ethernet CAT6 _A (IEC 11801), 10 Gbps
	PROFINET CAT6 _A (IEC 11801), 10 Gbps
Stripping length of the individual wire	4 mm +0,5 mm

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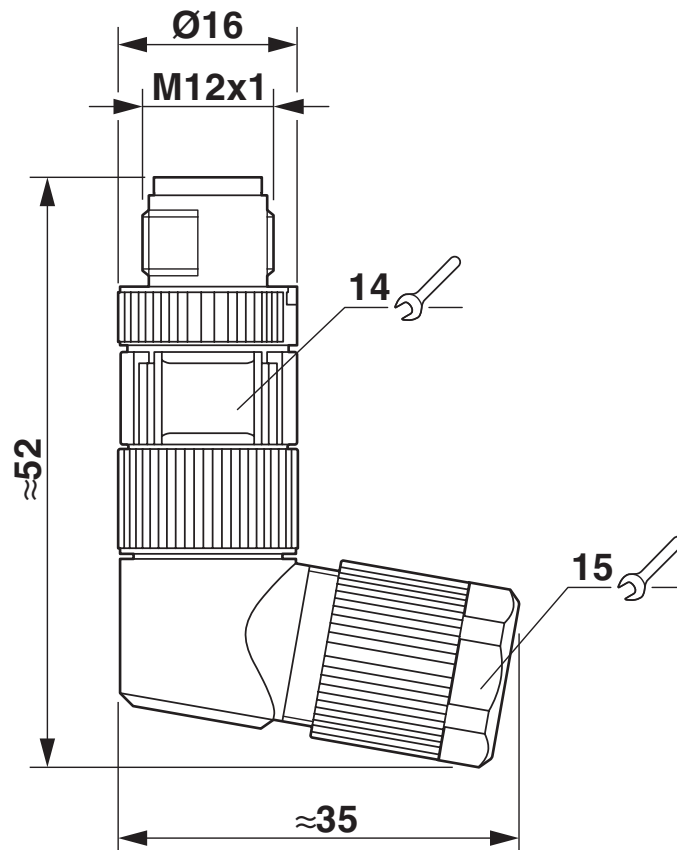
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Drawings

Dimensional drawing

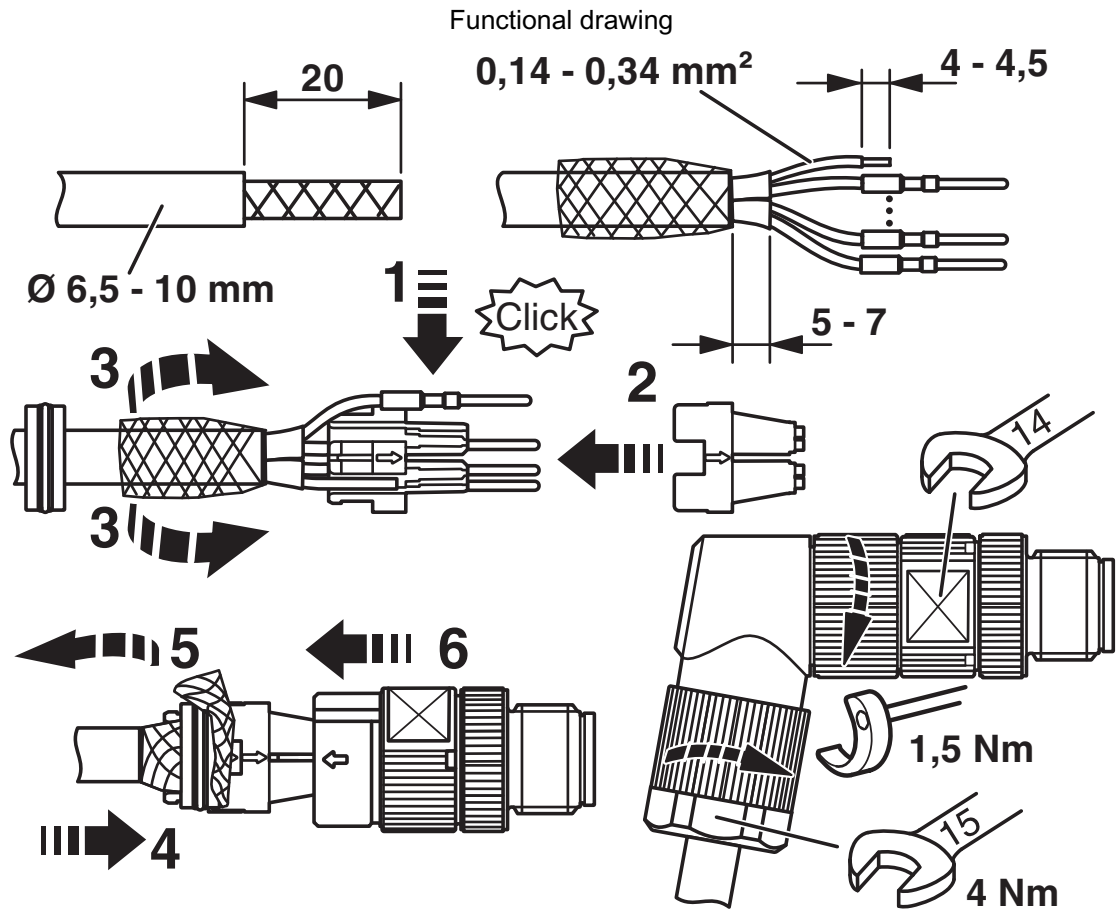


M12 x 1 male plug, angled, shielded

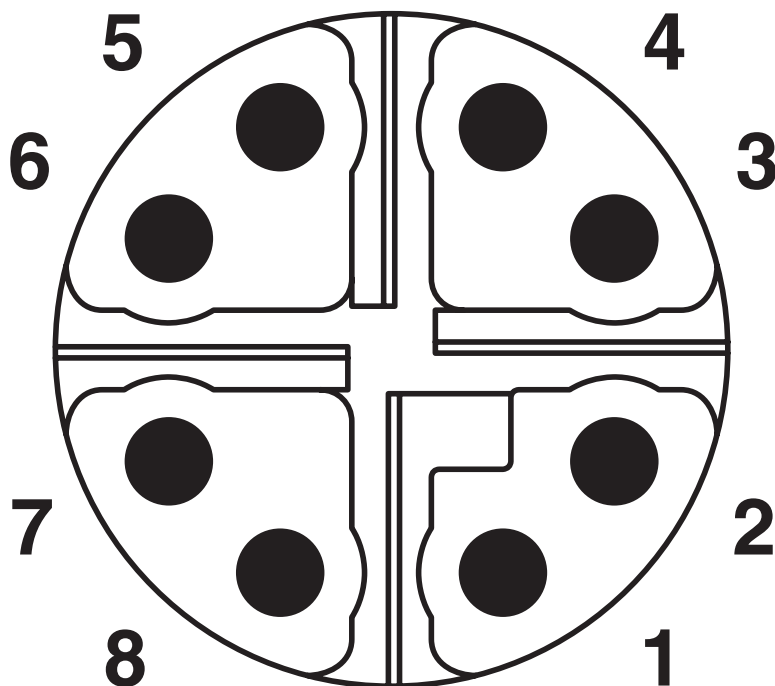
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Schematic diagram



Pin assignment M12 plug, 8-pos., view plug side

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Approvals



EAC

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



UL Listed

Approval ID: E335024-20120831



cUL Listed

Approval ID: E335024-20120831

cULus Listed

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Classifications

ECLASS

ECLASS-9.0	27440102
ECLASS-10.0.1	27440102
ECLASS-11.0	27440102

ETIM

ETIM 8.0	EC002635
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UNSPSC

UNSPSC 21.0	39121400
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Environmental Product Compliance

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

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Mandatory Accessories

Crimp contact

Crimp contact - CC0,6-TS-0,34M AU - 1423643

<https://www.phoenixcontact.com/pc/products/1423643>



Crimp contact, contact diameter: 0.6 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.14 mm² ... 0.34 mm², AWG 26 ... 22

Accessories

Crimping pliers with digital display

Crimping pliers with digital display - CRIMPFOX-TC MP - 1212510

<https://www.phoenixcontact.com/pc/products/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

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Crimp contact

Crimp contact - CC0,6-TS-0,34M AU - 1423643

<https://www.phoenixcontact.com/pc/products/1423643>



Crimp contact, contact diameter: 0.6 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.14 mm² ... 0.34 mm², AWG 26 ... 22

Diagonal cutter

Diagonal cutter - MICROFOX-SB - 1212489

<https://www.phoenixcontact.com/pc/products/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

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Stripping tool

Stripping tool - WIREFOX-D 13 - 1212162

<https://www.phoenixcontact.com/pc/products/1212162>



Stripping tool, for stripping installation lines of \varnothing 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

Stripping tool - WIREFOX SAC - 1212623

<https://www.phoenixcontact.com/pc/products/1212623>



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

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Torque screwdriver

Torque screwdriver - TSD 04 SAC - 1208429

<https://www.phoenixcontact.com/pc/products/1208429>



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

Tool

Tool - SAC BIT M12-D16 - 1200305

<https://www.phoenixcontact.com/pc/products/1200305>



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

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Torque screwdriver

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

<https://www.phoenixcontact.com/pc/products/1212224>



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

Adapter insert

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

<https://www.phoenixcontact.com/pc/products/1212600>



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

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Network cable

Network cable - NBC-100,0-94S - 1423514

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By the meter, Network cable, Ethernet CAT7 (10 Gbps), shielded, PE-X halogen-free, black, 8-wire (4x2xAWG26/7; S/FTP), color single wire: White-blue, white-orange, white-green, white-brown, cable length: 100 m, For railway applications

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