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

1422845

https://www.phoenixcontact.com/us/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

Commercial data

Item number	1422845
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	BF2CJJ
Catalog page	Page 27 (C-2-2019)
GTIN	4055626381893
Weight per piece (including packing)	36.69 g
Weight per piece (excluding packing)	36.53 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	Ethernet
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	X
Cable outlet	angled
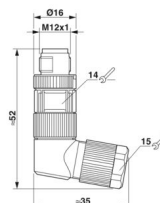
Data management status

Article revision	05

Insulation characteristics

Overvoltage 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	6.5 mm ... 10 mm

Housing

Diameter housing	16 mm

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 mm² ... 0.34 mm² (flexible)
Connection cross section AWG	26 ... 22 (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 = WHOG (D1+)
	2 = OG (D1-)
	3 = WHGN (D2+)
	4 = GN (D2-)
	5 = WHBN (D4+)
	6 = BN (D4-)
	7 = WHBU (D3-)
	8 = BU (D3+)

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

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Connector

Connection 1

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

Cable/line

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

Environmental and real-life conditions

Ambient conditions

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

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)

M12

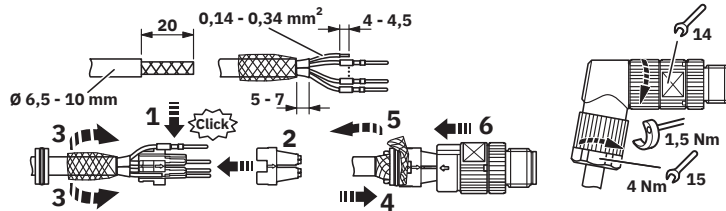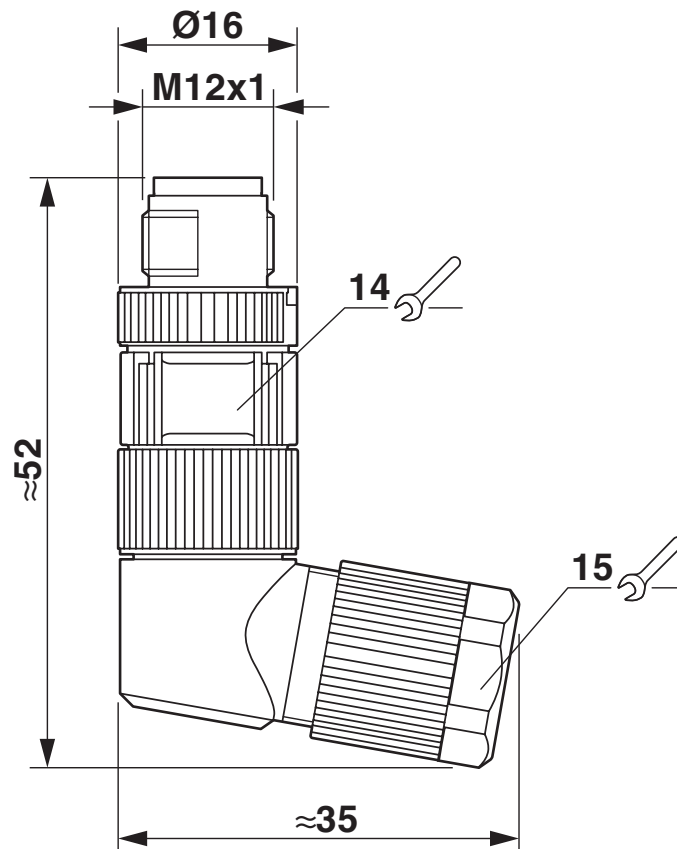|	
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-109
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

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Drawings

Functional drawing

Dimensional drawing
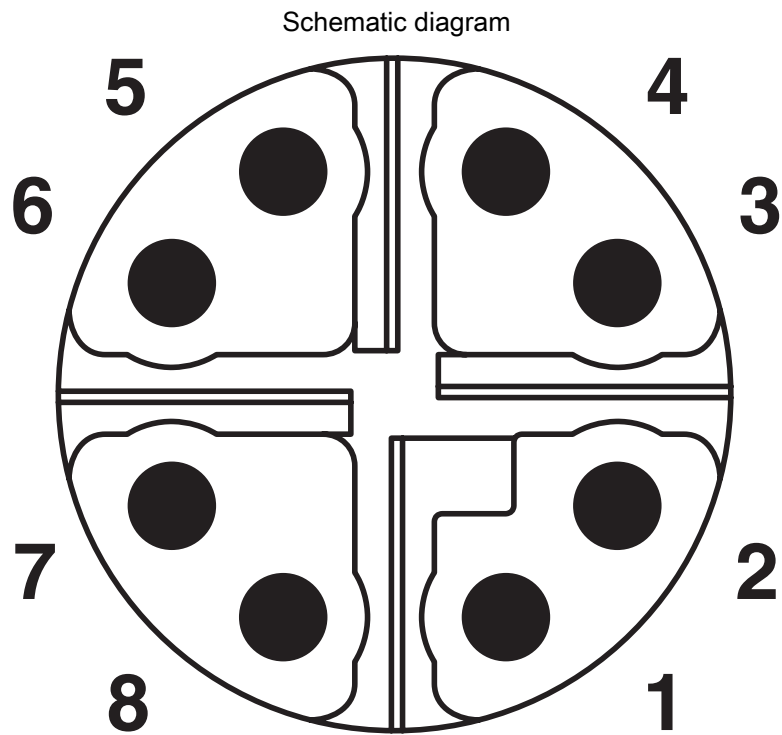

M12 x 1 male plug, angled, shielded

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Schematic diagram

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

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1422845

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

UL Listed
Approval ID: E335024-20120831

cUL Listed
Approval ID: E335024-20120831

cULus Listed

Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

ETIM 9.0	EC002635

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%

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1422845

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Mandatory accessories

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

1423643

https://www.phoenixcontact.com/us/products/1423643

Crimp contact, contact diameter: 0.6 mm, turned, Pin, contact material: CuZn, contact surface: Ni/Au, connection cross section: 0.14 mm^2 ... 0.34 mm^2, AWG 26 ... 22

Accessories

NBC-100,0-94S - Data cable

1423514

https://www.phoenixcontact.com/us/products/1423514

Data cable, Ethernet CAT7 (10 Gbps), 8-position, PE-X halogen-free, black, cable length: 100 m

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CRIMPFOX-TC MP - Crimping pliers with digital display

1212510

https://www.phoenixcontact.com/us/products/1212510

Crimping pliers, for turned contacts, universal cross section setting, up to a maximum of 2.5 mm^2, digital display with 0.01 mm increments, pressure lock can be unlocked, including positioning tool

MICROFOX-SB - Diagonal cutter

1212489

https://www.phoenixcontact.com/us/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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WIREFOX-D 13 - Stripping tool

1212162

https://www.phoenixcontact.com/us/products/1212162

Stripping tool, for stripping installation lines of Ø 8 - 13 mm , e.g. NYM 3 x 1.5 mm^2 to 5 x 2.5 mm^2, single line stripping 0.2 mm^2 - 4 mm^2 , with longitudinal cut blade and sliding knife

WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/us/products/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

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TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429

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

SAC BIT M12-D16 - Tool

1200305

https://www.phoenixcontact.com/us/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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TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/us/products/1212224

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

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600

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