

SACC-P12FRD-4PL-CM SH PN - Connector



1438185

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Connector, PROFINET CAT5 (100 Mbps), 4-position, shielded, Socket angled M12 Push-Pull, coding: D, Push-lock spring connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Your advantages

- Time-saving Push-Lock connection: Tool-free connection and disconnection of conductors by opening the contact levers
- Intuitive connection: Easy assignment of individual litz wires with color-coded and numerical identification of the contact levers
- Integrated Push-in Technology: Wire rigid and pretreated conductors easily by means of simple, direct insertion
- Shock- and vibration-resistant connection: Proven spring-cage technology guarantees secure and reliable contacting
- Safely shielded: Reliable 360° shield connection even under extreme mechanical strain
- Flexible cable outlets with angled connectors
- Save time, thanks to installation with push-pull fast locking

Commercial data

Item number	1438185
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF33
Product key	AF2CFN
GTIN	4063151816100
Weight per piece (including packing)	42.1 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

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.
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Product properties

Product type	Circular connector (cable-side)
Application	Data
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

External dimensions

Outside diameter	4 mm ... 8 mm
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Material specifications

Material	TPE-U (Clamping cage, weight: 1.1 g)
	PA 6 (Actuation lever)
Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated
Standards/regulations	PA 6.6
	PA 6

Connection data

Conductor connection

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Connection method	Push-lock spring connection
Connection cross section	0.14 mm ² ... 0.75 mm ² (without ferrule)
	0.14 mm ² ... 0.5 mm ² (with ferrule)
Connection cross section AWG	26 ... 18 (without ferrule)
	26 ... 20 (with ferrule)
Stripping length of the individual wire	7 mm
Tightening torque	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

Connection assignment

Contact Color (signal designation) Contact (optional)	1 = YE (TD+)
	2 = WH (RD+)
	3 = OG (TD-)
	4 = BU (RD-)

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	48 V AC
	60 V DC
Nominal current I _N	4 A (2 A when using 0.14 mm ² conductors)
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
Head locking type	Push-Pull
Coding	D

Cable/line

Signal type/category	PROFINET CAT5 (based on IEC 11801), 100 Mbps
Stripping length of the individual wire	7 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67

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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, R25, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

PA 6: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

M12

Standard designation

M12 connector

Standards/specifications

IEC 61076-2-101

Standard designation

Shock, vibration

Standards/specifications

EN 50155 Cat. 1B

Standard designation

M12-Push-Pull

Standards/specifications

IEC 61076-2-010

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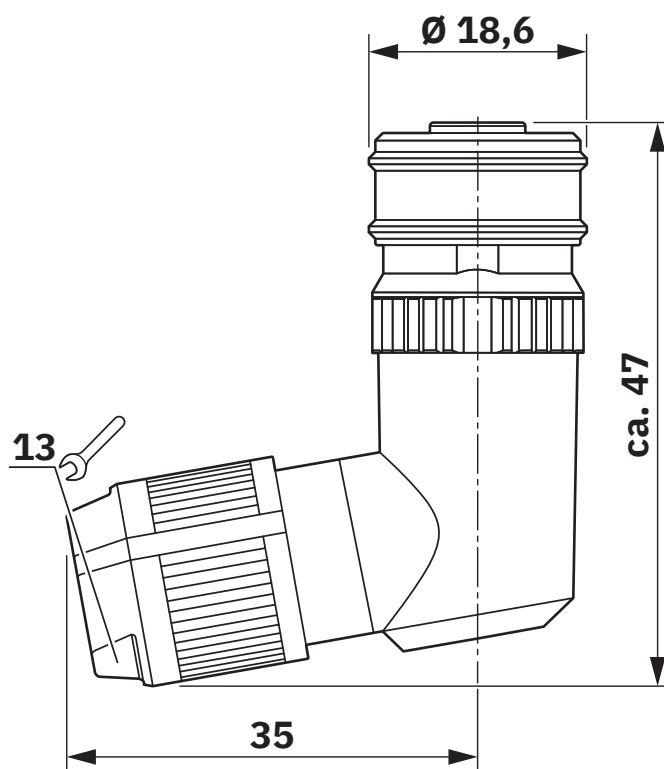
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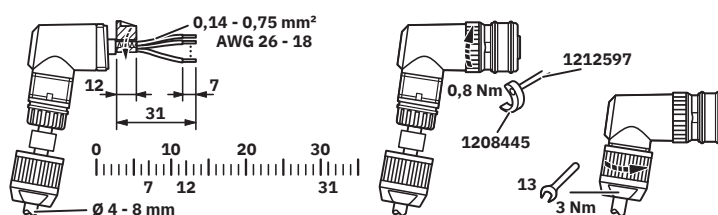
Drawings

Dimensional drawing



Dimensional drawing

Functional drawing



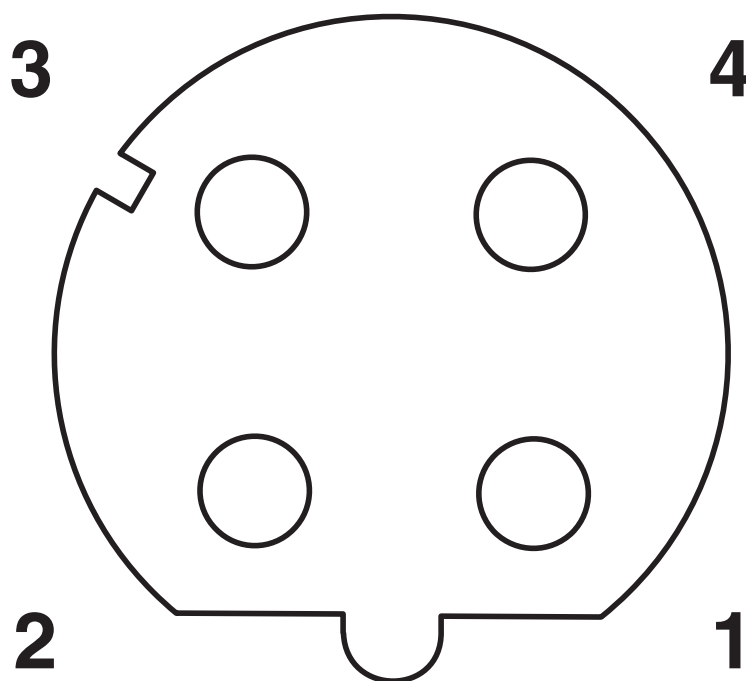
Functional drawing

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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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