

SACC-M12FRB-2PL SH PB - Data connector



1424681

<https://www.phoenixcontact.com/us/products/1424681>

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Data connector, PROFIBUS DP (12 Mbps), 2-position, shielded, Socket angled M12, coding: B, 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

Commercial data

Item number	1424681
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF33
Product key	BF2CFC
Catalog page	Page 422 (C-2-2019)
GTIN	4055626376080
Weight per piece (including packing)	43.5 g
Weight per piece (excluding packing)	43.5 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes

General	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.
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Mounting

Assembly instructions	The connector pin assignment can be rotated 45° to the cable outlet The wires can be connected both with ferrules and without ferrules
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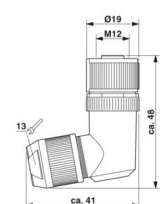
Product properties

Product type	Circular connector (cable-side)
Sensor type	PROFIBUS DP
Number of positions	2
Application	Data
No. of cable outlets	1
Shielded	yes
Coding	B
Cable outlet	angled

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions

Dimensional drawing	
Length	48 mm

External dimensions

Outside diameter	4 mm ... 8 mm
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Housing

Diameter housing	19 mm
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Material specifications

Material	TPE-U
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	PA 6
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: 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)

Connection data

Conductor connection

Connection method	Push-lock spring connection
Connection cross section	0.14 mm ² ... 0.75 mm ² (without ferrule)
	0.08 mm ² ... 0.5 mm ² (with ferrule)
	0.14 mm ² ... 0.75 mm ² (solid)
Connection cross section AWG	26 ... 18 (without ferrule)
	28 ... 20 (with ferrule)
Stripping length of the individual wire	7 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm (Connector with coupling sleeve)
	3 Nm (Pressure nut with coupling sleeve)

Pin assignment

Contact Color (signal designation) Contact (optional)	2 = GN (A)
	4 = RD (B)

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)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Connector

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Connection 1

Head design	Socket
Head cable outlet	angled
Head thread type	M12
Coding	B

Cable/line

Signal type/category	PROFIBUS DP, 12 Mbps
Stripping length of the individual wire	7 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, 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)
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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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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

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

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