SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

Connector, Universal, 4-position, unshielded, Socket straight M12, A, 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

Commercial Data

Item number	1424655
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF2
Product Key	BF2CEA
Catalog Page	Page 19 (C-2-2019)
GTIN	4055626375823
Weight per Piece (including packing)	26.5 g
Weight per Piece (excluding packing)	26 g
Customs tariff number	85366990
Country of origin	DE

Technical Data

Notes

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.

Mounting

Assembly instructions	The wires can be connected both with ferrules and without ferrules

Product properties

Product type	Circular connector (cable-side)
Number of positions	4
No. of cable outlets	1
Shielded	no
Coding	A
Cable outlet	straight

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Dimensions
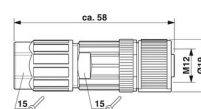
Dimensional drawing	
Length	58 mm

External dimensions

Outside diameter	4 mm ... 8 mm

Housing

Diameter housing	19 mm

Material specifications

Color Handle area	black
Material	PBT
	PA 6
Flammability rating according to UL 94	V0
Seal material	NBR
Material of grip body	PA 6.6
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, 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)
	PBT: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL2, R26: HL3)

Connection data

Conductor connection

Connection method	Push-lock spring connection
Connection cross section	0.14 mm² ... 0.75 mm² (without ferrule)
	0.08 mm² ... 0.5 mm² (with ferrule)
	0.14 mm² ... 0.75 mm² (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)
	0.4 Nm (Connector with coupling sleeve)
	1.5 Nm (Pressure nut with coupling sleeve)

Pin assignment

Contact | Color (signal designation) | Contact (optional)	1 = BN
	2 = WH
	3 = BU
	4 = BK

Electrical properties

Rated surge voltage	2.5 kV
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A (2 A when using 0.14 mm² conductors)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100 (Quantity: 500 with Phoenix Contact mating connector)

Connector

Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Coding	A

Cable/line

Signal type/category	Universal
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, 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)
	PBT: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL2, R26: HL3)

M12

Standards/specifications	IEC 61076-2-101
Standards/specifications	EN 50155:2001

Drawings

Dimensional drawing

ca. 58

M12 Ø19

15   15
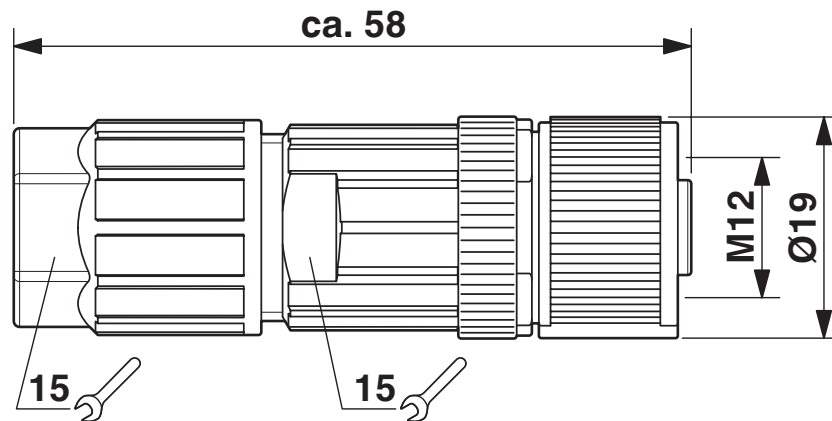
M12 x 1 socket, straight

Schematic diagram

3   4

2   1
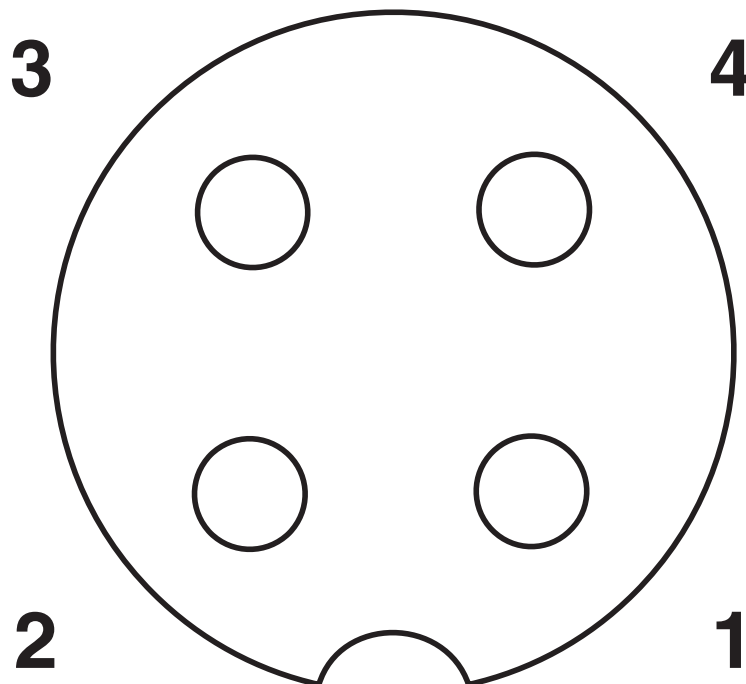
Pin assignment M12 socket, 4-pos., A-coded, view female side

SACC-M12FS-4PL M - Connector

Functional drawing

Ø 4 - 8 mm

24

7

0,14 - 0,75 mm²
AWG 26 - 18

0   10   20
7   24

15   0,4 Nm   1208429
1208445

15   15   0,4 Nm
1,5 Nm
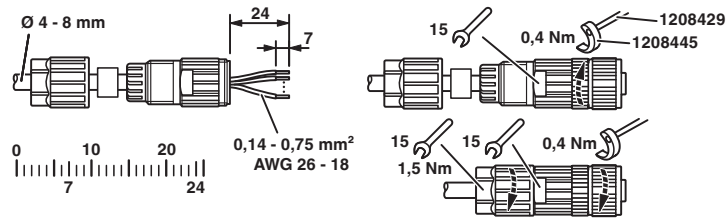
Approvals

EAC
Approval ID: RU C-DE.AI30.B.01102

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

UL Listed
Approval ID: E221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	250 V	4 A	-	26 - 18

cUL Listed
Approval ID: E221474

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
	250 V	4 A	26 - 18	-

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

Classifications

ECLASS

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

ETIM

ETIM 8.0	EC002635

UNSPSC

UNSPSC 21.0	39121400

Environmental Product Compliance

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

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

Accessories

TSD 04 SAC - Torque screwdriver

1208429

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

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

SACC BIT M12-D20 - Tool

1208445

https://www.phoenixcontact.com/in/products/1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

TSD-M 1,2NM - Torque screwdriver

1212224

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

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

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

PROT-M12 MS-PA-CHAIN - Screw plug

1430899

https://www.phoenixcontact.com/in/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets

SAC-4P-100,0-PUR/0,25 - Cable reel

1501692

https://www.phoenixcontact.com/in/products/1501692

By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

SAC-4P-100,0-PUR/0,34 - Cable reel

1501663

https://www.phoenixcontact.com/in/products/1501663

By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 4-wire, color single wire: brown, white, blue, black, cable length: 100 m

WIREFOX 2,5 - Stripping tool

1212368

https://www.phoenixcontact.com/in/products/1212368

Stripping tool, for conductors and cables with a conductor cross section from 0.08 to 2.5 mm, self-adjusting, stripping length adjustable up to 15 mm, cutting capacity up to 6 mm^2 stranded/1.5 mm^2 solid

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

WIREFOX SAC - Stripping tool

1212623

https://www.phoenixcontact.com/in/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

AI 0,25- 6 YE - Ferrule

3203024

https://www.phoenixcontact.com/in/products/3203024

Ferrule, sleeve length: 6 mm, length: 10.5 mm, color: yellow

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

A 0,25- 7 - Ferrule

3202478

https://www.phoenixcontact.com/in/products/3202478

Ferrule, length: 7 mm, color: silver

A 0,34- 7 - Ferrule

3009202

https://www.phoenixcontact.com/in/products/3009202

Ferrule, length: 7 mm, color: silver

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

A 0,5 - 6 - Ferrule

3200218

https://www.phoenixcontact.com/in/products/3200218

Ferrule, length: 6 mm, color: silver

AI 0,5 - 6 WH - Ferrule

3200687

https://www.phoenixcontact.com/in/products/3200687

Ferrule, sleeve length: 6 mm, length: 12 mm, color: white

SACC-M12FS-4PL M - Connector

1424655

https://www.phoenixcontact.com/in/products/1424655

CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/in/products/1212046

Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm^2 ... 6 mm^2, unlockable pressure lock, lateral entry