

1424655

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Connector, Universal, 4-position, unshielded, Socket straight M12, coding: 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	BF33
Product key	BF2CEA
Catalog page	Page 19 (C-2-2019)
GTIN	4055626375823
Weight per piece (including packing)	27.6 g
Weight per piece (excluding packing)	26 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.

## Mounting

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

## Product properties

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

### Data management status

	Article revision	05
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### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Dimensions

Dimensional drawing	ca. 58
Length	58 mm
External dimensions	
Outside diameter	4 mm 8 mm
Housing	
Diameter housing	19 mm
A	

## Material specifications

Material	PBT (Pressure nut, weight: 2.36 g)
	PA 6 (Actuation lever)
Flammability rating according to UL 94	V0



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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 mm <sup>2</sup> 0.75 mm <sup>2</sup> (without ferrule)
	0.08 mm <sup>2</sup> 0.5 mm <sup>2</sup> (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 <sub>N</sub>	250 V AC
	250 V DC
Nominal current I <sub>N</sub>	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)



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## 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

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

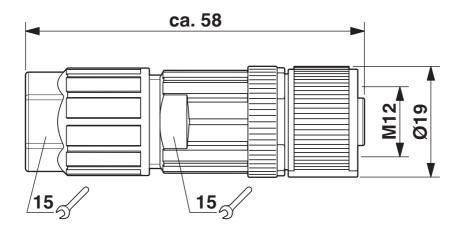
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## Drawings

## Dimensional drawing



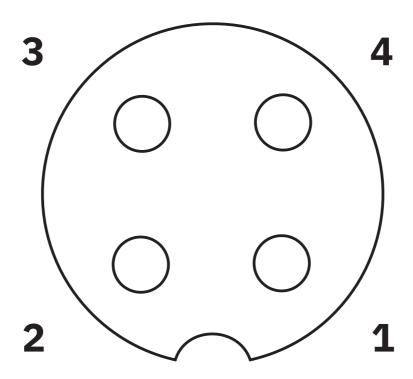
M12 x 1 socket, straight

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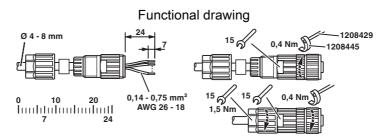
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## Schematic diagram



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





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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1424655



EAC

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

<u> </u>	<b>UL Listed</b> Approval ID: E221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		250 V	4 A	-	26 - 18

cUL Listed Approval ID: E221474				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
	250 V	4 A	26 - 18	-

cULus Listed



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## 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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