

1021817

https://www.phoenixcontact.com/us/products/1021817

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Connector, Universal, 5-position, shielded, Socket straight M12 Push-Pull, coding: A, Crimp connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4.5 mm ... 7.5 mm, without crimp contacts

### Your advantages

- · Plug and Produce: convenient and secure connection, thanks to the manufacturer-independent locking system
- · Extremely compact, thanks to the small wiring space and high contact density
- · Clear feedback: the connector springs back when not snapped into place correctly
- 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	1021817
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF34
Product key	BF2CJA
GTIN	4055626514666
Weight per piece (including packing)	28.8 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 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 note	Contacts can be clipped in place and unclipped without tools
Assembly note	Contacts can be dipped in place and undipped without tools

### Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight

### Data management status

Article revision	07
ALLIGIC TOVISION	01

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

#### **Dimensions**

Diffictioiono	
Dimensional drawing	15 J 14 J
Wrench size, union nut	15 mm
Wrench size, counter nut	14 mm
External dimensions	
Outside diameter	4.5 mm 7.5 mm
Housing	
Diameter housing	22 mm
Material specifications	
Flammability rating according to UL 94	V0



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Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
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)

### Connection data

#### Conductor connection

Connection method	Crimp connection
Connection cross section	0.14 mm² 1 mm² (flexible)
Connection cross section AWG	26 18 (flexible)
Stripping length of the individual wire	4 mm +0,5 mm
Tightening torque	4 Nm (Pressure nut with coupling sleeve)

### Electrical properties

Rated surge voltage	1.5 kV
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	60 V DC
	48 V AC
Nominal current I <sub>N</sub>	4 A

### Mechanical properties

#### Mechanical data

	Insertion/withdrawal cycles	≥ 100

#### Connector

#### Connection 1

Head design	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	Push-Pull
Coding	A

#### Cable/line

Signal type/category	Universal
Stripping length of the individual wire	4 mm +0,5 mm

### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP65
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)



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### 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)
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Note	In line with
Standard designation	Shock, vibration
Standards/specifications	EN 50155:2001

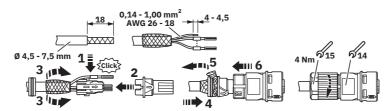


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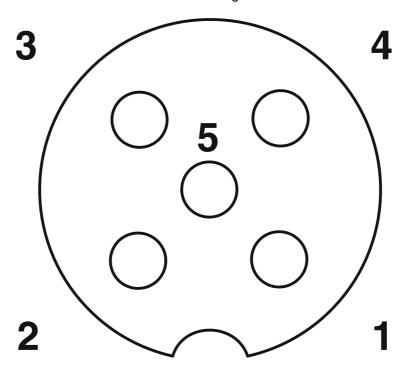
## Drawings

### Functional drawing



Functional drawing

### Schematic diagram



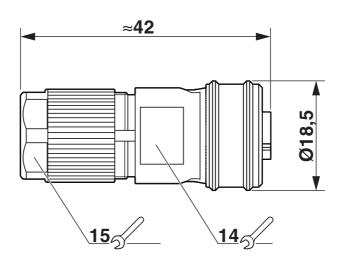
M12 PUSH-PULL male pin assignment, 5-pos., socket-side view



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### Dimensional drawing



M12 PUSH-PULL female, straight, shielded



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## Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116
ETIM	
ETIM 8.0	EC002635
UNSPSC	

39121400



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# Environmental product compliance

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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### Mandatory accessories

CC1,0-TS-0,34F AU - Crimp contact

1064041

https://www.phoenixcontact.com/us/products/1064041



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section:  $0.14~\text{mm}^2$  ...  $0.34~\text{mm}^2$ , AWG 26 ... 22

### CC1,0-TS-1,00F AU - Crimp contact

1423646

https://www.phoenixcontact.com/us/products/1423646



Crimp contact, contact diameter: 1 mm, turned, Socket, contact material: CuZn, contact surface: Ni/Au, connection cross section:  $0.34~\text{mm}^2$  ... 1 mm², AWG 22 ... 18

### Accessories



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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  $2.5~\text{mm}^2$ , 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

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Stripping tool, for stripping installation lines of Ø 8 - 13 mm , e.g. NYM 3 x 1.5  $\text{mm}^2$  to 5 x 2.5  $\text{mm}^2$ , single line stripping 0.2  $\text{mm}^2$  - 4  $\text{mm}^2$  , 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  $\emptyset$  of 4.4 to 7 mm, any stripping length



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### VS-CABLE-STRIP-VARIO - Stripping tool

1657407

https://www.phoenixcontact.com/us/products/1657407

Stripping tool, for the multi-level stripping of shielded cables



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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com