#### 1424666

https://www.phoenixcontact.com/au/products/1424666

**PHŒNI** 

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Connector, Universal, 4-position, shielded, Plug 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
- Safely shielded: Reliable 360° shield connection even under extreme mechanical strain

## Commercial data

Item number	1424666
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CFA
Product key	AF2CFA
Catalog page	Page 19 (C-2-2019)
GTIN	4055626375939
Weight per piece (including packing)	37.126 g
Weight per piece (excluding packing)	37.126 g
Customs tariff number	85366990
Country of origin	DE

1424666

https://www.phoenixcontact.com/au/products/1424666



## Technical data

### Notes

Assembly note	<b>NOTE:</b> 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	yes
Coding	A
Cable outlet	straight
Insulation characteristics	
Overvoltage category	II

3

### Dimensions

Degree of pollution

Seal material

19 mm
19 mm
60 mm
4 mm 8 mm
19 mm
TPE-U (Clamping cage, weight: 1.1 g)
PA 6 (Actuation lever)
V0

NBR



https://www.phoenixcontact.com/au/products/1424666

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

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 mm <sup>2</sup> 0.75 mm <sup>2</sup> (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)	1 = BN
	2 = WH
	3 = BU
	4 = BK

### **Electrical properties**

Rated surge voltage	1.5 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	48 V AC
	60 V DC
Nominal current I <sub>N</sub>	4 A (2 A when using 0.14 mm <sup>2</sup> conductors)

## Mechanical properties

Mechanical data		
Insertion/withdraw	al cycles	≥ 100 (Quantity: 500 with Phoenix Contact mating connector)

## Connector

Connection 1	
Head design	Plug
Head cable outlet	straight

PHŒNIX CONTACT

#### 1424666

https://www.phoenixcontact.com/au/products/1424666

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

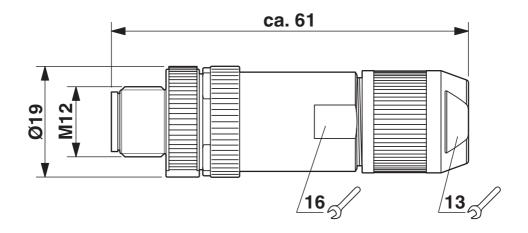
1424666

https://www.phoenixcontact.com/au/products/1424666

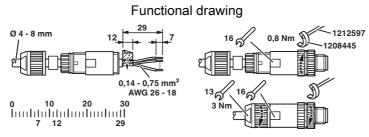


## Drawings

**Dimensional drawing** 



Dimensional drawing



Slide the pressure nut and sleeve housing along the cable, strip the cable, shorten the shield, strip the single wires, connect the wires, in the case of a straight sleeve housing gently twist the wires together, stick the shielding foil around the shortened shield, in the case of a cable outside diameter < 6 mm stick an additional shielding foil around the wire pack, screw the sleeve housing to the plug insert, screw the pressure nut tight.

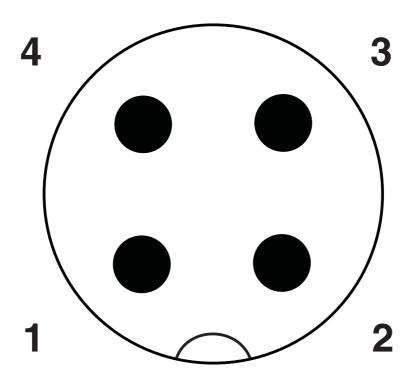




1424666

https://www.phoenixcontact.com/au/products/1424666

Schematic diagram



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

1424666

https://www.phoenixcontact.com/au/products/1424666



## Approvals

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1424666

UL 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>
	60 V	4 A	-	26 - 18

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

1424666

https://www.phoenixcontact.com/au/products/1424666



## Classifications

### ECLASS

	ECLASS-13.0	27440116	
ET	ΓIM		
	ETIM 9.0	EC002635	
UNSPSC			
	UNSPSC 21.0	39121400	

1424666

https://www.phoenixcontact.com/au/products/1424666



## Environmental product compliance

#### 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%

Phoenix Contact 2025 © - all rights reserved https://www.phoenixcontact.com

PHOENIX CONTACT PTY Ltd Unit 7, 2-8 South Street Rydalmere NSW 2116 1300 786 411 customerservice@phoenixcontact.com.au