

1404410

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Connector, Universal, 12-position, shielded, Plug straight M12, coding: A, Solder connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg9, external cable diameter 6 mm ... 8 mm

## Your advantages

- Safe use in the field, thanks to a high degree of protection
- · Save space with high-pos. connectors
- Reliable signal transmission 360° shielding in environments with electromagnetic interference

#### Commercial data

Item number	1404410
Packing unit	1 pc
Minimum order quantity	1 pc
Product key	BF2CGA
Catalog page	Page 26 (C-2-2019)
GTIN	4046356693837
Weight per piece (including packing)	41 g
Weight per piece (excluding packing)	41 g
Customs tariff number	85366990
Country of origin	DE



1404410

https://www.phoenixcontact.com/pc/products/1404410

## Technical data

#### Notes

## Product properties

Product type	Circular connector (cable-side)
Sensor type	Universal
Number of positions	12
No. of cable outlets	1
Shielded	yes
Coding	A
Cable outlet	straight
Pg screw connection	Pg9

## Data management status

Article revision	03
AI LIGIC TO VISION	00

#### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### **Dimensions**

Dimensional drawing	7080 18_0
Width	20.2 mm
Height	20.2 mm
Length	62 mm
External dimensions	
Outside diameter	6 mm 8 mm
Housing	
Diameter housing	20.2 mm

## Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuZn



1404410

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Contact surface material	Au
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated

#### Connection data

#### Conductor connection

Connection method	Solder connection
Connection cross section	0.08 mm <sup>2</sup> 0.25 mm <sup>2</sup> (without ferrule)
	0.08 mm <sup>2</sup> 0.25 mm <sup>2</sup> (solid)
Connection cross section AWG	28 24 (without ferrule)
Stripping length of the individual wire	4 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.8 Nm 1 Nm (Pressure screw)

## Electrical properties

Rated surge voltage	0.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	> 10 GΩ
Nominal voltage U <sub>N</sub>	30 V AC
	30 V DC
Nominal current I <sub>N</sub>	1.5 A (up to 40 °C)

## Mechanical properties

#### Mechanical data

	Insertion/withdrawal cycles	≥ 100

### Connector

#### Connection 1

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

#### Cable/line

Signal type/category	Universal
Stripping length of the individual wire	4 mm

#### Environmental and real-life conditions

#### Ambient conditions

Degree of protection	IP67	
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)	

## Standards and regulations



1404410

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Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101



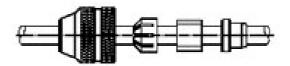
1404410

https://www.phoenixcontact.com/pc/products/1404410

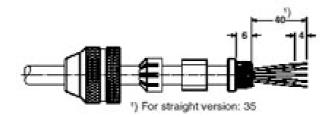
## **Drawings**

### Functional drawing

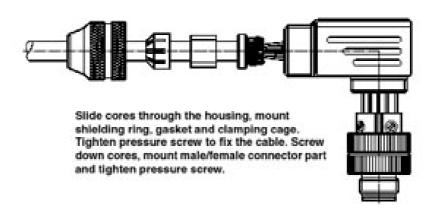
## Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor



Strip conductor, widen shield and lay around the shielding ring, cut off projecting mesh.

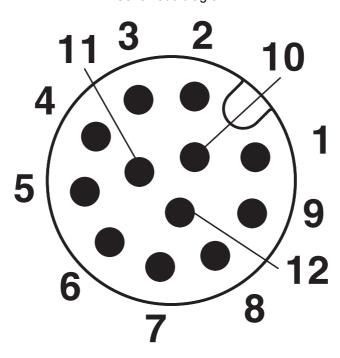




1404410

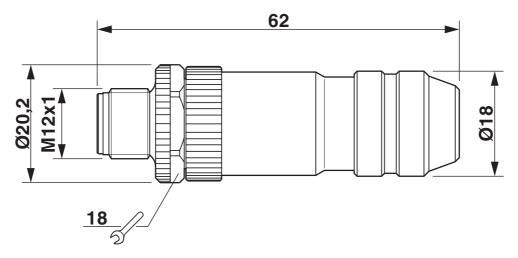
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## Schematic diagram



Pin assignment of M12 male connector, 12-pos., A-coded, view of pin side

## Dimensional drawing



Plug, M12 x 1, straight, shielded



1404410

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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/pc/products/1404410

. <b>91</b>	<b>cUL Recognized</b> Approval ID: FILE E 2214	174			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1 A	-	-

<b>71</b>	UL Recognized Approval ID: FILE E 221474				
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1 A	-	-

cULus Recognized



1404410

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## Classifications

UNSPSC 21.0

### **ECLASS**

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116
ETIM	
ETIM 9.0	EC002635
UNSPSC	

39121400



1404410

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## Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c)
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	22ca2923-30d9-47ab-bca5-c52622491c78

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