

1404413

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



## 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	1404413
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AF2CGA
Product key	AF2CGA
Catalog page	Page 26 (C-2-2019)
GTIN	4046356693868
Weight per piece (including packing)	67.39 g
Weight per piece (excluding packing)	67.39 g
Customs tariff number	85366990
Country of origin	DE



1404413

https://www.phoenixcontact.com/au/products/1404413

### 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.
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#### Mounting

Assembly note	The connector pin assignment can be rotated 90° to the cable
	outlet

#### 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	angled
Pg screw connection	Pg9
Insulation characteristics	
Overvoltage category	П

Seal material

Degree of pollution	3
Degree of pollution	3

#### **Dimensions**

Dimensional drawing	019.6 M1221 18 86 85 855
Width	19.6 mm
Height	55 mm
Length	36.9 mm
External dimensions	
Outside diameter	6 mm 8 mm
Housing	
Diameter housing	19.6 mm
Material specifications	
Flammability rating according to UL 94	НВ

NBR



1404413

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Material of grip body	Zinc die-cast, nickel-plated
Contact material	CuZn
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 $U_N$	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	Socket
Head cable outlet	angled
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) (male connector/female	-40 °C 85 °C (Plug / socket)



1404413

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

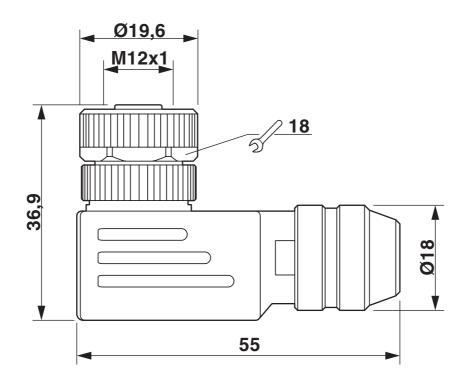


1404413

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## Drawings

#### Dimensional drawing



M12 x 1 socket, angled, shielded

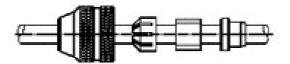


1404413

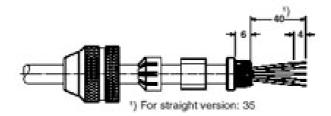
https://www.phoenixcontact.com/au/products/1404413

#### Functional drawing

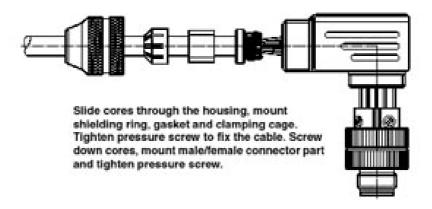
## Assembly steps for M 12 male/female connector and conductor



Slide parts onto the conductor



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





1404413

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# 2 3 11 50 0 4

Schematic diagram

Pin assignment M12 socket, 12-pos., A-coded, view female side



1404413

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## **Approvals**

To download certificates, visit the product detail page: https://www.phoenixcontact.com/au/products/1404413

.71	CUL 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	-	-

<b>7.1</b>	UL Recognized Approval ID: FILE E 221474				
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		30 V	1 A	-	-



1404413

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## Classifications

	ECLASS-13.0	27440116
ΕΊ	ГІМ	
	ETIM 9.0	EC002635
UNSPSC		
	UNSPSC 21.0	39121400



1404413

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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	592fa027-e075-4dac-b7de-ec822660408e	

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