

1681486

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Connector, Universal, 5-position, Socket straight M12, coding: A, Screw 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
- · Screw connection: proven connection technology for a large selection of different conductors

Commercial data

Item number	1681486
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	AF2CAA
GTIN	4017918157449
Weight per piece (including packing)	26.6 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.
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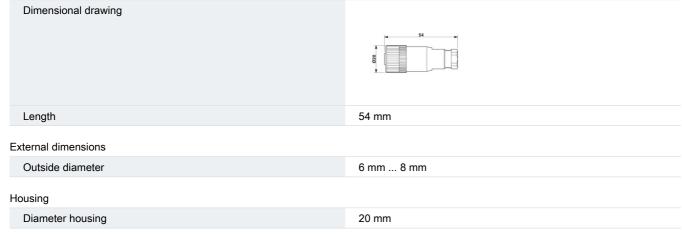
Product properties

Product type	Circular connector (cable-side)	
Sensor type	Universal	
Number of positions	5	
No. of cable outlets	1	
Shielded	no	
Coding	A	
Cable outlet	straight	
Pg screw connection	Pg9	
Insulation characteristics		
Overvoltage category	ll l	

3

Dimensions

Degree of pollution



Material specifications

Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	PA
Contact material	CuZn
Contact surface material	CuSnZn
Contact carrier material	PA
Material for screw connection	Zinc die-cast, nickel-plated



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Connection data

Conductor connection

Connection method	Screw connection
Connection cross section	0.25 mm ² 0.75 mm ² (without ferrule)
	0.14 mm ² 0.75 mm ² (with ferrule)
	0.25 mm ² 0.75 mm ² (solid)
Connection cross section AWG	24 18 (without ferrule)
	26 20 (with ferrule)
Stripping length of the individual wire	5 mm
Tightening torque	0.4 Nm (M12 knurl)
	0.2 Nm (Screw terminal blocks)
	0.8 Nm 1 Nm (Pressure screw with sleeve housing)

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 8 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I _N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 50

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	5 mm

Environmental and real-life conditions

Ambient conditions

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



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Standards and regulations

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

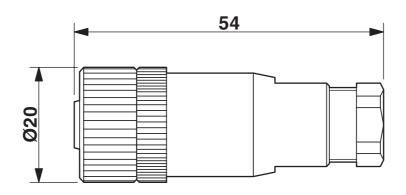


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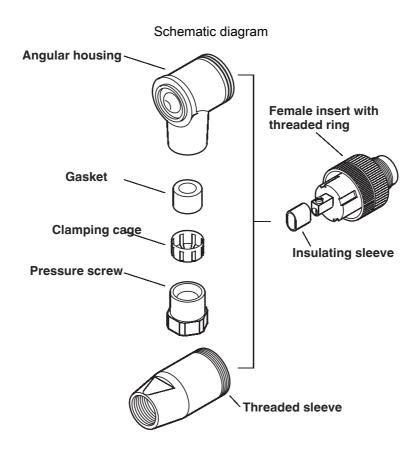


Drawings

Dimensional drawing



M12 x 1 socket, straight



Male/Female M12



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Schematic diagram

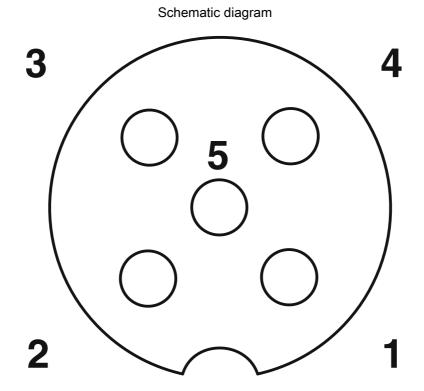
5

0

4

3

Cable connection side M12 (screw connection)



Pin assignment M12 socket, 5-pos., A-coded, socket side view



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1681486

. 7.1	cUL Recognized Approval ID: FILE E 221474			
	Nominal voltage	J _N Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	60 V	4 A	-	-

7.1	UL Recognized Approval ID: FILE E 221474	4			
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine					
		60 V	4 A	-	-



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Classifications

ECLASS

	ECLASS-13.0	27440116		
	ECLASS-15.0	27440116		
ΕI	ETIM			
	ETIM 9.0	EC002635		
UNSPSC				
О.	101 00			
	UNSPSC 21.0	39121400		



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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	ea1d2ae3-a11c-4084-b1ef-f2098df25052

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