1662968

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Connector, Universal, 5-position, Socket straight M12, coding: A, Screw connection, knurl material: Zinc die-cast, nickel-plated, cable gland Pg7, external cable diameter 4 mm ... 6 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	1662968
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF30
Product key	BF2CAA
Catalog page	Page 22 (C-2-2019)
GTIN	4017918129446
Weight per piece (including packing)	26.51 g
Weight per piece (excluding packing)	26 g
Customs tariff number	85366990
Country of origin	DE

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Technical data

Notes General

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 mechan	nical
loads upstream of the connector, e.g. by using cable ties.	

Mounting

Connection method	Screw connection
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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	Pg7
Insulation characteristics	

Overvoltage category	II
Degree of pollution	3

Dimensions

Dimensional drawing	
Width	20 mm
Height	20 mm
Length	54 mm
External dimensions Outside diameter	4 mm 6 mm
Housing	
Diameter housing	20 mm
aterial specifications	
Flammability rating according to UL 94	НВ
Seal material	NBR
Material of grip body	PA



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

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)

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

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Degree of protection	IP67
Ambient temperature (operation)	-40 °C 85 °C (Plug / socket)
Standards and regulations	
Standards and regulations	
Standards and regulations Standard designation	M12 connector

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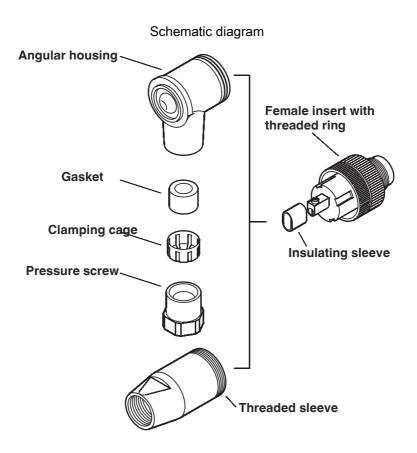


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Drawings

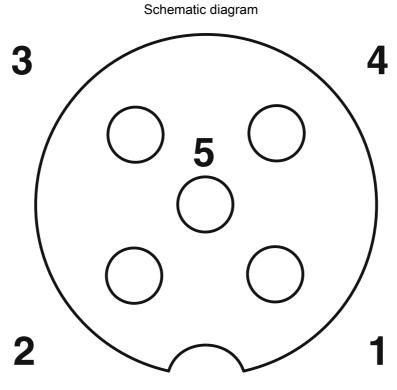


Male/Female M12



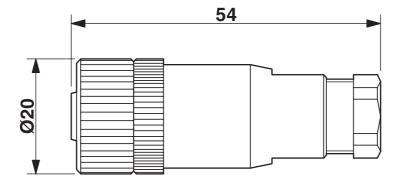
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Pin assignment M12 socket, 5-pos., A-coded, socket side view

Dimensional drawing



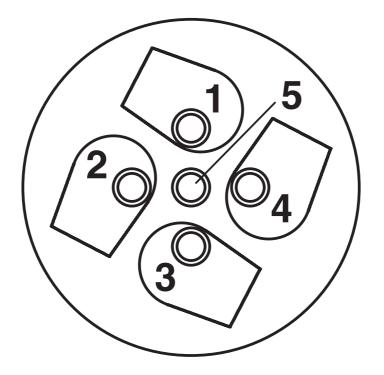
M12 x 1 socket, straight



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Schematic diagram



Cable connection side M12 (screw connection)



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Approvals

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.R .	AD CUL Recognized Approval ID: FILE E 221474				
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	-	-

Approval ID: F	nized FILE E 221474			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	60 V	4 A	-	-

cULus Recognized

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Classifications

ECLASS

ECLASS-11.0	27440102
ECLASS-12.0	27440116
ECLASS-13.0	27440116

ETIM

	ETIM 9.0	EC002635	
UN	UNSPSC		
	UNSPSC 21.0	39121400	



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Environmental product compliance

REACh SVHC	Lead 7439-92-1	
China RoHS	Environmentally Friendly Use Period = 50 years	
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"	

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Accessories

SACC-M12-SET/2,5-3,5 - Connector

1436505 https://www.phoenixcontact.com/us/products/1436505



Sensor/actuator connector, accessories, pressure screw and Pg7 seal, for unshielded M12 connector, cable diameter 2.5 mm - 3.5 mm

PROT-M12 MS-PA-CHAIN - Screw plug

1430899 https://www.phoenixcontact.com/us/products/1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



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SAC-5P-100,0-PUR/0,34 - Cable reel

1501676

https://www.phoenixcontact.com/us/products/1501676



By the meter, Cable reel, PUR halogen-free, black-gray RAL 7021, 5-wire, color single wire: brown, white, blue, black, green-yellow, cable length: 100 m

A 0,25-5 - Ferrule

3202465 https://www.phoenixcontact.com/us/products/3202465



Ferrule, color: silver

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TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/us/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

TSD-M 1,2NM - Torque screwdriver

1212224 https://www.phoenixcontact.com/us/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 $\rm Nm$

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TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/us/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

SACC BIT M12-D20 - Tool

1208445 https://www.phoenixcontact.com/us/products/1208445



Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive

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CRIMPFOX 6H - Crimping pliers

1212046

https://www.phoenixcontact.com/us/products/1212046



Crimping pliers, for ferrules without insulating collar according to DIN 46228 Part 1 and ferrules with insulating collar according to DIN 46228 Part 4, 0.14 mm² ... 6 mm², unlockable pressure lock, lateral entry

SZF 1-0,6X3,5 - Screwdriver

1204517 https://www.phoenixcontact.com/us/products/1204517



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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