

1683756

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Device connector front mounting, 5-position, Pin, straight, M12, coding: A, on free cable end, Front mounting, Pg9, Individual wires, cable length: 1.5 m, 0.34 mm², TPE litz wire

Commercial data

Item number	1683756
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	****
Product key	ABQCEE
GTIN	4017918422028
Weight per piece (including packing)	47.866 g
Weight per piece (excluding packing)	47.53 g
Customs tariff number	85444290
Country of origin	DE



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Technical data

Notes

Order information:	Lock nut is included in the scope of delivery	
General	Contact connection method: Crimp connection	
safety note		
Safety note	WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.	
	 WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible. 	
	WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.	
	 The products are suitable for applications in plant, controller, and electrical device engineering. 	
	 When operating the connectors in outdoor applications, they must be separately protected against environmental influences. 	
	 Assembled products may not be manipulated or improperly opened. 	
	 Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products). 	
	 When using the product in direct connection with third-party manufacturers, the user is responsible. 	
	 For operating voltages > 50 V AC, conductive connector housings must be grounded 	
	 Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards. 	
	Observe the corresponding technical data. You will find information: o On the product o On the packing label o In the supplied documentation o Online at phoenixcontact.com/products under the product	
	Only use tools recommended by Phoenix Contact	
	 Use a protective cap to protect connectors that are not in use. The suitable accessories are available online in the accessory section of the product at phoenixcontact.com/products 	
	 Ensure that the protective or functional ground has been properly connected. 	
	VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or	



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	connector
	 The connector warms up in normal operation. Depending on the ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).
punting	
Mounting type	Front mounting Pg9
oduct properties	
Product type	Circular connectors (device side)
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	A
Thread type	M12
Data management status	
Article revision	12
Insulation characteristics	
Overvoltage category Degree of pollution	3
aterial specifications	
Flammability rating according to UL 94	V0
Flammability rating according to UL 94 Seal material	V0 NBR
Seal material	NBR
Seal material Contact material	NBR CuZn
Seal material Contact material Contact surface material	NBR CuZn Au
Seal material Contact material Contact carrier material	NBR CuZn Au PA 66 GF
Seal material Contact material Contact surface material Contact carrier material Material for screw connection	NBR CuZn Au PA 66 GF Brass, nickel-plated
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties	NBR CuZn Au PA 66 GF Brass, nickel-plated
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage Contact resistance Insulation resistance	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires 1.5 kV ≤ 3 mΩ
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage Contact resistance Insulation resistance Nominal voltage U _N	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires 1.5 kV $\leq 3 \text{ m}\Omega$ > 100 M Ω
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage Contact resistance Insulation resistance	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires 1.5 kV $\leq 3 \text{ m}\Omega$ $> 100 \text{ M}\Omega$ 60 V
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage Contact resistance Insulation resistance Nominal voltage U _N Nominal current I _N	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires 1.5 kV $\leq 3 \text{ m}\Omega$ $> 100 \text{ M}\Omega$ 60 V 4 A
Seal material Contact material Contact surface material Contact carrier material Material for screw connection Conductor material ectrical properties Rated surge voltage Contact resistance Insulation resistance Nominal voltage U _N Nominal current I _N Max. conductor resistance	NBR CuZn Au PA 66 GF Brass, nickel-plated Tin-plated Cu litz wires 1.5 kV $\leq 3 \text{ m}\Omega$ $> 100 \text{ M}\Omega$ 60 V 4 A



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Contact connection type	Pin
Conductor cross section	0.34 mm²
Tightening torque	2 Nm 3 Nm

Connector

Connection 1

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

Connection 2

Head design	free cable end

Cable/line

Cable length	1.5 m
Cable lerigin	1.0.111
Cable type	TPE litz wire
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Single wire, color	black, brown,blue, white, gray
Cable cross section	0.34 mm²
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 Ω/km
Cable insulation resistance	≥ 20 MΩ*km

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
	IP67
Ambient temperature (operation)	-25 °C 90 °C (cable, fixed installation)
	-25 °C 85 °C (Plug)

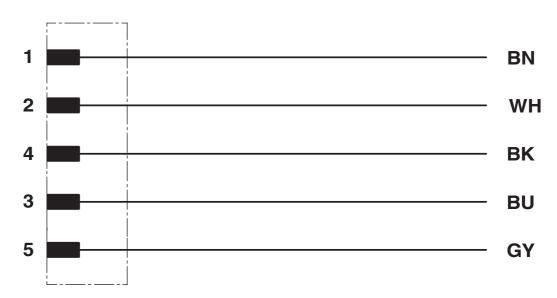


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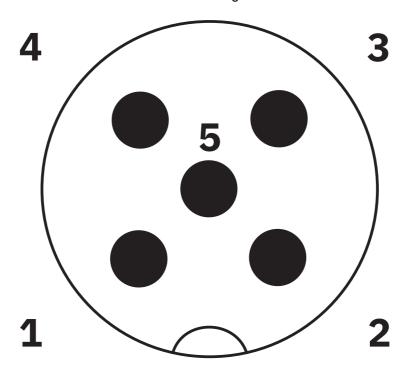
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Drawings

Circuit diagram



Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/sg/products/1683756

cUL Recognized Approval ID: E118976-20100522					
		Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-

UL Recognized Approval ID: E118976-20100522					
		Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
		60 V	4 A	22 - 22	-

e Flus cULu	cULus Recognized Approval ID: E221474-20140616			
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
	60 V	4 A	22 - 20	-

cULus Recognized



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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			
U	NSPSC				

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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	bb244b54-3d10-4875-a5d3-2c5f7a09f1c9

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