

1456459

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Device connector front mounting, Universal, 5-position, Pin, straight, M12, coding: B, Front mounting, Square flange, Solder pins, 0.34 mm²

Your advantages

- Easy PCB assembly: one-piece connectors for wave soldering
- Standard pin assignments for signal and power transmission with a uniform design-in design
- · SPEEDCON fast locking system reduces cabling times

Commercial data

Item number	1456459
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	AB24
Product key	ABQEFK
Catalog page	Page 240 (C-2-2013)
GTIN	4046356617062
Weight per piece (including packing)	11.34 g
Weight per piece (excluding packing)	11.34 g
Customs tariff number	85366990
Country of origin	DE



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Technical data

Notes

Notes on operation The electrical and mechanical data specified assume that the connector pair is correctly locked and mounted. If the connector is unlocked and if there is a danger of contamination, the connector must be sealed using a protective cap > IP54.
Influences arising from litz wires, cables or PCB assembly must also be taken into consideration.

Mounting

Mounting type	Front mounting Square flange 20 mm side length
Assembly note	20 mm side length

Product properties

Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	В
Thread type	M12

Data management status

Article revision	02
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Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Rated surge voltage	1.5 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	60 V
Nominal current I _N	4 A
Max. conductor resistance	57.6 mΩ/m



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Connection data

Conductor connection

Connection method	Solder pins
Contact connection type	Pin
Conductor cross section	0.34 mm²
Tightening torque	3 Nm 4 Nm (Installation-side)

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	> 100

Connector

Connection 1

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

Cable/line

Signal type/category	Universal
Wire diameter incl. insulation	1.2 mm ±0.07 mm
Cable cross section	0.34 mm²
Conductor structure signal line	7x 0.25 mm
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V
Test voltage, cable	2000 V AC
Cable resistance	≤ 57.6 mΩ/m
Cable insulation resistance	≥ 20 MΩ*km
Ambient temperature (operation)	-40 °C 85 °C (cable, fixed installation)
	-25 °C 85 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

egree of protection	IP20
	IP20
Ambient temperature (operation)	-25 °C 85 °C (Plug / socket)
	-40 °C 85 °C (without mechanical actuation)
	-25 °C 85 °C (Cable, flexible installation)
	-40 °C 85 °C (cable, fixed installation)



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Standards and regulations

M12

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

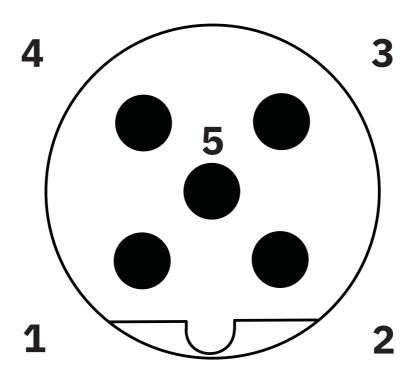


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Drawings

Schematic diagram



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



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Approvals

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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	-

c 911 us	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	-	-	

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Classifications

ECLASS

	ECLASS-11.0	27440102				
	ECLASS-12.0	27440116				
	ECLASS-13.0	27440116				
ΕT	ETIM					
	ETIM 9.0	EC002635				
UNSPSC						
	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	df16dc15-72c6-482d-8c0a-295088b5ed5b

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