

1456446

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Device connector front mounting, Universal, 5-position, Socket, straight, M12-SPEEDCON, coding: A, Front mounting/square flange, Wave soldering, 0.34 mm<sup>2</sup>

### 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	1456446
Packing unit	10 pc
Minimum order quantity	10 pc
Sales key	ABQEHK
Product key	ABQEHK
Catalog page	Page 240 (C-2-2013)
GTIN	4046356617055
Weight per piece (including packing)	13.13 g
Weight per piece (excluding packing)	9.879 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	yes
Coding	A
Thread type	M12

#### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Material specifications

Flammability rating according to UL 94  Seal material  Contact material  Contact surface material  Contact carrier material  PA 6.6	Material (Housing)	GD-Zn
Contact material CuZn Contact surface material Au	Flammability rating according to UL 94	V0
Contact surface material Au	Seal material	FKM
	Contact material	CuZn
Contact carrier material PA 6.6	Contact surface material	Au
	Contact carrier material	PA 6.6
Material for screw connection Zinc die-cast, nickel-plated	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 <sub>N</sub>	60 V
Nominal current I <sub>N</sub>	4 A
Max. conductor resistance	57.6 mΩ/m



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#### Connection data

#### Conductor connection

Connection method	Wave soldering
Contact connection type	Socket
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	Socket
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A

### 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

Degree 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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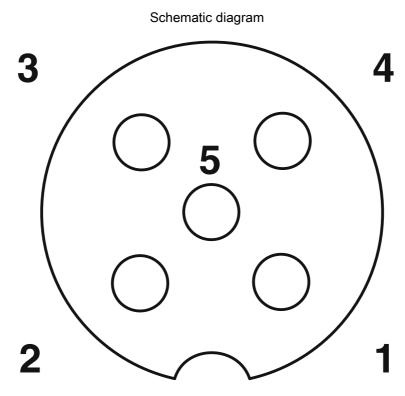
	UL Type Rating	Type 4 (indoor use only)	
Standards and regulations			
	Standard designation	M12 circular connector	
	Standards/specifications	according to IEC 61076-2-101	



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# Drawings



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



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# Approvals

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.71	<b>cUL Recognized</b> Approval ID: E118976-2	0100522			
		Nominal voltage $U_N$	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	22	-

<b>71</b>	UL Recognized Approval ID: E118976-20	0100522			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	22	-

c <b>921</b> us	cULus Recogniz Approval ID: E221474	<b>zed</b> 4-20140616			
		Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
		60 V	4 A	-	-



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## Classifications

ECL/	٩SS
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	ECLASS-13.0	27440110
E	TIM	
	ETIM 9.0	EC002635
U	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	
ironment 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	83c01728-5bc1-443e-9067-ef78d4e0d1ca

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