

1419425

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Device connector rear mounting, Universal, 8-position, PUR halogen-free, black-gray RAL 7021, shielded, Pin, straight, M12-SPEEDCON, coding: A, on free cable end, Rear mounting, M16 x 1. 5, Cable connection, cable length: 1 m, 0.25 mm<sup>2</sup>, PUR halogen-free black, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1239256

### Your advantages

- · Preassembled with cables in various standard lengths for immediate use
- · Customer-specific assemblies and cable lengths can be supplied
- · Sealed on the cable side for optimum tightness of seal
- For high transmission safety: shield connection to the housing with optional EMC nut

#### Commercial data

Item number	1419425
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB25
Product key	ABQDGA
Catalog page	Page 51 (C-2-2019)
GTIN	4046356533324
Weight per piece (including packing)	78.4 g
Weight per piece (excluding packing)	77.78 g
Customs tariff number	85444290
Country of origin	DE



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### Technical data

#### Notes

General	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.
General	Lock nut is included in the scope of delivery

### Mounting

Mounting type	Rear mounting M16 x 1.5 With flat nut
Assembly instructions	With flat nut

#### Product properties

Product type	Circular connectors (device side)
Sensor type	Universal
Number of positions	8
No. of cable outlets	1
Shielded	yes
Coding	A
Thread type	M12

#### 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
Outer sheath, material	PUR
Conductor material	Bare Cu litz wires

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	≤ 3 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U <sub>N</sub>	30 V
Nominal current I <sub>N</sub>	2 A



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Max. conductor resistance	78 Ω/km
Connection data	
Conductor connection	
Connection method	Cable connection
Contact connection type	Pin
Conductor cross section	8x 0.25 mm² (Signal line)
Tightening torque	3 Nm 4 Nm (Installation-side)
Mechanical properties	
Mechanical data	
Insertion/withdrawal cycles	> 100
Max. bending cycles	2000000
Connector	
Connection 1	
Head design	Pin
Head cable outlet	straight
Head thread type	M12
Head locking type	SPEEDCON
Coding	A
Connection 2	
Head design	free cable end
Cable/line	
Cable length	1 m
PUR halogen-free black [PUR]	
Dimensional drawing	
Cable weight	53 kg/km
UL AWM Style	20549 / 10493 (80°C/300 V)
Number of positions	8
Shielded	yes
Cable type	PUR halogen-free black [PUR]



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Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	8x 0.25 mm² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	5.90 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, green, yellow, gray, pink, blue, red
Thickness, insulation	approx. 0.20 mm
Thickness, outer sheath	approx. 0.50 mm
Overall twist	8 wires around filler to the core
Optical shield covering	85 %
Max. conductor resistance	≤ 78 Ω/km (at 20 °C)
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V AC
Test voltage	≥ 3000 V AC (Spark test)
Test voltage Core/Shield	≥ 2000.00 V AC (for 60 s)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	30 mm
Smallest bending radius, movable installation	59 mm
Max. bending cycles	2000000
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Flame resistance	in acc. with UL FT-2
	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
	According to DIN EN 60332-2-2 (20 s)
Resistance to oil	in accordance with IEC 60811-404
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water
	low-abrasion
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable
Ambient temperature (operation)	-40 °C 80 °C (cable, fixed installation)
	-25 °C 80 °C (Cable, flexible installation)

#### Environmental and real-life conditions

Ambient conditions		
	IP67 (When plugged in)	



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Degree of protection	IP65 (When plugged in)
	IP65/IP67
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)

### Standards and regulations

#### M12

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



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### Classifications

#### **ECLASS**

	ECLASS-11.0	27440102	
	ECLASS-12.0	27440116	
	ECLASS-13.0	27440116	
ETIM			
	ETIM 9.0	EC002635	
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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