

# SACC-DSI-M12FS-8CON-M16/0,5 - Device connector rear mounting



1419690

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Device connector rear mounting, Universal, 8-position, Socket, straight, M12-SPEEDCON, A-coding, on free cable end, Individual wires, cable length: 0.5 m, 0.25 mm<sup>2</sup>, TPE litz wire, potted, this item is expected to be lead-free from Q2 2026 in accordance with RoHS II without exception 6c (Pb < 0.1%), a lead-free alternative is possible on request in advance

## Your advantages

- Preassembled with litz wires for immediate use
- Customer-specific assemblies and litz wire lengths available
- Sealed on the litz wire side for optimum leak-tightness
- All standard pin assignments and codings for signal, data, and power transmission with a uniform design-in design
- For high transmission safety: shield connection to the housing with optional EMC nut
- SPEEDCON fast locking system reduces cabling times

## Commercial data

Item number	1419690
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	AB24
Product key	ABQCHB
GTIN	4046356533546
Weight per piece (including packing)	28.8 g
Weight per piece (excluding packing)	26.832 g
Customs tariff number	85444290
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.
Order information:	Lock nut is included in the scope of delivery
General	Contact connection method: Crimp connection

### Mounting

Mounting type	Rear mounting (M16 x 1.5, with flat nut)
Tightening torque	3 Nm ... 4 Nm (Installation-side)

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	3

### Material specifications

Material Housing	GD-Zn
Material Housing surface	Ni
Material Molding compound	PUR (potted)
Flammability rating according to UL 94	V0
Seal material	FKM
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Conductor material	Tin-plated Cu litz wires

### Electrical properties

Rated surge voltage	0.8 kV
Contact resistance	$\leq 3 \text{ m}\Omega$

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Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage $U_N$	30 V (AC)
	30 V (DC)
Nominal current $I_N$	2 A
Transmission medium	Copper
Max. conductor resistance	80 m $\Omega$ /m

## Connection data

Conductor connection	
Connection method	Individual wires
Contact connection type	Socket
Conductor cross-section	0.25 mm <sup>2</sup>
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

Connection 2	
Head design	free cable end

## Cable/line

Cable length	0.5 m
Cable type	TPE litz wire
Signal type/category	Universal
Wire diameter incl. insulation	1.15 mm $\pm 0.07$ mm
Single wire, color	brown, blue, white, gray, pink, red, yellow, green
Cable cross section	0.25 mm <sup>2</sup>
Conductor material	Tin-plated Cu litz wires
Conductor structure signal line	14x 0.15 mm
AWG signal line	24
Material wire insulation	TPE
Thickness, insulation	0.21 mm
Nominal voltage, cable	300 V

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Test voltage, cable	2000 V AC
Cable resistance	≤ 80 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	IP67 (When plugged in) IP65 (When plugged in) IP65/IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 85 °C (Plug / socket) -40 °C ... 85 °C (without mechanical actuation)
Ambient temperature (operation) (Cable, flexible installation)	-25 °C ... 85 °C (Cable, flexible installation)
Ambient temperature (operation) (Cable, fixed installation)	-40 °C ... 85 °C (cable, fixed installation)

## Standards and regulations

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

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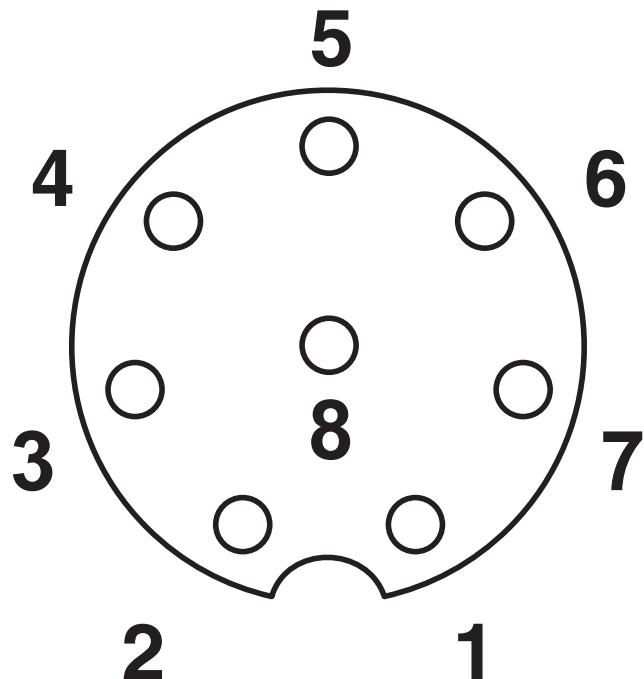


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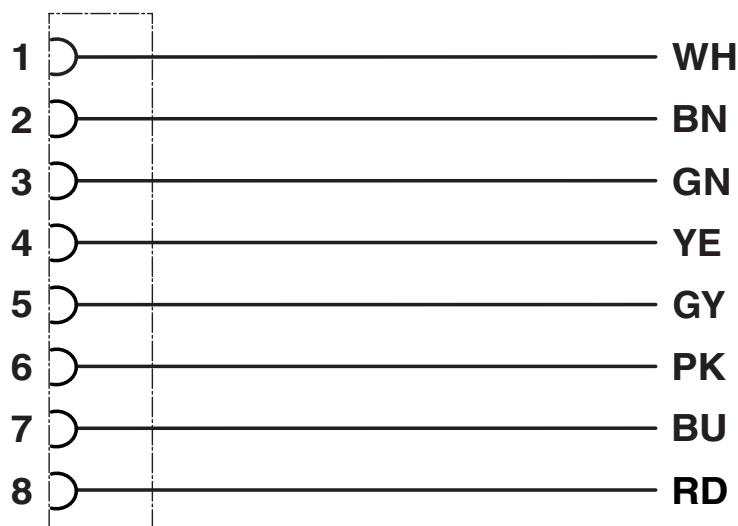
## Drawings

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

Circuit diagram



Contact assignment of the M12 socket

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## Approvals

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UL Recognized		Approval ID: E118976-20100522			
		Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine		30 V	2 A	24	-

cULus Recognized		Approval ID: E221474-20140616			
		Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $mm^2$
keine		30 V	2 A	24 - 22	-

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## Classifications

### ECLASS

ECLASS-13.0	27440103
ECLASS-15.0	27440103

### ETIM

ETIM 9.0	EC003570
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### 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.
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### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	3573f632-6333-4bbd-bb07-8c89dcc44c9e

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