

## Bus system connector - SACC-MSB-2QO SH PB SCO - 1413931

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Bus system connector, PROFIBUS DP (12 Mbps), 2-position, halogen-free, shielded, Plug straight M12 SPEEDCON, Coding: B, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

### Your advantages

- Safe use in the field, thanks to a high degree of protection
- Flexible: connectors for on-site assembly
- Insulation displacement connection: innovative and time-saving assembly without stripping the single wire
- Reliable signal transmission - 360° shielding in environments with electromagnetic interference
- Save time, thanks to installation with SPEEDCON fast locking system



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 055626 012223
GTIN	4055626012223
Weight per Piece (excluding packing)	40.000 g
Custom tariff number	85366990
Country of origin	Germany

### Technical data

#### Dimensions

Wrench size, union nut	15 mm
Diameter housing	19 mm
Length	58 mm
External cable diameter	5 mm ... 9.7 mm
Stripping length of the sheath	≥ 80 mm

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### Technical data

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C (Plug / socket)
Ambient temperature (assembly)	-5 °C ... 50 °C
Degree of protection	IP65
	IP67

#### General

Note	NOTE: Observe the permissible bending radii when laying conductors, since the degree of protection may be put in jeopardy if the bending forces are too high. Alleviate mechanical loads upstream of the connector, e.g. by using cable ties.
Rated current at 40°C	4 A
Rated voltage	48 V AC
	60 V DC
Number of positions	2
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Standards/regulations	M12 connector according to IEC 61076-2-101
Signal type/category	PROFIBUS DP, 12 Mbps
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Insulation displacement connection
Conductor cross section	0.25 mm <sup>2</sup> ... 0.75 mm <sup>2</sup> (flexible)
	0.14 mm <sup>2</sup> ... 0.5 mm <sup>2</sup> (solid)
Conductor cross section AWG	24 ... 18 (flexible)
	26 ... 20 (solid)
Wire diameter including insulation	1 mm ... 2 mm (maximum of 2.6 mm when connecting PROFIBUS cables)
Frequency of connections between conductors of the same cross section	10
Wire insulation material	PVC / PE / PP / rubber
Structure of individual litz in acc. with VDE 0295 / smallest wire diameter	Class 2-6
Insertion/withdrawal cycles	≥ 100
Torque	5 Nm (Pressure nut)

#### Material

Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated

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## Technical data

### Material

Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Standards/regulations	PA 6.6: Fire protection in rail vehicles - requirement sets R22, R23, R24, and R26 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

### Standards and Regulations

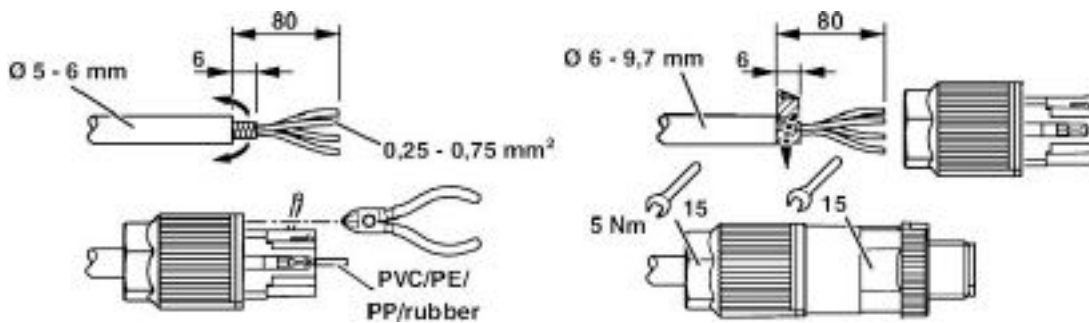
Standards/specifications	M12 connector according to IEC 61076-2-101
Flammability rating according to UL 94	V0

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

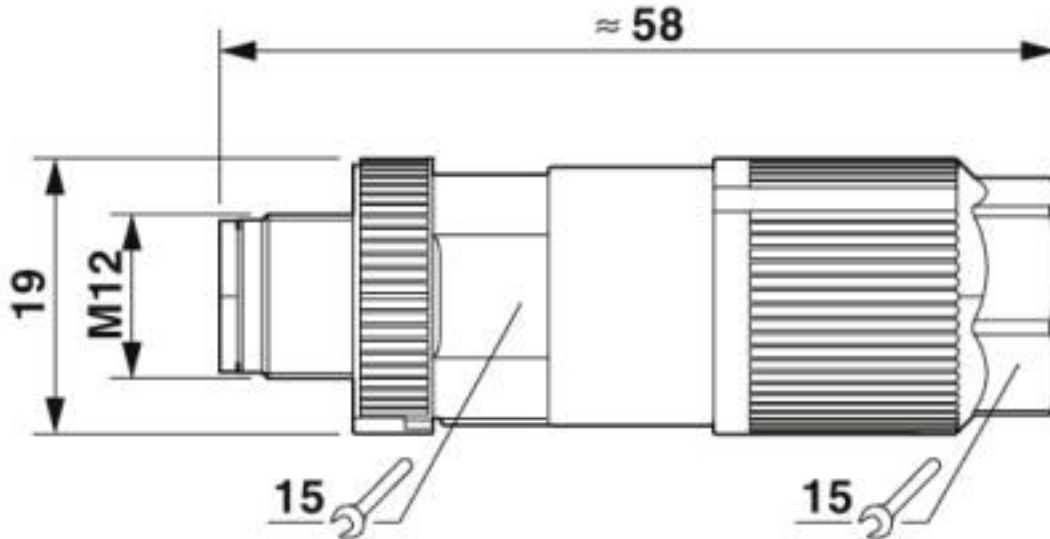
## Drawings

Functional drawing



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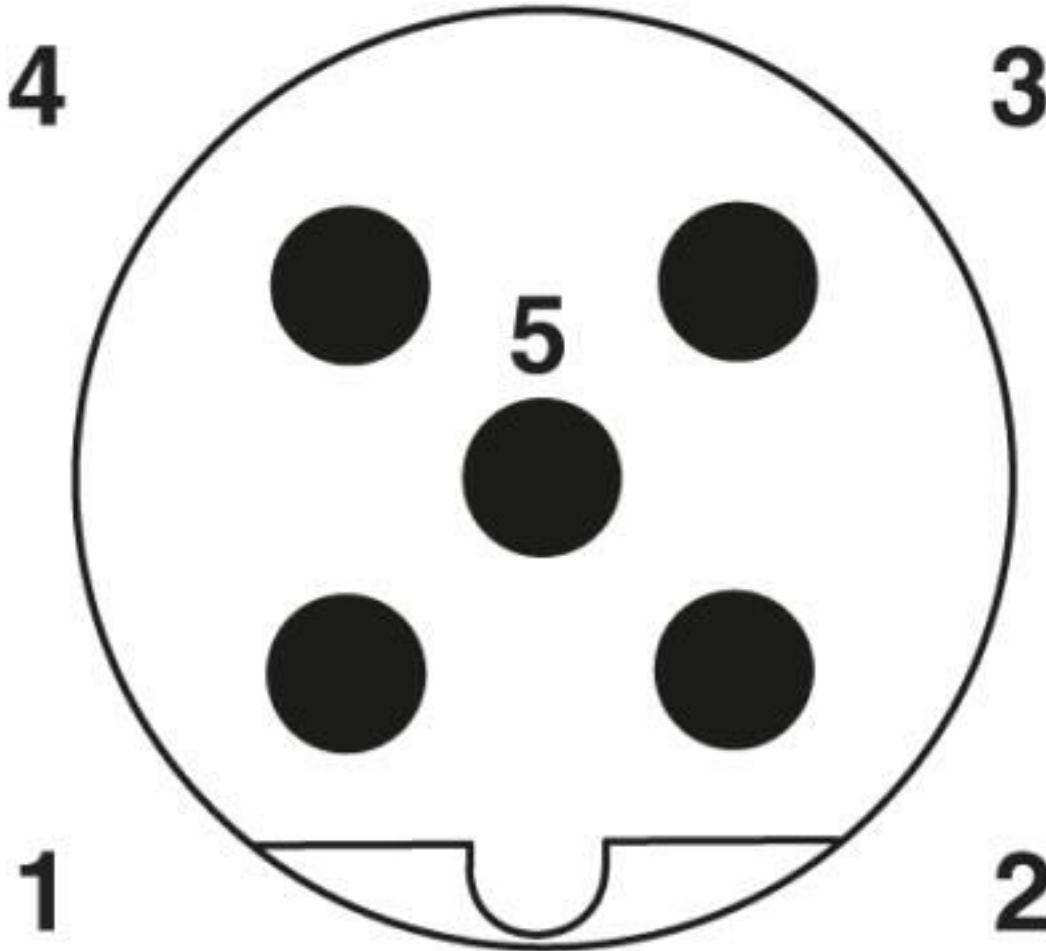
Dimensional drawing



Plug, M12 x 1, straight, shielded

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Schematic diagram



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

### Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27143400
eCl@ss 6.0	27279200
eCl@ss 7.0	27440104

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## Classifications

### eCl@ss

eCl@ss 8.0	27440104
eCl@ss 9.0	27440102

### ETIM

ETIM 5.0	EC002635
ETIM 6.0	EC002635
ETIM 7.0	EC002635

## Approvals

### Approvals

Approvals

EAC / EAC

Ex Approvals

### Approval details

EAC		EAC-Zulassung
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EAC		RU C- DE.BL08.B.00511
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## Accessories

### Accessories

#### Electronics pliers

Diagonal cutter - MICROFOX-SB - 1212489



Electronic diagonal cutter, round head, without chamfer, with opening spring, mirror-polished and oiled, 2-component grip, cutting capacity: soft 0.2 - 2.0 mm; medium hard 1.2 mm; hard 0.5 mm diameter

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### Accessories

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#### Protective cap

Sealing cap - PROT-M12 FS-PA-CHAIN - 1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



#### Screwdriver tools

Tool - SACC BIT M12-D20 - 1208445

Nut for assembling M12 connectors for assembly with a knurl diameter of 20 mm, for 4 mm hexagonal drive



Adapter insert - TSD-M SAC-BIT ADAPTER - 1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits

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#### Stripping tool

Stripping tool - WIREFOX-D 40 - 1212161



Stripping tool, for stripping cables of 4.5 mm - 40 mm-Ø, insulation thickness of up to 4.5 mm, pivoting blade for round, lengthwise, and spiral cuts

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#### Torque tool

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### Accessories

Torque screwdriver - TSD 04 SAC - 1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors

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Torque screwdriver - TSD-M 1,2NM - 1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0.3 - 1.2 Nm

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Shielding foil - VS-08-RJ45-FOLIEN-SET - 1417184

Shielding foil set, 25 pieces, replacement for RJ45 and M12 Quickon connector



Stripping tool - VS-CABLE-STRIP-VARIO - 1657407

Stripping tool, for the multi-level stripping of shielded cables

