PHŒNIX CONTACT

Connector - SACC-MSD-4QO SH PN SCO - 1411068

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Connector, PROFINET CAT5 (100 Mbps), 4-position, halogen-free, shielded, Plug straight M12 SPEEDCON, Coding: D, 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

☑ Save time, thanks to installation with SPEEDCON fast locking system

☑ Insulation displacement connection: innovative and time-saving assembly without stripping the single wire

☑ Reliable signal transmission - 360° shielding in environments with electromagnetic interference

RoHS   **PROFINET**   sercos EtherCAT

Key Commercial Data

Packing unit	1 pc
GTIN	4 046356 921794
GTIN	4046356921794
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	This product corresponds to the PROFINET Cabling and Interconnection Technology Guideline for PROFINET regulations, version 2.00, order no: 2.252, Chapter 8.2 Connectors for Outside Environment (Balanced cabling)
	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	4
Insulation resistance	$\geq$ 100 MΩ
Coding	D - data
Standards/regulations	M12 connector according to IEC 61076-2-101
	Shock, vibration EN 50155:2001
Signal type/category	PROFINET CAT5 (on the basis of IEC 11801), 100 Mbps
Status display	No
Overvoltage category	II
Degree of pollution	3
Connection method	Insulation displacement connection
Conductor cross section	0.25 mm² ... 0.5 mm² (flexible)
	0.25 mm² ... 0.5 mm² (solid)
Conductor cross section AWG	24 ... 20 (flexible)
	24 ... 20 (solid)
Wire diameter including insulation	0.75 mm ... 2 mm
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	$\geq$ 100
Torque	5 Nm (Pressure nut)
Transmission characteristics (category)	CAT5

Material

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Technical data

Material

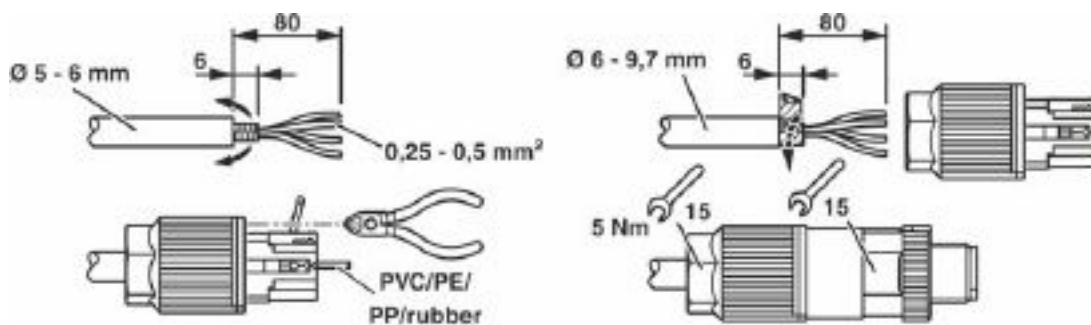| Flammability rating according to UL 94	V0
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	PA 6.6
Material of grip body	Zinc die-cast, nickel-plated
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR
Standards/regulations	PA 6.6: Fire protection in rail 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
	Shock, vibration EN 50155:2001
Flammability rating according to UL 94	V0

Environmental Product Compliance

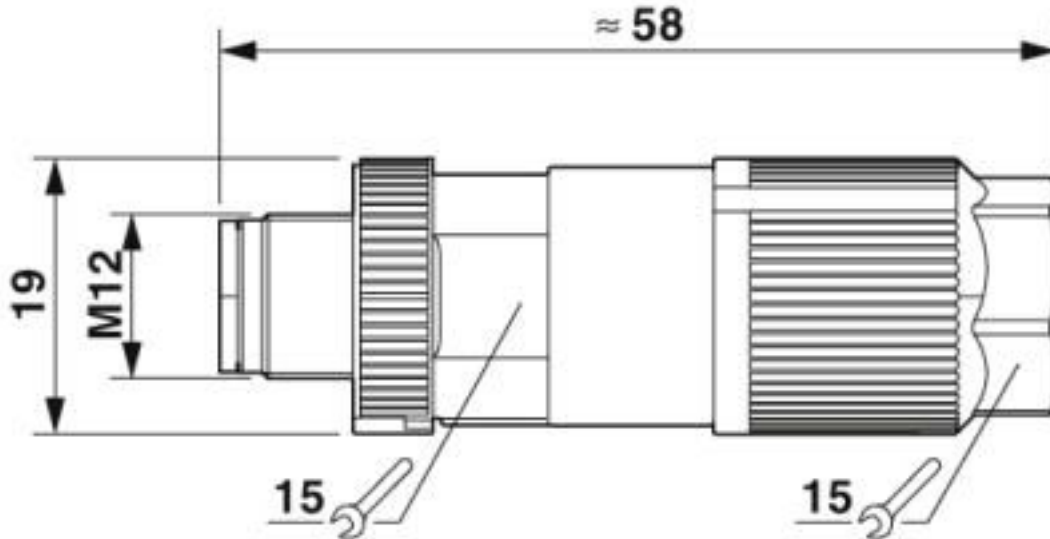| China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Functional drawing

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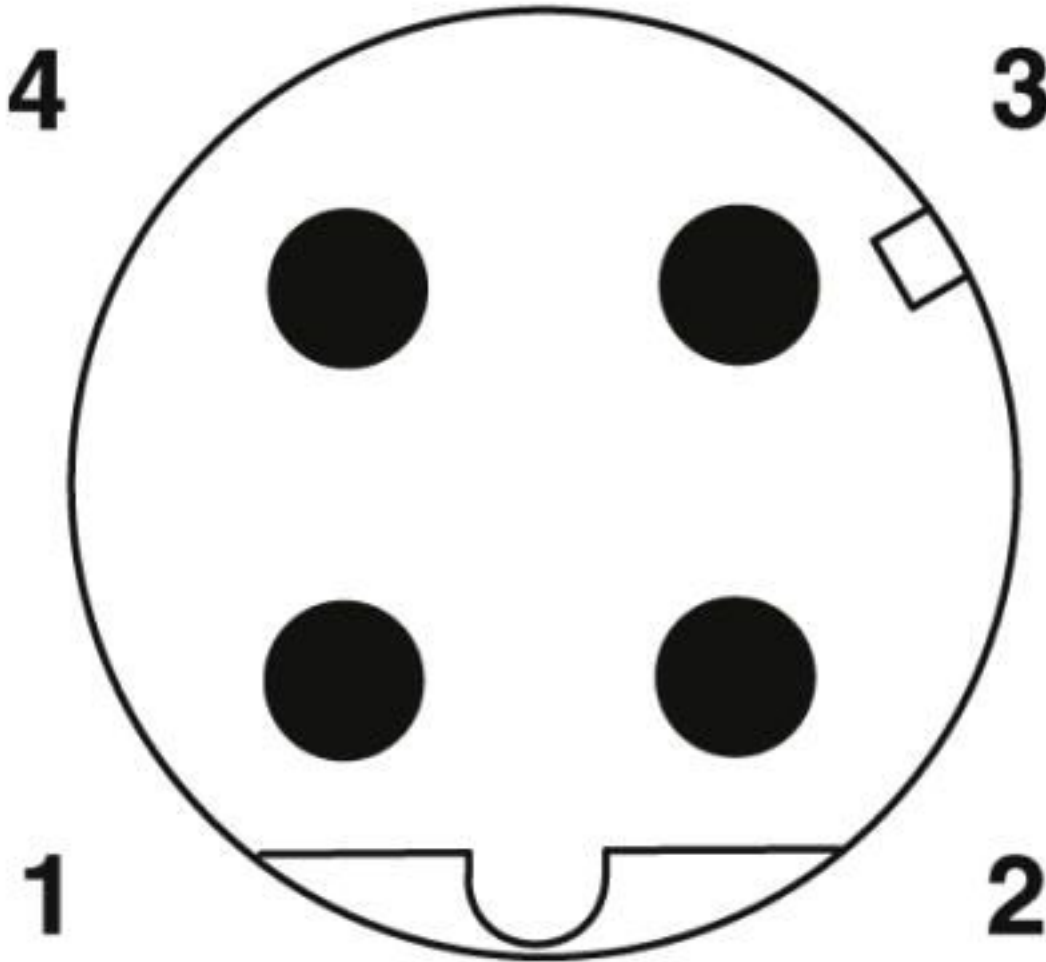# Connector - SACC-MSD-4QO SH PN SCO - 1411068

Dimensional drawing

Plug, M12 x 1, straight, shielded

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Schematic diagram

Pin assignment M12 male connector, 4-pos., D-coded, male side

Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
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	EAC-Zulassung

EAC	EAC	RU C-DE.BL08.B.00511

Accessories

Accessories

Data cable by the meter

Network cable - VS-OE-OE-93B/... - 1417362

Network cable, PROFINET CAT5 (100 Mbps), 4-position, PVC, green RAL 6018, shielded, free cable end, on free cable end, cable length: Free entry (0.5 ... 400 m)

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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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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

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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

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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

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Accessories

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

Torque tool

Torque screwdriver - TSD 04 SAC - 1208429

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

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

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

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