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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

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Sensor/Actuator cable, 8-position, PVC, yellow, Plug straight M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, Cable length: 3 m



Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	1.0 g
Custom tariff number	85444290
Country of origin	United States

Technical data

Dimensions

Length of cable	3 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65

General

Rated current at 40°C	2 A
Rated voltage	30 V
Number of positions	8
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired

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Technical data

General

Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	≥ 100
Torque	0.4 Nm (M12 connector)

Material

Flammability rating according to UL 94	HB
Contact material	CuZn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Standards and Regulations

Standard designation	M12 connector
Standards/regulations	IEC 61076-2-101
Flammability rating according to UL 94	HB

Cable

Cable type	PVC yellow 105 °C
Cable type (abbreviation)	542
UL AWM style	2517 (105°C/300 V)
AWG signal line	24
Core diameter including insulation	1.12 mm ±0.03 mm
Wire colors	white, brown, green, yellow, gray, pink, blue, red
Overall twist	8 wires around filler to the core
External sheath, color	yellow
External cable diameter D	5.7 mm ±0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	44 kg/km
Outer sheath, material	PVC
Material, filler	PP
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Conductor resistance	max. 79.7 Ω/km (20° C)
Nominal voltage, cable	300 V
Other resistance	UV resistant

Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

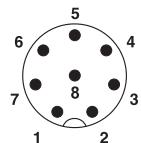
Technical data

Cable

Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)
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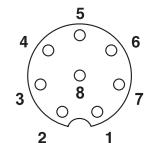
Drawings

Schematic diagram



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

Schematic diagram



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

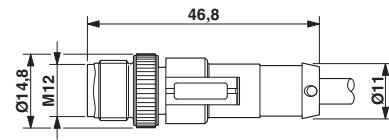
Cable cross section



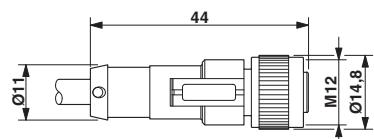
PVC yellow 105 °C [542]

M12 x 1 plug, straight

Dimensional drawing



Dimensional drawing



M12 x 1 socket, straight

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

Approvals

Approvals

Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approvals submitted

Approval details

UL Listed

cUL Listed

cULus Listed 

Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

Accessories

Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: Plotter, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

Marker carrier cable

Conductor marker carrier - PATO 2/15 - 1013122



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 2.8-4.4 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATO 3/15 - 1013135



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 4.4-6.7 mm, Lettering field: 4 x 15 mm

Conductor marker carrier - PATO 4/15 - 1013148



Conductor marker carrier, transparent, unlabeled, Mounting type: clip on, Cable diameter: 6.7-10 mm, Lettering field: 4 x 15 mm

Marker pen

Marker pen - B-STIFT - 1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

Accessories

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 sockets



Screw plug - PROT-M12 MS-PA-CHAIN - 1430899

M12 sealing cap with fixing band, for sensor cables, for free M12 sockets



Safety locking

Locking clip - SAC-M12-EXCLIP-M - 1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Locking clip - SAC-M12-EXCLIP-F - 1558991



Locking clip for the socket side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools

Screwdriver tools

Sensor/Actuator cable - SAC-8P-MS/ 3,0-542/ FS SCO BK - 1417912

Accessories

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

Tool - SAC BIT M12-D15 - 1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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
