

Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FSSH SCO BK - 1406180

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Sensor/Actuator cable, 4-position, PVC, yellow, shielded, Plug angled M12 SPEEDCON, A-coded, on Socket straight M12 SPEEDCON, A-coded, Cable length: 1.5 m



Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 798709
GTIN	4046356798709
Weight per Piece (excluding packing)	1.000 g
Custom tariff number	85444290
Country of origin	United States

Technical data

Dimensions

Length of cable	1.5 m
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Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
Degree of protection	IP65
	IP67

General

Rated current at 40°C	4 A
Rated voltage	250 V
Number of positions	4
Insulation resistance	≥ 10 MΩ

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Technical data

General

Coding	A - standard
Standards/regulations	M12 connector IEC 61076-2-101
Status display	No
Protective circuit/component	Unwired
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	CuSn
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

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	22
Core diameter including insulation	1.27 mm ±0.03 mm
Wire colors	brown, blue, black, white
Overall twist	4 wires, twisted
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	yellow
External cable diameter D	5.5 mm ±0.2 mm
Minimum bending radius, flexible installation	12 x D
Cable weight	48 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires

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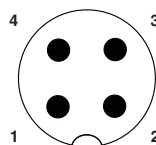
Technical data

Cable

Insulation resistance	$\geq (550 \text{ M Ohms/m @ } 500\text{V})$
Conductor resistance	max. $50.5 \text{ } \Omega/\text{km}$ (20° C)
Nominal voltage, cable	300 V
Special properties	UL standards PLTC and ITC
Flame resistance	FT4
Other resistance	UV resistant
Ambient temperature (operation)	$-30^\circ \text{ C} \dots 105^\circ \text{ C}$ (cable, fixed installation)

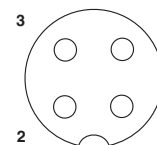
Drawings

Schematic diagram



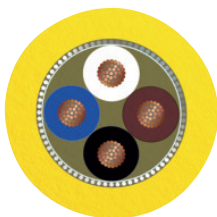
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



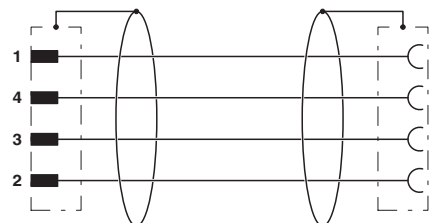
Pin assignment M12 socket, 4-pos., A-coded, view female side

Cable cross section



PVC yellow 105° C [542]

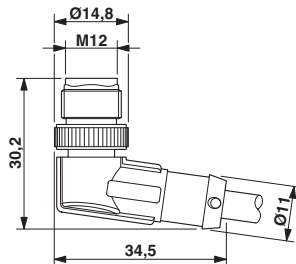
Circuit diagram



Contact assignment of the M12 plug and the M12 socket

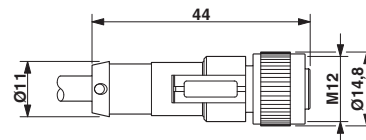
Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FSSH SCO BK - 1406180

Dimensional drawing



M12 x 1 male plug, angled

Dimensional drawing



M12 x 1 socket, straight

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27279218
eCl@ss 9.0	27060311

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855
ETIM 6.0	EC001855

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

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Sensor/Actuator cable - SAC-4P-MR/1,5-542/ FSSH SCO BK - 1406180

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		300 V	

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		300 V	

cULus Listed			
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Accessories

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



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Accessories

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

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

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Accessories

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
