

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195


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Sensor/Actuator cable, 4-position, PVC, yellow, Plug straight M8, on Socket angled M8, Cable length: 1.5 m



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 798556
GTIN	4046356798556
Weight per Piece (excluding packing)	50.000 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
	IP68

#### General

Rated current at 40°C	4 A
Rated voltage	30 V
Number of positions	4

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### Technical data

#### General

Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Standards/regulations	M8 connector IEC 61076-2-104
Status display	No
Protective circuit/component	Unwired
Overvoltage category	II
Degree of pollution	3
Insertion/withdrawal cycles	$\geq 100$
Torque	0.2 Nm (M8 connectors)

#### 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
Sealing material	NBR

#### Standards and Regulations

Standard designation	M8 connector
Standards/regulations	IEC 61076-2-104
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 $\pm$ 0.03 mm
Wire colors	brown, blue, black, white
Overall twist	4 wires, twisted
External sheath, color	yellow
External cable diameter D	4.4 mm $\pm$ 0.2 mm
Minimum bending radius, flexible installation	8 x D
Cable weight	25 kg/km
Outer sheath, material	PVC
Material conductor insulation	PVC
Conductor material	Tin-plated Cu litz wires

# Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195

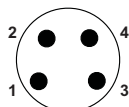
## Technical data

### Cable

Insulation resistance	$\geq (550 \text{ M Ohms/m @ } 500\text{V})$
Conductor resistance	max. $79.7 \text{ } \Omega/\text{km}$ ( $20^\circ \text{ C}$ )
Nominal voltage, cable	300 V
Flame resistance	FT4
Other resistance	UV resistant
Ambient temperature (operation)	$-30^\circ \text{ C} \dots 105^\circ \text{ C}$ (cable, fixed installation)

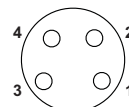
## Drawings

Schematic diagram



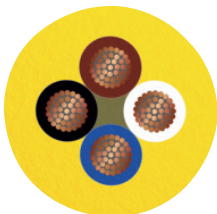
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



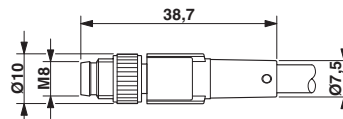
Pin assignment M8 socket, 4-pos., view female side

Cable cross section



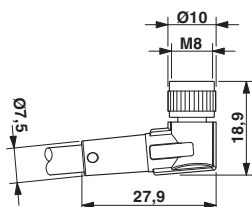
PVC yellow  $105^\circ \text{ C}$  [542]

Dimensional drawing



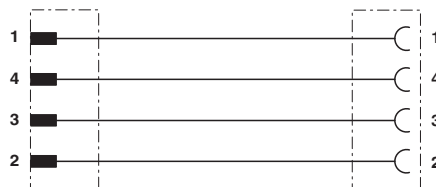
M8 x 1 male plug, straight version

Dimensional drawing



Socket M8 x 1, angled

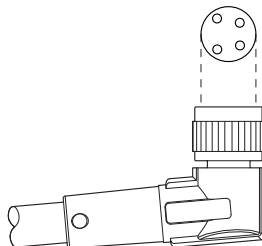
Circuit diagram



Contact assignment of M8 plugs/sockets

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195

Schematic diagram



Layout of connector pin assignments

### 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

Approvals

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195


### Approvals


Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		125 V	

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal current IN		4 A	
Nominal voltage UN		125 V	

cULus Listed			
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### Accessories

Accessories

Conductor marking

Insert label - PABA WH/15 - 1013151



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195

### Accessories

Insert label - PABA YE/15 - 1013698



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

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Insert label - PABA RD/15 - 1013944



Insert label, Strip, red, unlabeled, can be labeled with: CMS-P1-PLOTTER, Mounting type: Thread on, Cable diameter: 0.6-50 mm, Lettering field: 15 x 4 mm

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### 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

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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

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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

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195

### Accessories

#### 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

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#### Protective cap

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857



M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs

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Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860



M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets

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#### Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

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#### Torque tool

## Sensor/Actuator cable - SAC-4P-M8MS/ 1,5-542/M8 FR BK - 1406195

### Accessories

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors