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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!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



## Sensor/Actuator cable - SAC-4P-M12MR/1,5-PUR/M12FS D - 1696112

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Sensor/Actuator cable, 4-position, PUR/PVC, Yellow RAL 1021, Plug angled M12, A-coded, on Socket straight M12, A-coded, Cable length: 1.5 m, DESINA

### Product Features

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Convenient: simplified planning with connecting cables according to DESINA standard



### Key commercial data

Packing unit	1 1
Weight per Piece (excluding packing)	76.1 GRM
Custom tariff number	85444290
Country of origin	Germany

### 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	250 V

## Sensor/Actuator cable - SAC-4P-M12MR/1,5-PUR/M12FS D - 1696112

### Technical data

#### General

Number of positions	4
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard
Status display	No
Protective circuit/component	Unwired
Surge voltage category	II
Pollution degree	3
Insertion/withdrawal cycles	≥ 100

#### Material

Inflammability class 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

#### Cable

Cable type	PUR/PVC yellow
Cable type (abbreviation)	140
Cable abbreviation	LiYY-11Y
UL AWM style	20549
Conductor cross section	0.34 mm <sup>2</sup>
AWG signal line	22
Conductor structure signal line	42x 0.10 mm
Core diameter including insulation	1.5 mm ±0.05 mm
Thickness, insulation	approx. 0.3 mm (Core insulation)
	≥ 0.38 mm (Outer cable sheath)
	approx. 0.35 mm (Inner sheath)
Wire colors	brown, white, blue, black
Overall twist	4 wires, twisted
External sheath, color	Yellow RAL 1021
External cable diameter D	5.2 mm ± 0.2 mm
Smallest bending radius, fixed installation	52 mm
Smallest bending radius, movable installation	52 mm
Number of bending cycles	2000000

## Sensor/Actuator cable - SAC-4P-M12MR/1,5-PUR/M12FS D - 1696112

### Technical data

#### Cable

Bending radius	52 mm
Traversing path	5 m
Traversing rate	3 m/s
Cable weight	39 kg/km
Outer sheath, material	PUR
Material, inner sheath	PVC
Material conductor insulation	PVC
Conductor material	Bare Cu litz wires
Insulation resistance	≥ 1 GΩ*km (at 20 °C)
Conductor resistance	max. 58 Ω/km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage, cable	≥ 3000 V
Flame resistance	in accordance with DIN UL-Style 20549
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (cable, flexible installation)

### 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	27061801

#### ETIM

ETIM 2.0	EC000830
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

#### UNSPSC

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



# Sensor/Actuator cable - SAC-4P-M12MR/1,5-PUR/M12FS D - 1696112

## Classifications

### UNSPSC

UNSPSC 13.2	31251501
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## Approvals

### Approvals

#### Approvals

UL Listed / cUL Listed / GOST / cULus Listed

#### Ex Approvals

#### Approvals submitted

## Approval details

UL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

cUL Listed	
Nominal current IN	4 A
Nominal voltage UN	300 V

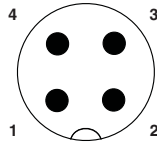
GOST	
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cULus Listed	
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# Sensor/Actuator cable - SAC-4P-M12MR/1,5-PUR/M12FS D - 1696112

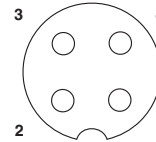
## Drawings

Schematic diagram



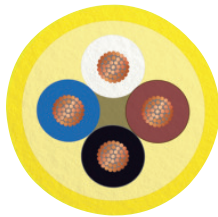
Pin assignment M12 plug, 4-pos., A-coded, view plug side

Schematic diagram



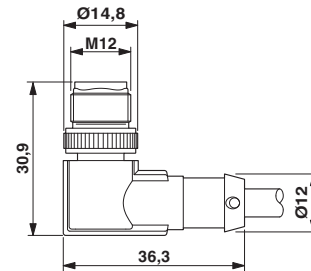
Pin assignment M12 socket, 12-pos., A-coded, view female side

Cable cross section



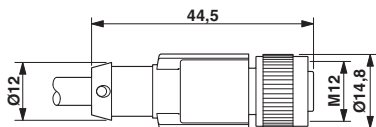
PUR/PVC yellow [140]

Dimensioned drawing



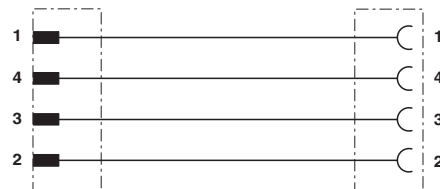
M12 x 1 male plug, angled, shielded

Dimensioned drawing



M12 x 1 socket, straight, shielded

Circuit diagram



Contact assignment of the M12 plug and the M12 socket