

SAC-3P-M12MS/ 5,0-140/M12FS - Sensor/actuator cable



1502468

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Sensor/actuator cable, 3-position, PUR/PVC, yellow, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 5 m

Commercial data

Item number	1502468
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF03
Product key	AF1CBA
GTIN	4017918815103
Weight per piece (including packing)	213.27 g
Weight per piece (excluding packing)	193.87 g
Customs tariff number	85444290
Country of origin	DE

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	3
No. of cable outlets	1
Shielded	no
Coding	A

Insulation characteristics

Overvoltage category	II
Degree of pollution	3

Material specifications

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

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100
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Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.4 Nm
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Connector

Connection 1

Type	Plug straight M12
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Number of positions	3
Coding type	A

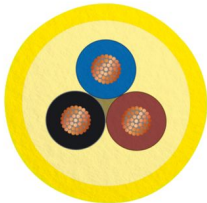
Connection 2

Type	Socket straight M12
Number of positions	3
Coding type	A

Cable/line

Cable length	5 m
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PUR/PVC yellow [140]

Dimensional drawing		
Cable weight	37 kg/km	
Number of positions	3	
Shielded	no	
Cable type	PUR/PVC yellow [140]	
Conductor structure signal line	42x 0.10 mm	
AWG signal line	22	
Conductor cross section	0.34 mm ²	
Wire diameter incl. insulation	1.52 mm ±0.02 mm	
External cable diameter	5.20 mm ±0.2 mm	
Outer sheath, material	PUR	
External sheath, color	yellow	
Conductor material	Bare Cu litz wires	
Material wire insulation	PVC	
Single wire, color	brown, blue, black	
Thickness, insulation	≥ 0.23 mm (Core insulation)	
	≥ 0.38 mm (Outer cable sheath)	
	approx. 0.45 mm (Inner sheath)	
Overall twist	3 wires, twisted	
Max. conductor resistance	max. 57.3 Ω/km (at 20 °C)	
Insulation resistance	≥ 100 MΩ*km (at 20 °C)	
Nominal voltage, cable	300 V	
Test voltage	2500 V	
Smallest bending radius, fixed installation	52 mm	
Smallest bending radius, movable installation	52 mm	
Dynamic load capacity (bending)	Max. bending cycles: 2000000, Bending radius: 52 mm,	

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	Traversing path: 5 m, Traversing rate: 3 m/s
Ambient temperature (operation)	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-25 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing



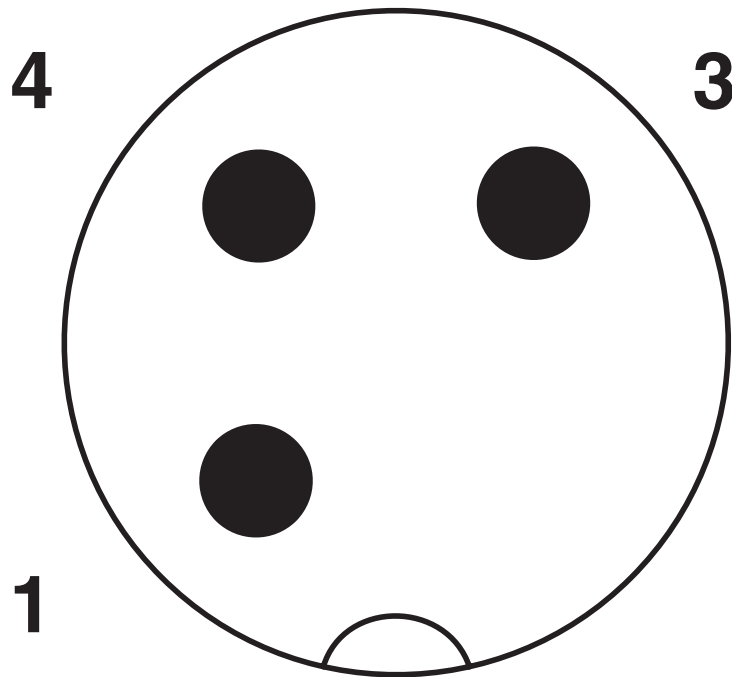
M12 x 1 socket, straight

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Schematic diagram



Pin assignment M12 plug, 3-pos., A-coded, view male side

Schematic diagram



Pin assignment M12 socket, 3-pos., A-coded, view female side

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Circuit diagram



Contact assignment of M12 connector/socket

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Classifications

ECLASS

ECLASS-13.0	27060311
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ETIM

ETIM 8.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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