

SAC-4P-M12MS/ 2,0-810/M12FS - Sensor/actuator cable



1089033
<https://www.phoenixcontact.com/us/products/1089033>

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Sensor/actuator cable, 4-position, PUR halogen-free, welding sputter-resistant, highly flexible, orange RAL 2003, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 2 m

As shown in the illustration but with an orange conductor

Commercial data

Item number	1089033
Packing unit	1 pc
Minimum order quantity	25 pc
Note	Made to order (non-returnable)
Product key	AF1CCA
GTIN	4055626892535
Weight per piece (including packing)	116.14 g
Weight per piece (excluding packing)	115 g
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	4
No. of cable outlets	1
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

Nominal voltage U_N	250 V AC
	250 V DC
Nominal current I_N	4 A

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
Number of positions	4
Coding type	A

Connection 2

Type	Socket straight M12
Number of positions	4

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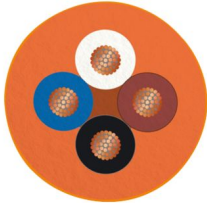
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Coding type	A
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Cable/line

Cable length	2 m
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PUR, halogen-free, highly flexible, welding-sputter resistant, orange [810]

Dimensional drawing	
UL AWM Style	20549 (80°C/300 V)
Number of positions	4
Shielded	no
Cable type	PUR, halogen-free, highly flexible, welding-sputter resistant, orange [810]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor cross-section	4x 0.34 mm ² (Signal line)
Wire diameter incl. insulation	1.55 mm ±0.05 mm (Signal line)
External cable diameter	6.40 mm ±0.1 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	brown, white, blue, black
Overall twist	4 wires, twisted
Max. conductor resistance	approx. 57 Ω/km
Insulation resistance	≥ 20 MΩ*km
Nominal voltage, cable	300 V (Peak value, not for high-power applications)
Test voltage Core/Core	3000 V (Spark test)
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	32 mm
Smallest bending radius, movable installation	64 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 10 x D, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ² , Ambient temperature: ≤ 60 °C
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in acc. with UL FT-2
Other resistance	hydrolysis and microbe resistant
Special properties	Sheath resistant to welding beads, can be recycled, matt, without

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	adhesion, wear-resistant, flame resistant and self-extinguishing
	Free from silicone and cadmium
	Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)
	≤ 60 °C (cable, drag chain applications)

Environmental and real-life conditions

Ambient conditions

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

Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

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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, 4-pos., A-coded, view plug side

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Schematic diagram



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

Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Approvals

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 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U _N	Nominal current I _N	Cross section AWG	Cross section mm ²
keine				
	300 V	4 A	-	-

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	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
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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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