

SAC-5P-M12MS/ 4,0-151/M12FS - Sensor/actuator cable



1409025

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Sensor/actuator cable, 5-position, PUR halogen-free, irradiated, orange RAL 2003, Plug straight M12, coding: A, on Socket straight M12, coding: A, cable length: 4 m

Commercial data

Item number	1409025
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1CDA
GTIN	4046356858243
Weight per piece (including packing)	178.6 g
Weight per piece (excluding packing)	166 g
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
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	48 V AC
	60 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

Connector

Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

Connection 2

Type	Socket straight M12
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Number of positions	5
Coding type	A

Cable/line

Cable length	4 m
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PUR irradiated halogen-free orange [150]

Dimensional drawing	
Number of positions	5
Shielded	no
Cable type	PUR irradiated halogen-free orange [150]
Conductor structure signal line	42x 0.10 mm
AWG signal line	22
Conductor structure, voltage supply	24x 0.15 mm
AWG power supply	20
Conductor cross-section	4x 0.34 mm ² (Signal line) 1x 0.5 mm ² (PE connection)
External cable diameter	5.20 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	orange RAL 2003
Conductor material	Bare Cu litz wires
Material wire insulation	PE
Single wire, color	brown, white, blue, black, green-yellow
Overall twist	5 cores, twisted
Max. conductor resistance	≤ 57.5 Ω/km (with 0.34 mm ² conductor cross-section) ≤ 39 Ω/km (with 0.5 mm ² conductor cross-section)
Nominal voltage, cable	250 V (AC)
Test voltage	2000 V (50 Hz, 5 minutes)
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	30 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 52 mm, Traversing path: 10 m, Traversing rate: 3 m/s
Halogen-free	The cable is halogen-free
Flame resistance	DIN VDE 0472 part 804, test type B
Other resistance	hydrolysis and microbe resistant UV resistant Resistant to welding splashes

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Special properties	Silicone-free
	Irradiated
Ambient temperature (operation)	-50 °C ... 105 °C (cable, fixed installation)
	-40 °C ... 105 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, fixed installation)	-50 °C ... 105 °C (cable, fixed installation)
Ambient temperature (operation) (flexible installation)	-40 °C ... 105 °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 male connector, 5-pos., A-coded, male side

Schematic diagram



Pin assignment M12 socket, 5-pos., A-coded, socket side view

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Circuit diagram



Contact assignment of the M12 plug and the M12 socket

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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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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