

SAC-8P-10,0-850/M12FS HN - Sensor/actuator cable



1402580

<https://www.phoenixcontact.com/us/products/1402580>

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Sensor/actuator cable, 8-position, PUR halogen-free, black RAL 9005, shielded, free cable end, on Socket straight M12, coding: A, cable length: 10 m, Customer version, with hybrid cable

As in the figure but with black grip and hybrid cable

Commercial data

Item number	1402580
Packing unit	1 pc
Minimum order quantity	10 pc
Product key	AF1CMA
GTIN	4046356624053
Weight per piece (including packing)	556.2 g
Weight per piece (excluding packing)	556.2 g
Country of origin	PL

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	8
No. of cable outlets	1
Shielded	yes
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	CuZn
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	30 V AC
	30 V DC
Nominal current I_N	2 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 (M12 connector)
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Connector

Connection 1

Type	free cable end
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Connection 2

Type	Socket straight M12
Number of positions	8
Coding type	A

Cable/line

Cable length	10 m
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PUR halogen-free black [850]

Number of positions	8
Shielded	yes
Cable type	PUR halogen-free black [850]
Conductor structure signal line	19x 0.10 mm
AWG signal line	26
Conductor structure, voltage supply	45x 0.10 mm
AWG power supply	22
Conductor cross-section	4x 0.14 mm ² (Signal line) 4x 0.34 mm ² (Power supply)
Wire diameter incl. insulation	1 mm (Signal line) 1.1 mm (Power supply)
External cable diameter	6 mm
Outer sheath, material	PUR
External sheath, color	black RAL 9005
Conductor material	Tin-plated Cu litz wires
Material, filler	PE + filler yarn
Material wire insulation	Foamed PE (Signal line) TPE (Power supply)
Single wire, color	yellow, gray, violet, pink, white-green, brown-green, white, blue
Thickness, insulation	≥ 0.38 mm (Outer cable sheath)
Optical shield covering	85 %
Max. conductor resistance	≤ 134 mΩ/m (Signal line) ≤ 55 mΩ/m (Power supply)
Insulation resistance	> 200 MΩ*km
Working capacitance	≤ 40 pF (Signal line)
Nominal voltage, cable	30 V
Test voltage Core/Core	500 V AC (at 50 Hz)
Test voltage Core/Shield	500.00 V AC (at 50 Hz)
Smallest bending radius, fixed installation	≥ 20 mm
Smallest bending radius, movable installation	≥ 75 mm
Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 75 mm
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -10 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

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Ambient conditions

Degree of protection	IP65
	IP67
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

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Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

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Circuit diagram



Contact assignment of the M12 socket

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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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Environmental product compliance

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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