

SAC-8P-10,0-PVC/M12FS SH - Sensor/actuator cable



1421545

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Sensor/actuator cable, 8-pos., PVC, RAL 7021 (black gray), shielded, free cable end, to straight M12 socket (A-coded), cable length: 10.0 m

Commercial data

Item number	1421545
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Sales key	AF1CMA
Product key	AF1CMA
GTIN	4055626268538
Weight per piece (including packing)	910 g
Weight per piece (excluding packing)	906 g
Customs tariff number	85444290
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	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
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

Connector

Connection 1

Type	free cable end
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Connection 2

Type	Socket straight M12
Number of positions	8
Coding type	A

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Cable/line

Cable length	10 m
PVC black [PVC]	
Dimensional drawing	
Note	The cable is not suitable for use with drag chains.
Cable weight	85 kg/km
UL AWM Style	2517
Number of positions	8
Shielded	yes
Cable type	PVC black [PVC]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	8x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	7.70 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	black RAL 9005
Conductor material	Bare Cu litz wires
Material, filler	PVC
Material wire insulation	PVC
Single wire, color	white, brown, green, yellow, gray, pink, blue, red
Thickness, insulation	≥ 0.38 mm (Conductor insulation, signal line) ≥ 0.76 mm (Outer cable sheath)
Overall twist	8 wires around filler to the core, twisted in with additional Cu litz in the wire outer godet
Optical shield covering	85 %
Max. conductor resistance	≤ 78 Ω/km
Insulation resistance	≥ 10 GΩ*km
Nominal voltage, cable	300 V
Test voltage	3000 V
Smallest bending radius, fixed installation	38.5 mm
Smallest bending radius, movable installation	77 mm
Flame resistance	According to UL 758/1581 (Cable Flame) According to DIN EN 60332-1-2 (60 s)
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 80°C
Ambient temperature (operation)	-25 °C ... 105 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

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

Drawings

Dimensional drawing



M12 x 1 socket, straight, shielded

Schematic diagram

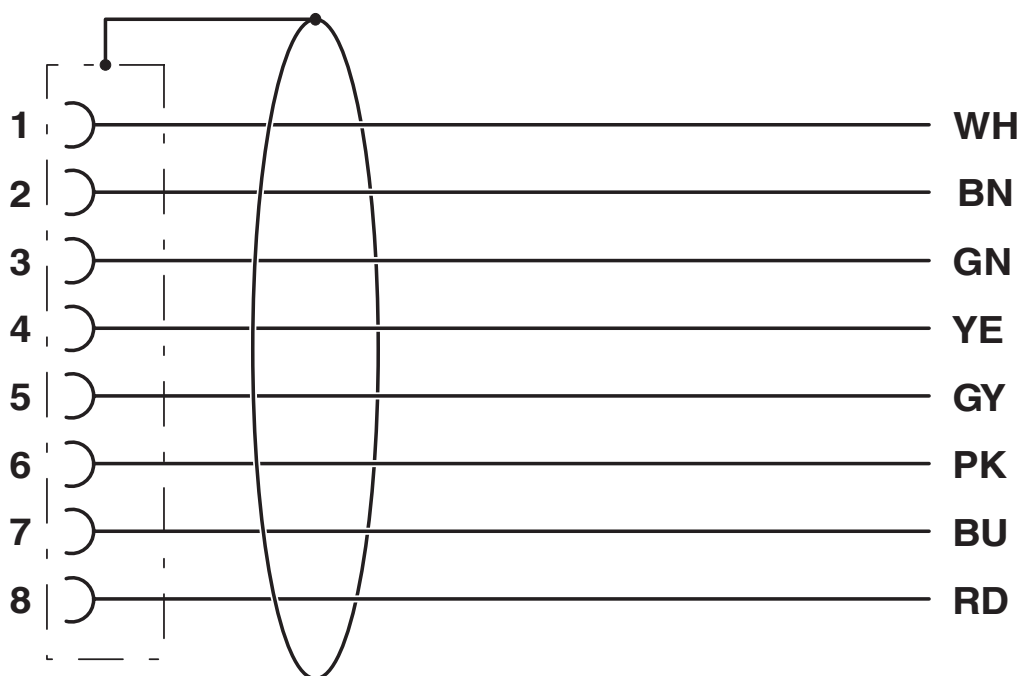


Pin assignment M12 socket, 8-pos., A-coded, view female side

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Circuit diagram



Contact assignment of the M12 socket

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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
	30 V	2 A	-	-



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Classifications

ECLASS

ECLASS-13.0	27060311
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ETIM

ETIM 9.0	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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