

SAC-4P-M8MR/ 0,5-542/M12FR BK - Sensor/actuator cable

1406211
<https://www.phoenixcontact.com/us/products/1406211>

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Sensor/actuator cable, 4-position, PVC, yellow, Plug angled M8, on Socket angled M12, coding: A, cable length: 0.5 m

Commercial data

Item number	1406211
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF13
Product key	BF1ICB
GTIN	4046356798396
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Customs tariff number	85444290
Country of origin	US

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Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	4
Application	Standard, U.S. cables
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
Outer sheath, material	PVC

Electrical properties

Contact resistance	$\leq 5 \text{ m}\Omega$
Insulation resistance	$\geq 100 \text{ M}\Omega$
Nominal voltage U_N	48 V AC
	60 V DC
Nominal current I_N	4 A
Protective circuit	unwired

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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	0.2 Nm (M8 connectors)
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Connector

Connection 1

Type	Plug angled M8
Number of positions	4

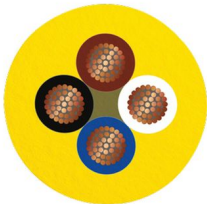
Connection 2

Type	Socket angled M12
Number of positions	4
Coding type	A

Cable/line

Cable length	0.5 m
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PVC yellow 105 °C [542]

Dimensional drawing	
Cable weight	25 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	4
Shielded	no
Cable type	PVC yellow 105 °C [542]
Conductor structure signal line	32x 1.10 mm
AWG signal line	24
Wire diameter incl. insulation	1.12 mm ±0.03 mm
External cable diameter	4.40 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	yellow
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PVC
Single wire, color	brown, blue, black, white
Overall twist	4 wires, twisted
Max. conductor resistance	max. 79.7 Ω/km (20 °C)
Insulation resistance	≥ (550 M Ohms/m @ 500V)
Nominal voltage, cable	300 V
Minimum bending radius, flexible installation	8 x D
Smallest bending radius, movable installation	36 mm

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Flame resistance	FT4
Other resistance	UV resistant
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)
	-5 °C ... 105 °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)
	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101
Standard designation	M8 connector
Standards/specifications	IEC 61076-2-104

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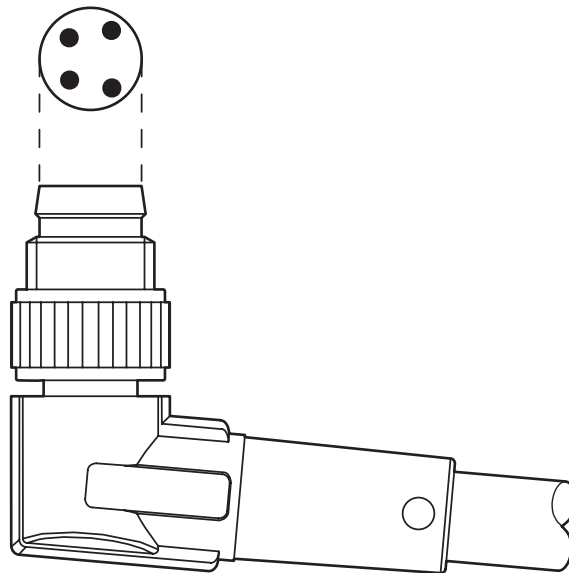


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Drawings

Schematic diagram



Layout of connector pin assignments

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Schematic diagram



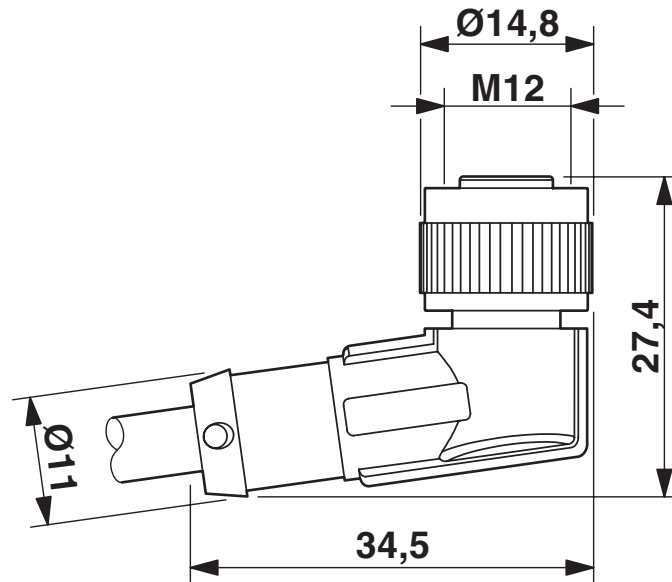
Pin assignment M12 socket, 4-pos., A-coded, view female side

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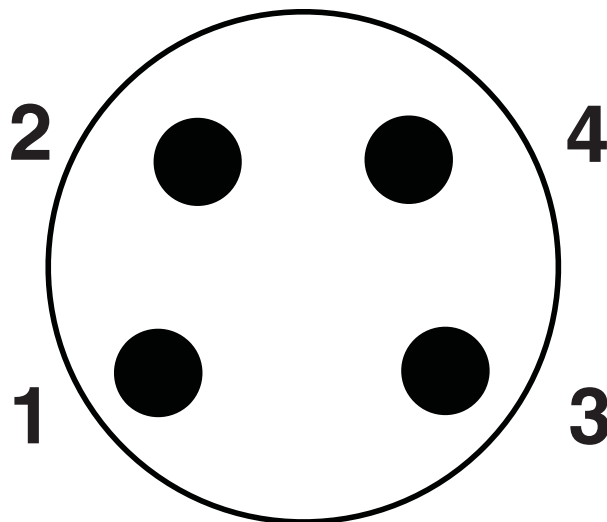
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Dimensional drawing



M12 x 1 socket, angled

Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

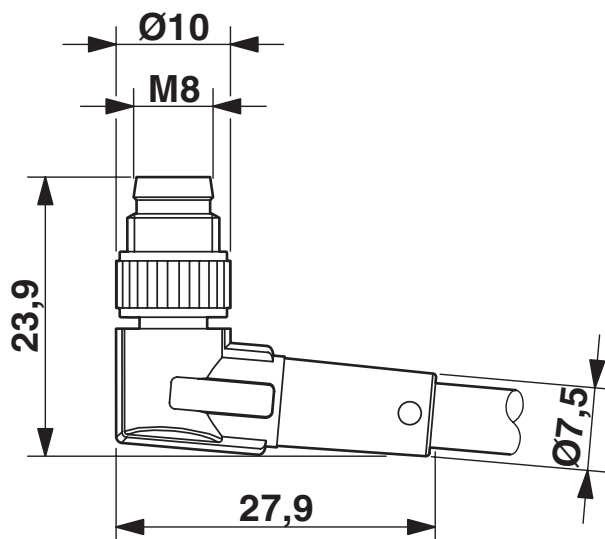
SAC-4P-M8MR/ 0,5-542/M12FR BK - Sensor/actuator cable



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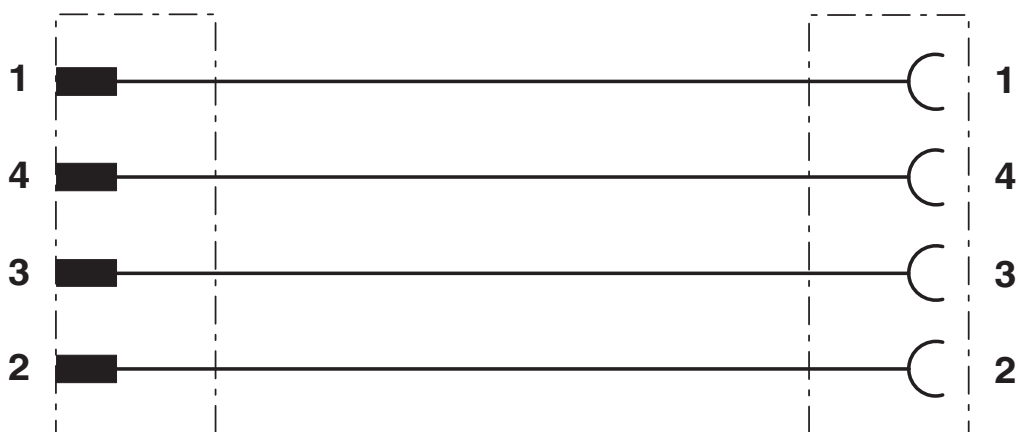
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Dimensional drawing



M8 x 1 male plug, angled version

Circuit diagram



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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
	125 V	4 A	-	-

 cUL Listed Approval ID: FILE E 221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	125 V	4 A	-	-

 EAC-RoHS Approval ID: RU D-DE.HB35.B.00387				
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 cUL Listed Approval ID: FILE E 221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	4 A	-	-

 UL Listed Approval ID: FILE E 221474				
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	30 V	4 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27060311
ECLASS-12.0	27060311
ECLASS-13.0	27060311

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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