SAC-4P-M8MS/3,0-680/M8FS FDP - Sensor/actuator cable

1096001

https://www.phoenixcontact.com/us/products/1096001

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Sensor/actuator cable, 4-position, PVC, gray, shielded, Plug straight M8, coding: A, on Socket straight M8, coding: A, cable length: 3 m, Foil shielding and drain wire connected to pin 2

Commercial data

Item number	1096001
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF13
Product key	AF1IEF
GTIN	4055626929521
Weight per piece (including packing)	22.22 g
Weight per piece (excluding packing)	22.22 g
Country of origin	US

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard, U.S. cables
Number of positions	4
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
Material grommet GRP	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	48 V AC
	60 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connection data

Conductor connection

Tightening torque	0.2 Nm (M8 connectors)

Connector

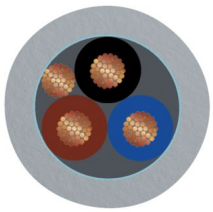
Connection 1

Type	Plug straight M8
Coding type	A

Connection 2

Type	Socket straight M8
Coding type	A

Cable/line

Cable length	3 m
Dimensional drawing	
Cable weight	26.04 kg/km
UL AWM Style	2517 (105 °C / 300 V)
Number of positions	3
Shielded	yes
AWG signal line	24
Wire diameter incl. insulation	1.12 mm ±0.03 mm
External cable diameter	4.17 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	gray
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PVC (Signal line)
Single wire, color	brown, blue, black
Type of pair shielding	Plastic-coated aluminum foil, aluminum side inside
Overall twist	Conductors, fillers, and drain wire are twisted with left-hand lay
Max. conductor resistance	max. 80.2 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	34 mm
Flame resistance	FT4
Other resistance	UV resistant
Ambient temperature (operation)	-30 °C ... 105 °C (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67

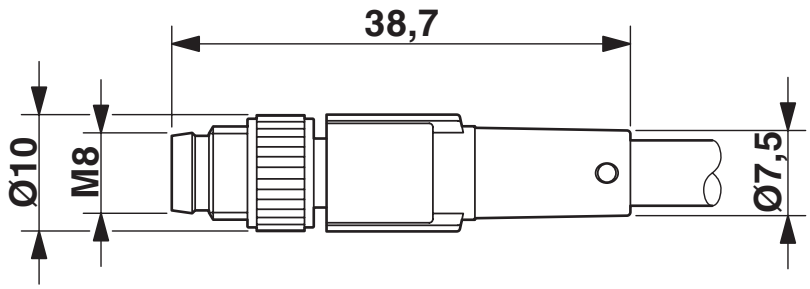
	IP68
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)
Ambient temperature (operation) (Cable, flexible installation)	-40 °C ... 80 °C (cable, fixed installation)
	-5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

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

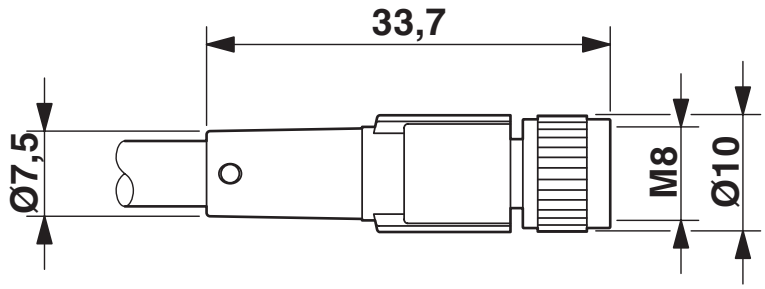
Drawings

Dimensional drawing



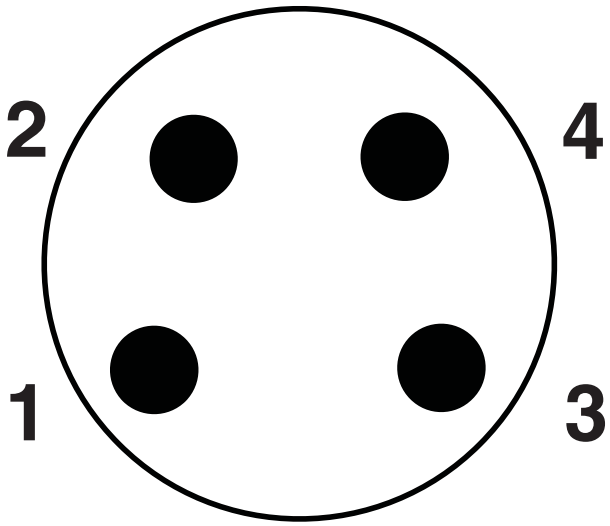
M8 x 1 male plug, straight version

Dimensional drawing



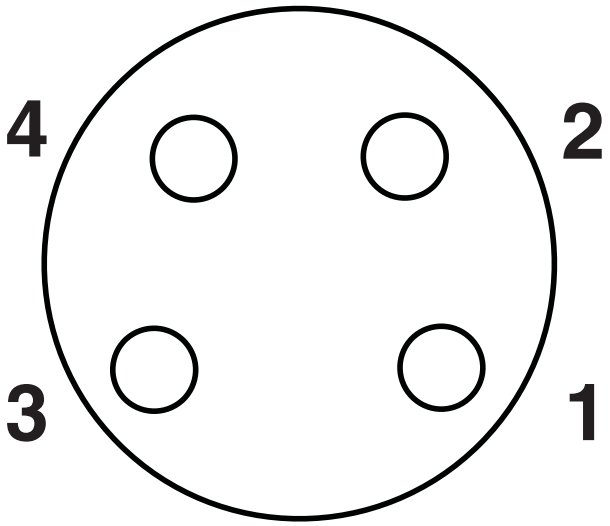
Socket M8 x 1, straight

Schematic diagram



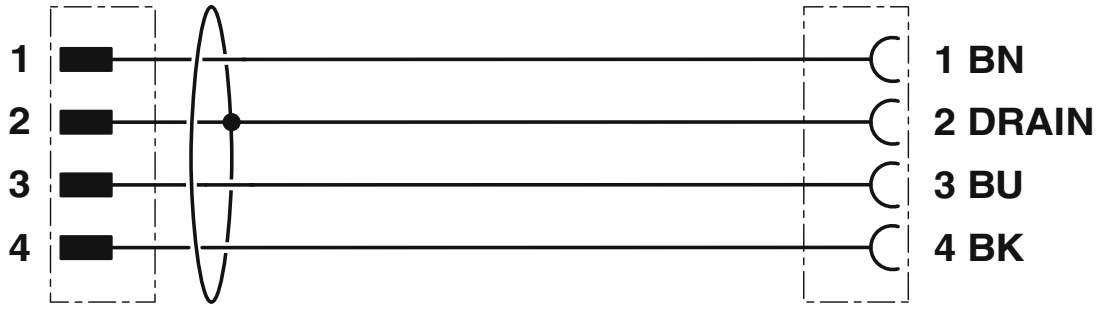
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



Pin assignment M8 socket, 4-pos., view female side

Circuit diagram



Contact assignment of M8 plugs/sockets

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1096001

UL Listed
Approval ID: FILE E 221474

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	30 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
keine				
	30 V	4 A	-	-

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855

UNSPSC

UNSPSC 21.0	31251501

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions

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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