SAC-5P-M 8MSB/ 1,0-115/M 8FSB - Sensor/actuator cable

1414617

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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, coding: B, on Socket straight M8, coding: B, cable length: 1 m

Your advantages

- Easy and safe: 100 % electrically tested plug-in components

Commercial data

Item number	1414617
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	BF01
Product key	AF1BDA
GTIN	4055626029917
Weight per piece (including packing)	39.1 g
Weight per piece (excluding packing)	37.8 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable
Number of positions	5
No. of cable outlets	1
Shielded	no
Coding	B

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	3 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100

Signaling

Status display	no
Status display present	no

Connector

Connection 1

Type	Plug straight M8
Number of positions	5
Coding type	B

Connection 2

Type	Socket straight M8

Number of positions	5
Coding type	B

Cable/line

Cable length	1 m

PUR, black, 5th conductor gray [115]

Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR, black, 5th conductor gray [115]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross-section	0.25 mm²
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	4.70 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material, filler	PP
Material wire insulation	PP
Single wire, color	brown, white, blue, black, gray
Thickness, insulation	approx. 0.21 mm (Core insulation)
	approx. 0.70 mm (Outer cable sheath)
Overall twist	5 cores, twisted
Length of twist, overall twist	75 mm
Max. conductor resistance	≤ 75 Ω/km
Insulation resistance	≥ 1 GΩ*km
Nominal voltage, cable	≤ 300 V (AC)
Test voltage	≥ 3000 V (AC)
Smallest bending radius, fixed installation	23.5 mm
Smallest bending radius, movable installation	47 mm
Dynamic load capacity (bending)	Max. bending cycles: 10000000, Bending radius: 47 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥5000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
	in accordance with DIN EN 50267-2-1
Flame resistance	according to UL 758/1581 (horizontal)
	in accordance with UL 758/1581 FT2
Resistance to oil	According to DIN EN 60811-2-1, 168 h at 100°C
Other resistance	hydrolysis and microbe resistant
	Resistant to salt water

	Low adhesion
	abrasion-resistant
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-25 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

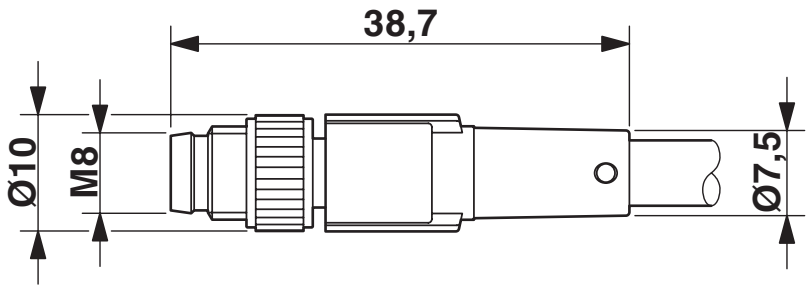
Degree of protection	IP65
	IP67
Ambient temperature (operation) (male connector/female connector)	-25 °C ... 90 °C (Plug / socket)

Standards and regulations

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

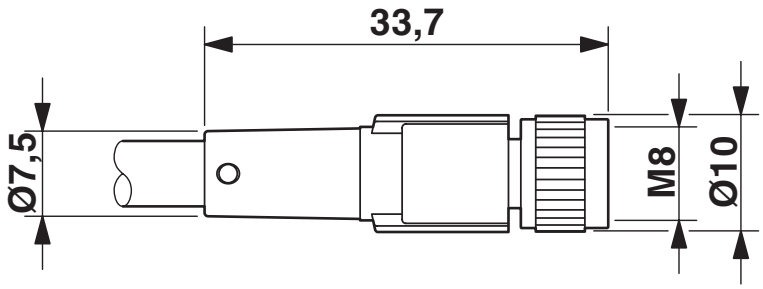
Drawings

Dimensional drawing



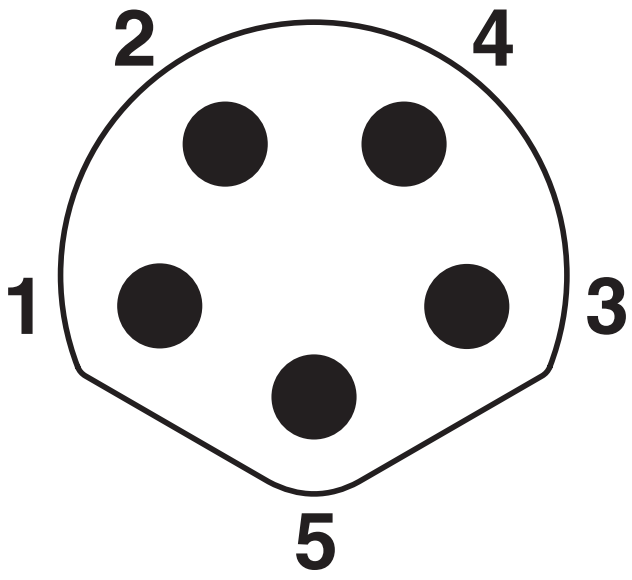
M8 x 1 male plug, straight version

Dimensional drawing



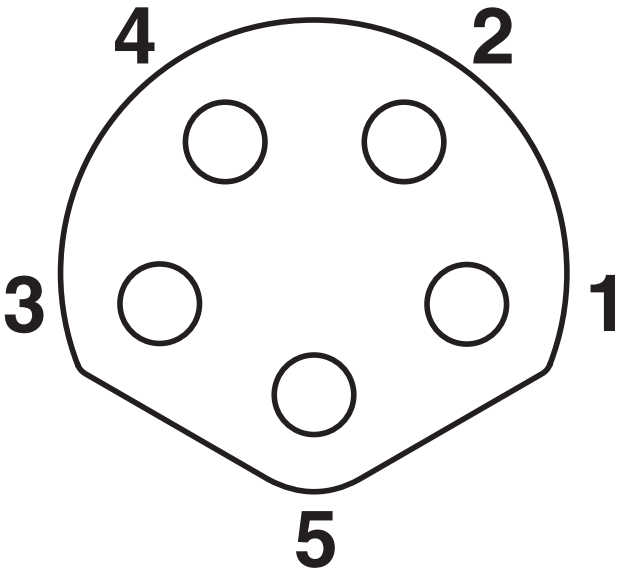
Socket M8 x 1, straight

Schematic diagram



Pin assignment, pin side, M8, 5-pos., B-coded

Schematic diagram



Pin assignment, socket side, M8, 5-pos., B-coded

Circuit diagram



Contact assignment of M8 plugs/sockets

Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1414617

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	3 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	3 A	-	-

Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

ETIM

ETIM 10.0	EC001855

UNSPSC

UNSPSC 21.0	26121600

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%

EF3.1 Climate Change

CO2e kg	3.626 kg CO2e

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