

SAC-6P-M 8MS/ 3,0-PUR - Sensor/actuator cable



1522105

<https://www.phoenixcontact.com/us/products/1522105>

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Sensor/actuator cable, 6-position, PUR halogen-free, black-gray RAL 7021, Plug straight M8, coding: A, on free cable end, cable length: 3 m

Your advantages

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

Commercial data

Item number	1522105
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF01
Product key	AF1BGA
GTIN	4046356020916
Weight per piece (including packing)	108.4 g
Weight per piece (excluding packing)	100 g
Customs tariff number	85444290
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable
Application	Standard
Number of positions	6
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
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	≥ 100 MΩ
Nominal voltage U_N	30 V AC
	30 V DC
Nominal current I_N	1.5 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	0.2 Nm (M8 connectors)
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Connector

Connection 1

Type	Plug straight M8
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Number of positions	6
Coding type	A

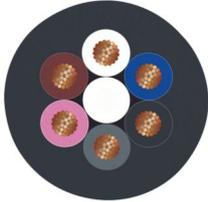
Connection 2

Type	free cable end
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Cable/line

Cable length	3 m
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PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	34 kg/km
Number of positions	6
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	32x 0.10 mm
AWG signal line	24
Conductor cross section	6x 0.25 mm ² (Signal line)
Wire diameter incl. insulation	1.17 mm ±0.02 mm
External cable diameter	5 mm 5.00 mm ±0.15 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material, filler	PE
Material wire insulation	PP
Single wire, color	brown, white, blue, black, gray, pink
Thickness, insulation	≥ 0.21 mm (Core insulation)
Thickness, outer sheath	approx. 0.70 mm
Overall twist	Six cores around the filler to the core
Max. conductor resistance	78 Ω/km (at 20 °C)
Insulation resistance	≥ 100 MΩ*km (at 20 °C)
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 3000 V
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	25 mm
Smallest bending radius, movable installation	50 mm

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Dynamic load capacity (bending)	Max. bending cycles: 5000000, Bending radius: 50 mm, Traversing path: 10 m, Traversing rate: 3 m/s, Acceleration: 10 m/s ²
Dynamic load capacity (torsion)	Torsion: ±180 °/m, Torsion cycles: ≥2000000, Torsional frequency: 35 cycles/min.
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	in accordance with DIN UL-Style 20549
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	Highly resistant to acids, alkaline solutions and solvents hydrolysis and microbe resistant partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Special properties	Flexible cable conduit capable Silicone-free Free of substances which would hinder coating with paint or varnish
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation) -5 °C ... 80 °C (Cable, flexible 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, fixed installation)	-40 °C ... 80 °C (cable, fixed installation)
Ambient temperature (operation) (Cable, flexible installation)	-5 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

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

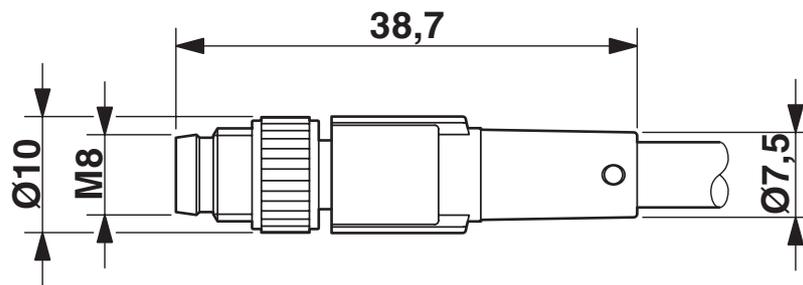
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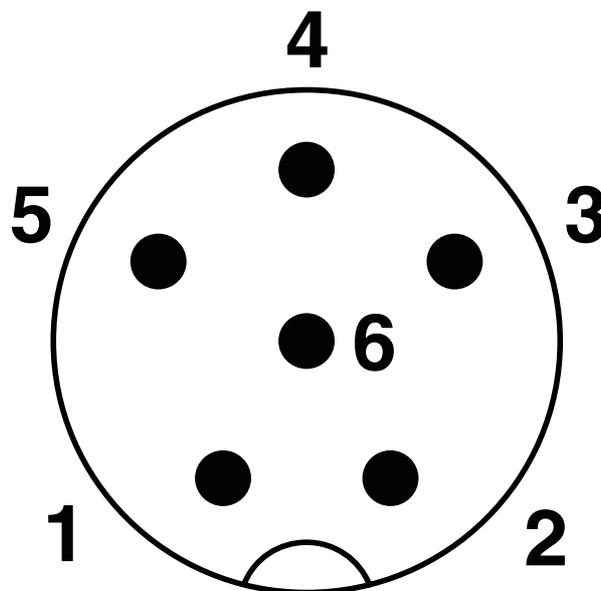
Drawings

Dimensional drawing



M8 x 1 male plug, straight version

Schematic diagram



Pin assignment M8 plug, 6-pos., view male side

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Circuit diagram



Contact assignment of the M8 plug

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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
keine				
	30 V	1.5 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	1.5 A	-	-

 EAC-RoHS Approval ID: RU D-DE.HB35.B.00387	
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Classifications

ECLASS

ECLASS-13.0	27060311
ECLASS-15.0	27060311

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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EF3.0 Climate Change

CO2e kg	0.784 kg CO2e
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