SAC-5P-MS/0,8-PUR/AD-2L 12W3 - Sensor/actuator cable

1407883

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Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, with 2 LEDs, on Valve connector AD (pressure switch), with 2 LEDs, Wiring: unwired, cable length: 0.8 m

Commercial data

Item number	1407883
Packing unit	1 pc
Minimum order quantity	50 pc
Product key	AF1DKA
GTIN	4046356784641
Weight per piece (including packing)	64.416 g
Weight per piece (excluding packing)	64.416 g
Country of origin	PL

Technical data

Product properties

Product type	Sensor/actuator cable with valve connector
Number of positions	5
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	V0
Seal material	TPU
Material housing valve plug	TPU
Material of grip body	TPU
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Contact material	CuSn
Valve plug contact insert material	PA 6
Contact surface material	Sn
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	≥ 100 MΩ
Nominal voltage U_N	24 V AC
	24 V DC
Nominal current I_N	4 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100 (M12 connector)

Signaling

Status display	2 LEDs
Status display present	yes

Connector

Connection 1

Type	Plug straight M12 SPEEDCON

Number of positions	5
Locking type	SPEEDCON
Coding type	A

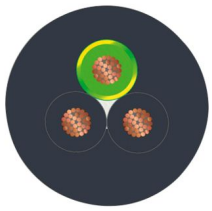
Connection 2

Type	Valve connector AD (pressure switch)
Number of positions	5
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6 (Contact carrier)
	TPU (Housing)
Protective circuit	unwired

Cable/line

Cable length	0.8 m

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	30 kg/km
UL AWM Style	20549
Number of positions	3
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross-section	3x 0.5 mm²
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	4.50 mm ±0.2 mm
Outer sheath, material	PUR
External sheath, color	black-gray RAL 7021
Conductor material	Bare Cu litz wires
Material wire insulation	PP
Single wire, color	black 1, black 2, green/yellow
Overall twist	3 wires, twisted
Max. conductor resistance	39 Ω/km (at 20 °C)
Insulation resistance	min. 20 MΩ*km
Nominal voltage, cable	≤ 300 V
Test voltage	≥ 1200 V

Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Smallest bending radius, fixed installation	22.5 mm
Smallest bending radius, movable installation	45 mm
Dynamic load capacity (bending)	Max. bending cycles: 15000000, Bending radius: 50 mm, Traversing path: 0.9 m, Traversing rate: 5 m/s, Acceleration: 30 m/s²
Halogen-free	in accordance with DIN VDE 0472 part 815
Flame resistance	according to DIN VDE 0482
	According to DIN EN 50265-2-1
Resistance to oil	in accordance with DIN EN 60811-2-1
Other resistance	largely oil-resistant
	partly UV-resistant (in accordance with DIN EN ISO 4892-2-A)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (Cable, flexible installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP65
	IP67
Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-20 °C ... 85 °C (Valve connector)
	-40 °C ... 80 °C (cable, fixed installation)
	-15 °C ... 80 °C (Cable, flexible installation)

Standards and regulations

M12

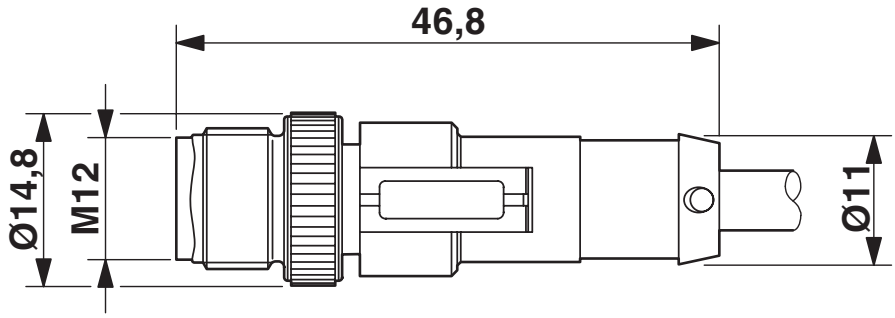
Standard designation	M12 connector
Standards/specifications	IEC 61076-2-101

Valve connector

Standard designation	Valve connector
Standards/specifications	EN 175301-803

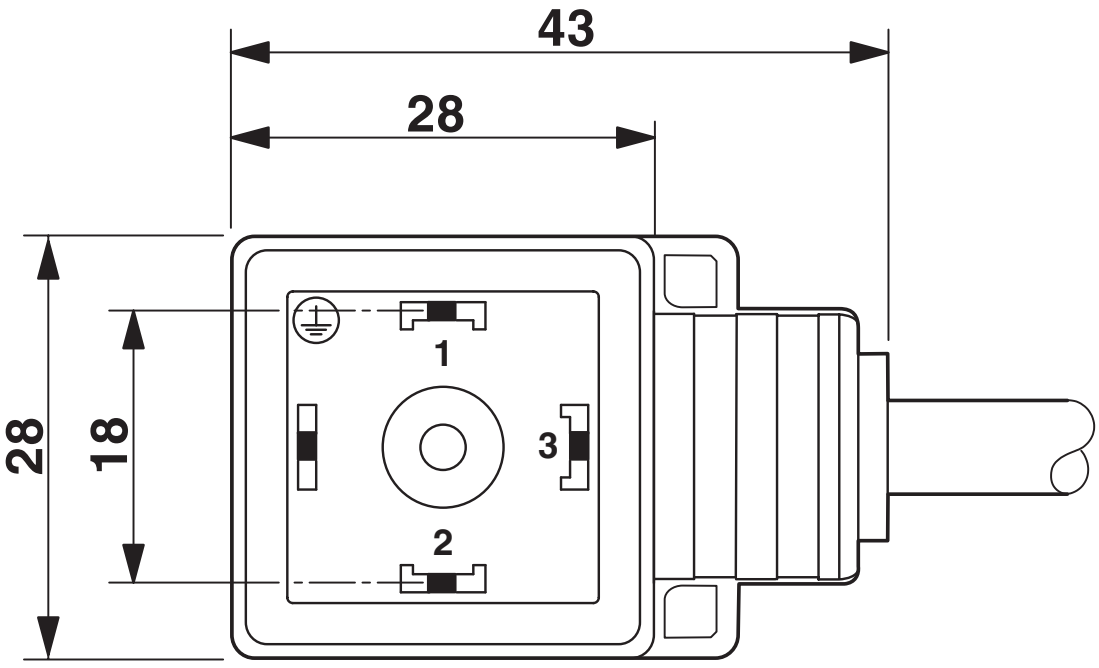
Drawings

Dimensional drawing



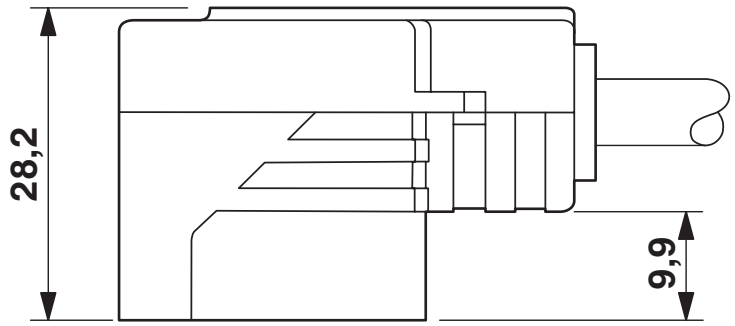
M12 SPEEDCON plug, straight

Dimensional drawing



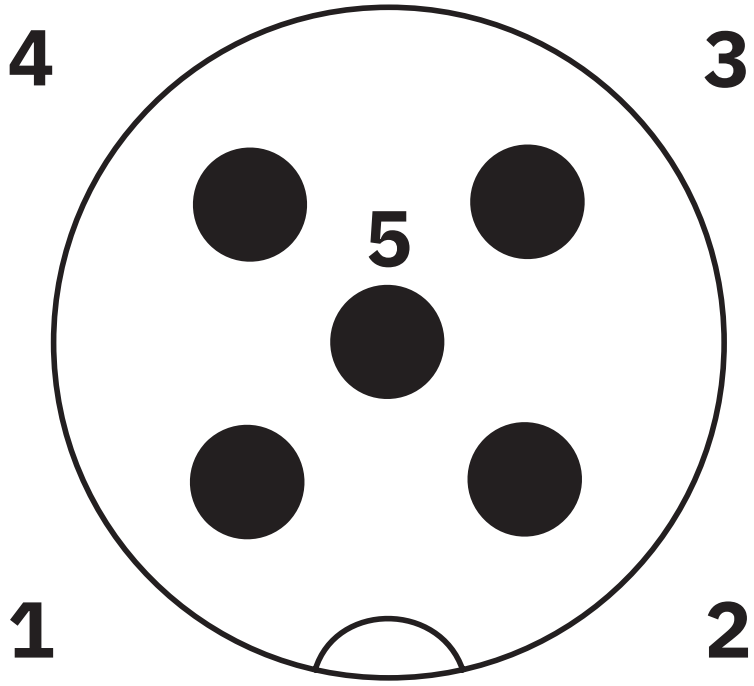
Valve connector, type AD

Dimensional drawing



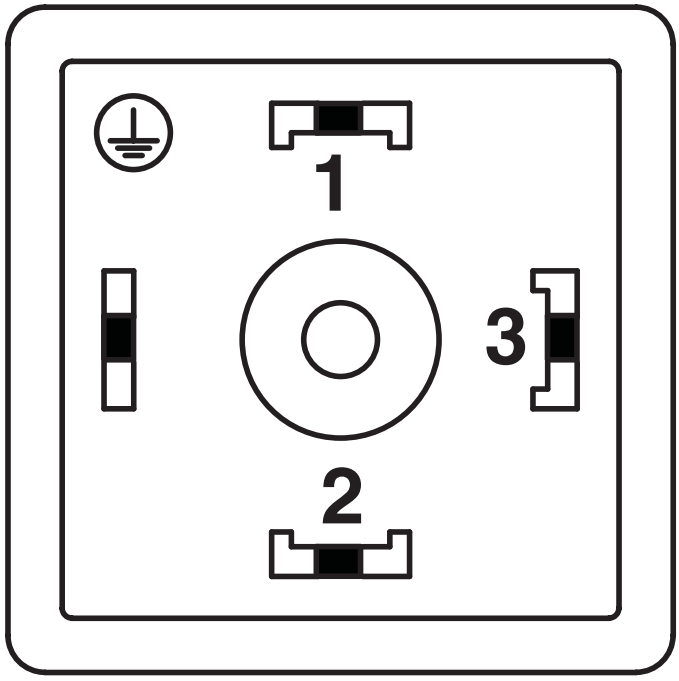
Valve connector, type AD, side view

Schematic diagram



Pin assignment M12 male connector, 5-pos., A-coded, male side

Schematic diagram



Valve plug connector pin assignment, type AD

Classifications

ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

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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