

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable

1439573
<https://www.phoenixcontact.com/us/products/1439573>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Sensor/actuator cable, 5-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12, coding: A, with 2 LEDs, on Valve connector AD (pressure switch), with 2 LEDs, Wiring: unwired, cable length: 0.6 m

Commercial data

Item number	1439573
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF07
Product key	AF1DKA
GTIN	4046356489423
Weight per piece (including packing)	59.8 g
Weight per piece (excluding packing)	59 g
Customs tariff number	85444290
Country of origin	PL

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573

<https://www.phoenixcontact.com/us/products/1439573>

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

Connection data

Conductor connection

Tightening torque	0.6 Nm (Valve connector)
	0.4 Nm (M12 connector)

Material specifications

Flammability rating according to UL 94	V0
Seal material	TPU
Material housing valve plug	PBT
Material of grip body	TPU, hardly inflammable, self-extinguishing
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Contact material	CuSn
Valve plug contact insert material	PBT
Contact surface material	Ag
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Insulation resistance	$\geq 100 \text{ M}\Omega$
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
----------------	--------

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573

<https://www.phoenixcontact.com/us/products/1439573>

Status display present	yes
------------------------	-----

Connector

Connection 1

Type	Plug straight M12
Number of positions	5
Coding type	A

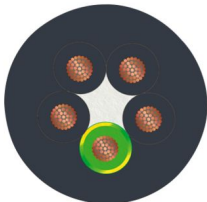
Connection 2

Type	Valve connector AD (pressure switch)
Number of positions	5
Material	CuSn (Contact)
	Ag (Contact surface)
	PBT (Contact carrier)
	PBT (Housing)
Protective circuit	unwired

Cable/line

Cable length	0.6 m
--------------	-------

PUR halogen-free black [PUR]

Dimensional drawing	
Cable weight	44.8 kg/km
UL AWM Style	20549
Number of positions	5
Shielded	no
Cable type	PUR halogen-free black [PUR]
Conductor structure signal line	28x 0.15 mm
AWG signal line	20
Conductor cross section	5x 0.5 mm²
Wire diameter incl. insulation	1.5 mm ±0.05 mm (Signal line)
External cable diameter	5.30 mm ±0.02 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, black 3, black 4, green/yellow

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573

<https://www.phoenixcontact.com/us/products/1439573>

Overall twist	5 cores, 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	26.5 mm
Smallest bending radius, movable installation	53 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/s ²
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
	largely oil-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)
	-20 °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)
Ambient temperature (operation) (Valve connector)	-20 °C ... 85 °C (Valve connector)

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

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable

1439573

<https://www.phoenixcontact.com/us/products/1439573>

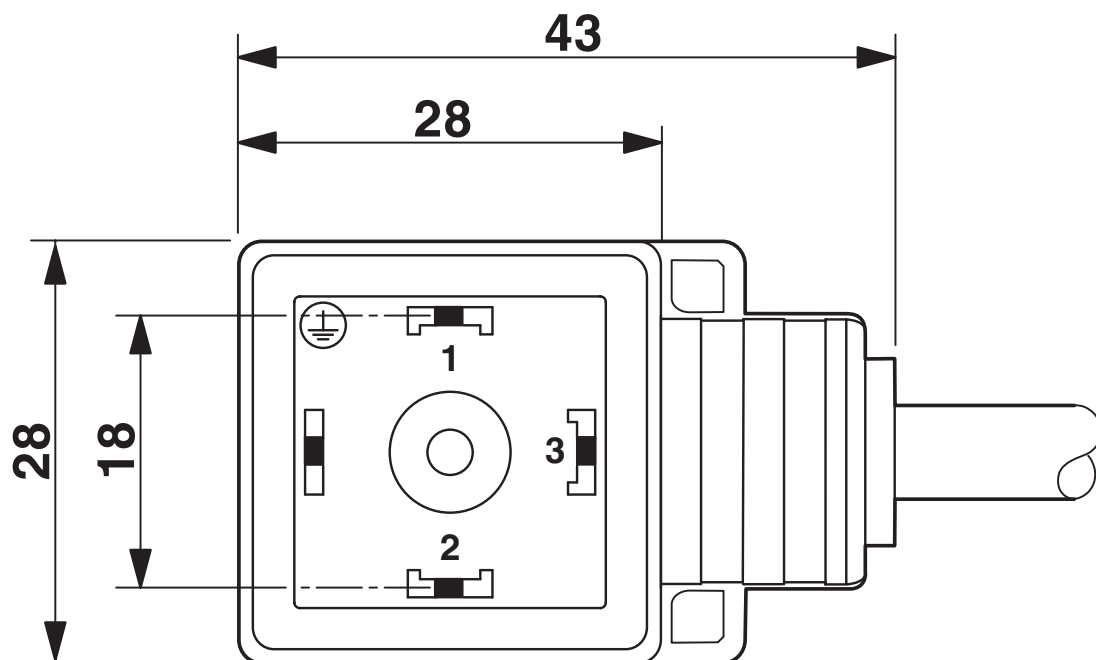
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing

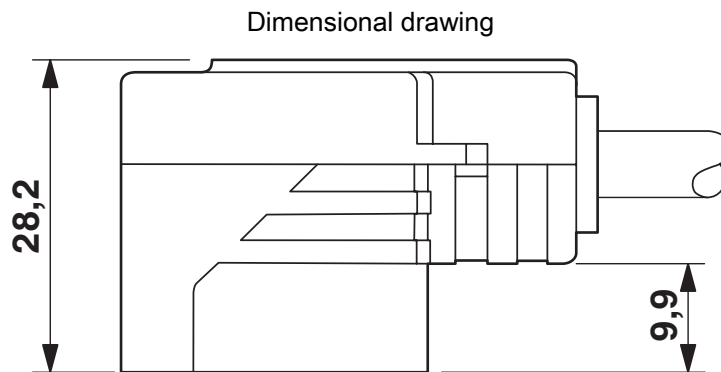


Valve connector, type AD

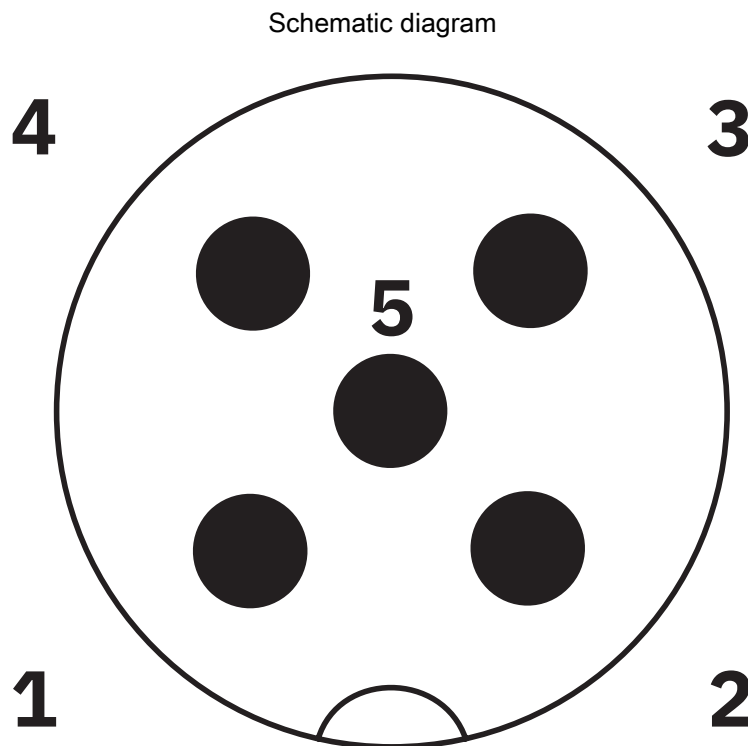
SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable

1439573

<https://www.phoenixcontact.com/us/products/1439573>



Valve connector, type AD, side view



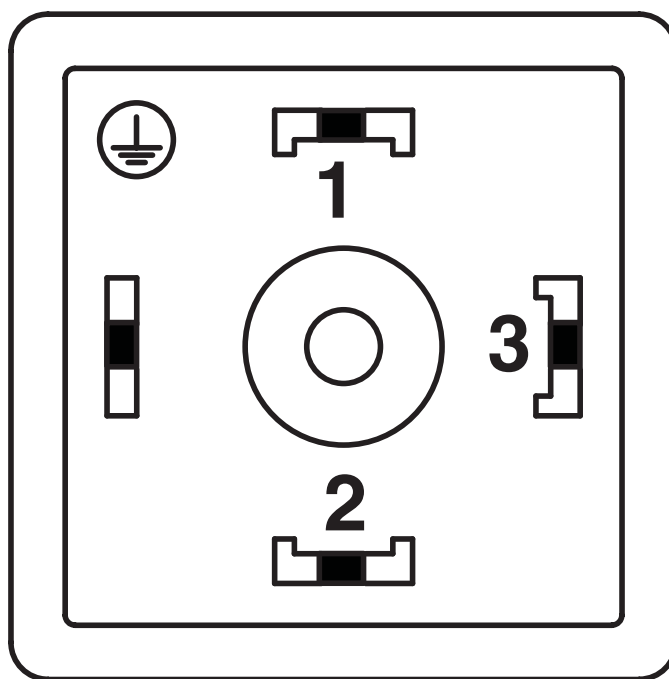
Pin assignment M12 male connector, 5-pos., A-coded, male side

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable

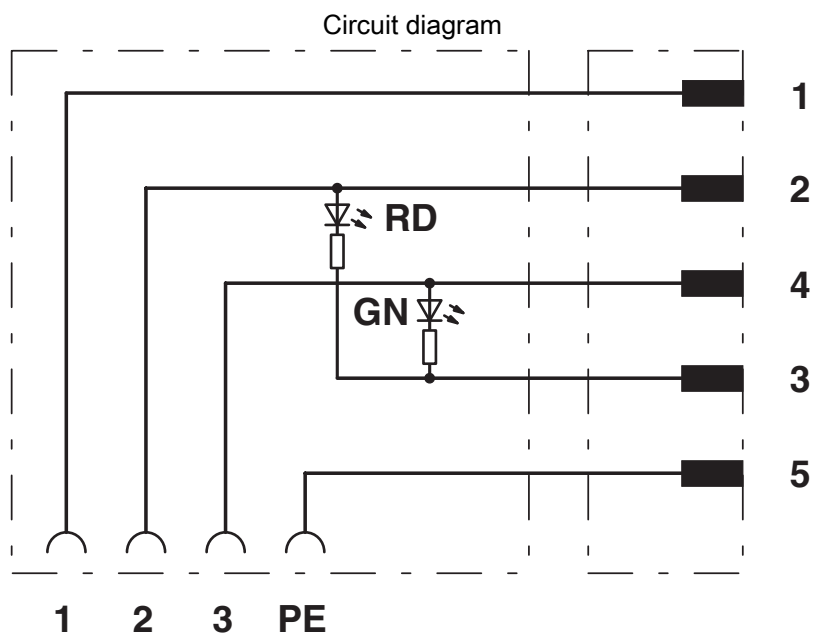
1439573

<https://www.phoenixcontact.com/us/products/1439573>

Schematic diagram



Valve plug connector pin assignment, type AD



Contact assignment of M12 plug and valve connector

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573
<https://www.phoenixcontact.com/us/products/1439573>

Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1439573>

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

	CSAus Approval ID: 13631			
	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
keine				
	24 V	4 A	-	-

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573

<https://www.phoenixcontact.com/us/products/1439573>

Classifications

ECLASS

ECLASS-13.0	27060312
ECLASS-15.0	27060312

ETIM

ETIM 9.0	EC001855
----------	----------

UNSPSC

UNSPSC 21.0	31251500
-------------	----------

SAC-5P-M12MS/0,6-PUR/AD-2L - Sensor/actuator cable



1439573

<https://www.phoenixcontact.com/us/products/1439573>

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%
-------------------------------------	----------------------------

Phoenix Contact 2025 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com