

1434905

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Sensor/actuator cable, 3-position, PUR halogen-free, black-gray RAL 7021, Plug straight M12 SPEEDCON, coding: A, on Valve connector A, with 1 LED, connected with Z diode, cable length: 1.5 m

Your advantages

- Easy and safe: 100% electrically tested plug-in components
- · Save time, thanks to installation with SPEEDCON fast locking system
- · Convenient: increased machine availability thanks to guick and easy diagnostics
- · Our standard: robust halogen-free PUR cable

Commercial Data

Item number	1434905
	1434303
Packing unit	1 pc
Minimum order quantity	1 pc
Sales Key	BF1
Product Key	BF1DJA
Catalog Page	Page 228 (C-2-2019)
GTIN	4046356413305
Weight per Piece (including packing)	82.3 g
Weight per Piece (excluding packing)	77.4 g
Customs tariff number	85444290
Country of origin	PL



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Technical Data

Product properties

Product type	Sensor/actuator cable with valve connector
Number of positions	3
Application	Standard
No. of cable outlets	1
Shielded	no
Coding	A
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

Material specifications

Flammability rating according to UL 94	НВ
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 6.6
Contact surface material	Sn
Material for screw connection	Zinc die-cast, nickel-plated

Electrical properties

Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Nominal voltage U _N	24 V AC
	24 V DC
Nominal current I _N	4 A
Protective circuit	Z diode

Valve connector characteristics

Fixing screws	M3 x 29
Pulse power	40 W (at 100 μs square-wave pulse)
Terminal voltage	70 V (at 2 mA constant current)
Reverse voltage	50 V

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 100 (M12 connector)



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Signaling

Status display	1 LED
Status display present	Yes

Connector

Connection 1

Α

Connection 2

Collination 2	
Material	CuSn (Contact)
	Sn (Contact surface)
	PA 6.6 (Contact carriers)
	TPU (Housing)

Cable/line

Cable length	1.5 m
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PUR halogen-free black [PUR]

Dimensional drawing



Cable weight30 kg/kmUL AWM Style20549Number of positions3ShieldednoCable typePUR halogen-free black [PUR]Conductor structure signal line28x 0.15 mmAWG signal line20Conductor cross section3x 0.5 mm²Wire diameter incl. insulation1.5 mm ±0.05 mm (Signal line)External cable diameter4.5 mm ±0.2 mmOuter sheath, materialPURExternal sheath, colorblack-gray RAL 7021Conductor materialBare Cu litz wiresMaterial wire insulationPPSingle wire, colorblack 1, black 2, green/yellowOverall twist3 wires, twistedMax. conductor resistance39 Ω/km (at 20 °C)Insulation resistancemin. 20 MΩ*km		
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So de la constante de la const	Overall twist	3 wires, twisted
Insulation resistance min. 20 $M\Omega^*km$	Max. conductor resistance	39 Ω/km (at 20 °C)
	Insulation resistance	min. 20 MΩ*km



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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
Max. bending cycles	15000000
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 plug)
	-40 °C 80 °C (cable, fixed installation)
	-15 °C 80 °C (Cable, flexible installation)

Standards and regulations

Standards/specifications	IEC 61076-2-101
Standards/specifications	EN 175301-803

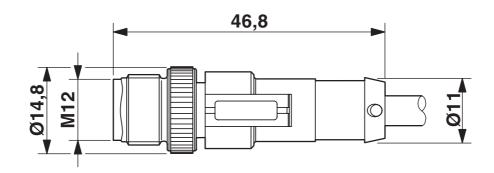


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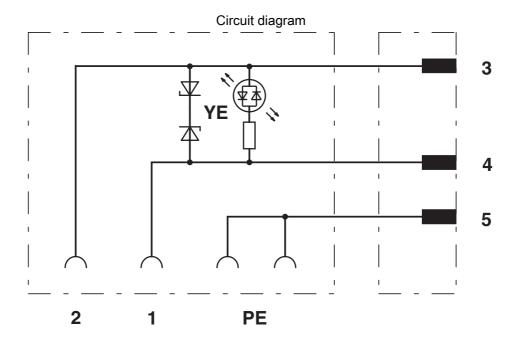
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Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

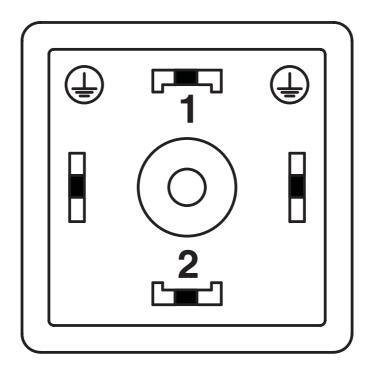




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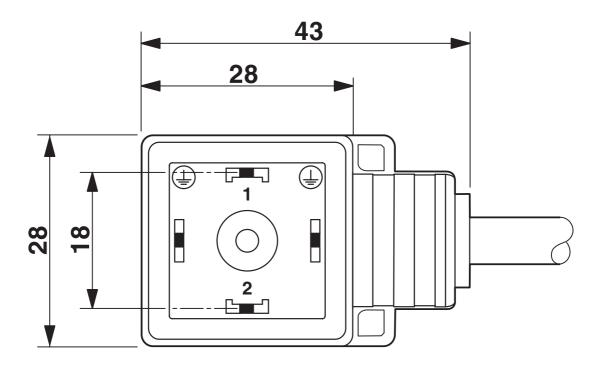
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Schematic diagram



Valve connector pin assignment, type A

Dimensional drawing

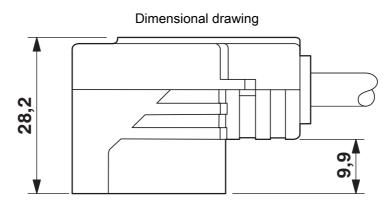


Valve connector, type A

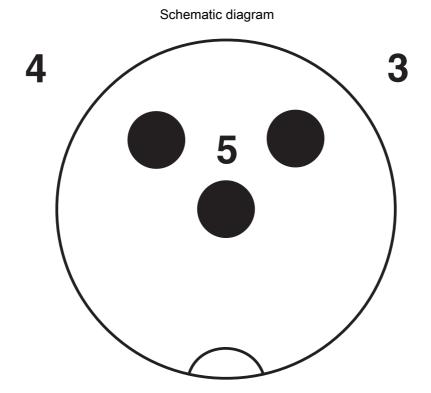


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Valve connector, type A, side view



Pin assignment M12 plug, 3-pos., valve connector



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Approvals

•	CSA Approval ID: 13631				
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		24 V	4 A	-	-

HHI	EAC Approval ID: RU C-DE.BL08.B.00286	
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EHC	EAC Approval ID: RU D-DE.HB35.B.00387
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@	CSAus Approval ID: 13631				
		Nominal Voltage U_N	Nominal Current I _N	Cross Section AWG	Cross Section mm ²
		24 V	4 A	-	-



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Classifications

ECLASS

UNSPSC 21.0

	ECLASS-11.0	27060312	
	ECLASS-12.0	27060312	
	ECLASS-13.0	27060312	
ETIM			
	ETIM 8.0	EC001855	
UN	ISPSC		

31251500



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Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years	
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"	



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Accessories

SAC-V-SCREW-M3-29 KNURL - Screw

1403779

https://www.phoenixcontact.com/in/products/1403779



Fillister head screw with plastic knurl, M3 x 40

SF-BIT-PH 1-70 - Screw insert

1212582

https://www.phoenixcontact.com/in/products/1212582



Screw bit, PH crosshead, E6.3-1/4" drive, size: PH 1 x 70 mm, hardened, suitable for holder according to DIN 3126-F6.3/ISO 1173



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PROT-M12 FS-PA-CHAIN - Sealing cap

1430873

https://www.phoenixcontact.com/in/products/1430873

M12 sealing cap made of plastic with fixing band, for sensor cables, for free M12 plugs



SAC-M12-EXCLIP-M - Locking clip

1558988

https://www.phoenixcontact.com/in/products/1558988



Locking clip for the pin side of sensor/actuator cables with M12 connector and M12 connectors for assembly, for knurl diameter: 15 mm or for Allen key with a wrench size of 14 mm, prevents the disconnection of plug-in connections without tools



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PABA WH/23 - Insert label

1013779

https://www.phoenixcontact.com/in/products/1013779



Insert label, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: $1.5 \dots 35$ mm, lettering field size: 23×4 mm, Number of individual labels: 20

PABA YE/23 - Insert label

1013782

https://www.phoenixcontact.com/in/products/1013782



Insert label, Strip, yellow, unlabeled, can be labeled with: CMS-P1-PLOTTER, mounting type: slide-on, cable diameter range: 1.5 ... 35 mm, lettering field size: 23 x 4 mm, Number of individual labels: 20



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B-STIFT - Marker pen

1051993

https://www.phoenixcontact.com/in/products/1051993



Marker pen, for manual labeling of unprinted Zack strips, smear-proof and waterproof, line thickness 0.5 mm

TSD 04 SAC - Torque screwdriver

1208429

https://www.phoenixcontact.com/in/products/1208429



Torque screwdriver, with preset torque of 0.4 Nm and 4 mm hexagonal drive for M12 connectors



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TSD-M 1,2NM - Torque screwdriver

1212224

https://www.phoenixcontact.com/in/products/1212224



Torque screw driver, accuracy as per EN ISO 6789 standard, adjustable from 0. 3 - 1.2 Nm

TSD-M SAC-BIT ADAPTER - Adapter insert

1212600

https://www.phoenixcontact.com/in/products/1212600



Adapter bit for TSD-M...torque tools, E6.3-1/4" drive with 4 mm hexagon to accommodate SAC bits



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SAC BIT M12-D15 - Tool

1208432

https://www.phoenixcontact.com/in/products/1208432



Nut for assembling sensor/actuator cables with M12 connector and M12 connectors for assembly, with a knurl diameter of 15 mm, for 4 mm hexagonal drive

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