

Bus system cable - SAC-5P-M 8MS/ 1,0-920/M 8FS - 1575848

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Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M8, on Socket straight M8, cable length: 1 m, Connector unshielded

RoHS

DeviceNet CANopen

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 431521
GTIN	4046356431521

Technical data

Dimensions

Length of cable	1 m
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Ambient conditions

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

General

Note	Further products with variable cable lengths can be found in the accessories section
Rated current at 40 °C	4 A
Rated voltage	30 V AC
	30 V DC
Number of positions	5
Color handle area	black
Insulation resistance	≥ 100 MΩ
Coding	B - inverse
Signal type/category	CANopen®
	DeviceNet™

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Technical data

General

Status display	No
Overvoltage category	II
Degree of pollution	3
Torque	0.2 Nm (M8 connectors)

Material

Flammability rating according to UL 94	HB
Contact material	CuSn
Contact surface material	Ni/Au
Contact carrier material	TPU GF
Material of grip body	TPU, hardly inflammable, self-extinguishing
Material, knurls	Zinc die-cast, nickel-plated
Sealing material	NBR

Pin assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) SR (shield) 1 (Socket)
	2 (Plug) RD (V+) 2 (Socket)
	4 (Plug) BK (V-) 4 (Socket)
	3 (Plug) WH (CAN_H) 3 (Socket)
	5 (Plug) BU (CAN_L) 5 (Socket)

Standards and Regulations

Flammability rating according to UL 94	HB
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Cable

Cable type	CANopen [®] /DeviceNet [™] , PUR, violet
Cable type (abbreviation)	920
UL AWM style	21198 (80°C/300 V)
Cable structure	2xAWG24/19+2xAWG22/19
Conductor cross section	2x 0.25 mm ² (Data cable)
	2x 0.34 mm ² (Power supply)
	1x 0.34 mm ² (Drain wire)
AWG signal line	24
AWG power supply	22
Conductor structure signal line	19x 0.13 mm
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	1.95 mm ±0.05 mm (Data cable)
	1.4 mm ±0.05 mm (Power supply)
Wire colors	Red-black, blue-white
Twisted pairs	2 cores to the pair
Type of pair shielding	Plastic-coated aluminum foil, aluminum side outside
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield

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Technical data

Cable

Optical shield covering	80 %
External sheath, color	violet RAL 4001
External cable diameter D	6.7 mm ±0.3 mm
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	10 x D
Number of bending cycles	5000000
Bending radius	70 mm
Minimum bending radius, drag chain applications	10 x D
Traversing path	4.5 m
Traversing rate	3 m/s
Acceleration	3 m/s ²
Cable weight	90 kg/km
Outer sheath, material	PUR
Material conductor insulation	Foamed PE (Data cable)
	PE (Power supply)
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 5 GΩ*km (Data cable)
	≥ 5 GΩ*km (Power supply)
Loop resistance	≤ 181.80 Ω/km (Data cable)
	≤ 114.80 Ω/km (Power supply)
Cable capacity	nom. 40 nF/km (Data cable)
Wave impedance	120 Ω ±10 % (with 1 MHz)
Attenuation	≤ 22.9 dB/km (with 1 MHz)
	≤ 16.4 dB/km (At 500 kHz)
	≤ 9.5 dB/km (At 125 kHz)
Nominal voltage, cable	≤ 300 V (Peak value, not for high-power applications)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
Other resistance	Low adhesion
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-20 °C ... 80 °C (cable, flexible installation)

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years

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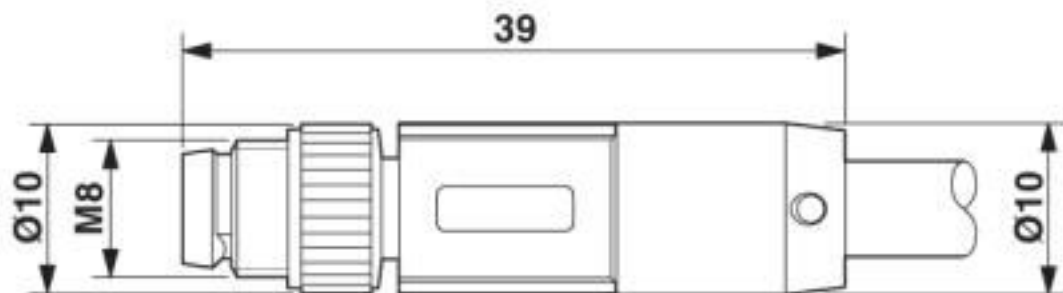
Technical data

Environmental Product Compliance

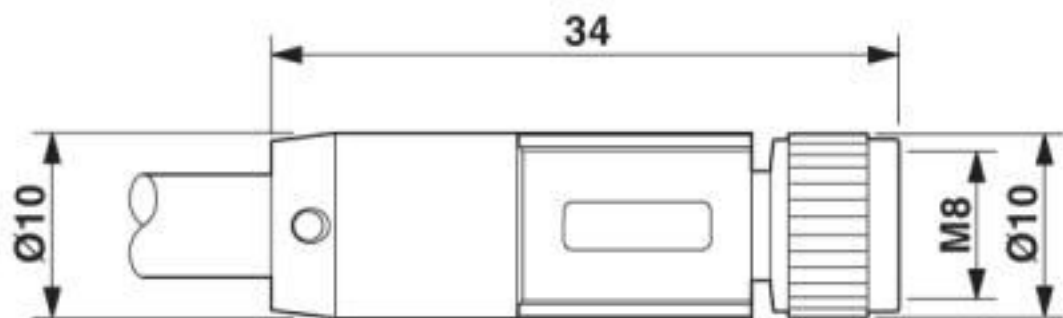
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"
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Drawings

Dimensional drawing

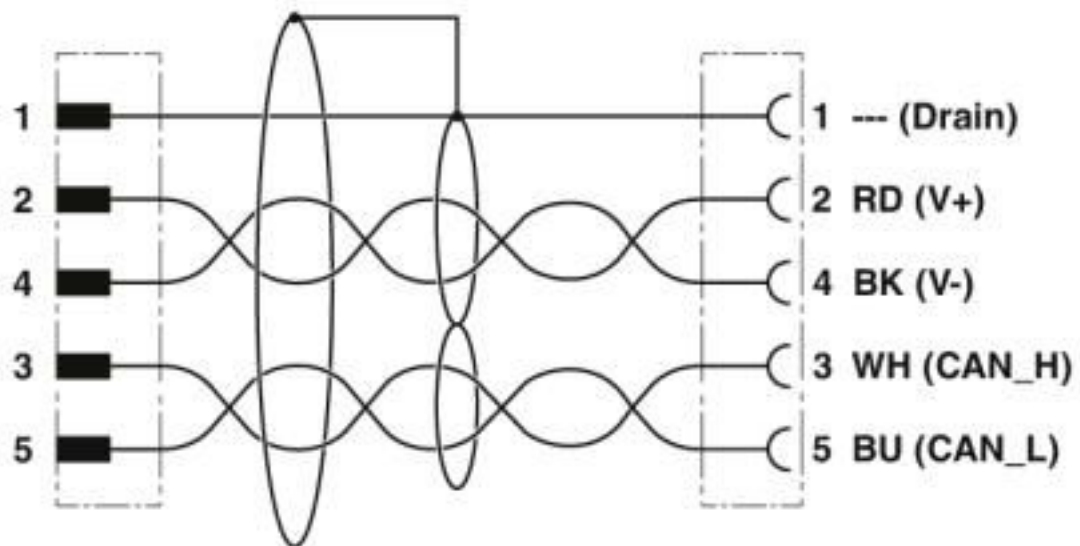


Dimensional drawing



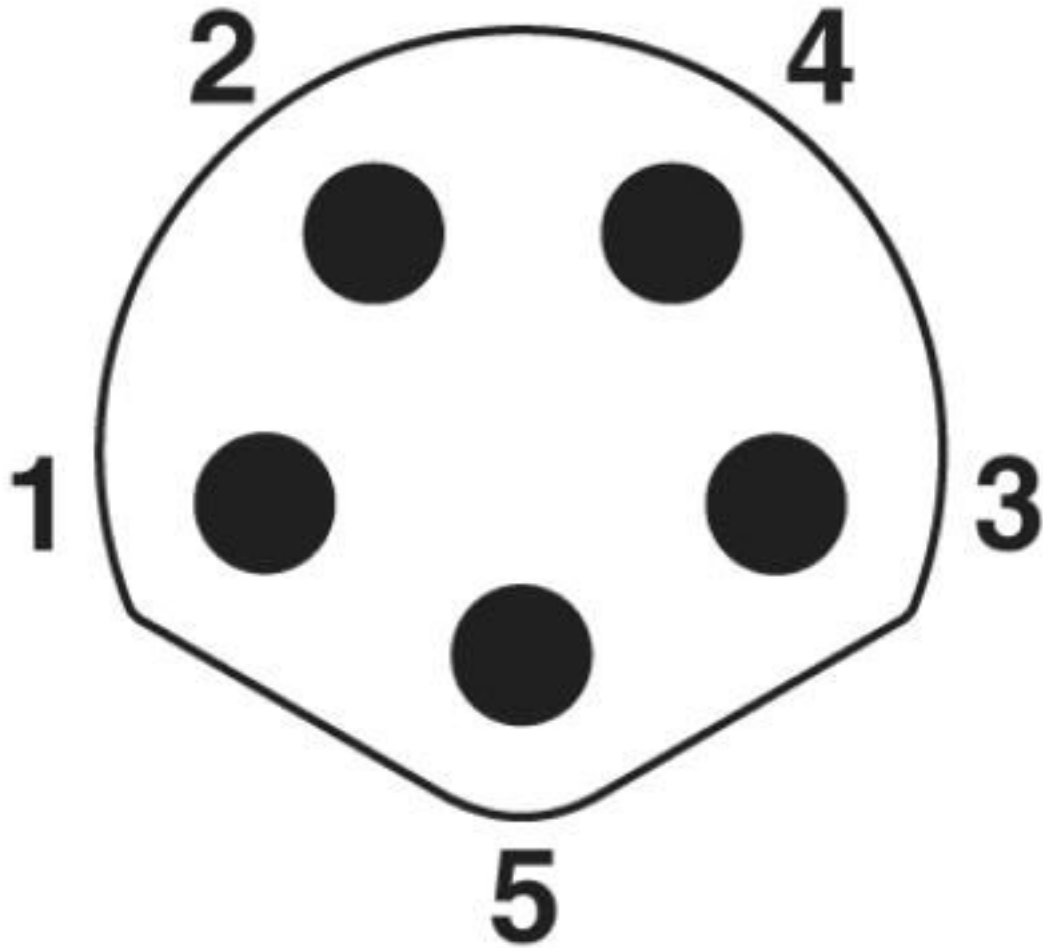
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Circuit diagram



Bus system cable - SAC-5P-M 8MS/ 1,0-920/M 8FS - 1575848

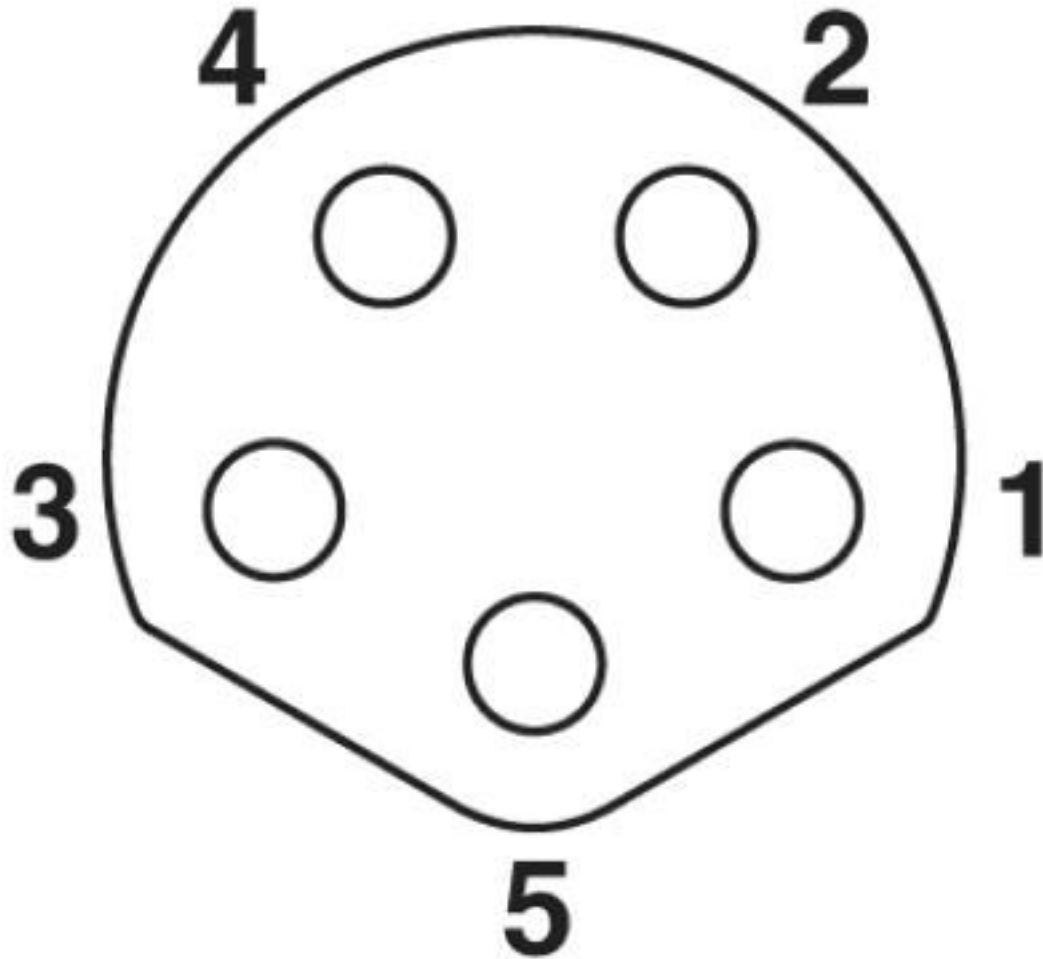
Schematic diagram



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

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Schematic diagram



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

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Cable cross section



CANopen[®]/DeviceNet[™], PUR, violet [920]

Classifications

eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 4.0	27060300
eCl@ss 4.1	27060300
eCl@ss 5.0	27061800
eCl@ss 5.1	27061800
eCl@ss 6.0	27279200
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218
eCl@ss 9.0	27060308

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Classifications

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC002599
ETIM 6.0	EC001262
ETIM 7.0	EC001262

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501
UNSPSC 18.0	26121604
UNSPSC 19.0	26121604
UNSPSC 20.0	26121604
UNSPSC 21.0	26121604

Approvals

Approvals

Approvals

UL Listed / cUL Listed / EAC-RoHS / EAC / cULus Listed

Ex Approvals

Approval details

UL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN	30 V		
Nominal current IN	3 A		

cUL Listed		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 221474
Nominal voltage UN	30 V		

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Approvals

Nominal current I _N	3 A
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EAC-RoHS	EAC	RU D- DE.HB35.B.00387
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EAC	EAC	EAC-Zulassung
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cULus Listed	cULus LISTED	
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Accessories

Accessories

Data cable preassembled

Bus system cable - SAC-5P-M 8MS-M 8FS/920/... - 1575893



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Bus system cable - SAC-5P-M 8MR-M 8FS/920/... - 1575932



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug angled M8, on Socket straight M8, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

Bus system cable - SAC-5P-M 8MR-M 8FR/920/... - 1575945



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug angled M8, on Socket angled M8, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

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Accessories

Bus system cable - SAC-5P-M 8MS/920/... - 1575767



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M8, on free cable end, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

Bus system cable - SAC-5P-M 8MR/920/... - 1575903



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug angled M8, on free cable end, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

Bus system cable - SAC-5P-M 8FS/920/... - 1575819



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, free cable end, on Socket straight M8, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

Bus system cable - SAC-5P-M 8FR/920/... - 1575916



Bus system cable, CANopen[®], DeviceNet[™], 5-position, PUR halogen-free, violet RAL 4001, shielded, free cable end, on Socket angled M8, cable length: Free input (0.2 ... 40.0 m), Connector unshielded

Plug for cable screw gland

Screw plug - PROT-M 8 MS-PA-CHAIN - 1430860

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 sockets



Protective cap

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Accessories

Sealing cap - PROT-M 8 FS-PA-CHAIN - 1430857

M8 sealing cap made of plastic with fixing band for sensor cables, for M8 plugs



Screwdriver tools

Tool - SAC BIT M8-D10 - 1208461



Nut for assembling M8 connectors with longitudinal knurl and a knurl diameter of 10 mm, for 4 mm hexagonal drive

Terminal resistor

Termination resistor - SAC-5P-M 8MS DN TR - 1435988



Termination resistor, DeviceNet™, M8, 5-pos.

Torque tool

Torque screwdriver - TSD 02 SAC - 1208487



Torque screwdriver, with preset torque of 0.2 Nm and 4 mm hexagonal drive for M8 connectors

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