

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

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



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 431521
GTIN	4046356431521
Weight per Piece (excluding packing)	80.000 g
Custom tariff number	85444290
Country of origin	Poland

### Technical data

#### Dimensions

Length of cable	1 m
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#### Ambient conditions

Ambient temperature (operation)	-25 °C ... 90 °C (Plug / socket)
	-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

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### Technical data

#### General

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™
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 mm² (Data cable)
	2x 0.34 mm² (Power supply)

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### Technical data

#### Cable

	1x 0.34 mm <sup>2</sup> (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
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 <sup>2</sup>
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)

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## Technical data

### Cable

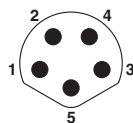
Nominal voltage, cable	≤ 300 V (Peak value, not for high-power applications)
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000 V (50 Hz, 1 min.)
Other resistance	Low adhesion
Flame resistance	UL 1581, Sec. 1060 (FT-1)
	IEC 60332-1
	in accordance with ISO 6722-1 5.22 (UN ECE-R 118.01)
Halogen-free	in accordance with DIN VDE 0472 part 815
	according to IEC 60754-1
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
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

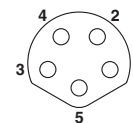
## Drawings

Schematic diagram



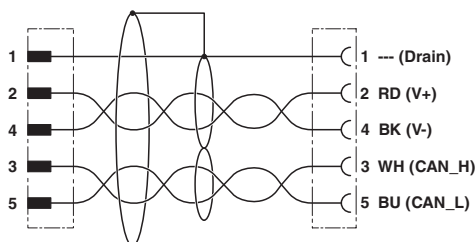
Pin assignment, pin side, M8, 5-pos., B-coded

Schematic diagram

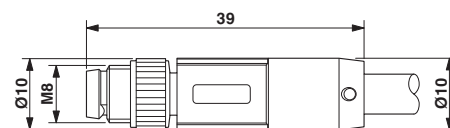


Pin assignment, socket side, M8, 5-pos., B-coded

Circuit diagram

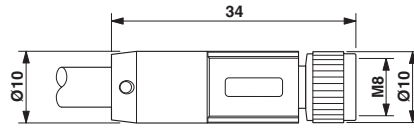


Dimensional drawing



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

Dimensional drawing



Cable cross section



CANopen<sup>®</sup>/DeviceNet<sup>™</sup>, PUR, violet [920]

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

### Classifications

#### eCl@ss

eCl@ss 10.0.1	27060308
eCl@ss 11.0	27060307
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 9.0	27060308

#### ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
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

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#### Approvals

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

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#### Ex Approvals

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

## Approvals

### Approval details

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

cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 221474
Nominal voltage UN		30 V	
Nominal current IN		3 A	

EAC-RoHS		RU D- DE.HB35.B.00387
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EAC		EAC-Zulassung
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cULus Listed	
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## Accessories

### Accessories

#### Data cable preassembled

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



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

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

### Accessories

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



Bus system cable, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 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<sup>®</sup>, DeviceNet<sup>™</sup>, 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

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



Bus system cable, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 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<sup>®</sup>, DeviceNet<sup>™</sup>, 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<sup>®</sup>, DeviceNet<sup>™</sup>, 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 8MS/ 1,0-920/M 8FS - 1575848

### Accessories

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



Bus system cable, CANopen<sup>®</sup>, DeviceNet<sup>™</sup>, 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

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### 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



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### Protective cap

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

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



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### 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

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### Terminal resistor

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### Accessories

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



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

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### 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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