PHŒNIX CONTACT

Bus system cable - SAC-5P-M 8MS/ 2,0-920 - 1575712

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Bus system cable, CANopen®, DeviceNet™, 5-position, PUR halogen-free, violet RAL 4001, shielded, Plug straight M8, on free cable end, cable length: 2 m, Connector unshielded

RoHS

DeviceNet **CAN**open

Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4046356423823
Weight per Piece (excluding packing)	120.500 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	2 m
Stripping length of the free conductor end	50 mm

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

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Technical data

General

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

Pin assignment

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

Standards and Regulations

Flammability rating according to UL 94	HB

Cable

Cable type	CAN Bus/DeviceNet
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)
	1x 0.34 mm² (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

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Technical data

Cable

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/s²
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

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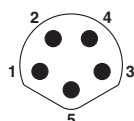# Bus system cable - SAC-5P-M 8MS/ 2,0-920 - 1575712

Technical data

Environmental Product Compliance

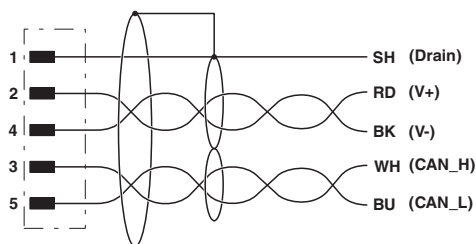| REACh SVHC	Lead 7439-92-1

Drawings

Schematic diagram

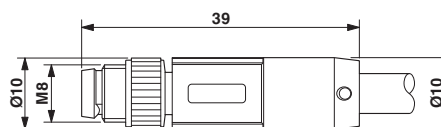Pin assignment, pin side, M8, 5-pos., B-coded

Cable cross section

CAN Bus/DeviceNet [920]

Circuit diagram

1	SH	(Drain)
2	RD	(V+)
4	BK	(V-)
3	WH	(CAN_H)
5	BU	(CAN_L)

Dimensional drawing

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Ø10   M8   Ø10

Classifications

eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
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

ETIM

ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC002599
ETIM 6.0	EC000830

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Classifications

UNSPSC

UNSPSC 6.01	31251501
UNSPSC 7.0901	31251501
UNSPSC 11	31251501
UNSPSC 12.01	31251501
UNSPSC 13.2	31251501

Approvals

Approvals

Approvals

UL Listed / cUL Listed / 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	
Nominal current IN		3 A	

EAC		EAC-Zulassung

cULus Listed	

Bus system cable - SAC-5P-M 8MS/ 2,0-920 - 1575712

Accessories

Accessories

Circular connector (cable-side)

Bus system connector - SACC-M12FS-5PL SH DN - 1424672

Bus system connector, CANopen®, DeviceNet™, 5-position, shielded, Socket straight M12, A-coded, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12MS-5PL SH DN - 1424670

Bus system connector, CANopen®, DeviceNet™, 5-position, shielded, Plug straight M12, A-coded, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12FR-5PL SH DN - 1424673

Bus system connector, CANopen®, DeviceNet™, 5-position, shielded, Socket angled M12, A-coded, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Bus system connector - SACC-M12MR-5PL SH DN - 1424671

Bus system connector, CANopen®, DeviceNet™, 5-position, shielded, Plug angled M12, A-coded, Push-in connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 4 mm ... 8 mm

Data cable preassembled

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 8MS/ 2,0-920 - 1575712

Accessories

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 angled 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

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

Bus system cable, CANopen®, DeviceNet™, 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 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 8MS/ 2,0-920 - 1575712

Accessories

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

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

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

Bus system cable - SAC-5P-M 8MS/ 2,0-920 - 1575712

Accessories

Sensor/actuator connector - SACC-FS-5QO SH DN SCO - 1422760

Sensor/actuator connector, CANopen®, DeviceNet™, 5-position, halogen-free, shielded, Socket straight M12 SPEEDCON, A-coded, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm

Sensor/actuator connector - SACC-MS-5QO SH DN SCO - 1422759

Sensor/actuator connector, CANopen®, DeviceNet™, 5-position, halogen-free, shielded, Plug straight M12 SPEEDCON, A-coded, Insulation displacement connection, knurl material: Zinc die-cast, nickel-plated, external cable diameter 5 mm ... 9.7 mm