

## Bus system cable - SAC-4P-M 8MR/ 1,0-950/M 8FR - 1550986

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Bus system cable, INTERBUS, INTERBUS, 4-position, PUR halogen-free, Black RAL 9005, shielded, Plug angled M8, on Socket angled M8, Cable length: 1 m

### Product Features

- System cable for supply voltage and bus signal
- Power cable for actuator voltage



### Key commercial data

Packing unit	1 1
Weight per Piece (excluding packing)	58.8 GRM
Custom tariff number	85444290
Country of origin	Germany

### 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

Rated current at 40°C	4 A
Rated voltage	30 V
Number of positions	4
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 100 MΩ
Coding	A - standard

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### Technical data

#### General

Signal type/category	INTERBUS
Status display	No
Surge voltage category	II
Pollution degree	3
Test voltage	800 V
Torque	0.2 Nm (M8 connectors)

#### Material

Inflammability class 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

Position = wire color (signal) = position (optional)	1 (Plug) = RD (0.34 mm <sup>2</sup> ) = 1 (Socket)
	3 (Plug) = BU (0.34 mm <sup>2</sup> ) = 3 (Socket)
	2 (Plug) = YE (0.14 mm <sup>2</sup> ) = 2 (Socket)
	4 (Plug) = GN (0.14 mm <sup>2</sup> ) = 4 (Socket)

#### Cable

Cable type	INTERBUS
Cable type (abbreviation)	950
UL AWM style	20963 (80°C/30 V)
Conductor cross section	2x 0.14 mm <sup>2</sup> (signal line)
	2x 0.34 mm <sup>2</sup> (Power supply)
	1x 0.38 mm <sup>2</sup> (Drain wire)
AWG signal line	26
AWG power supply	22
Conductor structure signal line	19x 0.10 mm
Conductor structure, voltage supply	19x 0.15 mm
Core diameter including insulation	0.97 mm (signal line)
	1.25 mm (Power supply)
Thickness, insulation	0.24 mm (Conductor insulation, signal line)
	0.25 mm (Conductor insulation, voltage supply)
Wire colors	red-blue, green-yellow
Twisted pairs	2 cores to the pair

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### Technical data

#### Cable

Type of pair shielding	Aluminum-lined polyester foil
Overall twist	2 pairs around a drain wire in the center to the core
Shielding	Tinned copper braided shield
Optical shield covering	85 %
External sheath, color	Black RAL 9005
Outer sheath thickness	approx. 0.75 mm
External cable diameter D	5.2 mm ± 0.2 mm
Smallest bending radius, fixed installation	26 mm
Smallest bending radius, movable installation	37 mm
Number of bending cycles	1000000
Bending radius	110 mm
Traversing path	6 m
Traversing rate	4 m/s
Acceleration	4 m/s <sup>2</sup>
Cable weight	41 kg/km
Outer sheath, material	PUR
Material conductor insulation	PP
Conductor material	Tin-plated Cu litz wires
Insulation resistance	≥ 20 MΩ*km
Conductor resistance	≤ 155 Ω/km (signal line)
	≤ 58 Ω/km (Power supply)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	1000 V
Test voltage Core/Shield	1000 V
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)
	-40 °C ... 80 °C (cable, flexible installation)

### Classifications

#### eCl@ss

eCl@ss 4.0	27060306
eCl@ss 4.1	27060306
eCl@ss 5.0	27061801
eCl@ss 5.1	27061801
eCl@ss 6.0	27279218
eCl@ss 7.0	27279218
eCl@ss 8.0	27279218

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## Classifications

### ETIM

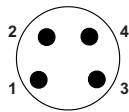
ETIM 3.0	EC001855
ETIM 4.0	EC001855
ETIM 5.0	EC001855

### UNSPSC

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

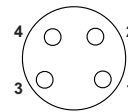
## Drawings

Schematic diagram



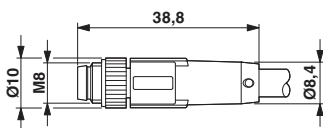
Pin assignment M8 plug, 4-pos., view male side

Schematic diagram



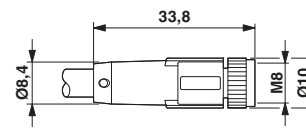
Pin assignment M8 socket, 4-pos., view female side

Dimensioned drawing



Plug M8 x 1, angled, shielded

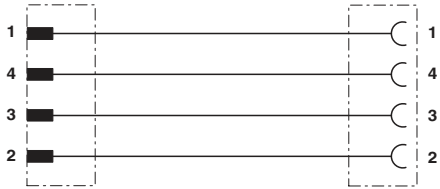
Dimensioned drawing



Socket M8 x 1, angled, shielded

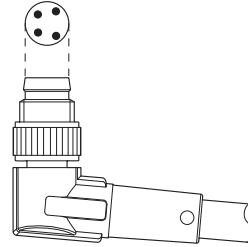
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Circuit diagram



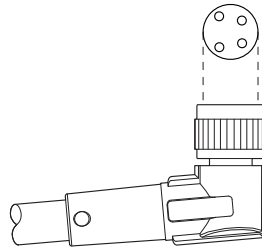
Contact assignment of M8 plugs/sockets

Schematic diagram



Layout of connector pin assignments

Schematic diagram



Layout of connector pin assignments