

Bus system cable - SAC-4P-M 8MR/20,0-950/M 8FR - 1551037

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Bus system cable, INTERBUS, 4-position, PUR halogen-free, black RAL 9005, shielded, Plug angled M8, on Socket angled M8, cable length: 20 m

Your advantages

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

RoHS

Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 151566
GTIN	4046356151566
Weight per Piece (excluding packing)	222.220 g
Custom tariff number	85444290
Country of origin	Poland

Technical data

Dimensions

Length of cable	20 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
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Technical data

General

Rated voltage	48 V AC
	60 V DC
Number of positions	4
Color handle area	black
Insulation resistance	$\geq 100 \text{ M}\Omega$
Coding	A - standard
Signal type/category	INTERBUS
Status display	No
Overvoltage category	II
Degree of pollution	3
Test voltage	800 V
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) RD (0.34 mm ²) 1 (Socket)
	3 (Plug) BU (0.34 mm ²) 3 (Socket)
	2 (Plug) YE (0.14 mm ²) 2 (Socket)
	4 (Plug) GN (0.14 mm ²) 4 (Socket)

Standards and Regulations

Flammability rating according to UL 94	HB
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Cable

Cable type	INTERBUS
Cable type (abbreviation)	950
UL AWM style	20963 (80°C/30 V)
Cable structure	2xAWG26/19+2xAWG22/19
Conductor cross section	2x 0.14 mm ² (Signal line)
	2x 0.34 mm ² (Power supply)
	1x 0.38 mm ² (Drain wire)

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Technical data

Cable

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
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
Minimum bending radius, fixed installation	5 x D
Minimum bending radius, flexible installation	7.5 x D
Number of bending cycles	1000000
Bending radius	110 mm
Traversing path	6 m
Traversing rate	4 m/s
Acceleration	4 m/s ²
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	≤ 150 Ω/km (Signal line)
	≤ 58 Ω/km (Power supply)
Wave impedance	75 Ω ±10 Ω (Signal line)
	55 Ω ±10 Ω (Power supply)
Nominal voltage, cable	≤ 100 V
Test voltage Core/Core	1000 V (50 Hz, 1 min.)
Test voltage Core/Shield	1000 V (50 Hz, 1 min.)
Ambient temperature (operation)	-40 °C ... 80 °C (cable, fixed installation)

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Technical data

Cable

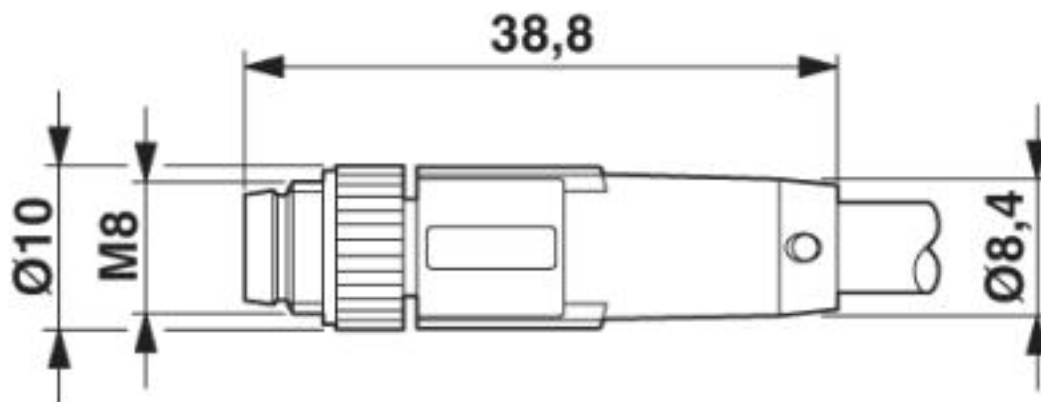
	-40 °C ... 80 °C (cable, flexible installation)
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Environmental Product Compliance

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

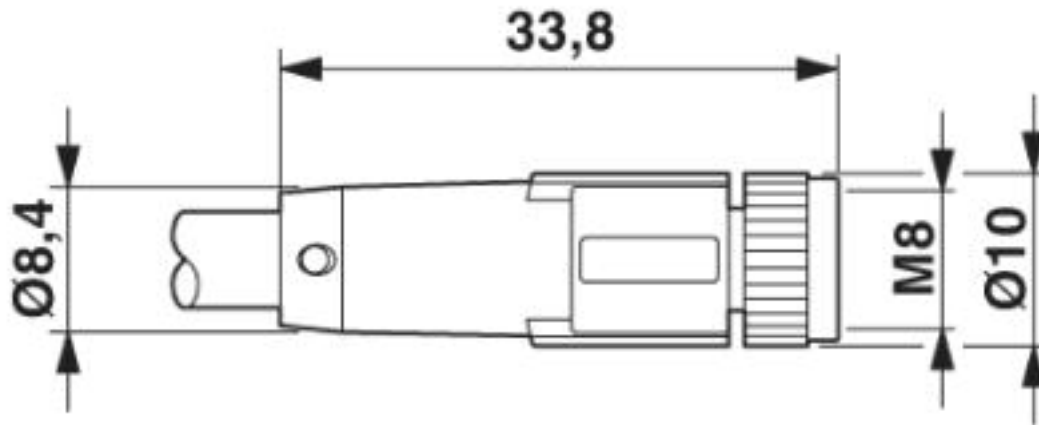
Dimensional drawing



Plug M8 x 1, angled, shielded

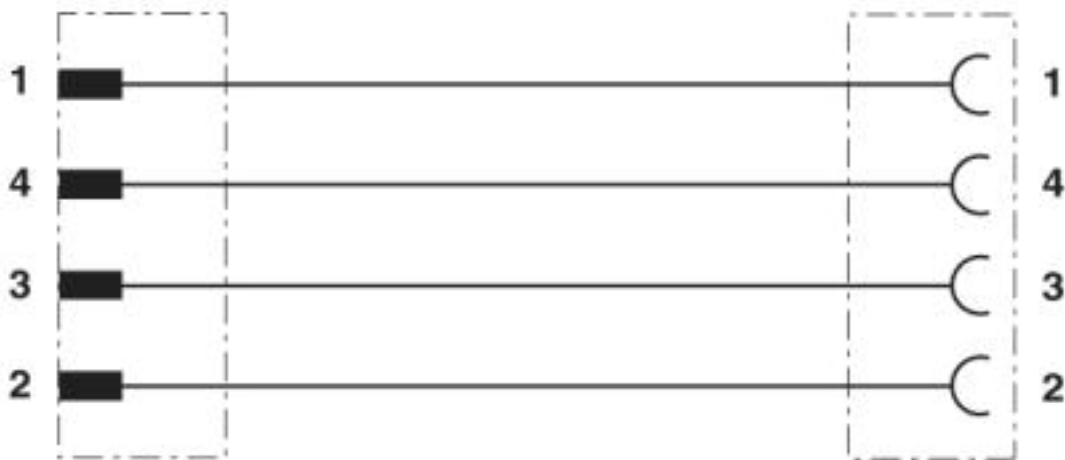
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Dimensional drawing



Socket M8 x 1, angled, shielded

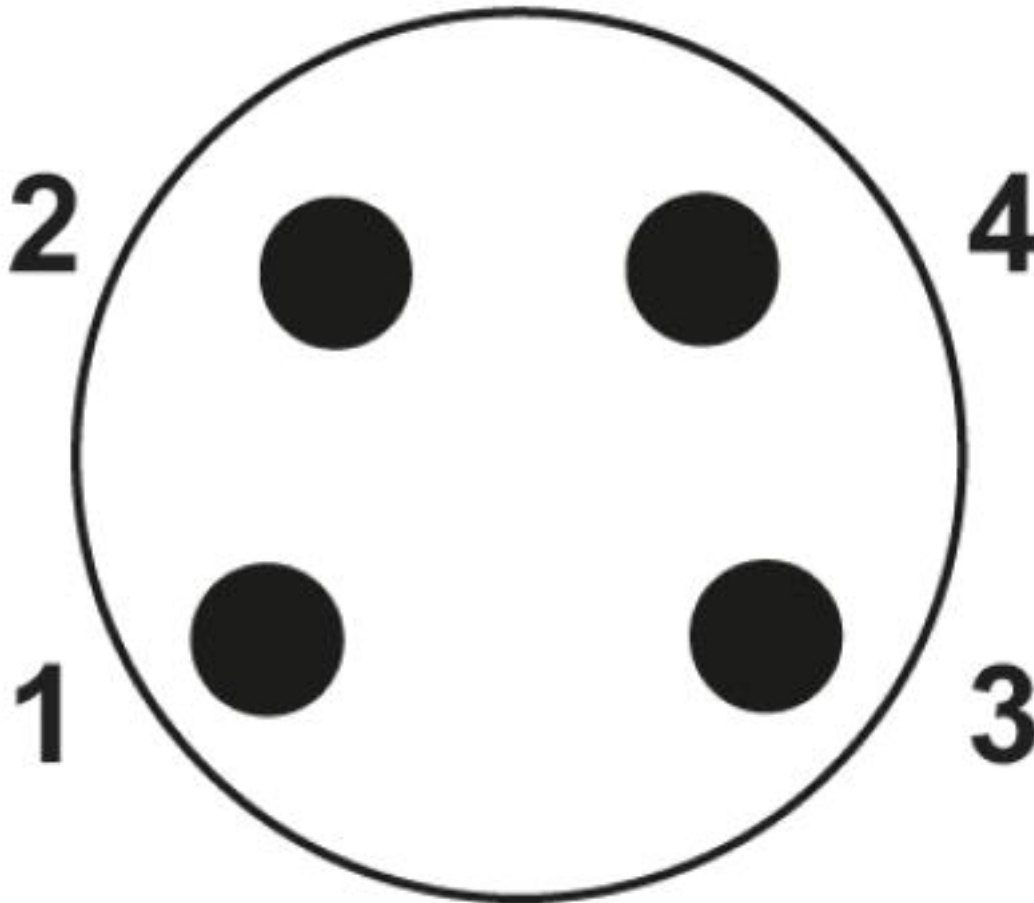
Circuit diagram



Contact assignment of M8 plugs/sockets

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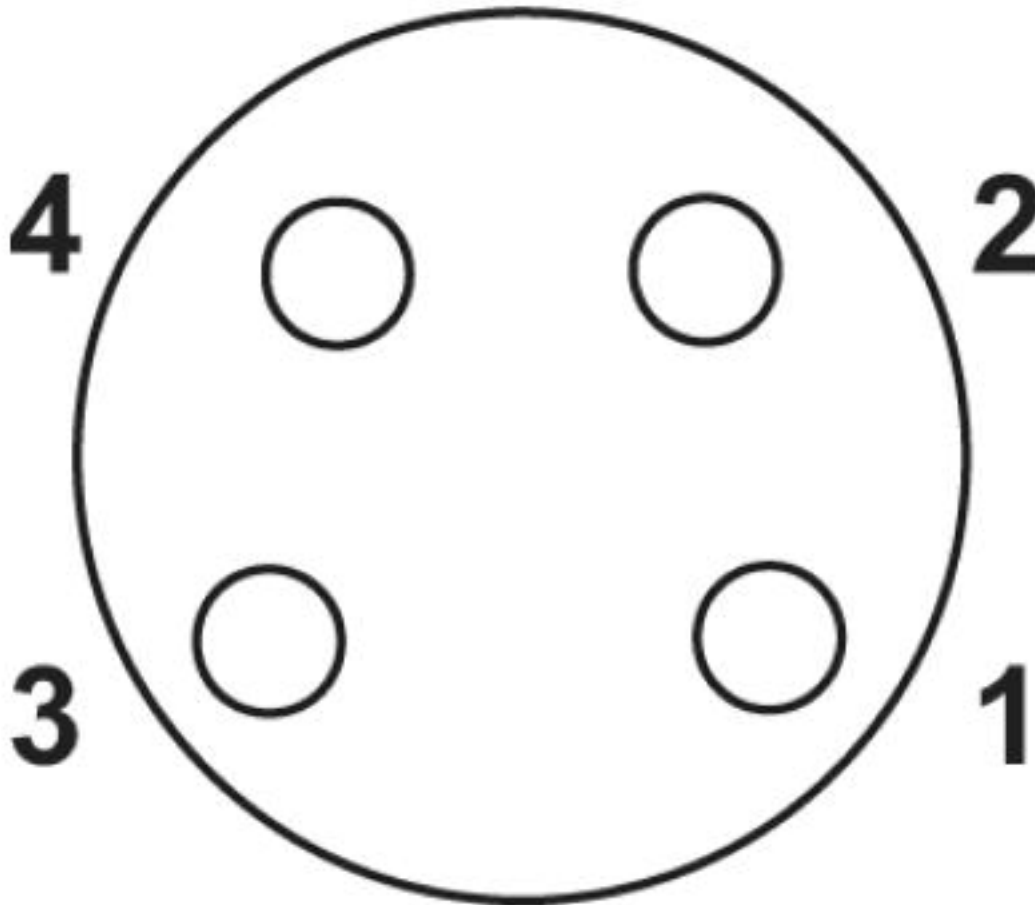
Schematic diagram



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

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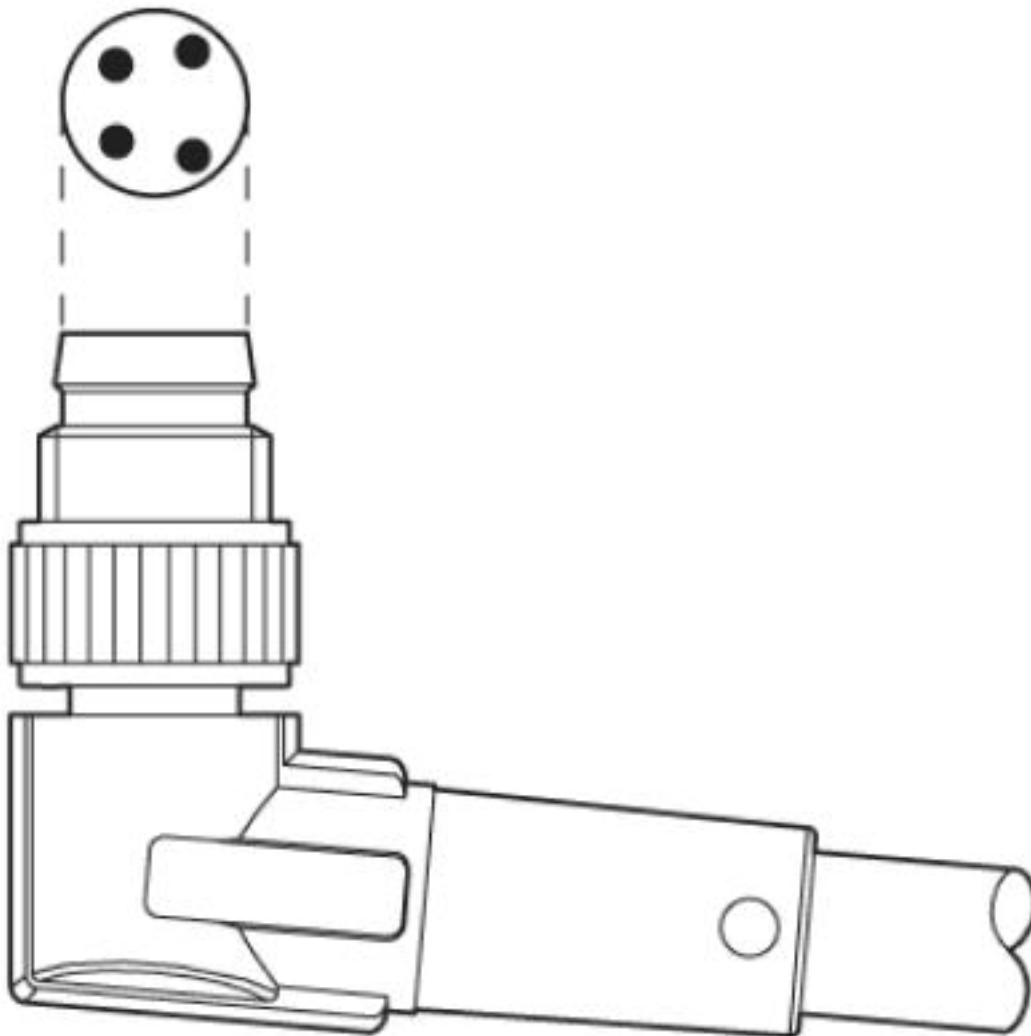
Schematic diagram



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

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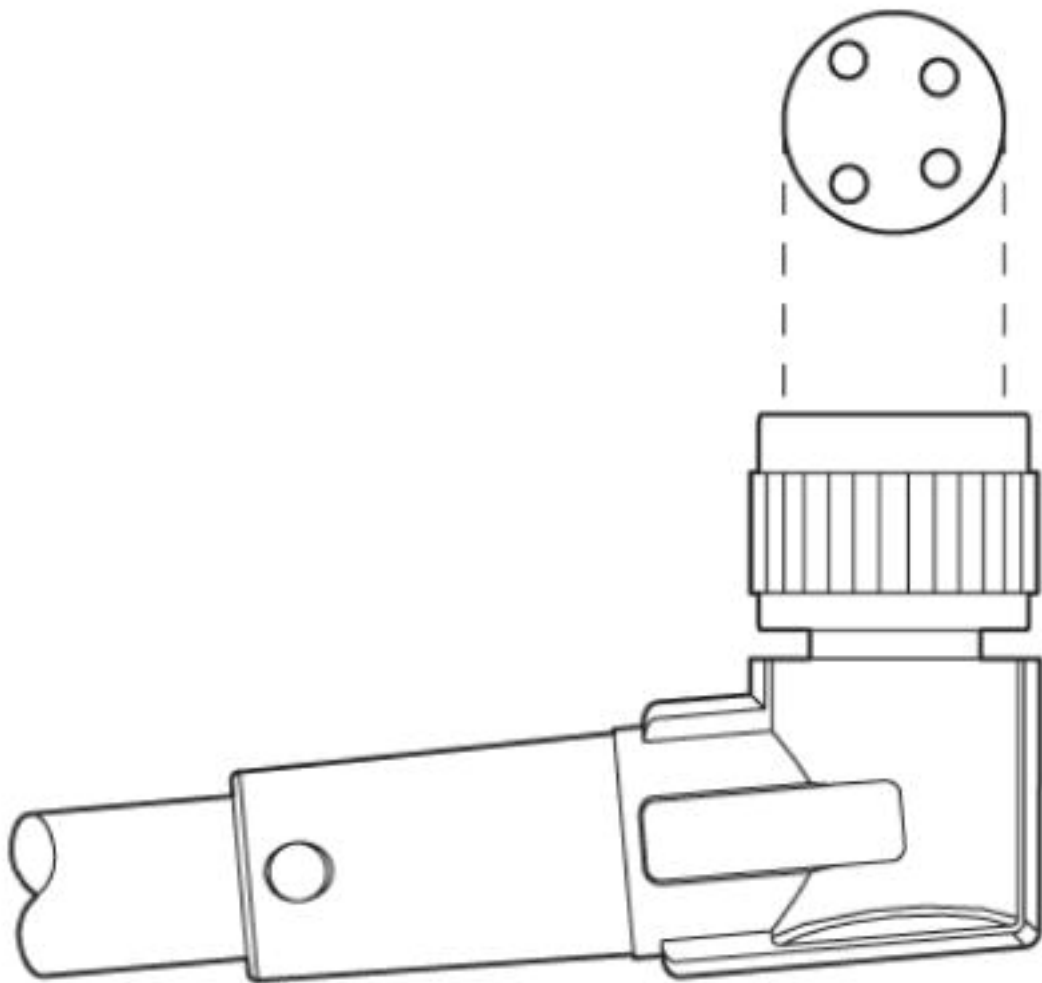
Schematic diagram



Layout of connector pin assignments

Bus system cable - SAC-4P-M 8MR/20,0-950/M 8FR - 1551037

Schematic diagram



Layout of connector pin assignments

Classifications

eCl@ss

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

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Classifications

eCl@ss

eCl@ss 9.0	27060308
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ETIM

ETIM 2.0	EC000830
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