

## Bus system cable - SAC-4P-10,0-961/MINFS VAL - 1433809


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Bus system cable, FOUNDATION Fieldbus (31.25 kbps), 3-position, PVC, blue RAL 5015, shielded, free cable end, on Socket straight 7/8"-16UNF, A-coded, cable length: 10 m



### Key Commercial Data

Packing unit	1 STK
GTIN	 4 046356 455657
GTIN	4046356455657

### Technical data

#### Dimensions

Length of cable	10 m
Stripping length of the free conductor end	50 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
Degree of protection	IP67
	1 (NEMA)
	3 (NEMA)
	4 (NEMA)
	6P (NEMA)

#### General

Note	For applications in circuits of intrinsic safety protection type "i". Electrical values following EN 60079-14.
Rated current at 40°C	5.2 A
Rated voltage	300 V
Number of positions	3
Color handle area	black
Insulation resistance	≥ 10 MΩ

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### Technical data

#### General

Coding	A - standard
Signal type/category	FOUNDATION Fieldbus, 31.25 kbps
Status display	No
Degree of pollution	2
Torque	0.8 Nm (7/8" connectors)

#### Material

Contact material	CuZn
Contact surface material	AU
Contact carrier material	PA 6.6
Material of grip body	TPU
Material, knurls	Stainless steel
Sealing material	TPU

#### Pin assignment

Position = wire color (signal) = position (optional)	1 (Socket)   BU (DATA-)
	2 (Socket)   OG (DATA+)
	3 (Socket)   SR (shield)

#### Cable

Cable type	Fieldbus FOUNDATION/PROFIBUS PA, blue
Cable type (abbreviation)	961
Cable structure	2xAWG18/7 + 1xAWG20/7
Conductor cross section	2x 0.75 mm <sup>2</sup> (Signal line)
	1x 0.5 mm <sup>2</sup> (Drain wire)
AWG signal line	18
Conductor structure signal line	7x 0.40 mm
Core diameter including insulation	2.24 mm ±0.05 mm
Thickness, insulation	0.5 mm
Wire colors	Blue, orange
Twisted pairs	2 cores to the pair
Overall twist	One pair with one drain wire and fillers for core
Shielding	Plastic-coated aluminum foil with a drain wire
Optical shield covering	100 %
External sheath, color	blue RAL 5015
Outer sheath thickness	1 mm
External cable diameter D	7.5 mm ±0.25 mm
Smallest bending radius, fixed installation	75 mm
Cable weight	56.552 kg/km
Tensile strength GRP	260 N
Outer sheath, material	PVC
Material conductor insulation	PO (Signal line)

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## Technical data

### Cable

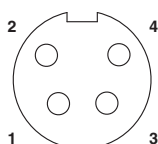
Conductor material	Tin-plated Cu litz wires
Conductor resistance	≤ 19.35 Ω/km (Signal line)
	26 Ω/km (shield)
Working capacitance	78 nF (at 1 kHz)
Cable capacity	147 pF/m (at 1 kHz, core/shield)
	≤ 3.94 pF/m (capacitance unbalance)
Signal speed	0.66 c
Shield attenuation	3 dB/km (at 39 kHz)
Cable impedance	100 Ω ±20 % (At 31.25 kHz)
Inductance	0.6233 μH (per meter)
Nominal voltage, cable	300 V
Special properties	UL standards PLTC-ER and ITC
Flame resistance	UL 1685 (CSA FT 4)
	UL 1685 (vertical tray)
	UL 1666 (riser)
Ambient temperature (operation)	-40 °C ... 105 °C (cable, fixed installation)

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

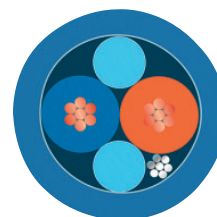
## Drawings

Schematic diagram



Pin assignment, socket, 7/8"-16UNF, 4-pos., view of female side

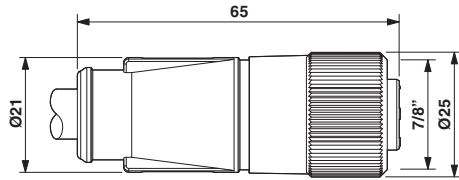
Cable cross section



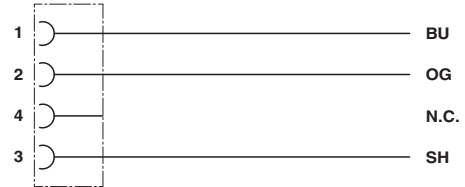
Fieldbus FOUNDATION/PROFIBUS PA, blue [961]

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Dimensional drawing



Circuit diagram



7/8"-16UNF socket, straight

Contact assignment of 7/8" socket

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