

SAC-4P-MINMR/ 0,5-961/MINFRVA - Bus system cable

1434510
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Bus system cable, FOUNDATION Fieldbus (31.25 kbps), 3-position, PVC, blue RAL 5015, shielded, Plug angled 7/8"-16UNF, coding: A, on Socket angled 7/8"-16UNF, coding: A, cable length: 0.5 m

Commercial data

Item number	1434510
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Product key	BF1FCG
Catalog page	Page 421 (C-4-2015)
GTIN	4046356456043
Weight per piece (including packing)	129 g
Weight per piece (excluding packing)	129 g
Country of origin	DE

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Technical data

Notes

General	For applications in circuits of intrinsic safety protection type "i". Electrical values following EN 60079-14.
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Product properties

Product type	Data cable preassembled
Application	Process technology
Sensor type	FOUNDATION Fieldbus
Number of positions	3
No. of cable outlets	1
Coding	A

Insulation characteristics

Degree of pollution	2
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Interfaces

Bus system	FOUNDATION Fieldbus
Signal type/category	FOUNDATION Fieldbus, 31.25 kbps

Signaling

Status display	No
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Electrical properties

Insulation resistance	$\geq 10 \text{ M}\Omega$
Nominal voltage U_N	300 V
Nominal current I_N	5.2 A
Transmission medium	Copper

Material specifications

Seal material	TPU
Material of grip body	TPU
Contact material	CuZn
Contact surface material	Au
Contact carrier material	PA 6.6
Material for screw connection	Stainless steel

Connection data

Pin assignment

Contact Color (signal designation) Contact (optional)	1 (Plug) BU (DATA-) 1 (Socket)
	2 (Plug) OG (DATA+) 2 (Socket)
	3 (Plug) SR (shield) 3 (Socket)

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Connector

Connection 1

Type	Plug angled 7/8"-16UNF
Number of positions	3
Coding type	A (Standard)

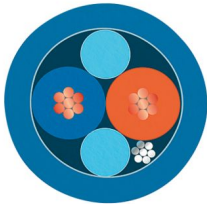
Connection 2

Type	Socket angled 7/8"-16UNF
Number of positions	3
Coding type	A (Standard)

Cable/line

Cable length	0.5 m
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Fieldbus FOUNDATION/PROFIBUS PA, blue [961]

Dimensional drawing	
Cable weight	56.552 kg/km
Number of positions	2
Shielded	yes
Cable type	Fieldbus FOUNDATION/PROFIBUS PA, blue [961]
Conductor structure	2xAWG18/7 + 1xAWG20/7
Signal speed	0.66 c
Conductor structure signal line	7x 0.40 mm
AWG signal line	18
Conductor cross section	2x 0.75 mm ² (Signal line) 1x 0.5 mm ² (Drain wire)
Wire diameter incl. insulation	2.24 mm ±0.05 mm
External cable diameter	7.50 mm ±0.25 mm
Outer sheath, material	PVC
External sheath, color	blue RAL 5015
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PO (Signal line)
Single wire, color	blue, orange
Thickness, insulation	0.50 mm
Thickness, outer sheath	1.00 mm
Twisted pairs	2 cores to the pair

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Overall twist	One pair with one drain wire and fillers for core
Optical shield covering	100 %
Max. conductor resistance	$\leq 19.35 \Omega/\text{km}$ (Signal line)
	$26 \Omega/\text{km}$ (shield)
Cable capacity	147 pF/m (at 1 kHz, core/shield)
	$\leq 3.94 \text{ pF/m}$ (capacitance unbalance)
Working capacitance	78 nF (at 1 kHz)
Cable impedance	$100 \Omega \pm 20 \%$ (At 31.25 kHz)
Nominal voltage, cable	300 V
Smallest bending radius, fixed installation	75 mm
Tensile strength	260 N
Shield attenuation	3.00 dB/km (at 39 kHz)
Flame resistance	UL 1685 (CSA FT 4)
	UL 1685 (vertical tray)
	UL 1666 (riser)
Special properties	UL standards PLTC-ER and ITC
Ambient temperature (operation)	$-40^\circ\text{C} \dots 105^\circ\text{C}$ (cable, fixed installation)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP67
Enclosure rating (NEMA)	1 (NEMA)
	3 (NEMA)
	4 (NEMA)
	6P (NEMA)
Ambient temperature (operation)	$-40^\circ\text{C} \dots 105^\circ\text{C}$ (Plug / socket)

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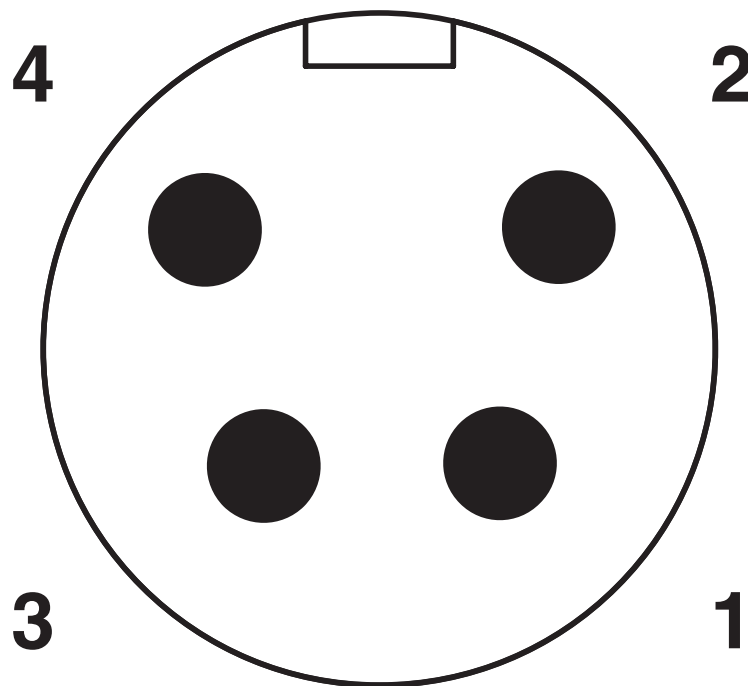


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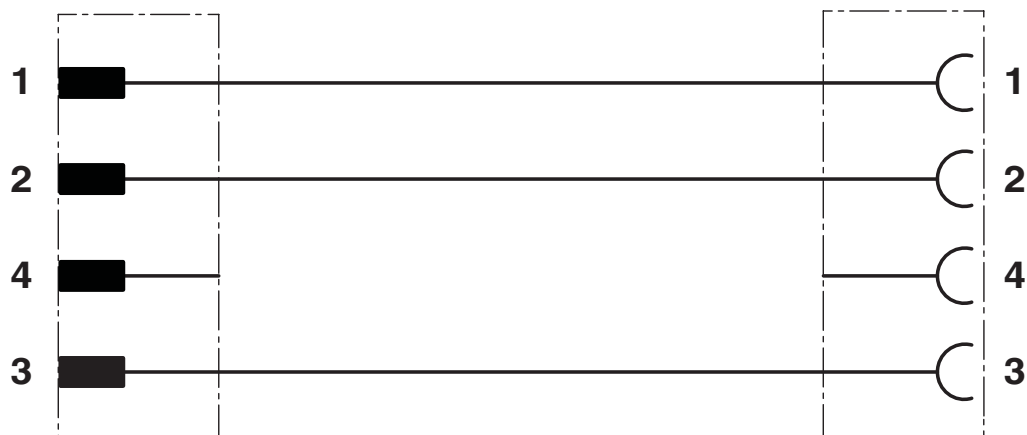
Drawings

Schematic diagram



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

Circuit diagram

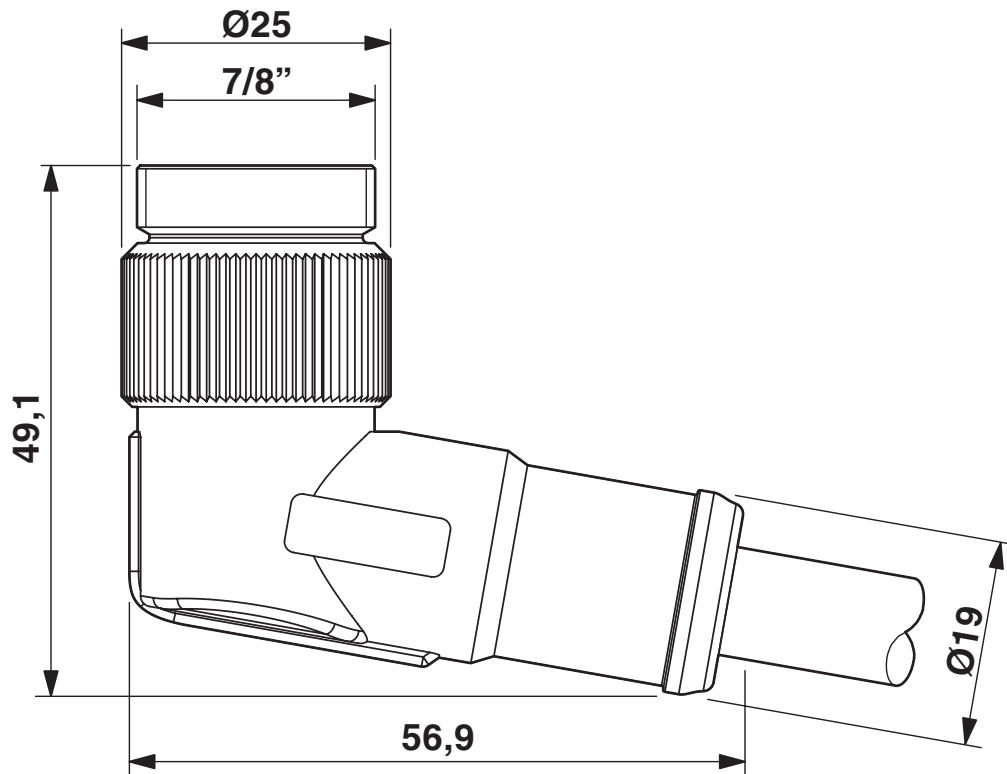


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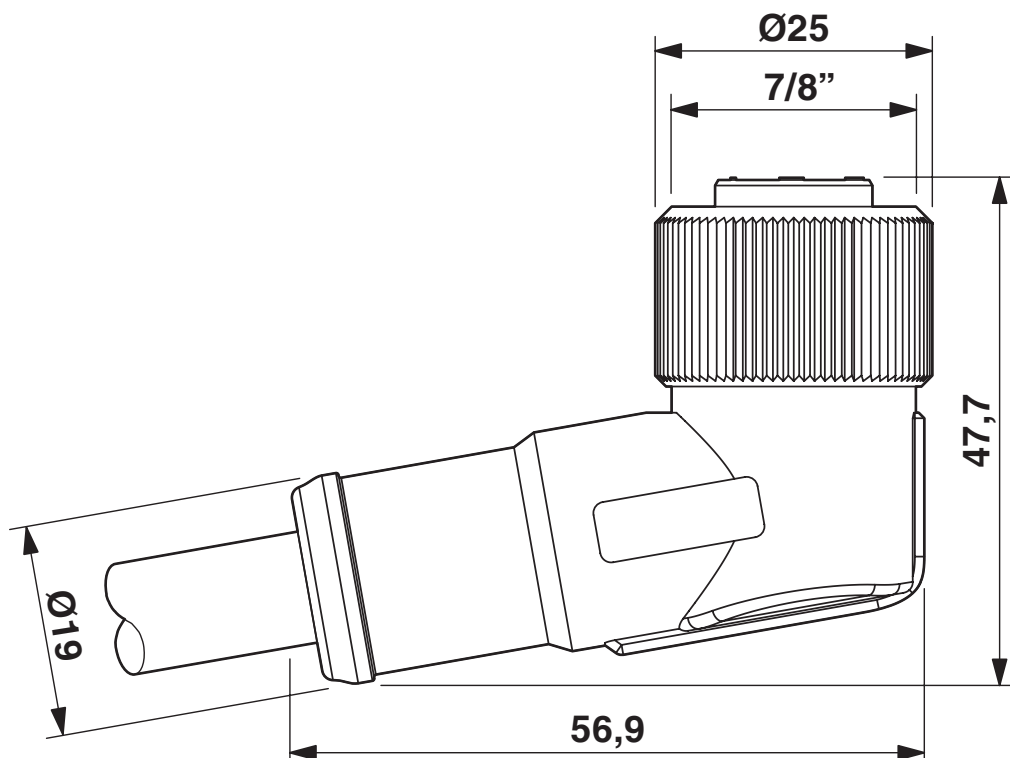
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Dimensional drawing



7/8"-16UNF plug, angled

Dimensional drawing



7/8"-16UNF socket, angled

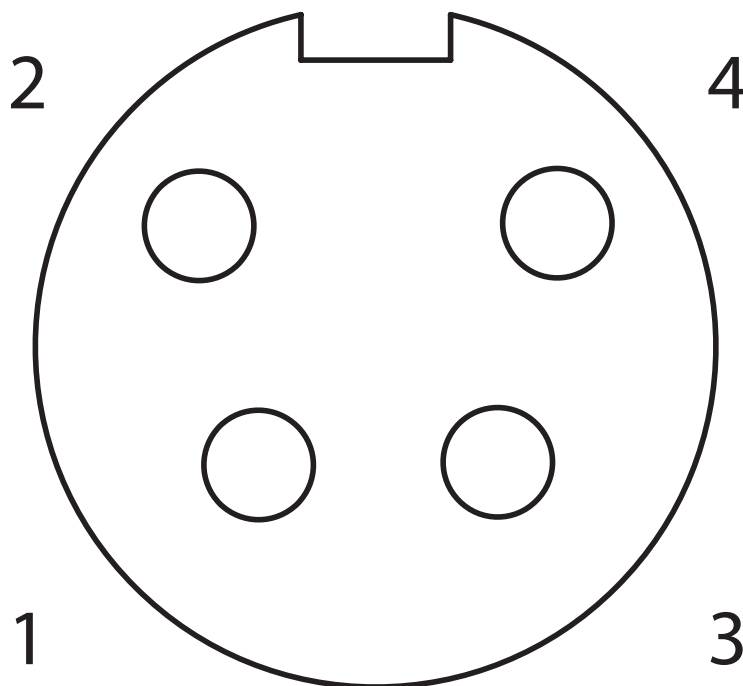
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Schematic diagram



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

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Classifications

ECLASS

ECLASS-11.0	27060307
ECLASS-13.0	27060307

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Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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