

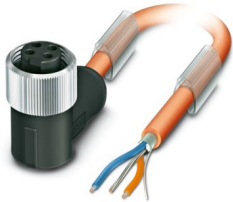
# SAC-4P-20,0-960/MINFR VA - Bus system cable



1429305

<https://www.phoenixcontact.com/us/products/1429305>

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Bus system cable, FOUNDATION Fieldbus (31.25 kbps), 3-position, PVC, orange RAL 2003, shielded, free cable end, on Socket angled 7/8"-16UNF, coding: A, cable length: 20 m



## Commercial data

Item number	1429305
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	B22
Product key	AF1FCG
GTIN	4046356318532
Weight per piece (including packing)	1,392 g
Weight per piece (excluding packing)	1,392 g
Customs tariff number	85444290
Country of origin	DE

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## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	II
Degree of pollution	2

### Interfaces

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

### Signaling

Status display	no
Status display present	no

### 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
Transmission speed	31.25 kbps

### Material specifications

Flammability rating according to UL 94	HB
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

#### Connection assignment

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

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## Connector

### Connection 1

Type	free cable end
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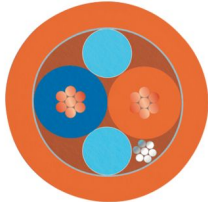
### Connection 2

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

## Cable/line

Cable length	20 m
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### FOUNDATION Fieldbus orange [960]

Dimensional drawing	
Cable weight	56.552 kg/km
Number of positions	2
Shielded	yes
Cable type	FOUNDATION Fieldbus orange [960]
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 <sup>2</sup> (Signal line) 1x 0.5 mm <sup>2</sup> (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	orange RAL 2003
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
Overall twist	One pair with one drain wire and fillers for core
Optical shield covering	100 %

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Max. conductor resistance	≤ 19.35 Ω/km (Signal line)
	26 Ω/km (shield)
Cable capacity	147 pF/m (at 1 kHz, core/shield)
	≤ 3.94 pF/m (capacitance unbalance)
Working capacitance	78 nF (at 1 kHz)
Cable impedance	100 Ω ±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 °C ... 105 °C (cable, fixed installation)

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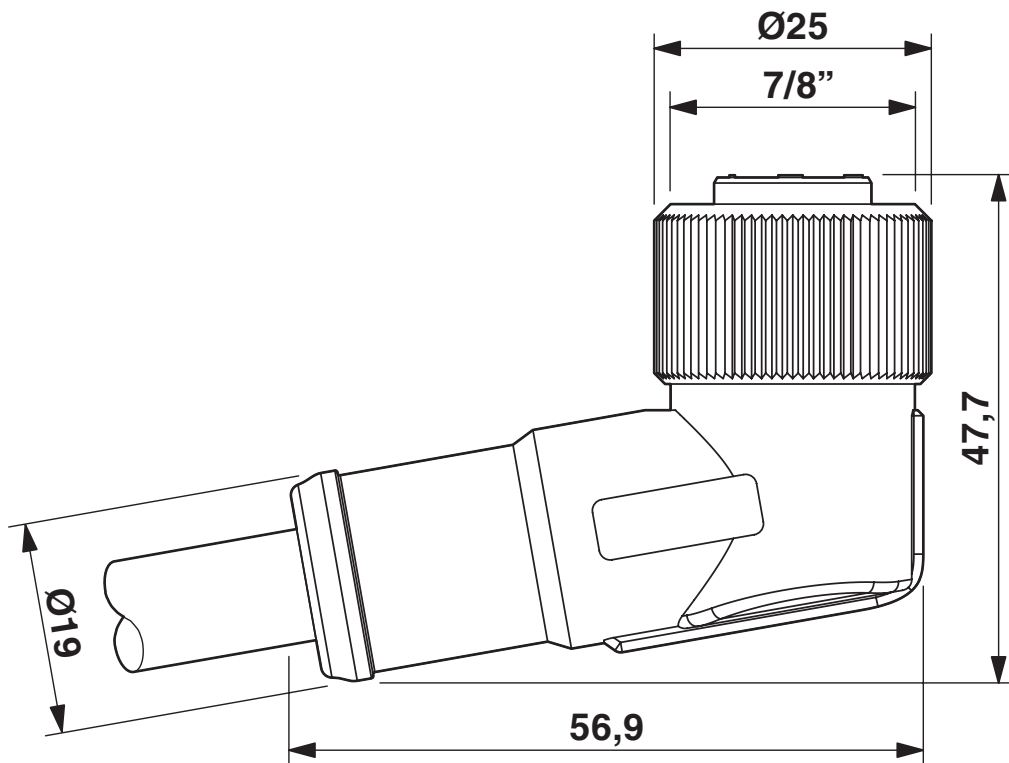


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## Drawings

Dimensional drawing



7/8"-16UNF socket, angled

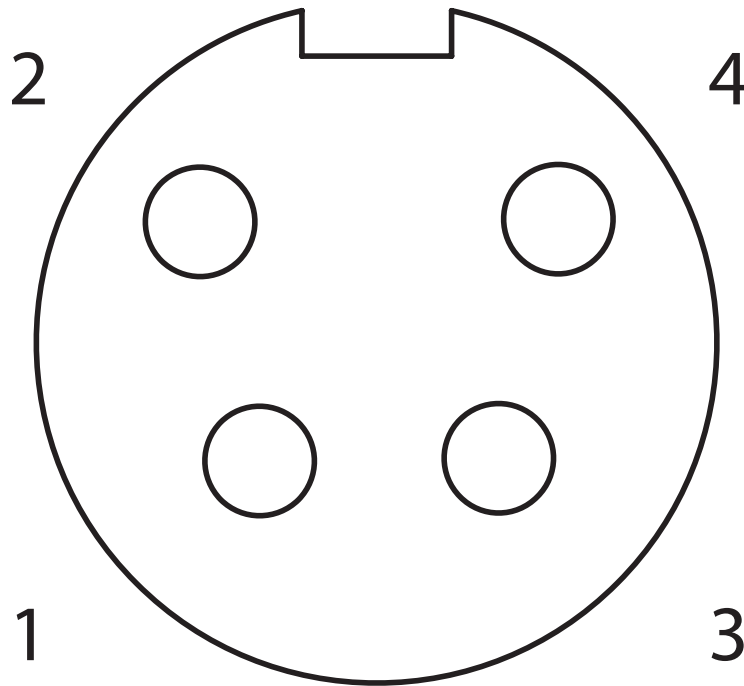
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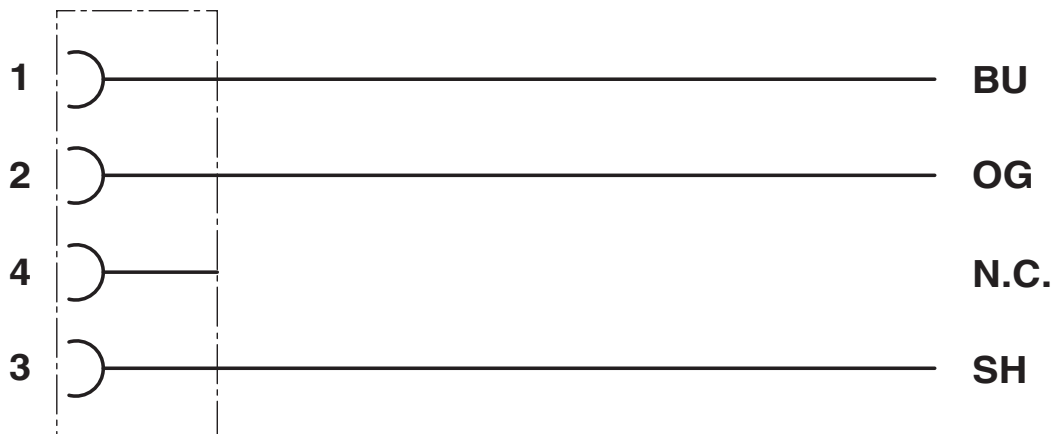
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Schematic diagram



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

Circuit diagram



Contact assignment of 7/8" socket

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## Classifications

### ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	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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