

## Bus system cable - SAC-4P-MINMR/30,0-960/MINFRVA - 1429994

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Bus system cable, FOUNDATION Fieldbus, Foundation Fieldbus, 3-position, PVC, orange RAL 2003, shielded, Plug angled 7/8"-16UNF, A-coded, on Socket angled 7/8"-16UNF, A-coded, Cable length: 30 m



### Key commercial data

Packing unit	1 1
Weight per Piece (excluding packing)	222.22 GRM
Custom tariff number	85444290
Country of origin	Germany

### Technical data

#### Dimensions

Length of cable	30 m
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#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 105 °C (Plug / socket)
Degree of protection	IP67

#### General

Rated current at 40°C	5.2 A
Rated voltage	300 V
Number of positions	3
Contact resistance	≤ 5 mΩ
Insulation resistance	≥ 10 MΩ
Coding	A - standard
Signal type/category	FOUNDATION Fieldbus
Status display	No

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### Technical data

#### General

Surge voltage category	II
Pollution degree	2
Torque	0.8 Nm (7/8" connectors)

#### Material

Inflammability class according to UL 94	HB
Contact material	CuZn
Contact surface material	AU
Contact carrier material	PA 66
Material of grip body	TPU
Material, knurls	High-grade steel

#### Cable

Cable type	FOUNDATION Fieldbus orange
Cable type (abbreviation)	960
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 (Core insulation)
	1 mm (Outer cable sheath)
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	orange RAL 2003
External cable diameter	7.42 mm
External cable diameter D	7.5 mm ±0.25 mm
Smallest bending radius, fixed installation	75 mm
Cable weight	56.552 kg/km
Outer sheath, material	PVC
Material conductor insulation	PO (signal line)
Conductor material	Tin-plated Cu litz wires
Conductor resistance	19.2 Ω/km (signal line)
	26 Ω/km (shield)

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### Technical data

#### Cable

Working capacitance	148 nF (core-shield)
	78 nF (core-core)
Wave impedance	100 Ω (At 31.25 kHz)
Signal speed	0.66 c
Nominal voltage, cable	300 V
Special properties	UL standards PLTC-ER and ITC
Flame resistance	UL 1685 (CSA FT 4)
Ambient temperature (operation)	-30 °C ... 105 °C (Cable)

### 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	27061801
eCl@ss 7.0	27061801
eCl@ss 8.0	27061801

#### 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

### Approvals

#### Approvals

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#### Approvals

UL Listed / cUL Listed / GOST / cULus Listed

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## Approvals

Ex Approvals

Approvals submitted

## Approval details

UL Listed	
Nominal current IN	5.2 A
Nominal voltage UN	300 V

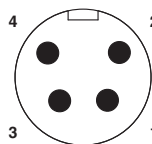
cUL Listed	
Nominal current IN	5.2 A
Nominal voltage UN	300 V

GOST	
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cULus Listed	
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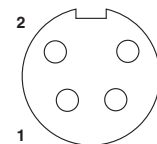
## Drawings

Schematic diagram



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

Schematic diagram



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

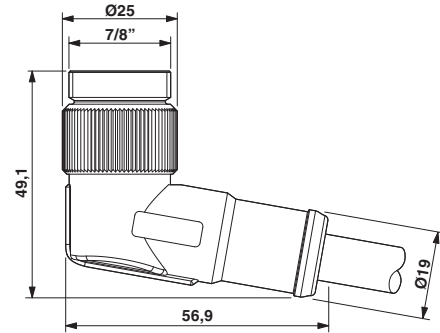
# Bus system cable - SAC-4P-MINMR/30,0-960/MINFRVA - 1429994

Cable cross section



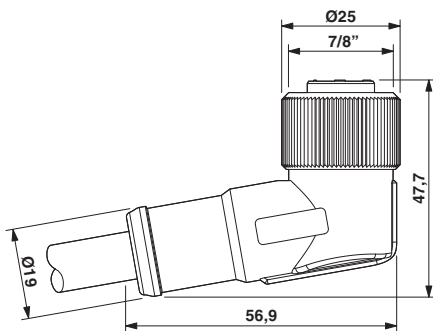
FOUNDATION Fieldbus orange [960]

Dimensioned drawing



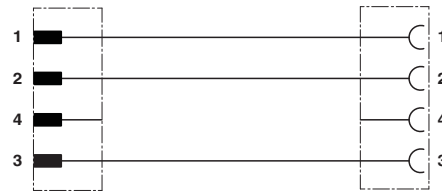
7/8"-16UNF plug, angled

Dimensioned drawing



7/8"-16UNF socket, angled

Circuit diagram



Contact assignment of the 7/8" connector and the 7/8" socket