

Bus system cable - SAC-4P-MINMR/ 0,5-960/MINFRVA - 1429910

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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: 0.5 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 | 0.5 m |
|-----------------|-------|

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 ² (signal line) |
| | 1x 0.5 mm ² (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

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 |

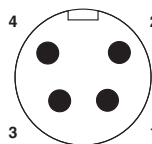
| | |
|--------------------|-------|
| cUL Listed | |
| | |
| Nominal current IN | 5.2 A |
| Nominal voltage UN | 300 V |

| | |
|------|--|
| GOST | |
|------|--|

| | |
|--------------|--|
| cULus Listed | |
|--------------|--|

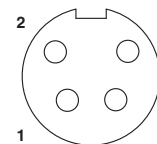
Drawings

Schematic diagram



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

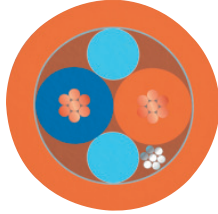
Schematic diagram



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

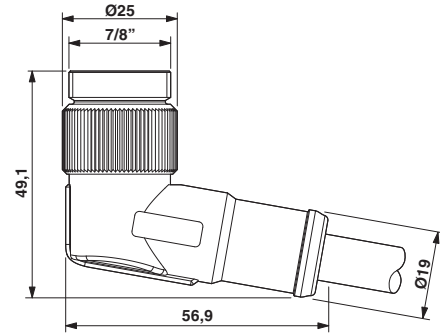
Bus system cable - SAC-4P-MINMR/ 0,5-960/MINFRVA - 1429910

Cable cross section



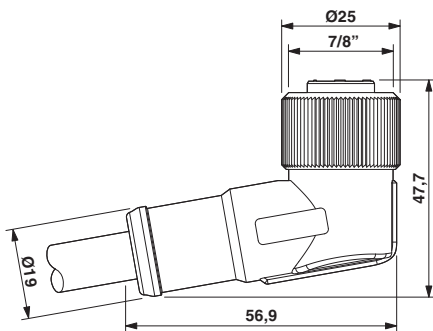
FOUNDATION Fieldbus orange [960]

Dimensioned drawing



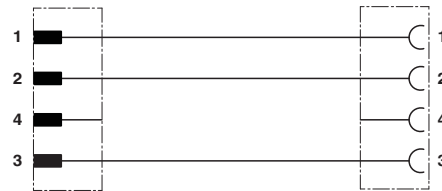
7/8"-16UNF plug, angled

Dimensioned drawing



7/8"-16UNF socket, angled

Circuit diagram



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