

Bus system cable - SAC-6P- 5,0-970/FR SCO - 1428623

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Bus system cable, VARAN (100 Mbps), 6-position, SANTOPRENE halogen-free/TPE halogen-free, black RAL 9005, shielded, free cable end, on Socket angled M12 SPEEDCON, coding: A, cable length: 5 m



Key Commercial Data

| | |
|--------------|---------------|
| Packing unit | 1 pc |
| GTIN | |
| GTIN | 4046356322904 |

Technical data

Dimensions

| | |
|--|-------|
| Length of cable | 5 m |
| Stripping length of the free conductor end | 50 mm |

Ambient conditions

| | |
|---------------------------------|----------------------------------|
| Ambient temperature (operation) | -25 °C ... 90 °C (Plug / socket) |
| Degree of protection | IP65 |
| | IP67 |

General

| | |
|-----------------------|-----------------|
| Rated current at 40°C | 2 A |
| Rated voltage | 30 V AC |
| | 30 V DC |
| Number of positions | 6 |
| Color handle area | black |
| Insulation resistance | ≥ 100 MΩ |
| Coding | A - standard |
| Signal type/category | VARAN, 100 Mbps |
| Status display | No |
| Overvoltage category | II |

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Technical data

General

| | |
|---------------------|------------------------|
| Degree of pollution | 3 |
| Torque | 0.4 Nm (M12 connector) |

Material

| | |
|--|---|
| Flammability rating according to UL 94 | HB |
| Contact material | CuZn |
| Contact surface material | Ni/Au |
| Contact carrier material | TPU GF |
| Material of grip body | TPU, hardly inflammable, self-extinguishing |
| Material, knurls | Zinc die-cast, nickel-plated |
| Sealing material | NBR |

Pin assignment

| | |
|---|--------------------------|
| Contact Color (signal designation) Contact (optional) | 1 (Socket) |
| | 4 (Socket) |
| | 6 (Socket) BU (Power) |
| | 7 (Socket) BN (Power) |
| | 5 (Socket) GN/WH (RD+) |
| | 8 (Socket) GN (RD-) |
| | 2 (Socket) OG/WH (TD+) |
| | 3 (Socket) OG (TD-) |

Standards and Regulations

| | |
|--|----|
| Flammability rating according to UL 94 | HB |
|--|----|

Cable

| | |
|-------------------------------------|---|
| Cable type | VARAN |
| Cable type (abbreviation) | 970 |
| Cable abbreviation | Li9YD12Y |
| Cable structure | 1x2xAWG22/19 + 1x4xAWG24/19 |
| Conductor cross section | 4x 0.25 mm ² (Signal line) |
| | 2x 0.38 mm ² (Power supply) |
| AWG signal line | 24 |
| AWG power supply | 22 |
| Conductor structure signal line | 19x 0.13 mm |
| Conductor structure, voltage supply | 19x 0.16 mm |
| Core diameter including insulation | 1.35 mm (Signal line) |
| | 1.5 mm (Power supply) |
| Wire colors | Brown, blue, white/orange, white/green, green, orange |
| Type of pair shielding | Tinned copper braided shield, 95 % covering |
| Overall twist | 1 star quad and 2 wires with 2 fillers |
| Shielding | Tinned copper-braided shield, approx. 85% covering |
| External sheath, color | black RAL 9005 |

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Technical data

Cable

| | |
|---|-------------------------------------|
| External cable diameter D | 7.8 mm ±0.2 mm |
| Smallest bending radius, fixed installation | ≥ 93 mm |
| Smallest bending radius, movable installation | ≥ 93 mm |
| Number of bending cycles | 3000000 |
| Bending radius | 93 mm |
| Traversing path | 2 m |
| Traversing rate | 1 m/s |
| Acceleration | 2 m/s ² |
| Cable weight | 81 kg/km |
| Outer sheath, material | SANTOPRENE halogen-free |
| Material, inner sheath | TPE |
| Material, filler | Yarn |
| Material conductor insulation | PP |
| Conductor material | Bare Cu litz wires |
| Insulation resistance | 5 GΩ*km (Data cable) |
| Conductor resistance | 77 Ω/m (Data cable) |
| Transmission characteristics (category) | CAT5 (IEC 11801:2002) |
| Working capacitance | 50 nF (Data cable) |
| Wave impedance | 100 Ω ±15 % |
| Nominal voltage, cable | 125 V (Data cable) |
| | 48 V (Power supply) |
| Test voltage, cable | 2000 V (Power supply) |
| | max. 700 V AC (Data cable) |
| Halogen-free | in accordance with DIN EN 50267-2-1 |
| Ambient temperature (operation) | -20 °C ... 80 °C (Cable) |

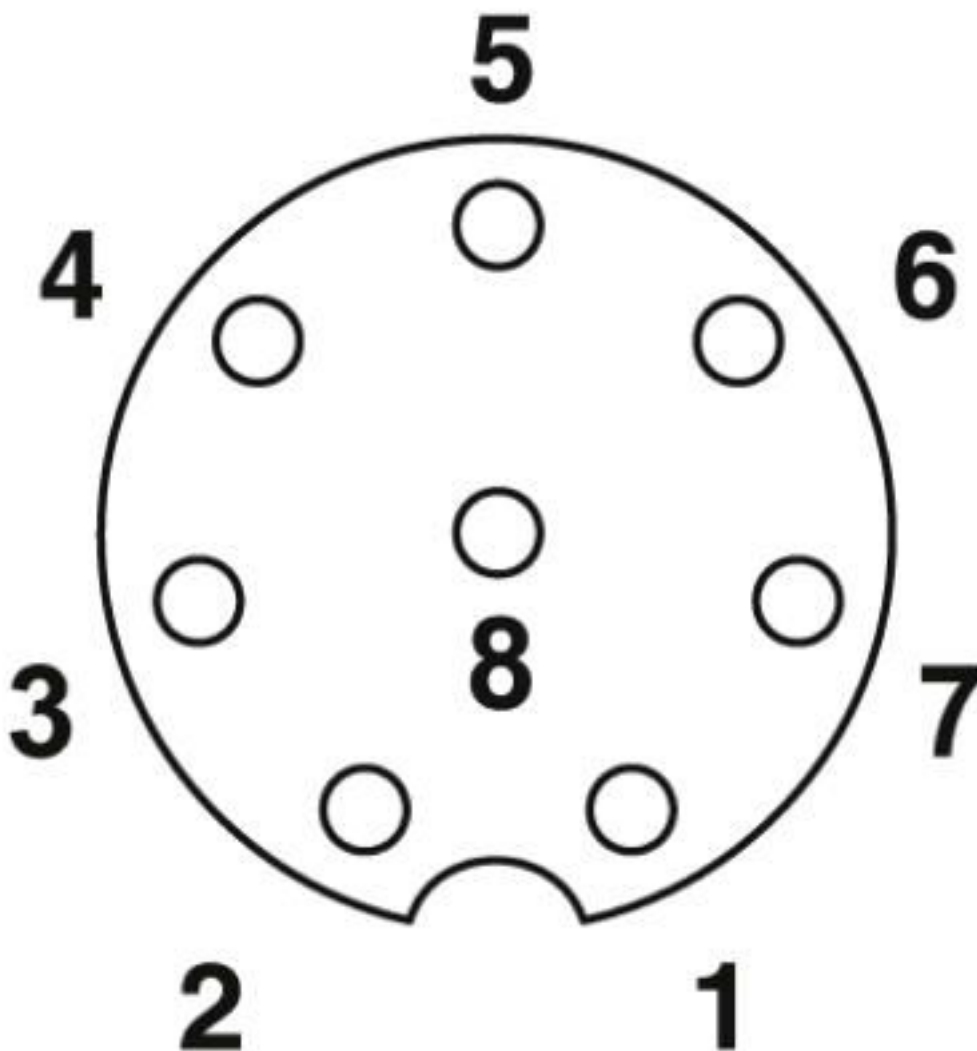
Environmental Product Compliance

| | |
|------------|---|
| REACH SVHC | Lead 7439-92-1 |
| China RoHS | Environmentally Friendly Use Period = 50 years |
| | For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration" |

Drawings

Bus system cable - SAC-6P- 5,0-970/FR SCO - 1428623

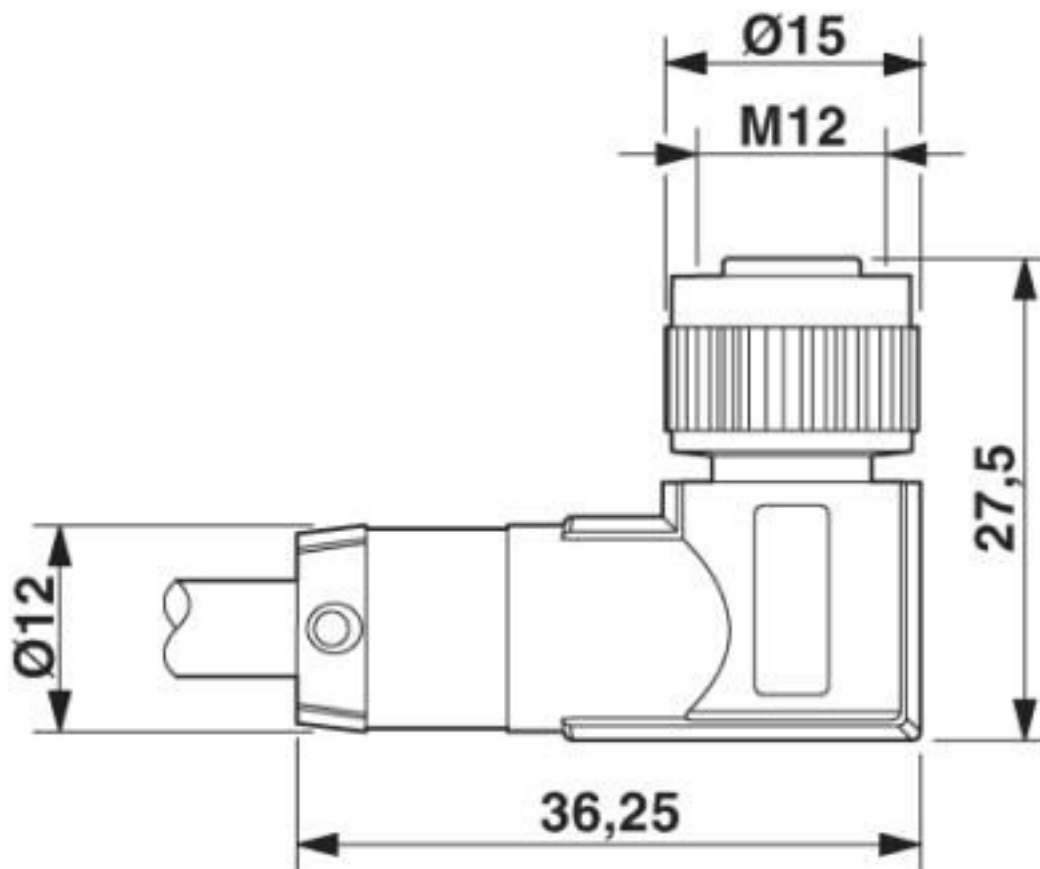
Schematic diagram



Pin assignment M12 socket, 8-pos., A-coded, view female side

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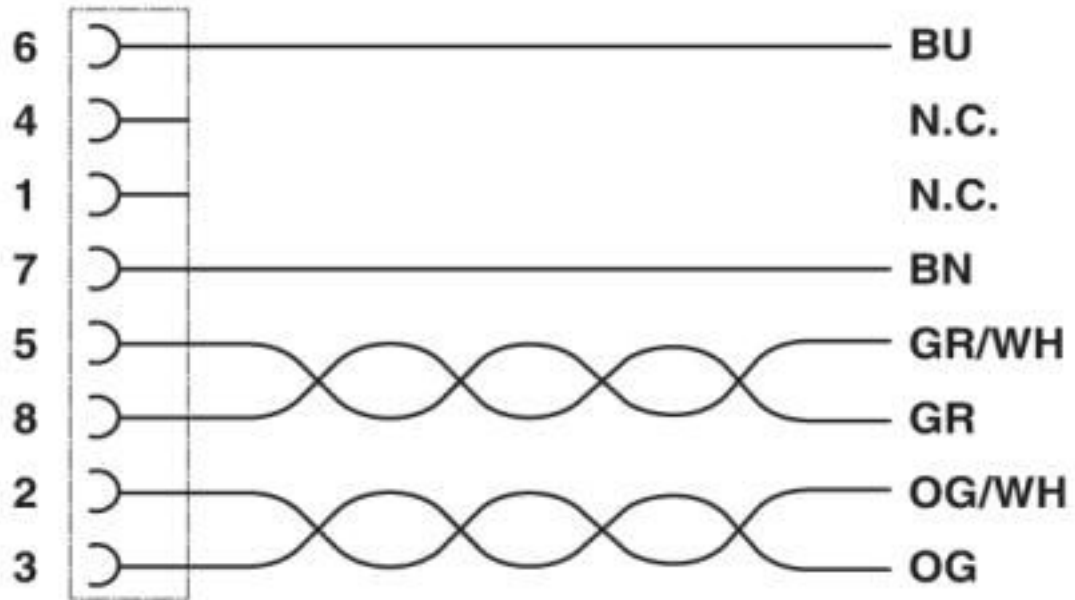
Dimensional drawing



M12 x 1 socket, angled, shielded

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Circuit diagram



Contact assignment of the M12 socket

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Cable cross section



VARAN [970]

Classifications

eCl@ss

| | |
|---------------|----------|
| eCl@ss 10.0.1 | 27060308 |
| eCl@ss 4.0 | 27060300 |
| eCl@ss 4.1 | 27060300 |
| eCl@ss 5.0 | 27061800 |
| eCl@ss 5.1 | 27061800 |
| eCl@ss 6.0 | 27279200 |
| eCl@ss 7.0 | 27279218 |
| eCl@ss 8.0 | 27279218 |
| eCl@ss 9.0 | 27060308 |

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Classifications

ETIM

| | |
|----------|----------|
| ETIM 3.0 | EC001855 |
| ETIM 4.0 | EC001855 |
| ETIM 5.0 | EC002599 |
| ETIM 6.0 | EC001262 |
| ETIM 7.0 | EC001262 |

UNSPSC

| | |
|---------------|----------|
| UNSPSC 6.01 | 31251501 |
| UNSPSC 7.0901 | 31251501 |
| UNSPSC 11 | 31251501 |
| UNSPSC 12.01 | 31251501 |
| UNSPSC 13.2 | 31251501 |
| UNSPSC 18.0 | 26121604 |
| UNSPSC 19.0 | 26121604 |
| UNSPSC 20.0 | 26121604 |
| UNSPSC 21.0 | 26121604 |

Approvals

Approvals

Approvals

EAC-RoHS / EAC

Ex Approvals

Approval details

| | | |
|----------|--|--------------------------|
| EAC-RoHS | | RU D- DE.HB35.B.00387 |
|----------|--|--------------------------|

| | | |
|-----|--|--------------------------|
| EAC | | RU C- DE.BL08.B.00286 |
|-----|--|--------------------------|

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