

## Sensor/actuator cable - SAC-4P-MS/0,6-600/M 8FR-2L FB - 1406867

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Sensor/actuator cable, 4-position, PP-EPDM halogen-free, gray RAL 7035, Plug straight M8, on Socket angled M8, with 2 LEDs, cable length: 0.6 m, Hygienic design, with plastic knurl

### Your advantages

- ✓ Easy and safe: 100% electrically tested plug-in components
- ✓ Easy to clean, thanks to the special hygienic design
- ✓ Contamination can be detected quickly – thanks to the light color
- ✓ Convenient: increased machine availability thanks to quick and easy diagnostics

RoHS

### Key Commercial Data

|              |                                                                                                         |
|--------------|---------------------------------------------------------------------------------------------------------|
| Packing unit | 1 pc                                                                                                    |
| GTIN         | <br>4 046356 781893 |
| GTIN         | 4046356781893                                                                                           |

### Technical data

#### Dimensions

|                 |       |
|-----------------|-------|
| Length of cable | 0.6 m |
|-----------------|-------|

#### Ambient conditions

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Ambient temperature (operation) | -40 °C ... 105 °C (Plug / socket) |
| Degree of protection            | IP65                              |
|                                 | IP67                              |
|                                 | IP68                              |
|                                 | IP69K                             |

#### General

|                       |         |
|-----------------------|---------|
| Rated current at 40°C | 4 A     |
| Rated voltage         | 24 V DC |
| Number of positions   | 4       |

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## Technical data

### General

|                              |                                          |
|------------------------------|------------------------------------------|
| Insulation resistance        | $\geq 100 \text{ M}\Omega$               |
| Coding                       | A - standard                             |
| Standards/regulations        | M8 connector IEC 61076-2-104             |
|                              | Material conformance FDA 21 CFR 177.2600 |
| Status display               | 2 LEDs                                   |
| Protective circuit/component | unwired                                  |
| Insertion/withdrawal cycles  | $\geq 100$                               |
| Torque                       | 0.2 Nm (M8 connectors)                   |

### Material

|                          |               |
|--------------------------|---------------|
| Contact material         | CuSn          |
| Contact surface material | Ni/Au         |
| Contact carrier material | PP            |
| Material of grip body    | PP            |
| Material, knurls         | Polypropylene |
| Sealing material         | FKM           |

### Standards and Regulations

|                          |                                          |
|--------------------------|------------------------------------------|
| Standards/specifications | M8 connector IEC 61076-2-104             |
|                          | Material conformance FDA 21 CFR 177.2600 |

### Cable

|                                                 |                                          |
|-------------------------------------------------|------------------------------------------|
| Cable type                                      | Halogen-free PP gray                     |
| Cable type (abbreviation)                       | 600                                      |
| Cable abbreviation                              | Li9Y14Y                                  |
| Conductor cross section                         | 4x 0.25 mm <sup>2</sup> (Signal line)    |
| AWG signal line                                 | 24                                       |
| Conductor structure signal line                 | 32x 0.10 mm                              |
| Core diameter including insulation              | 1.17 mm $\pm$ 0.02 mm (Signal line)      |
| Thickness, insulation                           | $\geq 0.21 \text{ mm}$ (Core insulation) |
| Wire colors                                     | brown, white, blue, black                |
| Overall twist                                   | 4 wires, twisted                         |
| Length of twist, overall twist                  | 44 mm                                    |
| External sheath, color                          | gray RAL 7035                            |
| Outer sheath thickness                          | approx. 0.8 mm                           |
| External cable diameter D                       | 4.5 mm $\pm$ 0.15 mm                     |
| Minimum bending radius, fixed installation      | 5 x D                                    |
| Minimum bending radius, flexible installation   | 10 x D                                   |
| Number of bending cycles                        | 4000000                                  |
| Minimum bending radius, drag chain applications | 10 x D                                   |
| Traversing path                                 | 10 m                                     |
| Traversing rate                                 | 3 m/s                                    |

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### Technical data

#### Cable

|                                 |                                                                                   |
|---------------------------------|-----------------------------------------------------------------------------------|
| Acceleration                    | 10 m/s <sup>2</sup>                                                               |
| Torsion force                   | ± 270 °/m (4,000,000 torsion cycles, max. 25 torsion cycles/min)                  |
| Cable weight                    | 23 kg/km                                                                          |
| Outer sheath, material          | PP-EPDM                                                                           |
| Material conductor insulation   | PP                                                                                |
| Conductor material              | Bare Cu litz wires                                                                |
| Insulation resistance           | ≥ 1 GΩ*km (at 20 °C)                                                              |
| Conductor resistance            | 78 Ω/km (at 20 °C)                                                                |
| Nominal voltage, cable          | ≤ 300 V AC                                                                        |
| Test voltage, cable             | ≥ 3000 V AC (Spark test)                                                          |
| Special properties              | FDA compliant according to FDA 21 CFR 177.2600                                    |
|                                 | highly flexible                                                                   |
|                                 | Flexible cable conduit capable                                                    |
| Halogen-free                    | in accordance with DIN VDE 0472 part 815                                          |
|                                 | in accordance with DIN EN 50267-2-1                                               |
| Other resistance                | Resistant to cold bending and cold impacts According to DIN EN 60811-1-4 (-40 °C) |
| Ambient temperature (operation) | -40 °C ... 105 °C (cable, fixed installation)                                     |
|                                 | -25 °C ... 105 °C (cable, flexible installation)                                  |

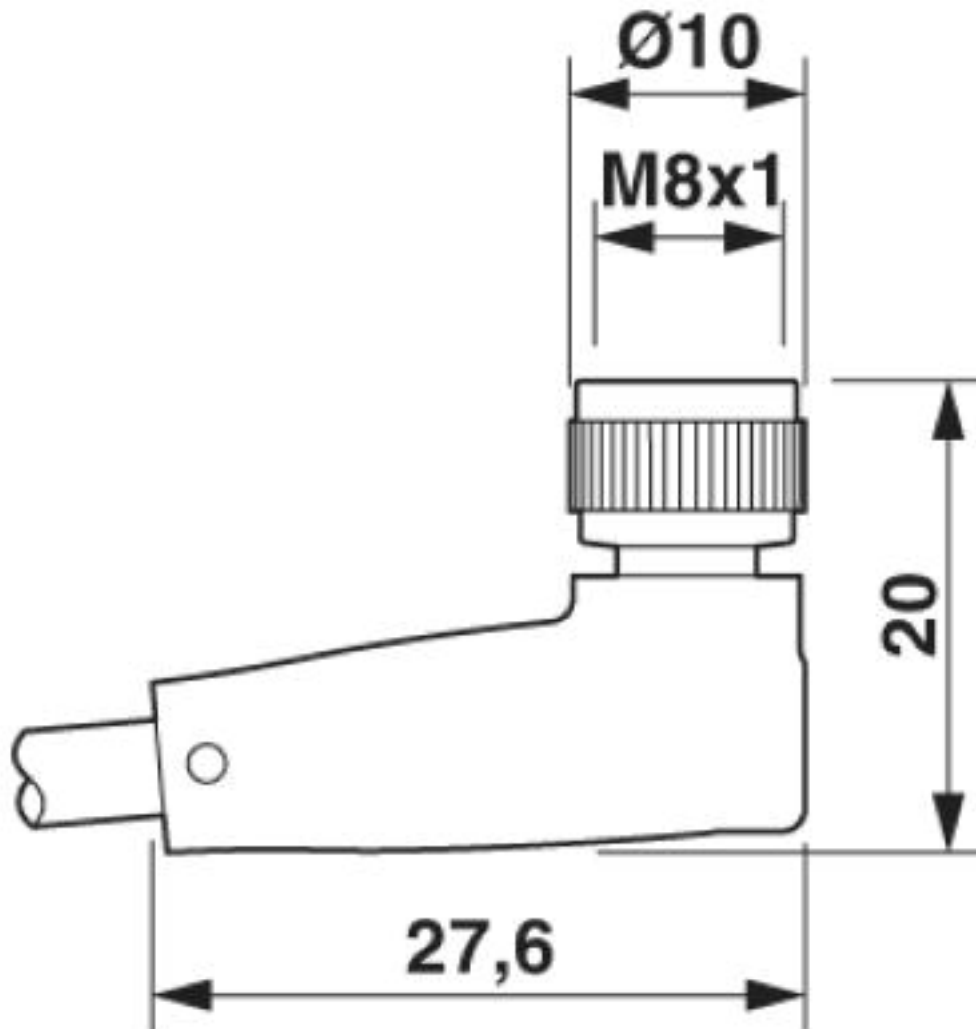
#### Environmental Product Compliance

|            |                                                         |
|------------|---------------------------------------------------------|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

### Drawings

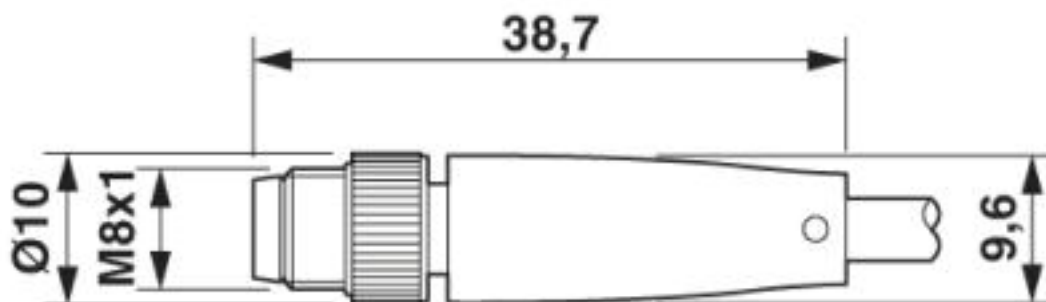
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Dimensional drawing



Socket M8 x 1, angled

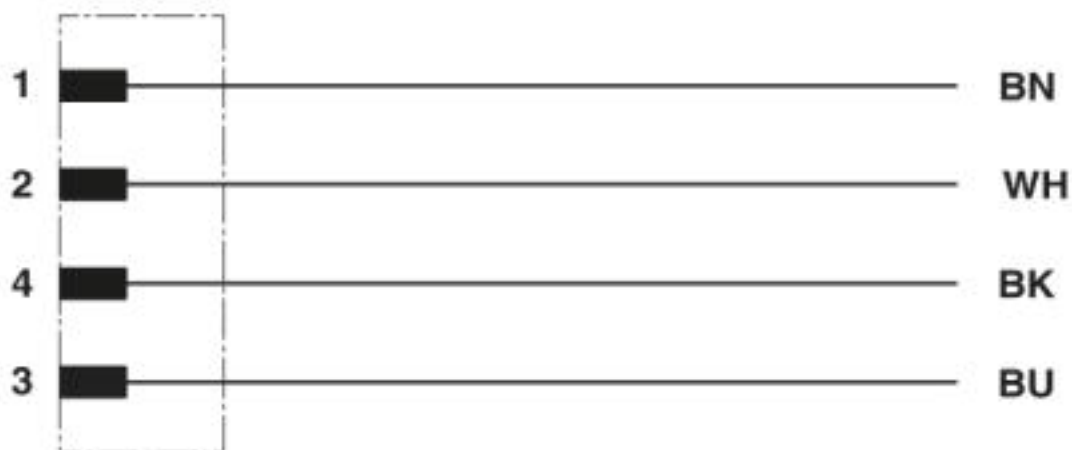
Dimensional drawing



M8 x 1 male plug, straight version

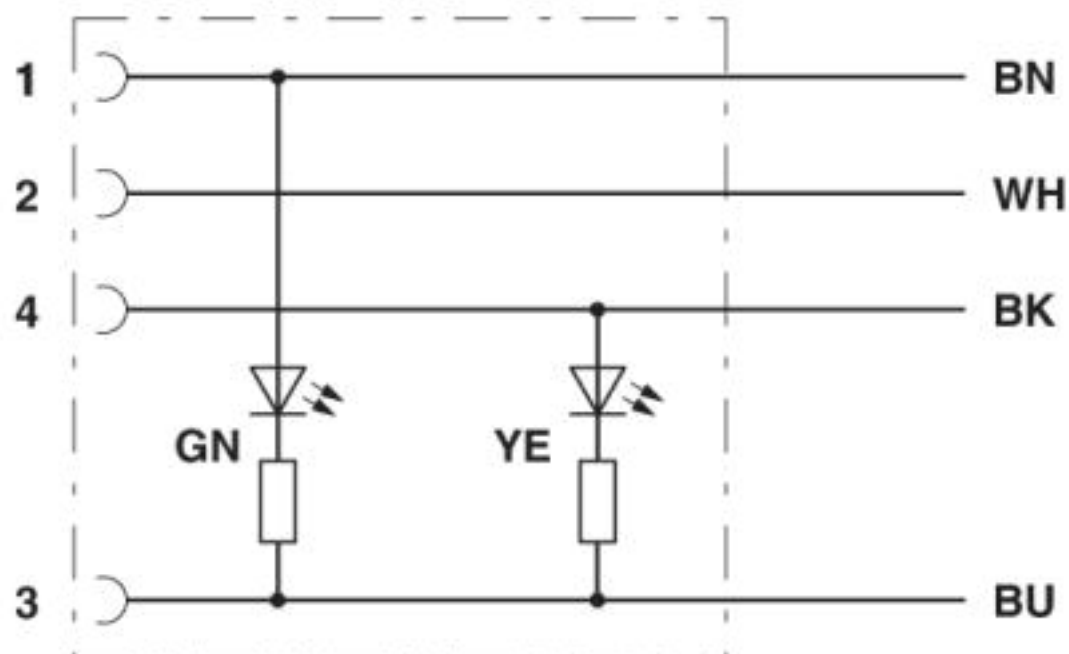
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Circuit diagram



Contact assignment of the M12 plug

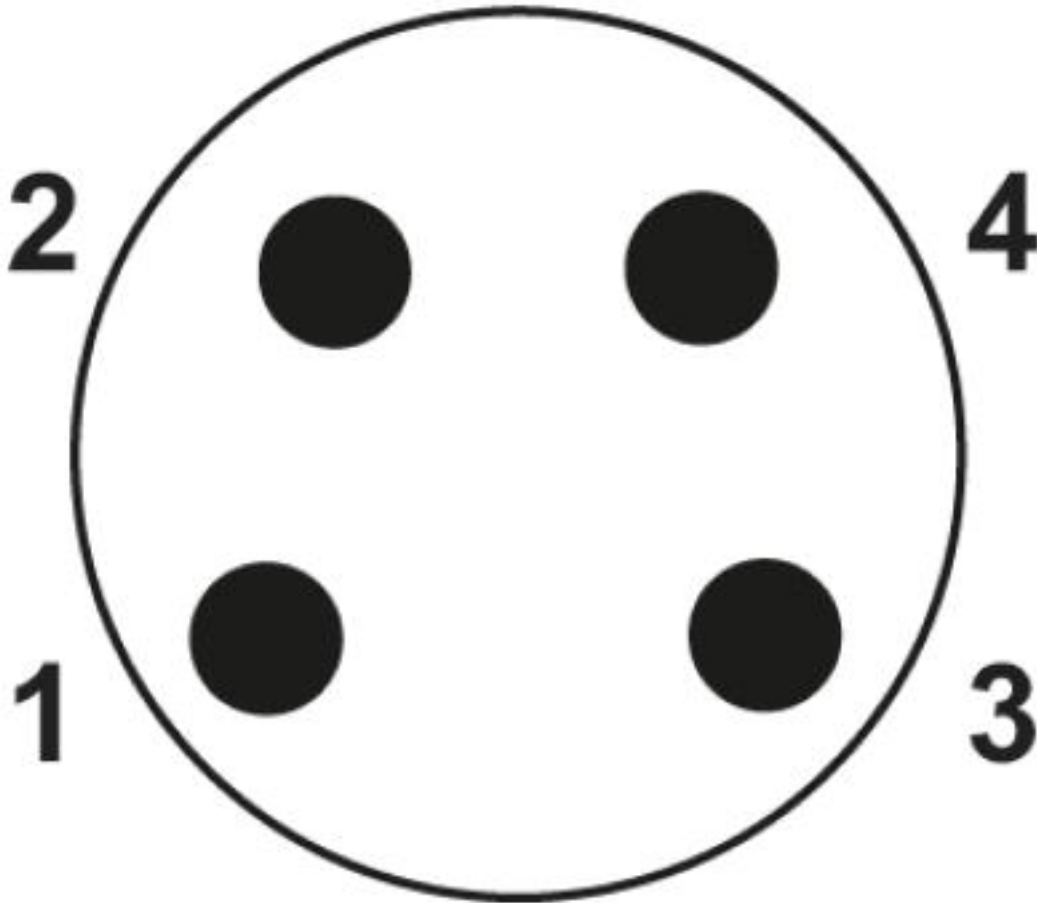
Circuit diagram



Contact assignment of the M8 socket with LED

## Sensor/actuator cable - SAC-4P-MS/0,6-600/M 8FR-2L FB - 1406867

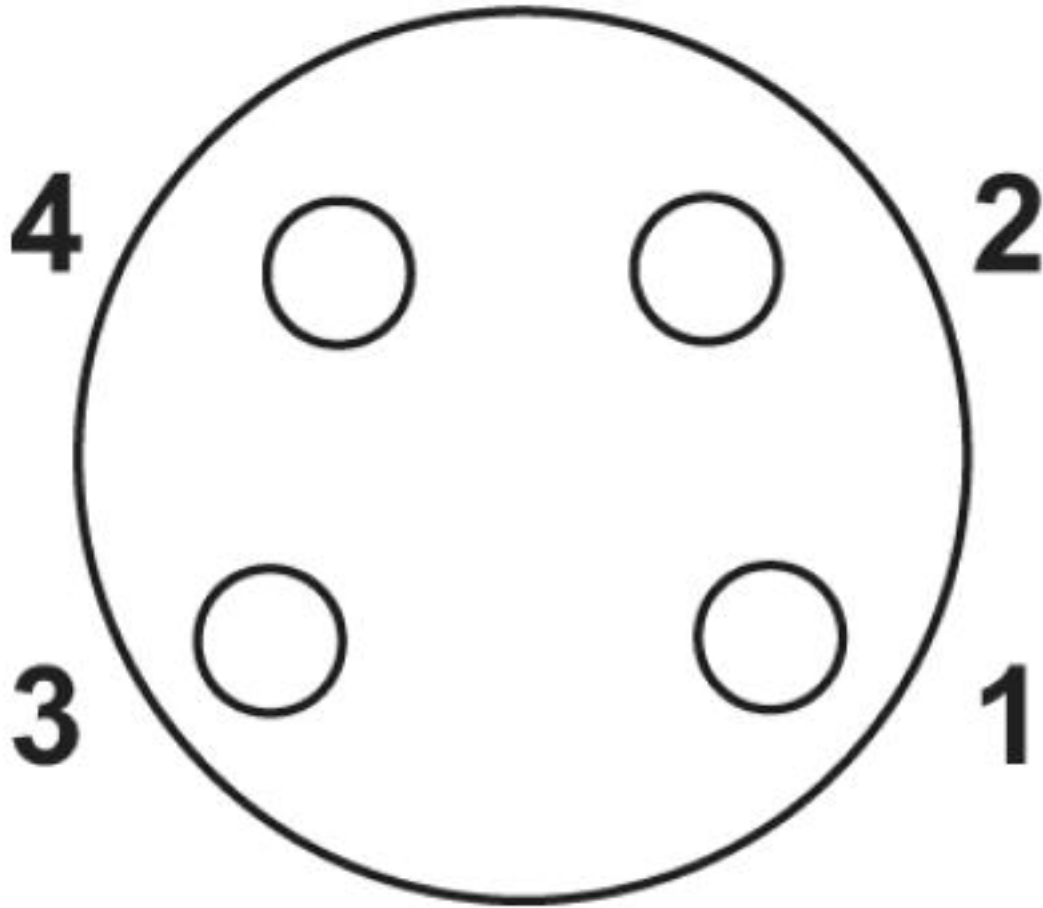
Schematic diagram



Pin assignment M8 plug, 4-pos., view male side

## Sensor/actuator cable - SAC-4P-MS/0,6-600/M 8FR-2L FB - 1406867

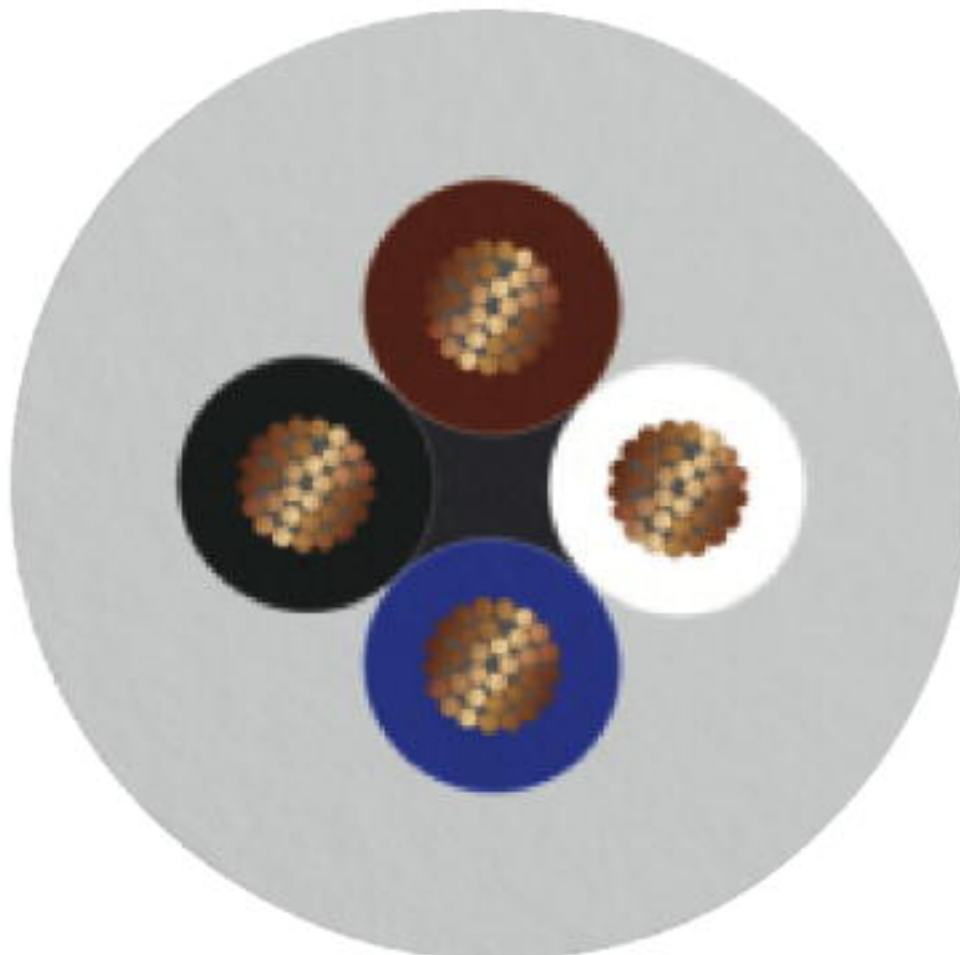
Schematic diagram



Pin assignment M8 socket, 4-pos., view female side

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Cable cross section



Halogen-free PP gray [600]

### Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27060311 |
| 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    | 27060311 |

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### Classifications

#### ETIM

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

#### UNSPSC

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

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PHOENIX CONTACT GmbH & Co. KG

Flachsmarktstr. 8

32825 Blomberg

Germany

Tel. +49 5235 300

Fax +49 5235 3 41200

<http://www.phoenixcontact.com>