

|                           |                                  |                                                                                     |
|---------------------------|----------------------------------|-------------------------------------------------------------------------------------|
| 22260237                  | <b>DATA SHEET</b>                |  |
| Valid from:<br>19.12.2023 | <b>AB-C3-M12MS-(L*)PUR-M12FA</b> |                                                                                     |

## Product description

- Sensor/actuator cable, 3-pol, PUR halogen-free, black
- Straight M12-plug on straight M12-jack



## General characteristics

|                      |                                                                                                                                                                                     |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of pins       | 3                                                                                                                                                                                   |
| Ambient temperature  | -25 °C to +90 °C (-13°F to 194°F) (plug / jack)<br>-40 °C to +80 °C (-40°F to 176°F) (cable, fixed installation)<br>-25 °C to +80 °C (-13°F to 176°F) (cable, movable installation) |
| Degree of protection | IP65 / IP67 / IP68                                                                                                                                                                  |
| Coding               | A-standard                                                                                                                                                                          |
| Tightening torque    | 0,4 Nm (M12-connector)                                                                                                                                                              |
| Plugging cycles      | ≥ 100                                                                                                                                                                               |

## Variation

| Article number | Description              | Length [m] | Configuration     |
|----------------|--------------------------|------------|-------------------|
| 22260237       | AB-C3-M12MS-0,3PUR-M12FA | 0,3        | straight - angled |
| 22260238       | AB-C3-M12MS-0,6PUR-M12FA | 0,6        | straight - angled |
| 22260239       | AB-C3-M12MS-1,0PUR-M12FA | 1,0        | straight - angled |
| 22260669       | AB-C3-M12MS-1,5PUR-M12FA | 1,5        | straight - angled |
| 22260240       | AB-C3-M12MS-2,0PUR-M12FA | 2,0        | straight - angled |

## Additional note

Data sheet also valid for variant lengths. Other lengths on request.

## Electrical properties

|                      |       |
|----------------------|-------|
| Rated voltage        | 250 V |
| Rated current        | 4 A   |
| Overvoltage category | II    |
| Pollution degree     | 3     |

## Mechanical properties

### Plug, jack

|                                               |                                          |
|-----------------------------------------------|------------------------------------------|
| Inflammability class in accordance with UL 94 | HB                                       |
| Contact, material                             | CuSn                                     |
| Contact carrier, material                     | TPU GF                                   |
| Contact surface, material                     | Ni/Au                                    |
| Knurl, material                               | Zinc diecasting, nickel-plated           |
| Handle, material                              | TPU, flame retardant, self-extinguishing |
| Sealing, material                             | NBR                                      |

|                                           |                                       |             |
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#### Line

|                                        |                                                                                                                                         |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| Cable construction                     | 3 x AWG22/42                                                                                                                            |
| Signal line, construction              | 42 x 0,1 mm                                                                                                                             |
| Conductor cross-section                | 0,34 mm <sup>2</sup>                                                                                                                    |
| Conductor diameter including isolation | 1,27 mm ± 0,02 mm                                                                                                                       |
| Cable outer diameter                   | 4,4 mm ± 0,15mm                                                                                                                         |
| Insulation color                       | brown, blue, black                                                                                                                      |
| Sheath color                           | grey-black, RAL 7021                                                                                                                    |
| Number of bending cycles               | 10.000.000                                                                                                                              |
| Bending radius                         | 44 mm                                                                                                                                   |
| Traveling distance                     | 10 m                                                                                                                                    |
| Traveling speed                        | 3 m/s                                                                                                                                   |
| Acceleration                           | 10 m/s <sup>2</sup>                                                                                                                     |
| Cable weight                           | 23 kg/km                                                                                                                                |
| Outer coating, material                | PUR                                                                                                                                     |
| Wire insulation, material              | PP                                                                                                                                      |
| Insulation resistance                  | ≥ 100 GΩ*km (at 20 °C)                                                                                                                  |
| Conductor resistance                   | ≤ 58 Ω/km (at 20 °C)                                                                                                                    |
| Flame resistance                       | acc. to UL 758 / 1581 FT2<br>DIN EN 60332-2-2 (20 s)                                                                                    |
| Halogen-free                           | acc. to DIN VDE 0472 Part 815                                                                                                           |
| Oil resistance                         | acc. to DIN EN 60811-2-1                                                                                                                |
| Other resistances                      | resistant to hydrolysis and microbes<br>good resistant to acids, lyes and solvents<br>limited UV resistance acc. to DIN EN ISO 4892-2-A |

#### Standards

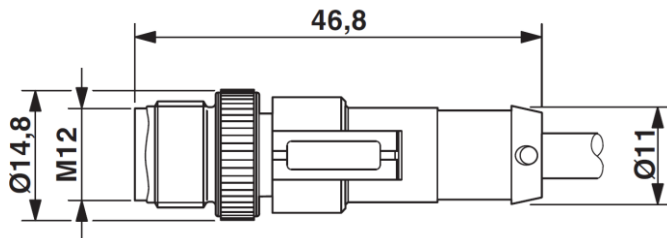
|                                 |                 |
|---------------------------------|-----------------|
| Product standard, M12 connector | IEC 61076-2-101 |
| UL-Listed, E-File               | E249137         |

|                                           |                                       |             |
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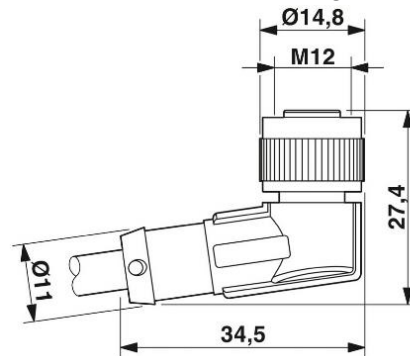
## Technical drawing

Dimensional drawing



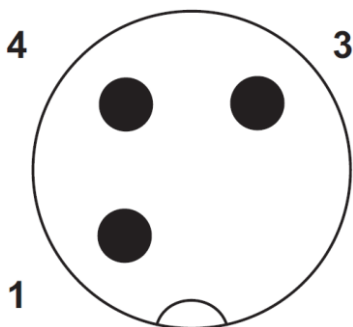
Plug M12 x 1, straight

Dimensional drawing



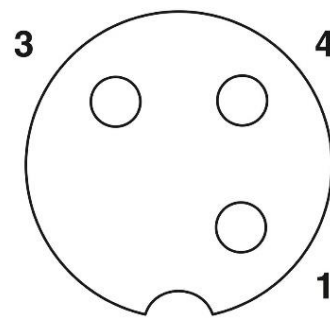
Jack M12 x 1, angled

Drawing



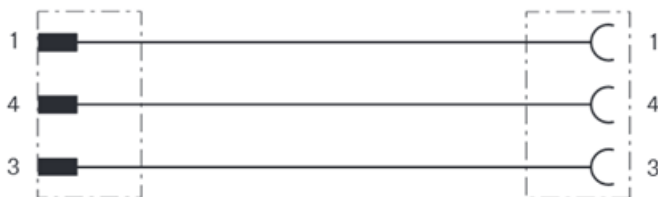
Pin assignment M12-plug, 3-pol, A-coding

Drawing



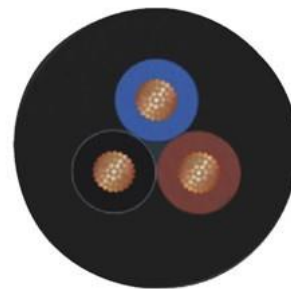
Pin assignment M12-jack, 3-pol, A-coding

Circuit diagram



Pin assignment between M12-plug and M12-jack

Wire cross section



## Application range

For increased mechanical load and rough operating conditions

## Note

Photographs are not true to scale and do not represent detailed images of the respective products.

|                                           |                                       |             |
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