

**SAIV-M12BG-4-5.0U****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)

Sensor/actuator cables are used for wiring sensors and actuators and for transmitting data or power in various applications. The moulded cable offers connected and tested connection of the plug-in connector to the cable ex-works. The cables may be exposed to a wide range of conditions, such as humidity, dust, heat, cold, shock or vibration.

Our developers have focused specifically on this issue and designed a host of different M8 and M12 sensor-actuator cables so you are bound to find the solution you need for your application.

The M12 sensor-actuator cables are supplied as standard with brass nickel-plated nuts. However if you are looking to use our products in an extremely harsh environment, we can also supply a variant with a stainless-steel nut. This enables use in environments where cables with nickel-plated M12 nuts would rust and cables with a plastic nut are unsuitable for mechanical reasons. Is there something you have not managed to find or you feel needs explanation? Talk to us!

**General ordering data**

|            |                                                                                                                                                                   |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version    | Sensor/actuator line, One end without connector, M12, Number of poles : 4, 5 m, Female socket, straight, Shielded: No, LED: No, Sheath material: PUR, Halogen: No |
| Order No.  | <a href="#">9457950500</a>                                                                                                                                        |
| Type       | SAIV-M12BG-4-5.0U                                                                                                                                                 |
| GTIN (EAN) | 4032248229642                                                                                                                                                     |
| Qty.       | 1 pc(s).                                                                                                                                                          |

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## Technical data

## Dimensions and weights

|            |       |
|------------|-------|
| Net weight | 165 g |
|------------|-------|

## Environmental Product Compliance

|            |                |
|------------|----------------|
| REACH SVHC | Lead 7439-92-1 |
|------------|----------------|

## Technical specifications for cable

|                                                |                                                                                                                                             |        |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Acceleration                                   | 5 m/s²                                                                                                                                      |        |
| Bending cycles                                 | 12 Mio                                                                                                                                      |        |
| Bending radius, min., moving                   | 10 x cable diameter                                                                                                                         |        |
| Bending radius, min., stationary               | 5 x cable diameter                                                                                                                          |        |
| Cable length                                   | 5 m                                                                                                                                         |        |
| Colour coding                                  | brown, white, blue, black                                                                                                                   |        |
| Configurable cable length                      | No                                                                                                                                          |        |
| Core cross-section                             | 0.34 mm²                                                                                                                                    |        |
| Core in accordance with UL AWM style           | 10493 (80 °C / 300 V)                                                                                                                       |        |
| Halogen                                        | No                                                                                                                                          |        |
| Housing main material                          | PUR                                                                                                                                         |        |
| Hydrolysis and microbe resistant               | Yes                                                                                                                                         |        |
| Insulation                                     | PP                                                                                                                                          |        |
| LABS-free                                      | Yes                                                                                                                                         |        |
| Number of poles                                | 4                                                                                                                                           |        |
| Number of poles                                | 4                                                                                                                                           |        |
| Outer cladding in accordance with UL AWM style | 20233 (80 °C / 300 V)                                                                                                                       |        |
| Outer diameter                                 | 4.7 ± 0.2 mm                                                                                                                                |        |
| Outside diameter                               | 4.7 mm ± 0.2 mm                                                                                                                             |        |
| Outside diameter                               | Diameter                                                                                                                                    | 4.7 mm |
|                                                | Signs                                                                                                                                       | ±      |
|                                                | Tolerance                                                                                                                                   | 0.2 mm |
| Resistance to oils                             | in accordance with IEC 60811:404                                                                                                            |        |
| Resistance to spread of flame                  | in accordance with IEC 60332-1-2, in accordance with IEC 60332-1-3, in accordance with IEC 60332-2-2, In accordance with UL1581 UL/ CUL FT1 |        |
| Resistant to welding beads                     | No                                                                                                                                          |        |
| Sheath material                                | PUR                                                                                                                                         |        |
| Sheathing colour                               | black                                                                                                                                       |        |
| Shielded                                       | No                                                                                                                                          |        |
| Speed                                          | 5 m/s                                                                                                                                       |        |
| Suitable for cable carriers                    | Yes                                                                                                                                         |        |
| Temperature range, moving                      | -25...80 °C                                                                                                                                 |        |
| Temperature range, moving, max.                | 80 °C                                                                                                                                       |        |
| Temperature range, moving, min.                | -25 °C                                                                                                                                      |        |
| Temperature range, stationary                  | -40...80 °C                                                                                                                                 |        |
| Temperature range, stationary, max.            | 80 °C                                                                                                                                       |        |
| Temperature range, stationary, min.            | -40 °C                                                                                                                                      |        |
| Torsion resistance                             | 360 °/m                                                                                                                                     |        |

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## Technical data

## General technical data

|                              |                   |                        |                                         |
|------------------------------|-------------------|------------------------|-----------------------------------------|
| AF size                      | 12 mm             | Coding                 | A                                       |
| Connection thread            | M12               | Contact surface        | Gold-plated                             |
| Housing main material        | PUR               | Insulation strength    | 10 <sup>8</sup> Ω                       |
| LED                          | No                | Plugging cycles        | ≥ 100                                   |
| Pollution severity           | 3                 | Protection degree      | IP65, IP66, IP67, IP68, when screwed in |
| Rated current                | 4 A               | Rated voltage          | 250 V                                   |
| Temperature range of housing | -25...+80 °C      | Threaded ring material | Stainless steel 1.4404 (316L)           |
| Tightening torque            | M12: 0.8 - 1.2 Nm | Version                | Female socket, straight                 |
| jumpered                     | No                |                        |                                         |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001855    | ETIM 7.0    | EC001855    |
| ECLASS 9.0  | 27-06-03-11 | ECLASS 9.1  | 27-06-03-11 |
| ECLASS 10.0 | 27-06-03-11 | ECLASS 11.0 | 27-06-03-11 |

## Approvals

Approvals



|                       |         |
|-----------------------|---------|
| ROHS                  | Conform |
| UL File Number Search | E307231 |

## Downloads

|                  |                              |
|------------------|------------------------------|
| Engineering Data | <a href="#">STEP</a>         |
| Engineering Data | <a href="#">EPLAN, WSCAD</a> |

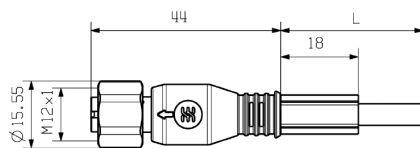
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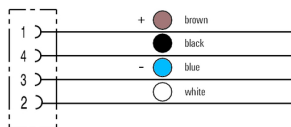
# Drawings

## Dimensioned drawing

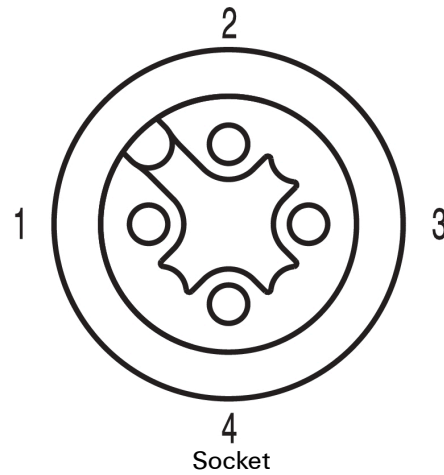


Straight socket

## Wiring diagram



## Pole scheme



## The ideal tool: Screwty® with torque function



Light, securely screwed-in round plug-in connectors. Screwty set DM / VPE: 1 / Order No.: 1920000000 Adapters: M12, M12 F, M8, M8 F