

**SAIV-M12BG-4-10U****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, 10 m, Female socket, straight, Shielded: No, LED: No, Sheath material: PUR, Halogen: No |
| Order No.  | <a href="#">9457951000</a>                                                                                                                                         |
| Type       | SAIV-M12BG-4-10U                                                                                                                                                   |
| GTIN (EAN) | 4032248229659                                                                                                                                                      |
| Qty.       | 1 pc(s).                                                                                                                                                           |

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## Technical data

## Dimensions and weights

|            |       |
|------------|-------|
| Net weight | 311 g |
|------------|-------|

## Environmental Product Compliance

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

## Technical specifications for cable

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

## 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           |                   | Protection degree      | IP65, IP66, IP67, IP68, when screwed in |
|                              | 3                 | Rated voltage          | 250 V                                   |
| Rated current                | 4 A               | Threaded ring material | Stainless steel 1.4404 (316L)           |
| Temperature range of housing | -40 ... +85 °C    | Version                | Female socket, straight                 |
| Tightening torque            | M12: 0.8 - 1.2 Nm |                        |                                         |
| jumpered                     | No                |                        |                                         |

## Electrical properties

|                     |                   |               |       |
|---------------------|-------------------|---------------|-------|
| Insulation strength | 10 <sup>8</sup> Ω | Rated voltage | 250 V |
|---------------------|-------------------|---------------|-------|

## General standards

|                         |         |                    |                 |
|-------------------------|---------|--------------------|-----------------|
| Certificate no. (cULus) | E307231 | Connector standard | IEC 61076-2-101 |
|-------------------------|---------|--------------------|-----------------|

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|                    |                 |
|--------------------|-----------------|
| Connector standard | IEC 61076-2-101 |
|--------------------|-----------------|

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001855    | ETIM 7.0    | EC001855    |
| ETIM 8.0    | 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="#">CAD data – STEP</a>          |
| Engineering Data | <a href="#">EPLAN, WSCAD</a>             |
| Catalogues       | <a href="#">Catalogues in PDF-format</a> |
| Brochures        | <a href="#">FL FIELDWIRING EN</a>        |

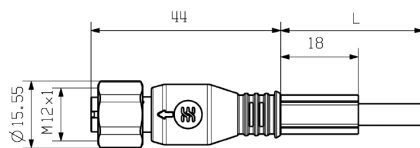
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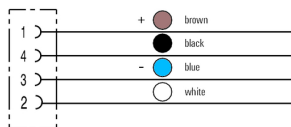
# Drawings

## Dimensioned drawing

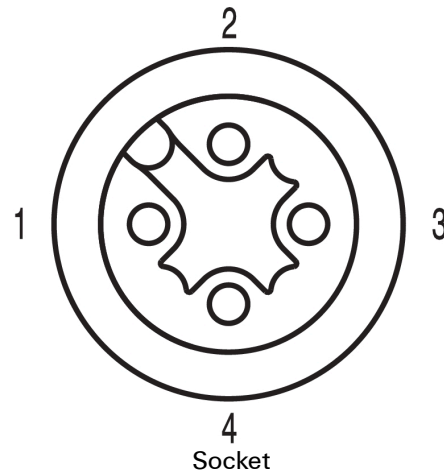


Straight socket

## 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