

**SAIL-M12BG-12-20U****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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.

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 : 12, 20 m, Female socket, straight, Shielded: No, LED: No, Sheath material: PUR, Halogen: No |
| Order No.  | <a href="#">1879712000</a>  |
| Type       | SAIL-M12BG-12-20U   |
| GTIN (EAN) | 4032248850730   |
| Qty.       | 1 pc(s).  |

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**Technical data****Dimensions and weights**

|            |       |
|------------|-------|
| Net weight | 738 g |
|------------|-------|

**Technical specifications for cable**

|                                      |                       |  |  |
|--------------------------------------|-----------------------|--|--|
| Acceleration                         | 5 m/s <sup>2</sup>    | Bending cycles                                 | 1 mill.  |
| Bending radius, min., moving         | 10 x cable diameter   | Bending radius, min., stationary               | 5 x cable diameter   |
| Cable length                         |                       | Colour coding                                  | yellow, pink, grey / pink, green, white, blue, violet, brown, red, grey, red / blue, black |
|                                      | 20 m                  |  |  |
| Configurable cable length            | No                    | Core cross-section                             | 0.14 mm <sup>2</sup>   |
| Core in accordance with UL AWM style | 10493 (80 °C / 300 V) | Halogen  | No   |
| Insulation                           | PP                    | Irradiation crosslinked                        | No   |
| Number of poles                      |                       | Outer cladding in accordance with UL AWM style | 20549 (80 °C / 300 V)  |
|                                      | 12                    | Resistant to welding beads                     | No   |
| Outside diameter                     | 5.6 mm ± 0.2 mm       | Sheathing colour                               | black  |
| Sheath material                      | PUR                   | Speed  | 5 m/s  |
| Shielded                             | No                    | Temperature range, moving                      | -25...80 °C  |
| Suitable for cable carriers          | Yes                   | Torsion resistance                             | 180 °/m  |
| Temperature range, stationary        | -40...80 °C           |  |  |
| Welding spark resistance             | No                    |  |  |

**General technical data**

|                              |                   |                        |                                   |
|------------------------------|-------------------|------------------------|-----------------------------------|
| AF size                      | 13 mm             | Coding                 | A-coded                           |
| 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      | IP67, when screwed in, IP65, IP66 |
|                              | 3                 | Rated voltage          | 30 V                              |
| Rated current                | 1.5 A             | Threaded ring material | Brass, nickel-plated              |
| 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 current | 2 A (8-pole) / 1.5 A (12-pole) |
| Rated voltage       | 30 V              |               |                                |

**General standards**

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

**Standards**

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

**Plug, left**

|           |   |
|-----------|---|
| Plug left | M12, A-coded, IP67, female contact, straight, Plastic, unshielded |
|-----------|---|

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## Technical data

## Plug, right

|            |                    |
|------------|--------------------|
| Plug right | free conductor end |
|------------|--------------------|

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001855    | ETIM 7.0    | EC001855    |
| ETIM 8.0    | EC001855    | ETIM 9.0    | 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 |
| ECLASS 12.0 | 27-06-03-11 | ECLASS 13.0 | 27-06-03-11 |

## Environmental Product Compliance

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| REACH SVHC                           | Lead 7439-92-1                       |
| SCIP                                 | e8d8af70-4c85-4483-bc8c-9bc5b598e2a9 |
| RoHS Compliance Status               | Compliant with exemption             |
| RoHS Exemption (if applicable/known) | 6c                                   |

## Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E307231    |

## Downloads

|                  |  |
|------------------|--|
| Engineering Data | <a href="#">CAD data – STEP</a>          |
| Catalogues       | <a href="#">Catalogues in PDF-format</a> |
| Brochures        | <a href="#">FL FIELDWIRING EN</a>        |

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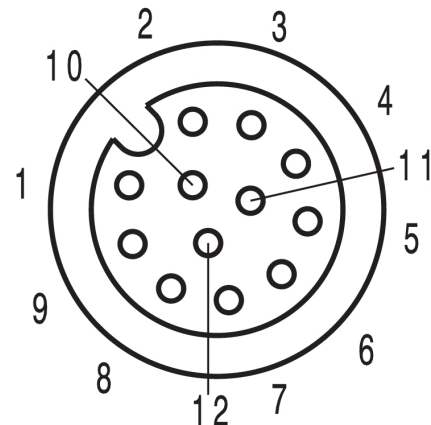
[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

## Dimensioned drawing



## Pole scheme



Socket

## Wiring diagram



## The ideal tool: Screwty<sup>®</sup> 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

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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Tools**

- Stripping tools with automatic self-adjustment
- For flexible and solid conductors
- Ideally suitable for mechanical and plant engineering, railway and rail traffic, wind energy, robot technology, explosion protection as well as marine, offshore and ship building sectors
- Stripping length adjustable via end stop
- Automatic opening of clamping jaws after stripping
- No fanning-out of individual conductors
- Adjustable to diverse insulation thicknesses
- Double-insulated cables in two process steps without special adjustment
- No play in self-adjusting cutting unit
- Long service life
- Optimised ergonomic design

**General ordering data**

|            |                            |                            |
|------------|----------------------------|----------------------------|
| Type       | STRIPPER 6-16 RED-LINE     | Version                    |
| Order No.  | <a href="#">9203110000</a> | Stripping and cutting tool |
| GTIN (EAN) | 4032248541423              |                            |
| Qty.       | 1 pc(s).                   |                            |

**Cutting tools**

Cutting tools for conductors up to 8 mm, 12 mm, 14 mm and 22 mm outside diameter. The special blade geometry allows pinch-free cutting of copper and aluminium conductors with minimum physical effort. The cutting tools (KT 8 to KT 22) also come with VDE and GS-tested protective insulation up to 1,000 V in accordance with EN/IEC 60900.

**General ordering data**

|            |                            |  |
|------------|----------------------------|--|
| Type       | KT 8                       | Version  |
| Order No.  | <a href="#">9002650000</a> | Cutting tools, Cutting tool for one-hand operation |
| GTIN (EAN) | 4008190020163              |  |
| Qty.       | 1 pc(s).                   |  |

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## Accessories

## Blank



TM-I is an acknowledged and accredited marker type for traffic engineering applications. There are various different tag lengths available for individual labelling with long character strings. Easy handling of separation and installation thanks to the project marker field. Pre-attachment of sleeves and retrofitting of tags offer excellent versatility

The special contour of TM-I allows easy assembly and secures firm positioning. They are compatible with a number of commercially available sleeves. Thanks to the MultiCard format, the tags can be printed quickly and conveniently with the PrintJet CONNECT, plotter or the STI pen.

- Easy handling of separation and installation thanks to the project marker field.
- Acknowledged and accredited marker for traffic engineering applications
- Pre-attachment of sleeves and retrofitting of tags offer excellent versatility
- Not suited for labelling with P-Ink or STI pen in connection with CLI T sleeves

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | TM-I 18 MC NE WS           | Version                                 |
| Order No.  | <a href="#">1718431044</a> | TM-I, Insert markers, 18 x 4 mm, white  |
| GTIN (EAN) | 4008190349011              |   |
| Qty.       | 320 pc(s).                 |   |
| Type       | TM-I 18 MC NE GE           | Version                                 |
| Order No.  | <a href="#">1718431687</a> | TM-I, Insert markers, 18 x 4 mm, yellow |
| GTIN (EAN) | 4008190349028              |   |
| Qty.       | 320 pc(s).                 |   |

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**Accessories****Tools**

Sheathing stripper for PVC cables

**General ordering data**

|            |                            |                            |
|------------|----------------------------|----------------------------|
| Type       | AM 12                      | Version                    |
| Order No.  | <a href="#">9030060000</a> | Tools, Sheathing strippers |
| GTIN (EAN) | 4008190337827              |                            |
| Qty.       | 1 pc(s).                   |                            |

**Screwty® cable gland tool with torque function****The ideal tool for any application**

Screwty® is the ideal, all-purpose tool for tightening all common sensor and actuator cables. Even difficult-to-reach round plugs are accessible using the Screwty®. A simple turning movement tightens and loosens the connectors without the need for excessive force. The Screwty® is a unique and global solution since it fits with most cables and plugs from other vendors (over 90 %). The Screwty® consists of a handle with a conventional 1/4" adapter. Thus it can be used for all sizes: for M12 and M8 round plug-in connectors, and for M12F and M8F customisable plugs and sockets, as well as for all M23 plugs and sockets.

**General ordering data**

|            |                            |  |               |
|------------|----------------------------|--|---------------|
| Type       | SCREWTY-M12-DM             | Version                                    | Packaging     |
| Order No.  | <a href="#">1900001000</a> | Cable gland tool for moulded M12 lines     | Cardboard box |
| GTIN (EAN) | 4032248436408              |  |               |
| Qty.       | 1 pc(s).                   |  |               |
| Type       | SCREWTY SW12               | Version                                    | Packaging     |
| Order No.  | <a href="#">2598970000</a> | Interchangeable blade for cable gland tool | Cardboard box |
| GTIN (EAN) | 4050118781151              |  |               |
| Qty.       | 1 pc(s).                   |  |               |
| Type       | SAI-SCREWTY BOX            | Version                                    | Packaging     |
| Order No.  | <a href="#">1939180000</a> | Bolting tool                               | Plastic case  |
| GTIN (EAN) | 4032248615506              |  | + form        |
| Qty.       | 1 pc(s).                   |  | insert        |