

**Industrial Ethernet  
IE-C5DD4UG0500MCSMCS-E****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

D-32758 Detmold

Germany

Fon: +49 5231 14-0

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www.weidmueller.com



Assembled IE cables, PROFINET, Cat. 5, PUR, green, drag-chain compatible, M12

**General ordering data**

|                 |                                                                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |                                                                                                                                                    |
| Available until | 2013-12-06                                                                                                                                         |
| Type            | IE-C5DD4UG0500MCSMCS-E                                                                                                                             |
| Order No.       | <a href="#">1025950500</a>                                                                                                                         |
| Version         | Dragline cable, PROFINET, M12 D-code – IP 67 straight pin, M12 D-code – IP 67 straight pin, Cat.5 (ISO/IEC 11801) / Cat.5e (TIA T568-B), PUR, 50 m |
| GTIN (EAN)      | 4032248750634                                                                                                                                      |
| Qty.            | 1 pc(s).                                                                                                                                           |

# Industrial Ethernet

## IE-C5DD4UG0500MCSMCS-E

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## Technical data

### Dimensions and weights

|            |         |                          |            |
|------------|---------|--------------------------|------------|
| Length     | 50 m    | Length (inches)          | 1.969 inch |
| Net weight | 3,165 g | Insulation cross-section | 1.5 mm     |

### Temperatures

|                             |                |                             |                |
|-----------------------------|----------------|-----------------------------|----------------|
| Operating temperature, max. | 70 °C          | Operating temperature, min. | -40 °C         |
| Storage temperature, max.   | 70 °C          | Storage temperature, min.   | -50 °C         |
| Operating temperature       | -40 °C...70 °C | Storage temperature         | -50 °C...70 °C |
| Installation temperature    | -20 °C...60 °C |                             |                |

### Environmental Product Compliance

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

### Electrical properties

|                     |           |
|---------------------|-----------|
| Insulation strength | 500,000 Ω |
|---------------------|-----------|

### Standards

|                               |                                                   |                         |                       |
|-------------------------------|---------------------------------------------------|-------------------------|-----------------------|
| Standard, insulating material | DIN EN 50290-2-23 (VDE 0819) Table 2/A (HD 624.3) | Standard, wire material | DIN EN 13602 Cu-ETP-A |
| Standard, shielding material  | DIN EN 13602 Cu-ETP-A..B                          | Certificate no. (cULus) | E316369               |

### Cable structure

|                                |                                 |                                       |                                                         |
|--------------------------------|---------------------------------|---------------------------------------|---------------------------------------------------------|
| Wire material                  | Stranded tin-plated copper wire | Standard designations                 | 2YH(ST)C11Y<br>2x2x0.75/1.5-100 LI VZN<br>GN FRNC       |
| Strands                        | 7                               | Cross-section                         | 4*AWG 22/7 - 0.36 mm <sup>2</sup>                       |
| Insulation                     | PE                              | Insulation cross-section              | 1.5 mm                                                  |
| Wire core insulation thickness | 0.38 mm                         | No. of wires                          | 4                                                       |
| Arrangement of wire cores      | Star-quad                       | Colour sequence or wires - wire pairs | white, yellow, blue, orange                             |
| Diameter of inner sheathing    | 3.9 mm                          | Filler                                | As central element                                      |
| Shielding                      | SF/UTP                          | Complete shielding                    | Aluminium foil, Shielding braid made from copper wiring |
| Shielding braid thickness      | 0.13 mm                         | Overlap of shielding braid            | 85 %                                                    |
| Material sheath                | PUR                             | Sheath diameter, min.                 | 6.3 mm                                                  |
| Sheath diameter, max.          | 6.7 mm                          | Sheathing material thickness          | 0.9 mm                                                  |
| Sheathing colour               | green (RAL 6018)                |                                       |                                                         |

### Electrical properties of cable

|                                |                                             |                               |                         |
|--------------------------------|---------------------------------------------|-------------------------------|-------------------------|
| Category                       | Cat.5 (ISO/IEC 11801) / Cat.5e (TIA T568-B) | Operating voltage (UL rating) | 600 V undefined         |
| Test voltage: wire-wire-shield | 2000 V <sub>eff</sub> , 50 Hz, 1 min        | Characteristic impedance      | 100 ± 15 Ω at 1-100 MHz |
| Loop resistance                | 120 Ω/km                                    | Deviation                     | 40 ns/100m              |
| Resistance differential        | 3 %                                         | Transfer impedance            | 20 mΩ/m at 10 MHz       |
| Insulation strength            | 500,000 Ω                                   | Capacity at 1 kHz             | 52 nF/km                |
| Signal propagation time        | 5.3 ns/m                                    | Speed                         | 180 m/min               |

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## Technical data

### Mechanical and material properties of cable

|                                 |                                  |                                |                                        |
|---------------------------------|----------------------------------|--------------------------------|----------------------------------------|
| Bending cycles                  | 3 Mio                            | Min. bending radius, once only | 5 x cable diameter                     |
| Min. bending radius, repetitive | 7.5 x cable diameter             | Pulling force                  | ≤ 150 N                                |
| Speed                           | 180 m/min                        | Acceleration                   | 4 m/s <sup>2</sup>                     |
| Abrasion resistance             | very good                        | Resistance to spread of flame  | in accordance with IEC 60332-1         |
| Resistance to oils              | in accordance with IEC 60811-2-1 | UV-resistant                   | Yes                                    |
| Silicone-free                   | Yes                              | Halogen                        | halogen-free, according to IEC 60754-2 |
| Fire propagation                | No                               |                                |                                        |

### plug

|                |                                 |                 |                                 |
|----------------|---------------------------------|-----------------|---------------------------------|
| Connector left | M12 D-code – IP 67 straight pin | Connector right | M12 D-code – IP 67 straight pin |
|----------------|---------------------------------|-----------------|---------------------------------|

### Classifications

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC000830    | ETIM 4.0   | EC000830    |
| ETIM 5.0   | EC000830    | ETIM 6.0   | EC002599    |
| UNSPSC     | 30-21-18-01 | eClass 6.2 | 27-06-91-90 |
| eClass 7.1 | 27-06-91-90 | eClass 8.1 | 27-06-91-90 |
| eClass 9.0 | 27-06-03-08 | eClass 9.1 | 27-06-03-08 |

### Approvals

Approvals



ROHS

Conform

### Downloads

|                    |                                                                             |
|--------------------|-----------------------------------------------------------------------------|
| Brochure/Catalogue | <a href="#">FL FIELDWIRING EN</a><br><a href="#">PI PROFINET CABLING EN</a> |
| User Documentation | <a href="#">MAN IE GUIDE DE</a><br><a href="#">MAN IE GUIDE EN</a>          |

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## Drawings

### Wiring

|     |        |     |
|-----|--------|-----|
| M12 |        | M12 |
| 1   | yellow | 1   |
| 2   | white  | 2   |
| 3   | orange | 3   |
| 4   | blue   | 4   |

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## Accessories

### Screwty® cable gland tool



#### 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         | Order No.                  | Version                                       | GTIN (EAN)    | Qty.     |
|--------------|----------------------------|-----------------------------------------------|---------------|----------|
| Screwty- M12 | <a href="#">1900000000</a> | Tools, Cable gland tool for moulded M12 lines | 4032248375868 | 1 pc(s). |
| Screwty Set  | <a href="#">1910000000</a> | Tools, Bolting tool                           | 4032248436842 | 1 pc(s). |

### Tool



Tools for stripping the sheathing from uncut power lines and outlet lines, plus screwdrivers for installing Pick-to-Light components.

#### General ordering data

| Type             | Order No.                  | Version                                       | GTIN (EAN)    | Qty.     |
|------------------|----------------------------|-----------------------------------------------|---------------|----------|
| Screwty-M12-DM   | <a href="#">1900001000</a> | Tools, Cable gland tool for moulded M12 lines | 4032248436408 | 1 pc(s). |
| Screwty Set - DM | <a href="#">1920000000</a> | Tools, Bolting tool                           | 4032248436859 | 1 pc(s). |

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## Accessories

### Blank



TM-I is an acknowledged and accredited marker type for traffic engineering applications. There are five 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 SMark laser printer, PrintJet ADVANCED, plotter, MC-Mobilo 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       | Order No.                  | Version                      | GTIN (EAN)    | Qty.       |
|------------|----------------------------|------------------------------|---------------|------------|
| TM-I 12 MC | <a href="#">1718411044</a> | TM-I, Insert markers, 12 x 4 | 4008190348977 | 320 pc(s). |
| NE WS      |                            | mm, white                    |               |            |

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### General ordering data

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