

**IE-C6EL8UG0020XCSXCS-E****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Assembled IE cables for EtherNet/IP applications

- with bayonet connector according to IEC 61076-3-106 var. 1, cat. 5, sheathed
- with plug-in connector, type M12 X, cat. 6A, according to IEC 61076-2-109 and RJ45 plug-in connector for 10 GBit/s applications

**General ordering data**

|            |                                                                                                                                            |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Version    | System cable, M12 X-type IP 67 straight male, M12 X-type IP 67 straight male, Cat.6A / Class E <sub>A</sub> (ISO/IEC 11801 2010), PUR, 2 m |
| Order No.  | <a href="#">1463640020</a>                                                                                                                 |
| Type       | IE-C6EL8UG0020XCSXCS-E                                                                                                                     |
| GTIN (EAN) | 4050118270747                                                                                                                              |
| Qty.       | 1 pc(s).                                                                                                                                   |

Creation date March 24, 2021 12:02:03 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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## Technical data

## Dimensions and weights

|            |       |                 |            |
|------------|-------|-----------------|------------|
| Length     | 2 m   | Length (inches) | 78.74 inch |
| Net weight | 127 g |                 |            |

## Temperatures

|                          |                |                       |                |
|--------------------------|----------------|-----------------------|----------------|
| Storage temperature      | -40 °C...80 °C | Operating temperature | -40 °C...80 °C |
| Installation temperature | -20 °C...60 °C |                       |                |

## Environmental Product Compliance

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

## Cable specific standards

|                     |                        |                    |                |
|---------------------|------------------------|--------------------|----------------|
| Impervious to smoke | According to IEC 61034 | Standard, assembly | UL Style 20963 |
|---------------------|------------------------|--------------------|----------------|

## Standards

|                     |                        |                    |                |
|---------------------|------------------------|--------------------|----------------|
| Impervious to smoke | According to IEC 61034 | Standard, assembly | UL Style 20963 |
|---------------------|------------------------|--------------------|----------------|

## Cable structure

|                           |                                          |                                       |                                                            |
|---------------------------|------------------------------------------|---------------------------------------|------------------------------------------------------------|
| Arrangement of wire cores |                                          | Colour sequence or wires - wire pairs | white - blue, white - orange, white - green, white - brown |
|                           | Twisted pair                             |                                       |                                                            |
| Complete shielding        | Shielding braid made from copper wiring  | Copper diameter                       | 0.48 µm                                                    |
| Cross-section             | 4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup> | Insulation                            | PE                                                         |
| Insulation cross-section  | 0.98 mm                                  | Material sheath                       | PUR                                                        |
| Number of wires           | 8                                        | Sheath diameter, max.                 | 6.7 mm                                                     |
| Sheath diameter, min.     | 6.1 mm                                   | Sheathing colour                      | green (RAL 6018)                                           |
| Shielding                 | S/FTP                                    | Shielding braid thickness             | 0.1 mm                                                     |
| Standard designations     | S/FTP, LIO2YSC11Y 4x2x0.15 PIMF FRNC GN  | Strands                               | 7                                                          |
| Wire material             | Stranded tin-plated copper wire          | Wire pair shielding                   | Aluminium foil                                             |
| Wiring                    | EIA/TIA T568 B                           |                                       |                                                            |

## Electrical properties of cable

|                    |                                                        |                                |                                     |
|--------------------|--------------------------------------------------------|--------------------------------|-------------------------------------|
| Category           | Cat.6A / Class E <sub>A</sub> (ISO/IEC 11801 2010)     | Characteristic impedance       | 100 ± 5 Ω at 100MHz                 |
| Loop resistance    | 290 Ω/km                                               | Signal propagation time        | 5.2 ns/m                            |
| Speed              | 10 GBit/s                                              | Test voltage: wire-wire-shield | 700 V <sub>rms</sub> , 50 Hz, 1 min |
| Transfer impedance | 15 mΩ/m at 1 MHz, 10 mΩ/m at 10 MHz, 30 mΩ/m at 30 MHz |                                |                                     |

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**Technical data****Mechanical and material properties of cable**

|                                 |                                  |                                |                                        |
|---------------------------------|----------------------------------|--------------------------------|----------------------------------------|
| Abrasion resistance             | very good                        | Halogen                        | halogen-free, according to IEC 60754-1 |
| Impervious to smoke             | According to IEC 61034           | Min. bending radius, once only | 5 x cable diameter                     |
| Min. bending radius, repetitive | 10 x cable diameter              | Resistance to oils             | in accordance with IEC 60811-2-1       |
| Resistance to spread of flame   | in accordance with IEC 60332-1-2 | Speed                          | 10 GBit/s                              |

**Plug, left**

|                |                                |
|----------------|--------------------------------|
| Connector left | M12 X-type IP 67 straight male |
|----------------|--------------------------------|

**Plug, right**

|                 |                                |
|-----------------|--------------------------------|
| Connector right | M12 X-type IP 67 straight male |
|-----------------|--------------------------------|

**plug**

|                |                                |                 |                                |
|----------------|--------------------------------|-----------------|--------------------------------|
| Connector left | M12 X-type IP 67 straight male | Connector right | M12 X-type IP 67 straight male |
|----------------|--------------------------------|-----------------|--------------------------------|

**Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002599    | ETIM 7.0    | EC002599    |
| ECLASS 9.0  | 27-06-03-08 | ECLASS 9.1  | 27-06-03-08 |
| ECLASS 10.0 | 27-06-03-08 | ECLASS 11.0 | 27-06-03-08 |

**Approvals**

|      |         |
|------|---------|
| ROHS | Conform |
|------|---------|

**Downloads**

|                    |                                                                    |
|--------------------|--------------------------------------------------------------------|
| User Documentation | <a href="#">MAN IE GUIDE DE</a><br><a href="#">MAN IE GUIDE EN</a> |
|--------------------|--------------------------------------------------------------------|

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[www.weidmueller.com](http://www.weidmueller.com)**Drawings****Wiring**

|     |   |               |   |     |
|-----|---|---------------|---|-----|
| M12 | 1 | White, Orange | 1 | M12 |
|     | 2 | Orange        | 2 |     |
|     | 3 | White, Green  | 3 |     |
|     | 4 | Green         | 4 |     |
|     | 5 | White, Brown  | 5 |     |
|     | 6 | Brown         | 6 |     |
|     | 7 | White, Blue   | 7 |     |
|     | 8 | Blue          | 8 |     |

**Pinning**