

IE-C6EL8UG0200U40XCS-E**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Assembled IE cables for EtherNet/IP applications 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, RJ45 IP 20, M12 X-type IP 67 straight male, Cat.6A / Class EA (ISO/IEC 11801 2010), PUR, 20 m |
| Order No. | 1457580200 |
| Type | IE-C6EL8UG0200U40XCS-E |
| GTIN (EAN) | 4050118450255 |
| Qty. | 1 pc(s). |

Creation date March 13, 2023 2:11:37 PM CET

Catalogue status 03.03.2023 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

| | | | |
|------------|-------|-----------------|--------------|
| Length | 20 m | Length (inches) | 787.402 inch |
| Net weight | 960 g | | |

Temperatures

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

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 | Twisted pair | Colour sequence or wires - wire pairs | white - blue, white - orange, white - green, white - brown |
| 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 ² | 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 EA (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 _{rms} , 50 Hz, 1 min |
| Transfer impedance | 15 mΩ/m at 1 MHz, 10 mΩ/m at 10 MHz, 30 mΩ/m at 30 MHz | | |

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 |

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Technical data

Plug

| | | | |
|-----------|---|------------|---|
| Plug left | RJ45, IP20, male contact, straight, plug, Plastic, shielded | Plug right | M12, X, IP67, male contact, straight, plug, Plastic, shielded |
|-----------|---|------------|---|

Plug, left

| | |
|----------------|------------|
| Connector left | RJ45 IP 20 |
|----------------|------------|

Plug, right

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

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002599 | ETIM 7.0 | EC002599 |
| ETIM 8.0 | 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 | ECLASS 12.0 | 27-06-03-08 |

Environmental Product Compliance

| | |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 67cf1078-beca-4687-860b-dc475a6ec24a |

Approvals

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

Downloads

| | |
|--------------------|---|
| Engineering Data | CAD data – STEP |
| User Documentation | MAN IE GUIDE DE MAN IE GUIDE EN |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL FIELDWIRING EN PI PROFINET CABLING EN |

Data sheet

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Drawings

Wiring

| | | | | |
|------|---|---------------|---|-----|
| RJ45 | 1 | White, Orange | 1 | M12 |
| | 2 | Orange | 2 | |
| | 3 | White, Green | 3 | |
| | 4 | Blue | 8 | |
| | 5 | White, Blue | 7 | |
| | 6 | Green | 4 | |
| | 7 | White, Brown | 5 | |
| | 8 | Brown | 6 | |

Pinning

