

**Industrial Ethernet  
IE-C5ES8VG0200M40M40-G****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 16

D-32758 Detmold

Germany

Fon: +49 5231 14-0

Fax: +49 5231 14-292083

www.weidmueller.com



Assembled cables, patch cable Cabinet Line, Cat. 5, PVC,  
green

**General ordering data**

|            |                                                                        |
|------------|------------------------------------------------------------------------|
| Type       | IE-C5ES8VG0200M40M40-G                                                 |
| Order No.  | <a href="#">1166020200</a>                                             |
| Version    | System cable, RJ45 IP 20, RJ45 IP 20, Cat.5 (ISO/IEC 11801), PVC, 20 m |
| GTIN (EAN) | 4032248956883                                                          |
| Qty.       | 1 pc(s).                                                               |

# Industrial Ethernet

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## Technische Daten

### Dimensions and weights

|        |      |            |       |
|--------|------|------------|-------|
| Length | 20 m | Net weight | 735 g |
|--------|------|------------|-------|

### Temperatures

|                          |                 |                     |  |
|--------------------------|-----------------|---------------------|--|
| Operating temperature    | -40 °C...+75 °C | Storage temperature |  |
| Installation temperature |                 |                     |  |

### Electrical properties

|                       |                            |                   |       |
|-----------------------|----------------------------|-------------------|-------|
| Insulation resistance | 5000 MΩ                    | Operating voltage | 100 V |
| PoE PoE+              | conforming to IEEE 802.3at |                   |       |

### Standards

|                                        |                                       |                               |                                                   |
|----------------------------------------|---------------------------------------|-------------------------------|---------------------------------------------------|
| Generic communication cable facilities | ISO / IEC 11801:2002, EN 50173-1:2007 | Connector standard            | IEC 60603-7-51                                    |
| Standard, assembly                     |                                       | Standard, insulating material | DIN EN 50290-2-23 (VDE 0819) Table 2/A (HD 624.3) |
|                                        | UL-Style 2879 (80°C/30V)              |                               |                                                   |
| Standard, wire material                | DIN EN 13602 Cu-ETP-A                 | Standard, shielding material  | DIN EN 13602 Cu-ETP-A..B                          |

### Cable structure

|                                |                                 |                                       |                                                                                    |
|--------------------------------|---------------------------------|---------------------------------------|------------------------------------------------------------------------------------|
| Wire material                  | Stranded tin-plated copper wire | Standard designations                 | LI02YSCY 4X2X0.15 PIMF GN, SF/UTP                                                  |
| Strands                        | 7                               | Cross-section                         | 4*2*AWG 26/7 - 4*2*0.128 mm <sup>2</sup>                                           |
| Insulation                     | PE                              | Insulation cross-section              | 0.98 mm                                                                            |
| Wire core insulation thickness | 0.25 mm                         | No. of wires                          | 8                                                                                  |
| Arrangement of wire cores      | Twisted pair                    | Diameter of wire pair                 | 2.4 mm                                                                             |
| Wire pair shielding            |                                 | Colour sequence or wires - wire pairs | white/blue - blue, white/orange - orange, white/green - green, white/brown - brown |
|                                | Aluminium foil, Plastic foil    |                                       |                                                                                    |
| Shielding                      | S/FTP                           | Complete shielding                    | Shielding braid made from copper wiring                                            |
| Shielding braid thickness      | 0.1 mm                          | Overlap of shielding braid            | 70 %                                                                               |
| Material sheath                | PVC                             | Sheath diameter, min.                 | 6 mm                                                                               |
| Sheath diameter, max.          | 6.4 mm                          | Sheathing material thickness          | 0.5 mm                                                                             |
| Sheathing colour               | green (RAL 6018)                |                                       |                                                                                    |

### Electrical properties of cable

|                          |                                                        |                                                     |                     |
|--------------------------|--------------------------------------------------------|-----------------------------------------------------|---------------------|
| Category                 | Cat.5 (ISO/IEC 11801)                                  | Operating voltage                                   | 100 V               |
| Operating voltage, UL    | 30 V                                                   | Test voltage: wire-wire-shield, at RMS 50Hz, 1 min. | 700 V               |
| Characteristic impedance | 100 ± 5 Ω at 100MHz                                    | Loop resistance                                     | 150 Ω/km            |
| Deviation                | 25 ns/100m                                             | Resistance differential                             | 3 %                 |
| Transfer impedance       | 15 mΩ/m at 1 MHz, 20 mΩ/m at 10 MHz, 30 mΩ/m at 30 MHz | Shield attenuation                                  | 55 dB at 30–600 MHz |
| Insulation resistance    | 5000 MΩ                                                | Capacity at 1 kHz                                   | 48 nF/km            |
| Signal propagation time  | 5.13 ns/m                                              |                                                     |                     |

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### Mechanical and material properties of cable

|                                |             |                                 |                                |
|--------------------------------|-------------|---------------------------------|--------------------------------|
| Min. bending radius, once only | 5 *diameter | Min. bending radius, repetitive | 10 *diameter                   |
| Abrasion resistance            | good        | Resistance to spread of flame   | in accordance with IEC 60332-1 |

### plug

|                        |            |                         |            |
|------------------------|------------|-------------------------|------------|
| Version connector left | RJ45 IP 20 | Version connector right | RJ45 IP 20 |
|------------------------|------------|-------------------------|------------|

### Classifications

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 3.0   | EC001262    | UNSPSC     | 26-12-16-06 |
| eClass 5.1 | 27-06-18-02 | eClass 6.2 | 27-06-03-90 |
| eClass 7.1 | 27-06-18-01 |            |             |

### Approvals

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

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## Zeichnungen

### Wiring

|      |   |               |   |      |
|------|---|---------------|---|------|
| RJ45 | 1 | white, orange | 1 | RJ45 |
|      | 2 | orange        | 2 |      |
|      | 3 | white, green  | 3 |      |
|      | 4 | blue          | 4 |      |
|      | 5 | white, blue   | 5 |      |
|      | 6 | green         | 6 |      |
|      | 7 | white, brown  | 7 |      |
|      | 8 | brown         | 8 |      |