



**Product:** [0985 806-U 100](#)

High-flex double-ended Ethernet/IP cord set, M12 female to RJ45 male, 24 AWG stranded TPE cable with blue jacket, rated for industrial environments.

## Product Description

EtherNet/IP, high-flex, double ended cord set, M12 male to male straight, 4-pin, D-coding, 24 AWG TPE cable, stranded/ unshielded, 2 twisted bonded pair with blue jacket.

## Technical Specifications

### Product Description

|                         |                       |
|-------------------------|-----------------------|
| Product Family:         | Data Connectors       |
| Brand:                  | Lumberg Automation    |
| Connector Type:         | Cordset, double ended |
| Voltage Rating:         | 60 V                  |
| Rated Impulse Voltage:  | 1.5 kV                |
| Operating Voltage:      | 30 V AC / 42 V DC     |
| Data Transmission Type: | Fast Ethernet Cat5e   |
| Data Transmission Rate: | 100 Mbit/s            |

### Technical Data Side 1

|                                      |                                         |
|--------------------------------------|-----------------------------------------|
| Side 1 Product Sub Family:           | M12 Overmolded Receptacle               |
| Side 1 Type of Contact/Gender:       | Socket Contact / Female                 |
| Connector Design:                    | Straight                                |
| Attachment Type:                     | Coupling Screw                          |
| Number of Pins:                      | 4                                       |
| Coding, Side 1:                      | D                                       |
| Side 1 Contact Resistance:           | ≤ 10 mOhm                               |
| Insulation Resistance:               | > 10 <sup>9</sup> Ohm                   |
| Mating Cycles:                       | ≤ 100                                   |
| Cable Gland:                         | M20 x 1.5                               |
| Ambient Temperature (Operation)*:    | - 20 °C to + 75 °C                      |
| Temperature Range (Gasket):          | gasket see Accessories                  |
| Protection Degree / IP Rating**:     | IP68                                    |
| Side 1 Design Standard:              | IEC 61076-2-101                         |
| Side 1 Pollution Degree:             | 3 acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Clearance / Creepage Distance:       | EN 60664-1 (2003/11); VDE 0110-1        |
| Overvoltage Category:                | III acc. to DIN EN 60664-1 (VDE 0110-1) |
| Contact Base Material:               | CuZn                                    |
| Side 1 Contact Plating:              | Copper over Gold (Cu/Au)                |
| Contact Bearer Material:             | Thermoplastic Polyurethane (TPU)        |
| Contact Bearer Color:                | Black                                   |
| Flammability Class (Contact Bearer): | UL 94 HB                                |

|                                   |                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Molded Body Material:             | PUR                                                                                                                                                                                                                                                                                                                       |
| Molded Body Color:                | Black                                                                                                                                                                                                                                                                                                                     |
| Flammability Class (Molded Body): | UL 94 HB                                                                                                                                                                                                                                                                                                                  |
| Housing Color:                    | see standard article                                                                                                                                                                                                                                                                                                      |
| Attachment Material:              | Brass (Cu/Zn)                                                                                                                                                                                                                                                                                                             |
| Attachment Plating:               | Nickel (Ni)                                                                                                                                                                                                                                                                                                               |
| Gasket Material:                  | SBR/NBR, cable gland                                                                                                                                                                                                                                                                                                      |
| Fastening Torque (Cable Gland):   | M20x1,5: (250-375) Ncm                                                                                                                                                                                                                                                                                                    |
| Fastening Torque (Attachment):    | M 12x1 (50-60) Ncm, hand-tight                                                                                                                                                                                                                                                                                            |
| Accessories to Order Separately:  | gasket: 730-801-002, NBR, temperature range: -30°C to +90°C, flat gasket GDM 3-7, pale brown; 731-739-004, EPDM, temperature range: -40°C to +125°C, flat gasket GDM 3-21, pale brown; 731-740-002, MPQ, temperature range: -40°C to +125°C, flat gasket GDM 3-17, red; central screw: 734-363-001, stainless steel screw |

Cable Data

|                                           |                                              |
|-------------------------------------------|----------------------------------------------|
| Cable Number:                             | 806                                          |
| Conductor Size:                           | 24 AWG                                       |
| Number of Wires:                          | 4 (2 twisted pairs)                          |
| Minimal Bending Radius (Fixed Inst):      | .250"                                        |
| Cycles (Bending):                         | > 2 M                                        |
| Cycles (Torsion):                         | 5 M                                          |
| Conductor Material:                       | Cu                                           |
| Cable Jacket Material:                    | Thermoplastic Elastomer (TPE)                |
| Cable Jacket Color:                       | Blue                                         |
| Cable Diameter D:                         | .275"                                        |
| Wire Insulation Material:                 | PO                                           |
| Insulated Wire Diameter:                  | .037"                                        |
| Ambient Temperature (Fixed Installation): | -50°C + 75°C                                 |
| UL Cable Type:                            | Cat 5e                                       |
| Flammability Class (Cable Jacket):        | UL CMR / CSA CMG                             |
| Core Colors:                              | White / Orange, White / Green, Orange, Green |

Technical Data Side 2

|                                              |                                         |
|----------------------------------------------|-----------------------------------------|
| Side 2 Product Sub Family:                   | RJ45                                    |
| Side 2 Type of Contact/Gender:               | Pin Contact / Male                      |
| Connector Design, Side 2:                    | Straight                                |
| Attachment Type, Side 2:                     | Plug                                    |
| Number of Pins, Side 2:                      | 4                                       |
| Coding, Side 2:                              | D                                       |
| Contact Resistance, Side 2:                  | ≤ 10 mOhm                               |
| Insulation Resistance, Side 2:               | > 10 <sup>9</sup> Ohm                   |
| Mating Cycles, Side 2:                       | ≤ 100                                   |
| Ambient Temperature (Operation), Side 2*:    | - 20 °C - + 60 °C                       |
| Protection Degree / IP Rating, Side 2**:     | IP20                                    |
| Design Standard, Side 2:                     | IEC 60603-7                             |
| Pollution Degree, Side 2:                    | 3 acc. to DIN EN 60664-1 (VDE 0110-1)   |
| Overvoltage Category, Side 2:                | III acc. to DIN EN 60664-1 (VDE 0110-1) |
| Contact Base Material, Side 2:               | Phosphorus / Copper and Tin (CuSn)      |
| Contact Plating, Side 2:                     | Gold                                    |
| Contact Bearer Material, Side 2:             | Polycarbonate                           |
| Contact Bearer Color, Side 2:                | Clear                                   |
| Flammability Class (Contact Bearer), Side 2: | UL 94 HB                                |
| Molded Body Material, Side 2:                | Elastomer Polyolefin                    |

|                                           |          |
|-------------------------------------------|----------|
| Molded Body Color, Side 2:                | Clear    |
| Flammability Class (Molded Body), Side 2: | UL 94 HB |

Safety & Environmental Compliance

|                 |     |
|-----------------|-----|
| RoHS Compliant: | yes |
|-----------------|-----|

Notes

|                |                 |
|----------------|-----------------|
| Note Derating: | Notice derating |
|----------------|-----------------|

History

|                      |                                                 |
|----------------------|-------------------------------------------------|
| Update and Revision: | Revision Number: 0.42 Revision Date: 10-04-2026 |
|----------------------|-------------------------------------------------|

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