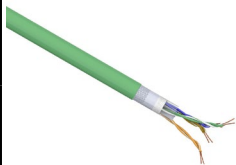
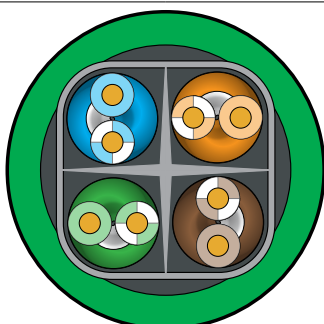


## Cat6 Industrial Ethernet



| H805655-1 Cable Specifications                                                    |                           |                                                                                                                       |                                                            |                          |                                                                                                                                                                  |                |
|-----------------------------------------------------------------------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|  | Part Number               | Wire/Cable Type                                                                                                       | Flexibility                                                | Minimum Cut Length (ft)* | Approximate Weight (lb/ft)                                                                                                                                       | Price Per Foot |
|                                                                                   | <a href="#">H805655-1</a> | Cat6 industrial Ethernet                                                                                              | Semi-flexible                                              | 20                       | 0.03                                                                                                                                                             | \$2.83         |
| Physical Properties                                                               |                           |                                                                                                                       |                                                            |                          |                                                                                                                                                                  |                |
| Conductor Gauge                                                                   |                           | 24 AWG                                                                                                                | Conductor Stranding                                        |                          | Solid bare copper                                                                                                                                                |                |
| Conductor Material                                                                |                           | Bare copper                                                                                                           | Conductor Insulation Wall Thickness                        |                          | 0.009 in, nominal                                                                                                                                                |                |
| Conductor Assembly                                                                |                           | 4 twisted pairs                                                                                                       | Bare Conductor Diameter                                    |                          | 0.020 in, nominal                                                                                                                                                |                |
| Color Code                                                                        | Pair 1                    | Blue, White/Blue                                                                                                      | Insulated Conductor Diameter                               |                          | 0.039 in, nominal                                                                                                                                                |                |
|                                                                                   | Pair 2                    | Orange, White/Orange                                                                                                  | Twisted Conductor Diameter                                 |                          | N/A                                                                                                                                                              |                |
|                                                                                   | Pair 3                    | Green, White/Green                                                                                                    | Overall Cable Diameter                                     |                          | 0.315 in, nominal                                                                                                                                                |                |
|                                                                                   | Pair 4                    | Brown, White/Brown                                                                                                    | Jacket Color                                               |                          | Green                                                                                                                                                            |                |
| Voltage Rating                                                                    |                           | 300V                                                                                                                  | Jacket Thickness                                           |                          | 0.030 in, nominal                                                                                                                                                |                |
| Temperature Rating                                                                |                           | -40 to 80 °C (-40 to 176 °F)                                                                                          | Jacket Material                                            |                          | PVC                                                                                                                                                              |                |
| Plenum                                                                            |                           | No                                                                                                                    | Sunlight Resistant                                         |                          | No                                                                                                                                                               |                |
| Shield                                                                            |                           | Overall aluminum foil and braid                                                                                       | Oil Resistance                                             |                          | Yes                                                                                                                                                              |                |
| Drain                                                                             |                           | No                                                                                                                    | Flame Retardant                                            |                          | Yes                                                                                                                                                              |                |
| Conductor Insulation Material                                                     |                           | Polyethylene                                                                                                          | Sample Print Legend                                        |                          | <metermarking>m HELUKAT® 250IND Industrial Ethernet SF/UTP 4x2xAWG24/1 PVC / 805655 * c(UL)us E312184 CMG 75°C FT4 0158<production lot nr.> <CE-Logo <HELU date> |                |
| Minimum Bend Radius                                                               |                           | Moving: 2.52in<br>Fixed: 1.58in                                                                                       |                                                            |                          |                                                                                                                                                                  |                |
| Electrical Characteristics (for 100 meters of cable)                              |                           |                                                                                                                       |                                                            |                          |                                                                                                                                                                  |                |
| Impedance                                                                         |                           | 100 Ω ± 15 Ω 1 to 100 MHz<br>100 Ω ± 20 Ω 101 to 250 MHz                                                              | UL Classification                                          |                          | (cULus) Type CMG                                                                                                                                                 |                |
| Capacitance                                                                       |                           | 21.9 pF/ft                                                                                                            | Approvals**                                                |                          | cULus, CSA, CE, RoHS, Halogen-free                                                                                                                               |                |
| Resistance, Max.                                                                  |                           | 29 Ω DC per 1000ft                                                                                                    | Attenuation Crosstalk Ratio, Far End (ACRF)                |                          | 1 ≤ f ≤ 250 MHz: 68 - 20 LOG10 (f/100) dB MIN                                                                                                                    |                |
| Dielectric Withstanding, Min.                                                     |                           | 1500V RMS                                                                                                             | Insertion Loss                                             |                          | 1 ≤ f ≤ 500 MHz: 1,82 x √f + 0.0169 x (f) + 0.25/√f dB MAX                                                                                                       |                |
| Return Loss                                                                       |                           | 1 ≤ f < 10 MHz: 20 + 5 LOG10 (f) dB MIN<br>10 ≤ f < 20 MHz: 25 dB MIN<br>20 ≤ f ≤ 250 MHz: 25 - 7 LOG10 (f/20) dB MIN | Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF) |                          | 1 ≤ f ≤ 250 MHz: 65 - 20 LOG10 (f/100) dB MIN                                                                                                                    |                |
| Near End Crosstalk (NEXT)                                                         |                           | 1 ≤ f ≤ 250 MHz: 75,3 - 15 LOG10 (f/100) dB MIN                                                                       | Cross Section                                              |                          |                                                                             |                |
| Power Sum Near End Crosstalk (PSNEXT)                                             |                           | 1 ≤ f ≤ 250 MHz: 72,3 - 15 LOG10 (f/100) dB MIN                                                                       |                                                            |                          |                                                                                                                                                                  |                |
| TCL                                                                               |                           | N/A                                                                                                                   |                                                            |                          |                                                                                                                                                                  |                |
| ELTCTL                                                                            |                           | N/A                                                                                                                   |                                                            |                          |                                                                                                                                                                  |                |
| Velocity of Propagation                                                           |                           | 0.62                                                                                                                  |                                                            |                          |                                                                                                                                                                  |                |
| Delay                                                                             |                           | 4 ≤ f ≤ 250 MHz: 534 + 36/√f ns Max                                                                                   |                                                            |                          |                                                                                                                                                                  |                |
| Delay Skew                                                                        |                           | 4 ≤ f ≤ 250 MHz: Max 45ns                                                                                             |                                                            |                          |                                                                                                                                                                  |                |

\* See web store [www.AutomationDirect.com](http://www.AutomationDirect.com) for maximum cut lengths\*\* To obtain the most current agency approval information, see the Agency Approval Checklist section on the part number's web page at [www.AutomationDirect.com](http://www.AutomationDirect.com)

Please Note: Our prices on Ethernet Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.