



# DataMax® Ethernet Cables

## Quabbin DataMax Ethernet Cable

The Quabbin DataMax® Category network cables are proudly made in the USA and are available in Cat5e, 6, 6a or 6e. These cables are offered in 26AWG or 24AWG stranded tinned copper or bare solid copper in shielded or unshielded constructions. Designed to be round and smooth, Quabbin DataMax® Category network cables are compatible with most popular plugs for quick termination and easy installation.

When it comes to network cable, flexibility can mean many different things. The first and most obvious is the ease with which it bends. The importance behind having a pliable cable has to do with installation and cabinet routing. Flexibility allows easy manipulation between devices while increasing the durability, which is important when considering a lifetime of "moves & changes" that can occur in a dynamic network environment. Durability is paramount in allowing these changes to take place without compromising the cable.

The Quabbin DataMax® Category network cables exceed the requirements of ANSI/TIA-568-C.2, are compatible with Cat 5e and 6 hardware, and are suitable for applications from 10 Base-T to 1000 Base-T (Gigabit Ethernet).

Also available are Quabbin DataMax® MIL-spec Cat6 cables with black low smoke PVC jacket and special conductor insulations colors.

\* DataMax is a registered trademark of Quabbin Wire and Cable Corporation.

\*\* EtherNet/IP is a trademark of ODVA, Inc.

### Features

- Available in Category 5e, 6, 6e, and 6a
- In compliance with TIA 568-C.2 and TIA 1005
- Designed for use in EtherNet/IP systems \*\*
- 4 twisted pairs
- Unshielded or overall foil shields
- UL Type CM and UL AWM Style 2463 (80°C, 600V)
- Some cables available with conductor color code for MIL spec applications
- Cut to length in 1 foot increments
- Low 20 foot minimum length
- Made in the USA



Click on the thumbnail or go to  
<https://www.automationdirect.com/VID-WD-0016>  
 for a short introduction on our cut to length cable



# Quabbin Ethernet Cable - Cat6/6a/6e

| Ethernet Cat6/6a/6e Cable Selection |                 |              |            |              |                                                                                                                              |                                                                                                                                              |                            |                          |                |
|-------------------------------------|-----------------|--------------|------------|--------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|----------------|
| Part Number                         | Wiring Standard | Jacket Color | Shield     | No. of Pairs | Pair Colors                                                                                                                  | Description                                                                                                                                  | Approximate Weight (lb/ft) | Minimum Cut Length (ft)* | Price per foot |
| <a href="#"><u>Q2034-1</u></a>      | 6a              | Black        | Shielded   | 4            | Pair 1: Natural & Orange<br>Pair 2: Gray & Brown<br>Pair 3: Natural & Green<br>Pair 4: Gray & Blue                           | shielded, 4 twisted pairs, 28 AWG, 7-stranded, tinned copper, foamed FEP conductor insulation material, PVC jacket, black, cut to length.    | 0.017                      | 20                       | \$1.16         |
| <a href="#"><u>Q2045-1</u></a>      | 6               |              |            |              |                                                                                                                              | shielded, 4 twisted pairs, 28 AWG, 7-stranded, tinned copper, foamed FEP conductor insulation material, PVC jacket, black, cut to length.    | 0.017                      |                          | \$1.10         |
| <a href="#"><u>Q2056-1</u></a>      | 6a              |              |            |              |                                                                                                                              | shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, foamed FEP conductor insulation material, PVC jacket, black, cut to length.    | 0.022                      |                          | \$1.18         |
| <a href="#"><u>Q2067-1</u></a>      | 6               |              |            |              |                                                                                                                              | shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, foamed FEP conductor insulation material, PVC jacket, black, cut to length.    | 0.022                      |                          | \$0.99         |
| <a href="#"><u>Q2206-1</u></a>      | Cat6e           | Blue         | Unshielded |              | Pair 1 - Blue/White & Blue<br>Pair 2 - Orange/White & Orange<br>Pair 3 - Green/White & Green<br>Pair 4 - Brown/White & Brown | unshielded, 4 twisted pairs, 24 AWG, 7-stranded, tinned copper, polyethylene conductor insulation material, PVC jacket, blue, cut to length. | 0.024                      |                          | \$0.49         |
| <a href="#"><u>Q2936-1</u></a>      | Cat6            |              | Shielded   |              |                                                                                                                              | shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, polyethylene conductor insulation material, PVC jacket, blue, cut to length.   | 0.025                      |                          | \$0.72         |
| <a href="#"><u>Q2948-1</u></a>      | Cat6a           |              |            |              |                                                                                                                              | shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, polyethylene conductor insulation material, PVC jacket, blue, cut to length.   | 0.025                      |                          | \$0.76         |

\*See web store for maximum cut lengths



**Please Note:** Our prices on Ethernet Cables 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.

# Quabbin Ethernet Cable - Cat6e

| Ethernet Cat6e Cable Specifications   |                                                                                                                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Physical Properties</i>            |                                                                                                                                                                                    |
| <u>Q2206-1</u>                        |                                                                                                                                                                                    |
| <b>Conductor Gauge and Stranding</b>  | 24AWG 7/32 stranded tinned copper; 4 twisted pairs                                                                                                                                 |
| <b>Assembly</b>                       | Individual conductors twisted into pairs with PVC Jacket                                                                                                                           |
| <b>Jacket</b>                         | Blue Polyvinylchloride (PVC)                                                                                                                                                       |
| <b>Jacket Insulation Thickness</b>    | 0.024 inch; Nominal                                                                                                                                                                |
| <b>Shield</b>                         | No                                                                                                                                                                                 |
| <b>Cable Overall Diameter</b>         | 0.220 inch; Nominal                                                                                                                                                                |
| <b>Temperature Rating</b>             | -20°C to 75°C<br>(-4°F to 167°F)                                                                                                                                                   |
| <b>Plenum</b>                         | No                                                                                                                                                                                 |
| <b>Sunlight Resistant</b>             | No                                                                                                                                                                                 |
| <b>Minimum Bend Radius</b>            | 2.67 inch                                                                                                                                                                          |
| <b>Conductor Insulation</b>           | High Density Polyethylene (HDPE)                                                                                                                                                   |
| <b>Color Code</b>                     | <b>Pair 1</b> Blue/White & Blue                                                                                                                                                    |
|                                       | <b>Pair 2</b> Orange/White & Orange                                                                                                                                                |
|                                       | <b>Pair 3</b> Green/White & Green                                                                                                                                                  |
|                                       | <b>Pair 4</b> Brown/White & Brown                                                                                                                                                  |
| <b>Bare Conductor Diameter</b>        | 0.024 inch; Nominal                                                                                                                                                                |
| <b>Conductor Insulation Thickness</b> | 0.007 inch; Nominal                                                                                                                                                                |
| <b>Insulated Conductor Diameter</b>   | 0.039 inch; Nominal                                                                                                                                                                |
| <b>Pair Diameter</b>                  | 0.078 inch; Nominal                                                                                                                                                                |
| <b>Cabled Core Diameter</b>           | 0.160 inch; Nominal                                                                                                                                                                |
| <b>Print Legend</b>                   | QUABBIN DATAMAX 6E 600 MHZ ENHANCED PATCH CORDP/N xxxx – (UL) TYPE CMR 24 AWG 75C – CSA LL51726 TYPE CMG 60C -- TIA-568.2-D CAT 6 -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE) |



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# Quabbin Ethernet Cable - Cat6e

| Ethernet Cat6e Cable Specifications (continued)            |                                                                                        |
|------------------------------------------------------------|----------------------------------------------------------------------------------------|
|                                                            | Electrical Characteristics (for 100 meters of cable)                                   |
|                                                            | <u>Q2206-1</u>                                                                         |
| Impedance (1-100 MHz)                                      | 100Ω ±15Ω (1-100 MHz)                                                                  |
| Capacitance                                                | 13.5 pF/ft @ 1MHz; Nominal                                                             |
| Resistance (max)                                           | 42.6 Ω DC per 1000ft                                                                   |
| Voltage Rating (max)                                       | 300V                                                                                   |
| Dielectric Withstand, Min.                                 | 1500V RMS                                                                              |
| Return Loss                                                | $1 \leq f < 10 \text{ MHz}$ 20 + 5 LOG(f) dB MIN                                       |
|                                                            | $10 \leq f < 20 \text{ MHz}$ 25 dB MIN                                                 |
|                                                            | $20 \leq f \leq 500 \text{ MHz}$ 25 - 8.6 LOG(f/20) dB MINPS                           |
| Near End Crosstalk (NEXT)                                  | $1 \leq f \leq 250 \text{ MHz}$ 47.8 - 15 LOG(f/100) dB MIN                            |
|                                                            | $250 < f \leq 500 \text{ MHz}$ 44.3 - 15 LOG(f/100) dB MIN                             |
| Power Sum Near End Crosstalk (PSNEXT)                      | $1 \leq f \leq 250 \text{ MHz}$ 45.3 - 15 LOG(f/100) dB MIN                            |
|                                                            | $250 < f \leq 500 \text{ MHz}$ 42.3 - 15 LOG(f/100) dB MIN                             |
| Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF) | $1 \leq f \leq 500 \text{ MHz}$ 24.8 - 20 LOG(f/100) dB MIN                            |
| Attenuation Crosstalk Ratio, Far End (ACRF)                | $1 \leq f \leq 500 \text{ MHz}$ 27.8 - 20 LOG(f/100) dB MIN                            |
| Insertion Loss                                             | $1 \leq f \leq 500 \text{ MHz}$ $1.2[1.808 \sqrt{f} + 0.017(f) + 0.2/\sqrt{f}]$ dB MAX |
| Delay                                                      | $1 \leq f \leq 500 \text{ MHz}$ $534 + 36/\sqrt{f}$ ns MAX                             |
| Delay Skew                                                 | $1 \leq f \leq 500 \text{ MHz}$ <45 ns MAX                                             |
| TCL                                                        | $1 \leq f \leq 500 \text{ MHz}$ 30 - 10 LOG(f/100) dB MIN                              |
| ELTCTL                                                     | $1 \leq f \leq 30 \text{ MHz}$ 35 - 20 LOG(f) dB MIN                                   |
| Velocity Of Propagation                                    | 0.68                                                                                   |
| UL Classification                                          | (UL) Type CMR/CMG, (CSA) Type CMG                                                      |
| Agency Approvals                                           | cULus, CSA, RoHS                                                                       |



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