## **Cat6 Ethernet**



Q2067-1 Cable Specifications								
		Part Number	Wire/Cable Type	Flexibility	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot	
		Q2067-1	Cat6 Ethernet	Semi-flexible	20	0.03	\$0.96	
Physical Properties								
Conductor Gauge		26 AWG		Conductor Stranding		7-Stranded Tinned Copper		
Conductor Material		Tinned Copper		Conductor Insulation Wall Thickness		0.010 in, nominal		
Conductor Assembly		4 twisted pairs		Bare Conductor Diameter		0.019 in, nominal		
	Pair 1	Natural, Orange		Insulated Conductor Diameter		0.039 in, nominal		
Color Code	Pair 2	Gray, Brown		Twisted Conductor Diameter		0.078 in, nominal		
	Pair 3	Natural, Green		Overall Cable Diameter		0.223 in, nominal		
Pair 4		Gray, Blue		Jacket Color		Black		
Voltage Rating		300V		Jacket Thickness		0.021 in, nominal		
Temperature Rating		-20 to 105 °C (-4 to 221 °F)		Jacket Material		PVC		
Plenum		Yes		Sunlight Resistant		No		
Shield		Shielded		Oil Resistance		Yes		
Drain		Yes		Flame Retardant		No		
Conductor Insulation Material		Foamed FEP		Sample Print Legend		QUABBIN DATAMAX CAT 6 F/UTP PATCH CORD P/N xxxx PATENT PENDING C(ETL)US TYPE CMP 26 AWG 105C RoHS (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)		
Minimum Bend Radius		2.23in						
Cabled Core Diameter		0.181 in						
			Electrical Characteris	· ·	,			
Impedance				UL Classification		NEC (ETL) TYPE CMP CEC C(ETL) TYPE CMP		
Capacitance		13.5 pF/ft @ 1	13.5 pF/ft @ 1MHz; Nominal		Approvals**  Attenuation Crosstalk Ratio,		cETLus, RoHS	
Resistance, Max.		42.6 Ω DC	per 1000ft	Far End (ACRF		$1 \le f \le 250 \text{ MHz}$ : 27.8 - 20 LOG( $f/100$ ) dB MIN		
Dielectric Withstanding, Min.		1500V RMS		Insertion Loss		1 ≤ $f$ ≤ 250 MHz: 1.5 [1.808 $\sqrt{f}$ + 0.017( $f$ ) + 0.20/ $\sqrt{f}$ ] dB MAX		
Return Loss		$1 \le f < 10 \text{ MHz: } 20 + 5 \text{ LOG}(f) \text{ dB MIN}$ $10 \le f < 20 \text{ MHz: } 25 \text{ dB MIN}$ $20 \le f \le 250 \text{ MHz: } 25 - 8.6 \text{ LOG}(f/20) \text{ dB MIN}$ $20 \le f < 250 \text{ MHz: } 25 - 8.6 \text{ LOG}(f) \text{ dB MIN}$		Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)		1 ≤ f ≤ 250 MHz: 24.8 - 20 LOG(f/100) dB MIN		
Near End Crosstalk (NEXT)		$1 \le f \le 250 \text{ MHz: } 44.3 - 15 \text{ LOG}(f/100) \text{ dB MIN}$		Cross Section				
Power Sum Near End Crosstalk (PSNEXT)		$1 \le f \le 250 \text{ MHz: } 42.3 - 15 \text{ LOG}(f/100) \text{ dB MIN}$						
TCL		1 ≤ $f$ ≤ 250 MHz: 30 - 10 LOG( $f$ /100) dB MIN						
ELTCTL		$1 \le f \le 30 \text{ MHz: } 35 - 20 \text{ LOG}(f) \text{ dB MIN}$						
Velocity of Propagation		0.	68					
Delay		1 ≤ f ≤ 250 MHz: 5	$534 + 36/\sqrt{f}$ ns MAX					
Delay Skew		$1 \le f \le 250 \text{ MHz: } <45 \text{ns MAX}$						

<sup>\*</sup> See web store <a href="www.AutomationDirect.com">www.AutomationDirect.com</a> 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





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.



## **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 5 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



