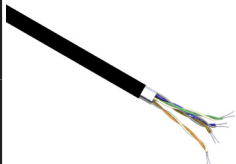
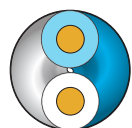
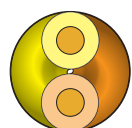


Cat6 Ethernet



Q2045-1 Cable Specifications								
	Part Number		Wire/Cable Type		Flexibility	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
	Q2045-1		Cat6 Ethernet		Semi-flexible	20	0.02	\$1.07
Physical Properties								
Conductor Gauge		28 AWG			Conductor Stranding		7-Stranded Tinned Copper	
Conductor Material		Tinned Copper			Conductor Insulation Wall Thickness		0.008 in, nominal	
Conductor Assembly		4 twisted pairs			Bare Conductor Diameter		0.015 in, nominal	
Color Code	Pair 1	Natural, Orange			Insulated Conductor Diameter		0.031 in, nominal	
	Pair 2	Gray, Brown			Twisted Conductor Diameter		0.062 in, nominal	
	Pair 3	Natural, Green			Overall Cable Diameter		0.186 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 MINI-6 F/UTP PATCH CORD P/N xxxx -- PATENT PENDING -- C(ETL)US TYPE CMP 28 AWG 105C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)	
Minimum Bend Radius		1.86in						
Cabled Core Diameter		0.145 in						
Electrical Characteristics (for 100 meters of cable)								
Impedance		100 ± 15 Ω (1 - 250 MHz)			UL Classification		NEC (ETL) TYPE CMP CEC C(ETL) TYPE CMP	
Capacitance		13.5 pF/ft @ 1MHz; Nominal			Approvals**		cETLus, RoHS	
Resistance, Max.		68.2 Ω DC per 1000ft			Attenuation Crosstalk Ratio, Far End (ACRF)		1 ≤ f ≤ 250 MHz: 27.8 - 20 LOG(f/100) dB MIN	
Dielectric Withstanding, Min.		1500V RMS			Insertion Loss		1 ≤ f ≤ 250 MHz: 1.95 [1.808 √f + 0.017(f) + 0.2/√f] dB MAX	
Return Loss		1 ≤ f < 2 MHz: 17 + 9.5 LOG(f) dB MIN 2 ≤ f < 10 MHz: 20 + 5 LOG(f) dB MIN 10 ≤ f < 20 MHz: 25 dB MIN 20 ≤ f < 250 MHz: 25 - 8.6 LOG(f) 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 ≤ f ≤ 250 MHz: 44.3 - 15 LOG(f/100) dB MIN			Cross Section			
Power Sum Near End Crosstalk (PSNEXT)		1 ≤ f ≤ 250 MHz: 42.3 - 15 LOG(f/100) dB MIN						
TCL		1 ≤ f ≤ 250 MHz: 30 - 10 LOG(f/100) dB MIN						
ELTCTL		1 ≤ f ≤ 30 MHz: 35 - 20 LOG(f) dB MIN						
Velocity of Propagation		0.68						
Delay		1 ≤ f ≤ 250 MHz: 534 + 36/√f ns MAX						
Delay Skew		1 ≤ f ≤ 250 MHz: <45ns MAX						
								

* See web store 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



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

