Cat6a Ethernet

QUABBIN® WIRE & CABLE CO., INC.
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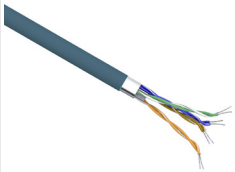
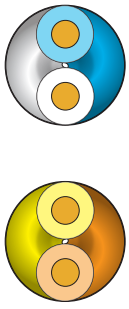
Q2948-1 Cable Specifications



Part Number	Wire/Cable Type	Flexibility	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
Q2948-1	Cat6a Ethernet	Semi-flexible	20	0.02	$0.74

Physical Properties				
Conductor Gauge	26 AWG	**Conductor Stranding**	7-Stranded Tinned Copper	
Conductor Material	Tinned Copper	**Conductor Insulation Wall Thickness**	0.009 in, nominal	
Conductor Assembly	4 twisted pairs	**Bare Conductor Diameter**	0.019 in, nominal	
Color Code	**Pair 1**	Blue, White/Blue	**Insulated Conductor Diameter**	0.036 in, nominal
	Pair 2	Orange, White/Orange	**Twisted Conductor Diameter**	0.072 in, nominal
	Pair 3	Green, White/Green	**Overall Cable Diameter**	0.235 in, nominal
	Pair 4	Brown, White/Brown	**Jacket Color**	Blue
Voltage Rating	300V	**Jacket Thickness**	0.024 in, nominal	
Temperature Rating	-20 to 75 °C (-4 to 167 °F)	**Jacket Material**	PVC	
Plenum	No	**Sunlight Resistant**	No	
Shield	Shielded	**Oil Resistance**	No	
Drain	Yes	**Flame Retardant**	Yes	
Conductor Insulation Material	Polyethylene	**Sample Print Legend**	QUABBIN DATAMAX 6a F/UTP 100 OHM PATCH CORD P/N xxxx -- TYPE CMR C(UL) US CMG 4 PR 26 AWG SHIELDED 75C -- FT4/IEEE 1202 -- CAT 6a TIA-568.2-D -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE	
Minimum Bend Radius	2.35in			
Cabled Core Diameter	0.208 in			

Electrical Characteristics (for 100 meters of cable)			
Impedance	100 ± 15 Ω (1 - 200 MHz)	**UL Classification**	(UL) Type CMR/CMG
Capacitance	13.5 pF/ft @ 1MHz; Nominal	**Approvals****	cULus, RoHS
Resistance, Max.	26.0 Ω DC per 1000ft	**Attenuation Crosstalk Ratio, Far End (ACRF)**	$1 \le f \le 500$ MHz: 27.8 – 20 LOG(f/100) dB MIN
Dielectric Withstanding, Min.	1500V RMS	**Insertion Loss**	$1 \le f \le 500$ MHz: $1.5[1.82\sqrt{(f)} + 0.0091(f) + 0.25/\sqrt{(f)}]$ dB MAX
Return Loss	$1 \le f < 10$ MHz: 20 + 5 LOG(f) dB MIN $10 \le f < 20$ MHz: 25 dB MIN $20 \le f \le 500$ MHz: 25 – 8.6 LOG(f/20) dB MIN $1 \le f \le 500$ MHz: 44.3 – 15 LOG(f/100) dB MIN	**Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)**	N/A
Near End Crosstalk (NEXT)	$1 \le f \le 500$ MHz: 42.3 – 15 LOG(f/100) dB MIN	**Cross Section**	
Power Sum Near End Crosstalk (PSNEXT)	$1 \le f \le 500$ MHz: 24.8 – 20 LOG(f/100) dB MIN		
TCL	N/A		
ELTCTL	N/A		
Velocity of Propagation	0.68		
Delay	$1 \le f \le 500$ MHz: 534 + 36/$\sqrt{(f)}$ ns MAX		
Delay Skew	$1 \le f \le 500$ 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.

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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