

# Quabbin Ethernet Cable - Cat6/6a - LSZH

Ethernet Cat6/6a - LSZH 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>Q2025-1</u></a>	Cat6	black	Shielded	4	Pair 1 - Blue/White & Blue Pair 2 - Orange/White & Orange Pair 3 - Green/White & Green Pair 4 - Brown/White & Brown	shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, HDPE conductor insulation material, low smoke zero halogen (LSZH) jacket, black, cut to length.	0.02	20	\$0.88
<a href="#"><u>Q2260-1</u></a>			Unshielded			unshielded, 4 twisted pairs, 28 AWG, 7-stranded, tinned copper, HDPE conductor insulation material, low smoke zero halogen (LSZH) jacket, black, cut to length.	0.01		\$0.61
<a href="#"><u>Q2270-1</u></a>	Cat6a		Shielded			shielded, 4 twisted pairs, 28 AWG, 7-stranded, tinned copper, HDPE conductor insulation material, low smoke zero halogen (LSZH) jacket, black, cut to length.	0.02		\$0.72
<a href="#"><u>Q2279-1</u></a>			Shielded			shielded, 4 twisted pairs, 26 AWG, 7-stranded, tinned copper, HDPE conductor insulation material, low smoke zero halogen (LSZH) jacket, black, cut to length.	0.02		\$0.82

\*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 - Cat6/6a - LSZH

Ethernet Cat6/6a - LSZH Cable Specifications				
	Physical Properties			
	Q2025-1	Q2260-1	Q2270-1	Q2279-1
<b>Conductor Gauge and Stranding</b>	26AWG 7/34 stranded tinned copper; 4 twisted pairs	28AWG 7/36 stranded tinned copper; 4 twisted pairs		26AWG 7/34 stranded tinned copper; 4 twisted pairs
<b>Assembly</b>	Individual conductors twisted into pairs with LSZH jacket			
<b>Jacket</b>	Black low smoke zero halogen (LSZH)			
<b>Jacket Insulation Thickness</b>	0.023 inch; Nominal	0.020 inch; Nominal	0.023 inch; Nominal	
<b>Shield</b>	Aluminized Polyester Foil Shield (Foil In, 100% Coverage)	No	Aluminized Polyester Foil Shield (Foil In, 100% Coverage)	
<b>Cable Overall Diameter</b>	0.230 inch; Nominal	0.150 inch; Nominal	0.190 inch; Nominal	0.230 inch; Nominal
<b>Temperature Rating</b>	-20°C to 75°C (-4°F to 167°F)			
<b>Plenum</b>	No			
<b>Sunlight Resistant</b>	No			
<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>	0.019 inch; Nominal	0.015 inch; Nominal	0.015 inch; Nominal	0.019 inch; Nominal
<b>Conductor Insulation Thickness</b>	0.011 inch; Nominal	0.005 inch; Nominal	0.008 inch; Nominal	0.011 inch; Nominal
<b>Insulated Conductor Diameter</b>	0.041 inch; Nominal	0.025 inch; Nominal	0.033 inch; Nominal	0.041 inch; Nominal
<b>Pair Diameter</b>	0.081 inch; Nominal	0.049 inch; Nominal	0.064 inch; Nominal	0.081 inch; Nominal
<b>Cabled Core Diameter</b>	0.177 inch; Nominal	N/A	0.146 inch; Nominal	0.180 inch; Nominal
<b>Print Legend</b>	QUABBIN DATAMAX LSZH 6 F/UTP PATCH CORD P/N xxxx -- PATENT PENDING -- C(UL)US TYPE CM-LS 26 AWG 75C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)	QUABBIN DATAMAX LSZH MINI-6 U/UTP PATCH CORD P/N xxxx -- C(UL)US TYPE CM-LS 28 AWG 75C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)	QUABBIN DATAMAX LSZH MINI-6a F/UTP PATCH CORD P/N xxxx --PATENT NO. US 9,355,759 B2--C(UL)US TYPE CM-LS 28 AWG 75C --RoHS --(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)	QUABBIN DATAMAX LSZH 6a F/UTP PATCH CORD P/N xxxx -- PATENT PENDING -- C(UL)US TYPE CM-LS 26 AWG 75C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)



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# Quabbin Ethernet Cable - Cat6/6a - LSZH

Ethernet Cat6/6a - LSZH Cable Specifications (continued)				
	Electrical Characteristics (for 100 meters of cable)			
	<u>Q2025-1</u>	<u>Q2260-1</u>	<u>Q2270-1</u>	<u>Q2279-1</u>
<b>Impedance (1-100 MHz)</b>	100 ± 15 Ω 1 - 250 MHz	100 ± 15 Ω 1 - 250 MHz	100 ± 15 Ω 1 - 500 MHz	100 ± 15 Ω 1 - 100 MHz 100 ± 20 Ω 100 - 500 MHz
<b>Capacitance</b>	13.5 PF/FT. AT 1 MHz	13.5 PF/FT. AT 1 MHz	13.5 PF/FT. AT 1 MHz	13.5 PF/FT. AT 1 MHz
<b>Resistance (max)</b>	42.6 Ω DC per 1000'	68.2 Ω/1,000'	68.2 Ω/1,000'	42.6 Ω/1,000'
<b>Voltage Rating (max)</b>	300V			
<b>Dielectric Withstand, Min.</b>	1500V RMS			
<b>Return Loss</b>	1 ≤ f < 10 MHz 20 + 5 LOG(f) dB MIN		1 ≤ f < 2 MHz 17 + 9.5 LOG(f) dB MIN	1 ≤ f < 10 MHz 20 + 5 LOG(f) dB MIN
	10 ≤ f < 20 MHz 25 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/20) dB MINPS		10 ≤ f < 20 MHz 25 dB MIN	20 ≤ f ≤ 500 MHz 25 - 8.6 LOG(f/20) dB MINPS
<b>Near End Crosstalk (NEXT)</b>	1 ≤ f ≤ 250 MHz 44.3 - 15 LOG(f/100) dB MIN		1 ≤ f ≤ 500 MHz 44.3 - 15 LOG(f/100) dB MIN	
<b>Power Sum Near End Crosstalk (PSNEXT)</b>	1 ≤ f ≤ 250 MHz 42.3 - 15 LOG(f/100) dB MIN		1 ≤ f ≤ 500 MHz 42.3 - 15 LOG(f/100) dB MIN	
<b>Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)</b>	1 ≤ f ≤ 250 MHz 24.8 - 20 LOG(f/100) dB MIN		1 ≤ f ≤ 500 MHz 24.8 - 20 LOG(f/100) dB MIN	
<b>Attenuation Crosstalk Ratio, Far End (ACRF)</b>	1 ≤ f ≤ 250 MHz 27.8 - 20 LOG(f/100) dB MIN		1 ≤ f ≤ 500 MHz 27.8 - 20 LOG(f/100) dB MIN	
<b>Insertion Loss</b>	1 ≤ f ≤ 250 MHz 1.5[1.808√(f + 0.017(f + 0.2)√(f))] dB MAX	1 ≤ f ≤ 250 MHz 1.87[1.808√(f + 0.017(f + 0.2)√(f))] dB MAX	1 ≤ f ≤ 500 MHz 1.95[1.82√(f + 0.0091(f + 0.25)√(f))] dB MAX	1 ≤ f ≤ 500 MHz 1.5[1.82√(f + 0.0091(f + 0.25)√(f))] dB MAX
<b>Delay</b>	1 ≤ f ≤ 250 MHz 534 + 36/√(f) ns MAX		1 ≤ f ≤ 500 MHz 534 + 36/√(f) ns MAX	
<b>Delay Skew</b>	1 ≤ f ≤ 250 MHz <45ns		1 ≤ f ≤ 500 MHz <45ns	
<b>TCL</b>	1 ≤ f ≤ 250 MHz 30 - 10 LOG(f/100)		1 ≤ f ≤ 500 MHz 30 - 10 LOG(f/100) dB MIN, 40 dB MIN	
<b>ELTCTL</b>	1 ≤ f ≤ 30 MHz 35 - 20 LOG(f)		1 ≤ f ≤ 30 MHz 35 - 20 LOG(f) dB MIN	
<b>Velocity Of Propagation</b>	0.68			
<b>UL Classification</b>	NEC (UL) TYPE CM-LS; CEC C(UL) TYPE CM-LS			
<b>Agency Approvals</b>	cULus, RoHs			

NOTE: All testing conducted off the reel.



# 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

