
**Application:**

Shielded (SF/UTP) flexible patch/jumper cable for production of durable flame retardant Category 5e shielded Industrial Ethernet cords for transmitting 10Base-T or 100Base-T. Jacket provides excellent mechanical, flex-life, oil resistance, low-temperature flexibility, UV, and aging characteristics. May be terminated with shielded encapsulated RJ-45 or cylindrical M12 connectors to achieve IP-67 rating. RoHS compliant

**Construction:**

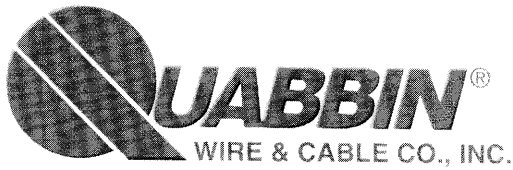
Stranded 26 AWG (7/34) tinned copper insulated with polyolefin and paired. Pairs cabled with overall clear polyester tape, aluminum polyester tape with stranded tinned copper drain wire out, and 38 AWG tinned copper braid. Jacketed with pressured Polyurethane that may be over-molded. 4-pair color code per Table G. 2-pair: white/green x green, white/orange x orange

**Listing/Ratings:**

Cords meet TIA Cat 5e and ISO class D requirements  
 Temperature rating: 75 °C Max., -40 °C Min.  
 Maximum plug-to-plug Cat 5e channel 80 meters  
 Nom. Impedance 1 - 100 MHz: 100 +/- 15 Ohms  
 Mutual Capacitance 13.5 pF/ft Nom. @ 1 MHz  
 Consult factory and page 16-E for flex-life information

Part Number	No. of Pairs	AWG Stranding	Jacket Color*	Insulation Thickness		Jacket Thickness		Nominal Diameter		1M' Pkg Weight Lbs.
				inch	mm	inch	mm	inch	mm	
5055	2	26 (7/34)	Black	.010	.25	.022	.56	.236	5.99	31
5056	2	26 (7/34)	Blue	.010	.25	.022	.56	.236	5.99	31
5057	2	26 (7/34)	Teal	.010	.25	.022	.56	.236	5.99	31
5730	4	26 (7/34)	Black	.010	.25	.022	.56	.220	5.59	35
5731	4	26 (7/34)	Blue	.010	.25	.022	.56	.220	5.59	35
5732	4	26 (7/34)	Teal	.010	.25	.022	.56	.220	5.59	35

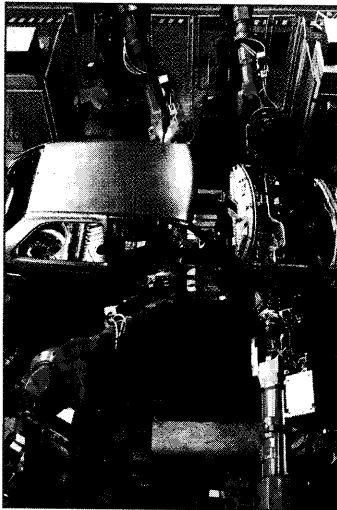
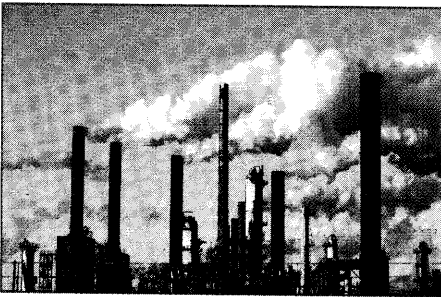
\*Other jacket colors are available



## **DataMax<sup>®</sup> Extreme** Industrial Ethernet Patch Cable

### **DataMax Extreme Patch Cable Transmits High-Speed Ethernet and Survives Harsh Environments**

Quabbin Wire's family of Industrial Ethernet (IE) flexible patch cables is available in many designs with three optional jacket compounds. Each jacket has a different balance of mechanical and chemical resistant properties. Cords may be terminated with encapsulated RJ-45 plugs or cylindrical data rated M12 connectors to reliably transmit high-speed Ethernet.



#### **Industrial Ethernet (IE) Application**

Non-proprietary Ethernet offers a huge increase in signaling speeds over older industrial control systems. Ethernet is reliable and easily migrates from 10Base-T to higher speeds. However, commercial office Ethernet systems cannot survive harsh conditions on the factory floor without being specially hardened or protected.

Quabbin's family of Industrial Ethernet cables were developed to reliably survive industrial hazards and may be terminated using encapsulated RJ-45 modular plugs or industrial M12 connectors which have recently been adapted for Ethernet transmission. These connectors use O-rings, over-molding, and/or sealing gaskets to bond to the cable jackets, providing a mated connection that resists fluids, dust, vibration, and other hazards, yet often may be field assembled. Assembly ratings of IP67 and IP69 are achievable when properly terminated using sealed connectors, assuring resistance to both fluid and dust particle penetration.

#### **Cable Design Variations**

DataMax Extreme cables are available in a huge variety of constructions. All three cable jacket options can be applied to 2-pair or 4-pair unshielded designs with 24 AWG or 22 AWG stranded conductors. Shielded designs are also offered in 2 or 4-pair and three available jackets using 26 AWG stranded conductors to maintain a consistent product line OD. Operational environment usually determines if shielded cable must be considered, however Quabbin's unshielded cables have exceptional "balance" that provides a high degree of isolation from EMI and other emissions. Due to the outstanding balance, many customers have found they can use unshielded cables where they thought they needed shielded. This can be a critical performance advantage since unshielded cables typically have a longer flex life than shielded cables.

#### **Pressure Extruded Jackets**

DataMax Extreme jackets are pressure extruded over the cable core, effectively locking the pairs in place. This provides very stable electrical performance, even when the cable is impacted, bent, or repeatedly flexed. Pressure extrusion also provides a very smooth, round jacket that aids termination and sealing.

Cable Jackets protect the cable core from environmental, operational, and installation hazards. The DataMax Extreme jackets were developed to survive many of the industrial hazards that commercial jackets will not. Compare the performance characteristics of the three optional compounds used for cable jacketing in the chart on the inside of this brochure.