

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	.024"
INSULATION:	HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS	.039"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.078"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER WITH FILLER AND WRAPPED WITH A CLEAR POLYESTER TAPE TO FORM A CABLE CORE	.176"
JACKET:	THERMOPLASTIC ELASTOMER, ( <b>COLOR, PER CHART 1</b> ), .032" NOM. WALL THICKNESS (PRESSURE)	
	OVERALL CABLE DIAMETER	.240" (± .005")

2) PHYSICAL PROPERTIES:	
TEMPERATURE RATING, MAX.	75°C (JACKET 105°C, 75°C OIL) & 80°C
TEMPERATURE RATING, MIN.	-40°C
WT./M', NOM., NET.	26.2 LBS.
JACKET IS WELD SPATTER RESISTANT	
JACKET IS SUNLIGHT RESISTANT	PER UL 2556
FLEX LIFE	
(126 CYCLES/MIN, @ 20°C)	1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
	10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)
TORSION TEST	
(1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C)	3 MILLION CYCLE TEST
JACKET CUTTING/MACHINING OIL RESISTANCE (PER QUABBIN TEST REPORT #TR 08-0001)	
(6 MONTHS @ 20°C)	
TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%

CHART 1:

QUABBIN P/N	JACKET COLOR
5770	BLACK
5771	BLUE
5772	TEAL
5773	RED

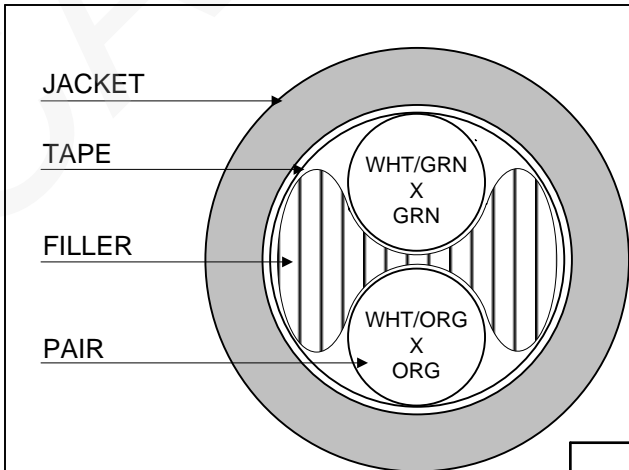
- 3) ELECTRICAL CHARACTERISTICS:  
SEE PAGE 2
- 4) AGENCY APPROVALS:  
UL AWM STYLE 2463 (80C 600V)  
NEC (UL) TYPE CMX OUTDOOR - CM  
CEC C(UL) TYPE CMX OUTDOOR - CM  
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:  
FOR CAT 5e APPLICATIONS REQUIRING A RUGGED PATCH CORD ASSEMBLY.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)  
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e U/UTP P/N (**QWC P/N PER CHART 1**) -- C(UL)US TYPE CMX OUTDOOR - CM 2PR 24 AWG 75C SUN RES OR AWM 2463 80C 600V -- CE RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

- 7) COLOR CODE:  
1. WHITE/GREEN X GREEN  
2. WHITE/ORANGE X ORANGE

8) PUT UPS  
AVAILABLE IN STANDARD 1000 FT REELS OR IN LONGER BULK PUTUPS



Created 3/23/11	DRAWN: SGH 04/08/19	
REV. 09	CHECKED: ZRS 04/08/19	
TITLE DATAMAX EXTREME HI-FLEX INDUSTRIAL 5E ETHERNET/IP PATCH CABLE -- 2 PR -- TYPE CMX OUTDOOR-CM, AWM STYLE 2463		
DRAWING #		QWC0022
		1 of 2

CUSTOMER APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_


3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 85 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184  
 CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 85 METER LENGTH  
 CAPACITANCE, MUTUAL, NOM. 13.5 PF/FT. AT 1 MHz  
 DIELECTRIC WITHSTANDING, MIN. 1500V RMS  
 VOLTAGE RATING, MAX. 600V  
 D.C. RESISTANCE, MAX. 26.0 Ω/ 1000' @ 20°C

**NOTE:** TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL. (FOR 100m OF CABLE)

IMPEDANCE	100 ± 15 Ω 1 - 100 MHz	
RETURN LOSS	1 ≤ f < 10 MHz	20 + 6 LOG (f) dB MIN*
	10 ≤ f < 20 MHz	26 dB MIN*
	20 ≤ f ≤ 100 MHz	26 - 5 LOG(f/20) dB MIN*
NEXT	1 ≤ f ≤ 100 MHz	35.3 - 15 LOG (f/100) dB MIN
ACRF	1 ≤ f ≤ 100 MHz	23.8 - 20 LOG(f/100) dB MIN
INSERTION LOSS	1 ≤ f ≤ 100 MHz	1.2[1.967√f + 0.023(f) + 0.050/√f] dB MAX
DELAY	1 ≤ f ≤ 100 MHz	534 + 36/√f ns MAX
DELAY SKEW	1 ≤ f ≤ 100 MHz	<25 ns
TCL	1 ≤ f < 30 MHz	73 - 15 LOG(f) dB (40 dB MAX) E <sub>3</sub> *
	30 ≤ f ≤ 100 MHz	80.4 - 20 LOG(f) dB MIN E <sub>3</sub> *
ELTCTL	1 ≤ f ≤ 30 MHz	50 - 20 LOG(f) dB MIN (40 dB MAX) E <sub>3</sub> *
VELOCITY OF PROPAGATION	68%	

\*PER ODVA VOLUME 2 ETHERNET/IP

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