

QWC0039

1) CONSTRUCTION:

CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	NOM. DIA.	.024"
INSULATION:	HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS		.040"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.080"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A CLEAR POLYESTER TAPE TO FORM A CABLE CORE		.184"
JACKET:	THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .032" NOM. WALL THICKNESS (PRESSURE)		
	OVERALL CABLE DIAMETER		.248" (+/- .005")

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C & 80°C (JACKET 105°C, 75°C OIL)
TEMPERATURE RATING, MIN.	-40°C
WT./M', NOM., NET.	29.3 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 (PENDING) (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%

POE COMPLIANT (802.3af) TO 85 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184  
CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 85 METER LENGTH

CHART 1:

QUABBIN P/N	JACKET COLOR
5750	BLACK
5751	BLUE
5752	TEAL
5753	RED

3) ELECTRICAL CHARACTERISTICS:  
SEE PAGE 2

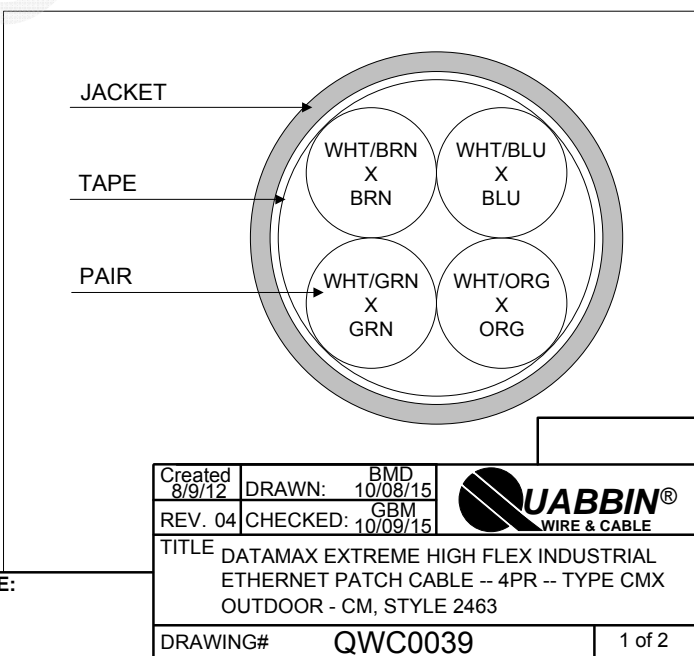
4) AGENCY APPROVALS:  
UL AWM STYLE 2463 (80C 600V)  
NEC (UL) TYPE CMX OUTDOOR - CM  
CEC C(UL) TYPE CMX OUTDOOR - CM

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

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 4PR 24 AWG 75C SUN RES OR AWM 2463 80C 600V -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)

7) COLOR CODE:  
1. WHITE/BLUE X BLUE  
2. WHITE/ORANGE X ORANGE  
3. WHITE/GREEN X GREEN  
4. WHITE/BROWN X BROWN

8) PUT UPS  
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



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


3) ELECTRICAL CHARACTERISTICS: (FOR 100m OF CABLE)

CAPACITANCE, MUTUAL, NOM.	13.5 PF/FT. AT 1 MHz
DIELECTRIC WITHSTANDING, MIN.	1500V RMS
VOLTAGE RATING, MAX.	600V
D.C. RESISTANCE, MAX.	14.0 Ω
IMPEDANCE	100 +/- 15 Ω 1-100 MHz

RETURN LOSS	$1 \leq f < 10$ MHz	20 + 6 LOG( $f$ ) dB MIN*
	$10 \leq f < 20$ MHz	26 dB MIN*
	$20 \leq f \leq 100$ MHz	26 - 5 LOG( $f/20$ ) dB MIN*
PSNEXT	$1 \leq f \leq 100$ MHz	32.3 - 15 LOG( $f/100$ ) dB MIN
NEXT	$1 \leq f \leq 100$ MHz	35.3 - 15 LOG( $f/100$ ) dB MIN
PSACRF	$1 \leq f \leq 100$ MHz	20.8 - 20 LOG( $f/100$ ) dB MIN
ACRF	$1 \leq f \leq 100$ MHz	23.8 - 20 LOG( $f/100$ ) dB MIN
INSERTION LOSS	$1 \leq f \leq 100$ MHz	$1.2 * [1.967 \sqrt{f} + 0.023(f) + 0.050/\sqrt{f}]$ dB MAX
DELAY	$1 \leq f \leq 100$ MHz	$534 + 36/\sqrt{f}$ ns MAX
DELAY SKEW	$1 \leq f \leq 100$ MHz	<25ns
TCL	$1 \leq f \leq 30$ MHz	73-15 LOG(F) dB MIN, (40 dB MAX)*
	$30 \leq f \leq 100$ MHz	80.4-20 LOG(F) dB MIN*
ELTCTL	$1 \leq f \leq 30$ MHz	50-20 LOG(F) dB MIN, (40 dB MAX)*
VELOCITY OF PROPAGATION	68%	

\*PER ODVA VOLUME 2 ETHERNET/IP

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL

Created 8/9/12	DRAWN: BMD 10/08/15	
REV. 04	CHECKED: GBM 10/09/15	
TITLE DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET PATCH CABLE -- 4PR -- TYPE CMX OUTDOOR - CM, STYLE 2463		
DRAWING# QWC0039		2 of 2

CUSTOMER APPROVAL:	DATE:
--------------------	-------