

1) CONSTRUCTION:  
 CONDUCTOR: 24 AWG 7/32 STRANDED TINNED COPPER  
 INSULATION: HIGH DENSITY POLYETHYLENE, .007" NOM. WALL THICKNESS  
 PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS  
 CABLE: (4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH TISSUE TAPE TO FORM A CABLE CORE  
 JACKET: POLYURETHANE (TYPE 350B), BLUE, .050" NOM. WALL THICKNESS (PRESSURE)  
 NOM. DIA. .024"  
 .039" MAX  
 .078"  
 OVERALL CABLE DIAMETER .275"

2) PHYSICAL PROPERTIES:  
 TEMPERATURE RATING, MAX. 75°C  
 TEMPERATURE RATING, MIN. -40°C  
 WT./M', NOM., NET. 38.3 LBS.  
 UV RESISTANT JACKET  
 BEND RADIUS 1" FOR STATIC BEND  
 FLEX LIFE 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)  
 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)

3) ELECTRICAL CHARACTERISTICS:  
 SEE PAGE 2

4) AGENCY APPROVALS:

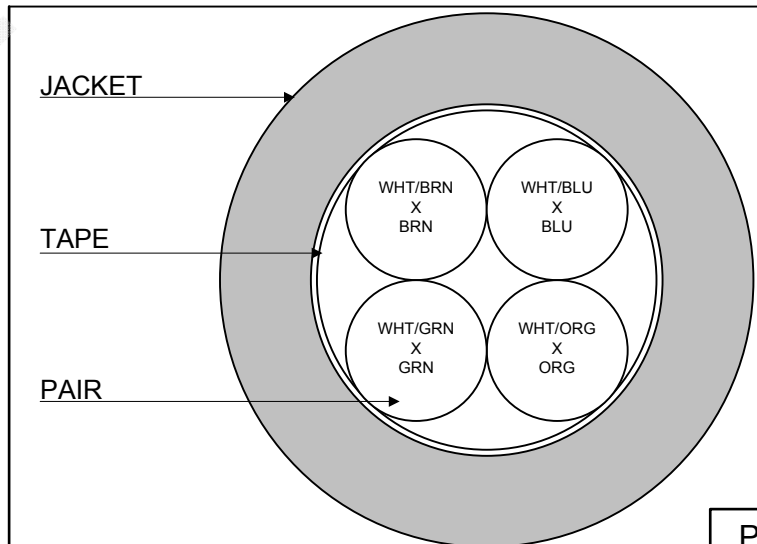
5) APPLICATION:  
 FOR APPLICATIONS REQUIRING A RUGGED PATCH CORD ASSEMBLY. MEETS CATEGORY 5e ASSEMBLY SPECIFICATIONS. ALSO FOR USE IN PLUG TO PLUG CHANNELS (NO JACKS OR HORIZONTAL CABLE). SEE ATTENUATION TABLE FOR EQUIVALENT CHANNEL LENGTH. RoHS COMPLIANT MATERIALS.

6) PRINT:  
 QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD P/N **XXXXX** -- RoHS --  
**(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

NOTE: **XXXXX** WILL BE QWC'S 5 DIGIT P/N TO BE DETERMINED AT TIME OF ORDER.

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



PS1576

Created 05/05/14	BMD DRAWN: 05/05/14
REV. 01	GBM CHECKED: 05/06/14



TITLE

DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET PATCH CABLE – 4PR

PRELIMINARY SPECIFICATION IS FOR DESIGN REVIEW PURPOSES ONLY. A PRODUCT SPECIFICATION WITH A QWC PERMANENT PART NUMBER WILL BE PROVIDED FOR CUSTOMER SIGNATURE BEFORE AN ORDER WILL BE ACCEPTED.

## 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.	300V (MANUFACTURER'S RECOMMENDED)	
D.C. RESISTANCE, MAX.	14.0 $\Omega$	
IMPEDANCE, NOM.	100 +/- 15 $\Omega$ 1-100 MHz; 100 +/- 20 $\Omega$ 1-350 MHz	
RETURN LOSS	1 $\leq f <$ 10 MHz	20 + 5 LOG( $f$ ) dB MIN
	10 $\leq f <$ 20 MHz	25 dB MIN
	20 $\leq f \leq$ 100 MHz	25- 8.6 LOG( $f/20$ ) dB MIN
NEXT	1 $\leq f \leq$ 100 MHz	35.3 - 15 LOG( $f/100$ ) dB MIN
PSNEXT	1 $\leq f \leq$ 100 MHz	32.3 - 15 LOG( $f/100$ ) dB MIN
ACRF	1 $\leq f \leq$ 100 MHz	23.8 - 20 LOG( $f/100$ ) dB MIN
PSACRF	1 $\leq f \leq$ 100 MHz	20.8 - 20 LOG( $f/100$ ) dB MIN
ATTENUATION	(SEE BELOW)	
DELAY	1 $\leq f \leq$ 100 MHz	534 + 36 $\sqrt{f}$ ns MAX
DELAY SKEW	1 $\leq f \leq$ 100 MHz	<25ns
LCL	1 $\leq f \leq$ 100 MHz	-38 dB MIN
VELOCITY OF PROPAGATION	68%	

## ATTENUATION:

FREQUENCY	SPEC 70M OF CABLE (CAT 5e CHANNEL)	ATTENUATION PER METER
1.0	2.5	.036
4.0	4.5	.064
8.0	6.3	.09
10.0	7.0	.1
16.0	9.2	.13
20.0	10.3	.15
25.0	11.4	.16
31.25	12.8	.18
62.5	18.5	.26
100.0	24.0	.343

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

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