

1) CONSTRUCTION:  
 CONDUCTOR: 22 AWG 19/.0058 STRANDED TINNED COPPER  
 INSULATION: HIGH DENSITY POLYETHYLENE, .009" NOM. WALL THICKNESS  
 PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS  
 CABLE: (2) TWISTED PAIRS TWISTED TOGETHER WITH FILLER AND WRAPPED WITH CLEAR POLYESTER TAPE TO FORM A CABLE CORE  
 JACKET: THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .042" NOM. WALL THICKNESS (PRESSURE)  
 NOM. DIA. .028"  
 .048" MAX  
 .093"  
 .186"  
 OVERALL CABLE DIAMETER .270" ± .010" (BY PI TAPE)

2) PHYSICAL PROPERTIES:  
 TEMPERATURE RATING, MAX. 75°C (JACKET 105°C, 75°C OIL)  
 TEMPERATURE RATING, MIN. -40°C  
 WT./M', NOM., NET. 31.3 LBS.  
 JACKET IS WELD SPATTER RESISTANT  
 JACKET IS SUNLIGHT RESISTANT  
 JACKET IS CUTTING/MACHINING OIL RESISTANT (PER QUABBIN TEST REPORT #TR 08-0001) (6 MONTHS @ 20°C)  
 TENSILE STRENGTH RETENTION, NOM. 80%  
 ELONGATION RETENTION, NOM. 100%

FLEX LIFE 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)  
 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)

CHART 1:

QUABBIN P/N	JACKET COLOR
5900	BLACK
5901	BLUE
5902	TEAL

3) ELECTRICAL CHARACTERISTICS:  
 SEE PAGE 2

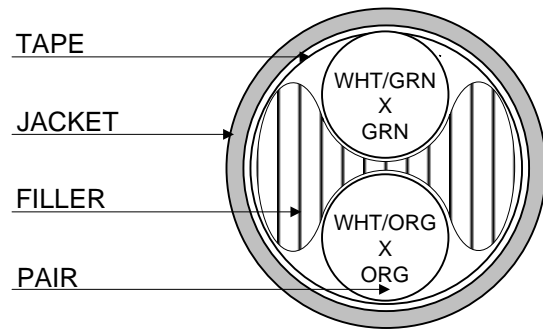
4) AGENCY APPROVALS:  
 UL AWM 2463 (80C 600V)  
 NEC (UL) TYPE PLTC  
 NEC (UL) TYPE CMX OUTDOOR - CM  
 CEC C(UL) TYPE CMX OUTDOOR - CM  
 PENNSYLVANIA D.E.P. – MSHA  
 EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II).

5) APPLICATION:  
 FOR APPLICATIONS REQUIRING A RUGGED PATCH CORD ASSEMBLY. DESIGNED TO RELIABLY TERMINATE TO M12 CONNECTORS. LOW LOSS DESIGN MEETS HORIZONTAL CABLE INSERTION LOSS ALLOWING LONG PATCH RUNS.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)  
 QUABBIN DATAMAX EXTREME HI-FLEX INDUSTRIAL 5e ETHERNET/IP PATCH CORD P/N (QWC P/N PER CHART 1) -- (UL) TYPE PLTC OIL RES I & II SUN RES OR C(UL)US TYPE CMX OUTDOOR - CM 2PR U/UTP 22 AWG 75C OR AWM 2463 80C 600V -- P-07-KA140018-MSHA -- 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 3/01/13	DRAWN: 10/17/19	
REV. 08	CHECKED: 10/18/19	
TITLE DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET PATCH CABLE -- 2 PR -- TYPE PLTC, TYPE CMX OUTDOOR – CM, STYLE 2463, MSHA		
DRAWING # QWC0035		1 of 2

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

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 100 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184  
 CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 100 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. 15.9 Ω/1,000 @20°C

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

IMPEDANCE, NOM.	100 ± 15 Ω	1 – 100 MHz; 100 ± 20 Ω	100 – 350 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	1.02[1.967 √f + 0.023(f) + 0.050/√f] + 4*0.040*√f	dB MAX
DELAY	1 ≤ f ≤ 100 MHz	534 + 36/√f	ns MAX
DELAY SKEW	1 ≤ f ≤ 100 MHz	<25	ns
VELOCITY OF PROPAGATION	68%		

\*PER ODVA VOLUME 2 ETHERNET/IP

Created 3/01/13	DRAWN: SGH 10/17/19	
REV. 08	CHECKED: ZRS 10/18/19	
TITLE DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET PATCH CABLE -- 2 PR -- TYPE PLTC, TYPE CMX OUTDOOR – CM, STYLE 2463, MSHA		
DRAWING #		QW/C0035
		2 of 2

CUSTOMER APPROVAL:

DATE: