

1) CONSTRUCTION:

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

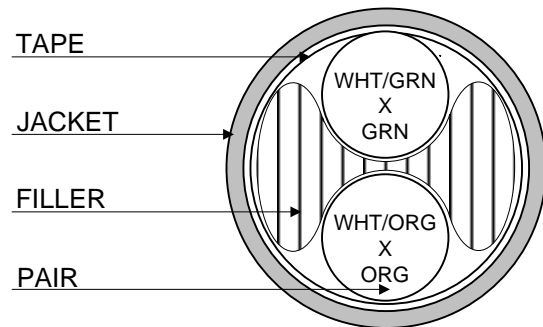
4) AGENCY APPROVALS:
 UL AWM 2463 (80C 600V)
 NEC (UL) TYPE PLTC
 NEC (UL) TYPE CMX OUTDOOR - CM
 CEC C(UL) TYPE CMX OUTDOOR - CM
 PENNSYLVANIA D.E.P. – MSHA
 EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II).

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: 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 #		QWC0035

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

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