

1) CONSTRUCTION:

CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	NOM. DIA.
INSULATION:	HIGH DENSITY POLYETHYLENE, .010" NOM. WALL THICKNESS	.028"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.048" MAX.
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH CLEAR POLYESTER TAPE TO FORM A CABLE CORE	.098"
JACKET:	THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .042" NOM. WALL THICKNESS (PRESSURE)	.206"
	OVERALL CABLE DIAMETER	.290" NOM ± .005" (BY PI TAPE)

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.	40.8 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 (PENDING) 1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS)
 (126 CYCLES/MIN, @ 20°C) 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)

CHART 1:

QUABBIN P/N	JACKET COLOR
5932	BLACK
5933	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)

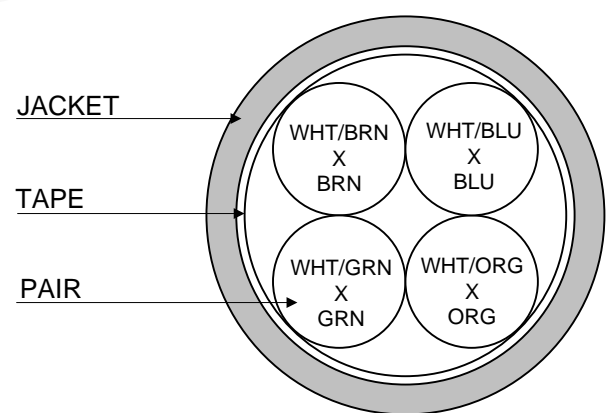
5) APPLICATION:
FOR APPLICATIONS REQUIRING A RUGGED PATCH CORD ASSEMBLY. DESIGNED TO RELIABLY TERMINATE TO M12 CONNECTORS.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
 QUABBIN DATAMAX EXTREME HI-FLEX INDUSTRIAL 6
 ETHERNET/IP PATCH CORD P/N (P/N PER CHART 1) --
 (UL) TYPE PLTC OIL RES II SUN RES OR C(UL)US TYPE
 CMX OUTDOOR - CM 4PR 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/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



PS1559

Created 06/22/16	DRAWN: SGH 07/21/20	
REV. 03	CHECKED: ZRS 07/21/20	



TITLE
DATAMAX EXTREME HIGH FLEX INDUSTRIAL
ETHERNET/IP PATCH CABLE -- 4 PR -- TYPE PLTC,
TYPE CMX OUTDOOR - CM, STYLE 2463, MSHA -- CAT 6

DRAWING # **QWC0096** 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 6 CHANNEL REQUIREMENTS TO 85 METER LENGTH	
CAPACITANCE, MUTUAL, NOM.	13.5 PF/FT. AT 1 MHz
DIELECTRIC WITHSTANDING, MIN.	2000V 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 \pm 15 Ω 1 – 100 MHz; 100 \pm 20 Ω 100 – 350 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 250 MHz	26 – 5 LOG(f/20) dB MIN*
NEXT	1 \leq f \leq 250 MHz	44.3 – 15 LOG(f/100) dB MIN
PSNEXT	1 \leq f \leq 250 MHz	42.3 – 15 LOG(f/100) dB MIN
ACRF	1 \leq f \leq 250 MHz	27.8 – 20 LOG(f/100) dB MIN
PSACRF	1 \leq f \leq 250 MHz	24.8 – 20 LOG(f/100) dB MIN
INSERTION LOSS	1 \leq f \leq 250 MHz	1.2*[1.808 \sqrt{f} + 0.017(f) + 0.2/ \sqrt{f}] dB MAX
DELAY	1 \leq f \leq 250 MHz	534 + 36/ \sqrt{f} ns MAX
DELAY SKEW	1 \leq f \leq 250 MHz	<45 ns
TCL	1 \leq f < 30 MHz	\geq 73 – 15 LOG(f) dB; 40 dB MAX
	30 \leq f \leq 250 MHz	\geq 80.4 – 20 LOG(f) dB
ELTCTL	1 \leq f \leq 30 MHz	\geq 50 – 20 LOG(f) dB
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

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DRAWING #		QWC0096
		2 of 2

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