

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	.0236"
INSULATION:	HIGH DENSITY POLYETHYLENE, .012" NOM. WALL THICKNESS	.047"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.094"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A CLEAR POLYESTER TAPE TO FORM A CABLE CORE.	.201"
SHIELD:	AN OVERALL SHIELD OF ALUMINIZED POLYESTER FOIL (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE AND SHALL INCLUDE A 26 AWG 7/34 TINNED COPPER DRAIN WIRE IN CONTACT WITH THE METALIZED SURFACE.	.207"
JACKET:	THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .033" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER .273" ± .010"

2) PHYSICAL PROPERTIES:	
TEMPERATURE RATING, MAX.	75°C
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	35.2 LBS.
JACKET IS WELD SPATTER RESISTANT	
JACKET IS SUNLIGHT RESISTANT	
JACKET CUTTING/MACHINING OIL RESISTANCE (6 MONTHS @ 20°C)	
TENSILE STRENGTH RETENTION, NOM.	80%
ELONGATION RETENTION, NOM.	100%

CHART 1:

QUABBIN P/N	JACKET COLOR
5928	BLACK
5929	TEAL

3) ELECTRICAL CHARACTERISTICS:  
SEE PAGE 2

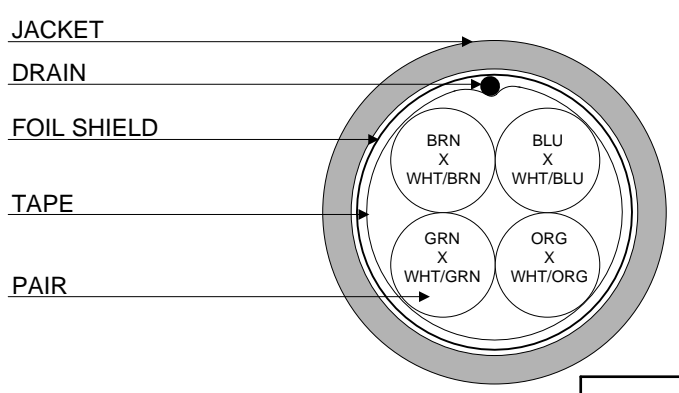
4) AGENCY APPROVALS:  
 NEC (UL) TYPE CMX OUTDOOR - CM  
 CEC C(UL) TYPE CMX OUTDOOR - CM  
 EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)  
 QUABBIN DATAMAX EXTREME INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e F/UTP P/N (P/N PER CHART 1) -  
 C(UL)US TYPE CMX OUTDOOR - CM 4PR 24 AWG 75C  
 SUN RES -- CE RoHS -- (LOT DESIGNATOR)  
 (SEQUENTIAL FOOTAGE)

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

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



CUSTOMER APPROVAL:

DATE:

Created 10/26/15	DRAWN: SGH 05/16/19	
REV. 02	CHECKED: ZRS 05/17/19	
TITLE 4PR. F/UTP DATAMAX EXTREME INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 5e		
DRAWING #	QWC0092	1 of 2

## 3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 85 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184  
 CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 85 METER LENGTH  
 CAPACITANCE, MUTUAL, NOM. 13.5 PF/FT. AT 1 MHz  
 DIELECTRIC WITHSTANDING, MIN. 1500V RMS  
 VOLTAGE RATING, MAX. 300V  
 D.C. RESISTANCE, MAX. 26.2  $\Omega$ /1,000' (14.0  $\Omega$ /100m)


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

IMPEDANCE	100 $\pm$ 15 $\Omega$ 1 - 100 MHz	
IMPEDANCE, SMOOTHED	100 $\pm$ 20 $\Omega$ TYPICAL 5 - 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*
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
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	<25 ns
VELOCITY OF PROPAGATION	68%	

\*PER ODVA VOLUME 2 ETHERNET/IP

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DRAWING #		QWC0092
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