

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	.0280"
INSULATION:	HIGH DENSITY POLYETHYLENE, .013" NOM. WALL THICKNESS	.054"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.108"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER WITH FILLER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	.214"
SHIELDS:	AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (75% MINIMUM COVERAGE), SHALL BE APPLIED OVER THE CABLE CORE. A SECOND SHIELD OF ALUMINIZED POLYESTER FOIL (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID.	.233"
JACKET:	THERMOPLASTIC ELASTOMER, GREEN (#CR70), .042" NOM. WALL THICKNESS (PRESSURE)	.317" (.322" MAX.) (BY CALIPER)
	OVERALL CABLE DIAMETER	

2) PHYSICAL PROPERTIES:	
TEMPERATURE RATING, MAX.	75°C & 80°C (JACKET 105°C, 75°C OIL)
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	49.4 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	
(126 CYCLES/MIN, @ 20°C)	
TORSION TEST	
(1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C)	5 MILLION CYCLE TEST
	3 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

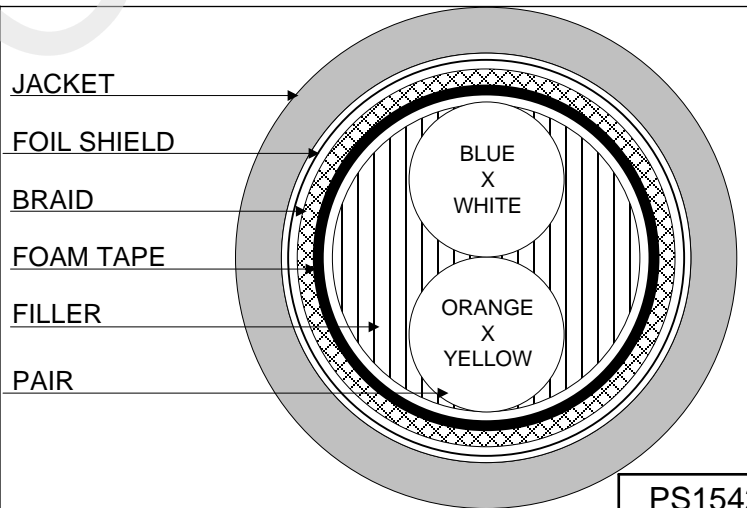
4) AGENCY APPROVALS:  
UL AWM STYLE 2463 (80C 600V)  
NEC (UL) TYPE PLTC  
NEC (UL) TYPE ITC  
PENNSYLVANIA D.E.P. – MSHA  
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:  
PATCH CABLE FOR PROFINET TYPE B AND C CAT 5e APPLICATIONS. U.S. PATENT NO. US 8,487,184 B2

6) PRINT:  
QUABBIN DATAMAX INDUSTRIAL PROFINET TYPE B AND C CAT 5E SHIELDED P/N 5924 -- U.S. PATENT NO. US 8,487,184 B2 -- (UL) TYPE PLTC 2PR 22 AWG SF/UTP 75C SUNLIGHT RESISTANT OIL RES I & II OR ITC OR AWM 2463 80C 600V -- P-07-KA140018-MSHA -- CE RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)

7) COLOR CODE:  
1. BLUE X WHITE  
2. ORANGE X YELLOW

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



PS1542

Created 12/30/13	DRAWN: 10/15/19	SGH
REV. 08	CHECKED: 10/16/19	ZRS



TITLE  
DATAMAX EXTREME INDUSTRIAL ETHERNET CABLE --  
2 PR – TYPE PLTC, TYPE ITC STYLE 2463, MSHA --  
CAT 5e, PROFINET

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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. 2000V RMS  
 VOLTAGE RATING, MAX. 600V  
 D.C. RESISTANCE, MAX. 15.9  $\Omega$ /1,000' @20°C

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

IMPEDANCE	100 $\pm$ 15 $\Omega$ 1 – 100 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 – 7 LOG(f/20) dB MIN
NEXT	1 $\leq$ f $\leq$ 100 MHz	35.3 – 15 LOG(f/100) dB MIN
ACRF	1 $\leq$ f $\leq$ 100 MHz	23.8 – 20 LOG(f/100) dB MIN
INSERTION LOSS	1 $\leq$ f $\leq$ 100 MHz	1.02*(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	$\leq$ 20ns Per IEC 61156-5
COUPLING ATTENUATION	30 $\leq$ f $\leq$ 100 MHz	$\geq$ 80 dB Segregation class d acc. EN 50174-2
VELOCITY OF PROPAGATION	69%	

\*MEETS 100M CHANNEL REQUIREMENTS

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