

1) CONSTRUCTION:

CONDUCTOR:	22 AWG SOLID TINNED COPPER	NOM. DIA.	.0254"
INSULATION:	HIGH DENSITY POLYETHYLENE, .012" NOM. WALL THICKNESS		.050"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.100"
CABLE:	(2) TWISTED PAIRS TWISTED TOGETHER WITH FILLER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.		.200"
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.		.219"
JACKET:	THERMOPLASTIC ELASTOMER, GREEN (CR# 70), .043" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER	.305" (.315" MAX.) (BY PI TAPE)

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.	47.8 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%

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:

HORIZONTAL CABLE FOR PROFINET TYPE A CAT 5e APPLICATIONS. U.S. PATENT NO. US 8,487,184 B2

6) PRINT:

QUABBIN DATAMAX INDUSTRIAL PROFINET
 TYPE A CAT 5E SHIELDED P/N 5923 -- 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

JACKET

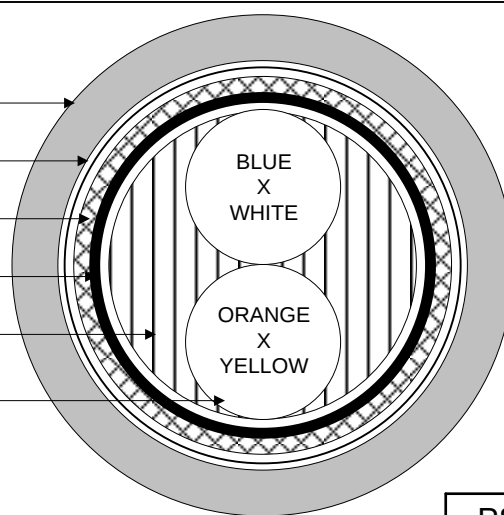
FOIL SHIELD

BRAID

FOAM TAPE

FILLER

PAIR



PS1532

Created 12/30/13
 DRAWN: 10/15/19
 REV. 04
 CHECKED: 10/16/19



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

QUABBIN P/N 5923

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. 2000V RMS
 VOLTAGE RATING, MAX. 600V
 D.C. RESISTANCE, MAX. 17.2 Ω /1,000' @20°C

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

IMPEDANCE	100 $\pm$ 15 Ω 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	$1.967\sqrt{f} + 0.023(f) + 0.050/\sqrt{f}$ dB MAX
DELAY	$1 \leq f \leq 100$ MHz	$534 + 36/\sqrt{f}$ ns MAX
DELAY SKEW	$1 \leq f \leq 100$ MHz	≤ 20 ns Per IEC 61156-5
COUPLING ATTENUATION	$30 \leq f \leq 100$ MHz	≥ 80 dB Segregation class d acc. EN 50174-2
VELOCITY OF PROPAGATION	69%	

PS1532

Created 12/30/13	DRAWN: SGH 10/15/19
REV. 04	CHECKED: ZRS 10/16/19



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

CUSTOMER APPROVAL:

DATE:

QUABBIN P/N 5923

2 of 2