

1) CONSTRUCTION:		NOM. DIA.
CONDUCTOR:	22 AWG 19/.0058 STRANDED TINNED COPPER	.0280"
INSULATION:	HIGH DENSITY POLYETHYLENE, .014" NOM. WALL THICKNESS	.057"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS	.114"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.	.250"
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.	.272"
JACKET:	THERMOPLASTIC ELASTOMER, TEAL, .041" NOM. WALL THICKNESS (PRESSURE) OVERALL CABLE DIAMETER	.354" ± .010" (BY CALIPER)

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.	59.7 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) (126 CYCLES/MIN, @ 20°C)	1 MILLION CYCLE TEST (10X CABLE O.D., MINIMUM RADIUS) 10 MILLION CYCLE TEST (20X CABLE O.D., MINIMUM RADIUS)
TORSION TEST (PENDING) (1 LB LOAD, 360°, 71 CYCLES/MIN, @ 20°C)	3 MILLION CYCLE TEST

3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2

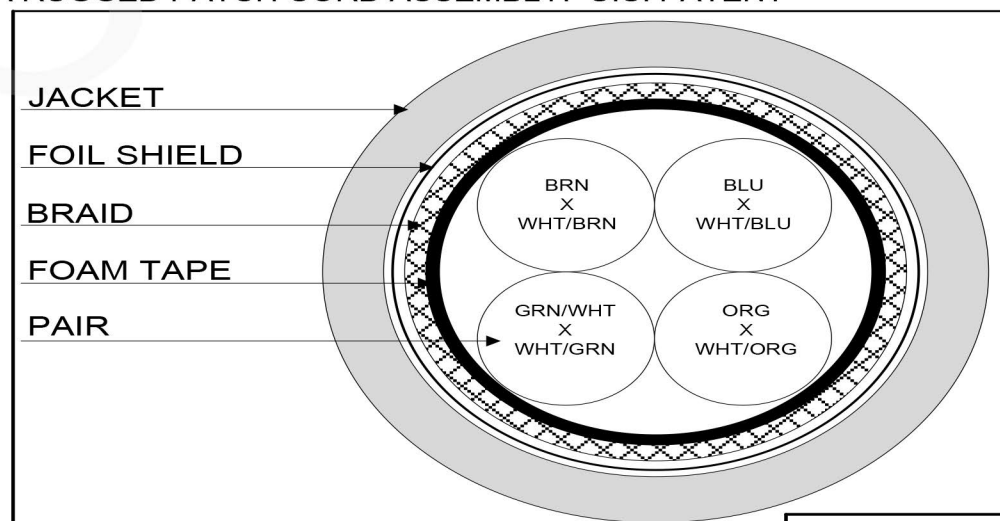
4) AGENCY APPROVALS:
UL AWM STYLE 2463 (80C 600V)
NEC (UL) TYPE PLTC
NEC (UL) TYPE ITC
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:
PATCH CABLE FOR CAT 5e APPLICATIONS REQUIRING A RUGGED PATCH CORD ASSEMBLY. U.S. PATENT NO. US 8,487,184 B2

6) PRINT:
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD CAT 5e SF/UTP P/N 5921 -- U.S. PATENT NO. US 8,487,184 B2 -- (UL) PLTC 4PR 22 AWG 75C SUNLIGHT RESISTANT OIL RES I & II OR ITC OR AWM 2463 80C 600V -- CE RoHS -- **(LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)**

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

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



PS1537

Created 10/23/13	DRAWN: SGH 10/18/19
REV. 06	CHECKED: ZRS 10/18/19



TITLE
DATAMAX EXTREME INDUSTRIAL ETHERNET/IP CABLE -- 4 PR -- STYLE 2463, TYPE PLTC, TYPE ITC -- CAT 5e

QUABBIN P/N 5921 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. 15.9 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 + 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*
PS NEXT	1 $\leq f \leq$ 100 MHz	32.3 – 15 LOG(f /100) dB MIN
NEXT	1 $\leq f \leq$ 100 MHz	35.3 – 15 LOG(f /100) dB MIN
PSACRF	1 $\leq f \leq$ 100 MHz	20.8 – 20 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}] + 4*0.040 \sqrt{f} dB MAX
DELAY	1 $\leq f \leq$ 100 MHz	534 + 36/ \sqrt{f} ns MAX
DELAY SKEW (ORG X WHT/ORG, GRN/WHT X WHT/GRN PAIRS) (BLU X WHT/BLU, BRN X WHT/BRN PAIRS)	1 $\leq f \leq$ 100 MHz	\leq 20 ns Per IEC 61156-5 < 45 ns
COUPLING ATTENUATION	30 $\leq f \leq$ 100 MHz	\geq 60 dB E3*
VELOCITY OF PROPAGATION	69%	

*PER ODVA VOLUME 2 ETHERNET/IP

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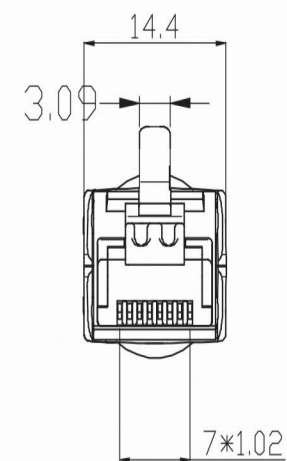
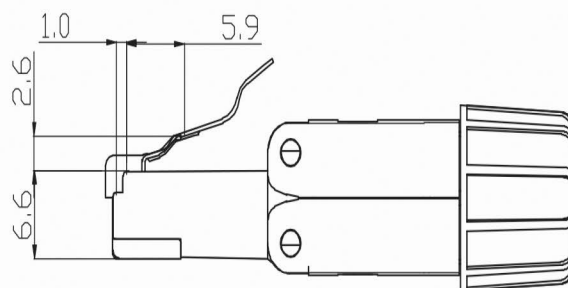
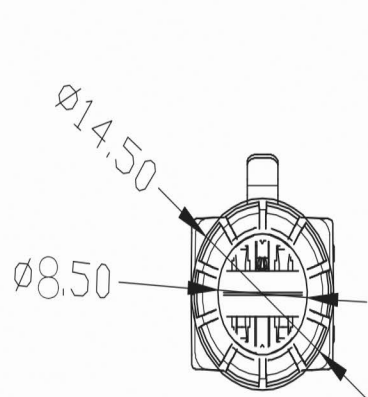
QUABBIN P/N	5921
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2 of 2

C/NO:

Material No.:

MODIFICATION

**TYPE:**

1. RJ45 CAT6A UNSHIELDED TOOLLESS PLUG
2. COLOUR: WHITE

CABLE MATCHED:

1. SOILD AND STRANDED
2. 22AWG/23AWG/24AWG

ELECTRICAL:

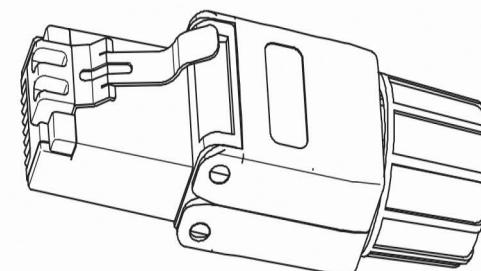
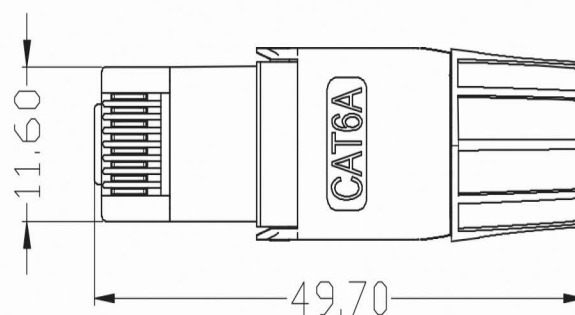
1. CONTACT RESISTANCE: 20m OHM
2. INSULATION RESISTANCE: $\leq 500M$ OHM @100 V DC
3. WITHSTAND VOLTAGE: DC1000V AC700V RMS 60HZ, I MIN
4. CAT6A PERMANENT LINK: CONFORM TO ANSI/TIA/EIA 568B. 2-10

ENVIRONMENTAL:

1. STORAGE: -40° / $+70^{\circ}$
2. OPERATION: -10° / $+60^{\circ}$

MECHANICAL:

1. PLASTIC MATERIAL: NEW PC
2. SHIELDED MATERIAL: ZINC ALLOY NICKEL PLATING
3. TERMINAL PINS: PHOSPHOR BRONZE, ZIN PLATING
4. RJ45 CONTACT LIFE: 750 TIMES MIN
5. IDC TERMINAL LIFE: 250 TIMES MIN



Weltron[®]

Unit

SCALE

MATERIAL

DWG NO

SHEET

TITLE

44-751-8C6A-FTP