

1) CONSTRUCTION:

CONDUCTOR:	24 AWG 7/32 STRANDED TINNED COPPER	NOM. DIA.	.0236"
INSULATION:	HIGH DENSITY POLYETHYLENE, .011" NOM. WALL THICKNESS		.046"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.092"
CABLE:	4 TWISTED PAIRS TWISTED TOGETHER WITH A CENTRAL SPLINE AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE.		.228"
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.		.247"
JACKET:	THERMOPLASTIC ELASTOMER, GREEN (#CR70), .039" NOM. WALL THICKNESS (PRESSURE)	OVERALL CABLE DIAMETER	.325" ± .010" (BY PI TAPE)

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C & 80°C
TEMPERATURE RATING, MIN.	-20°C (PER UL 444 COLD BEND)
TEMPERATURE RATING, MIN.	-40°C (MANUFACTURER'S RECOMMENDED)
WT./M', NOM., NET.	51.2 LBS.
JACKET IS SUNLIGHT RESISTANT	
JACKET IS WELD SPATTER 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

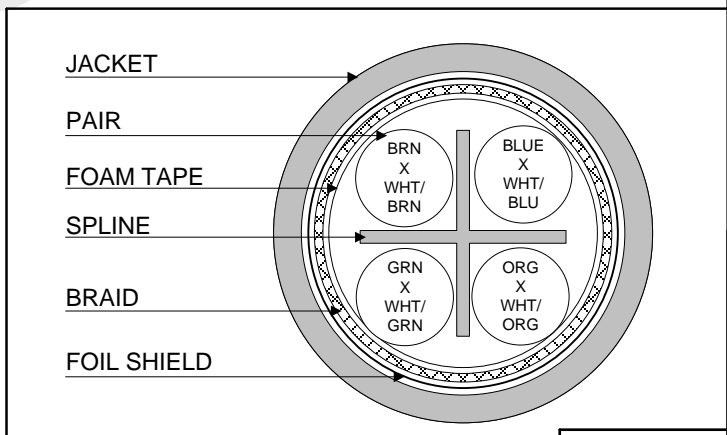
4) AGENCY APPROVALS:
NEC (UL) TYPE CMX OUTDOOR - CM
CEC C(UL) TYPE CMX OUTDOOR - CM
UL AWM STYLE 2463
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:
SHIELDED FLEXIBLE PATCH/JUMPER CABLE FOR PROFINET TYPE B AND C, TIA-568.2-D CATEGORY 6 AND 6a APPLICATIONS.
PATENT NO. US 8,487,184 B2

6) PRINT:
QUABBIN DATAMAX INDUSTRIAL PROFINET TYPE B AND C CAT 6/6a SF/UTP PATCH CORD P/N 5937 -- PATENT NO. US 8,487,184 B2 -- C(UL)US TYPE CMX OUTDOOR - CM 4PR 24 AWG 75C SUN RES OR AWM 2463 80C 600V -- CAT 6a TIA-568.2-D -- 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) PACKAGING:
TO BE PACKAGED AS PER QWC'S
STANDARD PACKAGING



Created 04/12/23	DRAWN: BMD 04/12/23	
REV. 01	CHECKED: ZRS 04/13/23	
TITLE 4 PR 24 AWG SF/UTP HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 6/6a, PROFINET		
QUABBIN P/N	5937	1 of 2

CUSTOMER APPROVAL: _____ DATE: _____


3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 88 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
 CABLE WILL MEET CAT 6a CHANNEL REQUIREMENTS TO 88 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. 26.2 Ω/1,000'

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

IMPEDANCE, NOM.	100 ± 15 Ω 1 - 100 MHz 100 ± 20 Ω 100 - 500 MHz		
RETURN LOSS	1 ≤ f < 10 MHz 10 ≤ f < 20 MHz 20 ≤ f < 100 MHz 100 ≤ f ≤ 500 MHz	20 + 6 LOG(f) dB MIN* 26 dB MIN* 26 - 5 LOG(f/20) dB MIN* 25 - 8.6 LOG(f/20) dB MIN	
PS NEXT	1 ≤ f ≤ 500 MHz	42.3 - 15 LOG(f/100) dB MIN	
NEXT	1 ≤ f ≤ 500 MHz	44.3 - 15 LOG(f/100) dB MIN	
PSACRF	1 ≤ f ≤ 500 MHz	24.8 - 20 LOG(f/100) dB MIN	
ACRF	1 ≤ f ≤ 500 MHz	27.8 - 20 LOG(f/100) dB MIN	
INSERTION LOSS	1 ≤ f ≤ 500 MHz	1.2 [1.82√(f) + 0.0091(f) + 0.25/√(f)] dB MAX	
DELAY	1 ≤ f ≤ 500 MHz	534 + 36/√(f) ns MAX	
DELAY SKEW	1 ≤ f ≤ 500 MHz	≤45 ns	
PS ANEXT LOSS (6 AROUND 1)	1 ≤ f ≤ 500 MHz	62.5 - 15 LOG(f/100) dB MIN 67 dB MIN	50 - 500 MHz 1 - 50 MHz
PSAACRF	1 ≤ f ≤ 500 MHz	38.2 - 20 LOG(f/100) dB MIN	
COUPLING ATTENUATION	30 ≤ f ≤ 100 MHz	≥ 80 dB Segregation class d acc. EN 50174-2	
VELOCITY OF PROPAGATION	68%		

*PER ODVA VOLUME 2 ETHERNET/IP

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TITLE 4 PR 24 AWG SF/UTP HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD -- CAT 6/6a, PROFINET		
QUABBIN P/N	5937	2 of 2

CUSTOMER APPROVAL:

DATE: