

- 1) CONSTRUCTION:
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|-------------|---|------------------------|-----------------------------------|
| CONDUCTOR: | 26 AWG 7/34 STRANDED TINNED COPPER | NOM. DIA. | .019" |
| INSULATION: | HIGH DENSITY POLYETHYLENE, .009" NOM. WALL THICKNESS | | .036" |
| PAIRS: | COLOR CODED SINGLES TWISTED INTO PAIRS | | .072" |
| CABLE: | (4) TWISTED PAIRS TWISTED TOGETHER WITH A CENTRAL SPLINE AND WRAPPED WITH A FOAM POLYPROPYLENE TAPE TO FORM A CABLE CORE. | | .176" |
| SHIELDS: | AN OVERALL SHIELD OF 38 AWG TINNED COPPER BRAID (80% MINIMUM COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE. AN ALUMINIZED POLYESTER FOIL SHIELD (FOIL IN, 100% COVERAGE) SHALL BE APPLIED OVER THE BRAID SHIELD. | | .195" |
| JACKET: | POLYURETHANE, BLACK, .022" NOM. WALL THICKNESS (PRESSURE) | OVERALL CABLE DIAMETER | .239" NOM. (± .010") (BY CALIPER) |
- 2) PHYSICAL PROPERTIES:
- | | |
|--------------------------|-----------|
| TEMPERATURE RATING, MAX. | 75°C |
| TEMPERATURE RATING, MIN. | -40°C |
| WT./M', NOM., NET. | 33.0 LBS. |
| JACKET IS UV RESISTANT | |
- 3) ELECTRICAL CHARACTERISTICS:
SEE PAGE 2
- 4) AGENCY APPROVALS:
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)
- 5) APPLICATION:
SHIELDED FLEXIBLE PATCH/JUMPER CABLE TO SUPPORT SCREENED 568.2-D CATEGORY 6 AND 6a APPLICATIONS. RoHS COMPLIANT MATERIALS MEET EU DIRECTIVE 2002/95/EC, EU DIRECTIVE 2011/65/EU, AND EU DIRECTIVE 2015/863/EU. PATENT NO. US 8,487,184 B2.
- 6) PRINT: (WHITE INK)
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD CAT 6/6a SF/UTP P/N 5919 4PR 26 AWG -- PATENT NO. US 8,487,184 B2 -- 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

JACKET

SHIELD

BRAID

SPLINE

PAIR

FOAM TAPE

Created 06/05/13	DRAWN: SGH 01/05/23
REV. 08	CHECKED: JFR 1/9/23



TITLE
4PR. SF/UTP HIGH FLEX INDUSTRIAL
ETHERNET/IP PATCH CORD -- CATEGORY 6/6a

QUABBIN P/N 5919

1 of 2

CUSTOMER APPROVAL:

DATE:

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 70 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
 CABLE WILL MEET CAT 6a CHANNEL REQUIREMENTS TO 70 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. 42.6 Ω /1,000'


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

IMPEDANCE, NOM.	100 \pm 15 Ω 1 - 100 MHz 100 \pm 20 Ω 100 - 500 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* $100 < f \leq 500$ MHz 25 - 8.6 LOG($f/20$) dB MIN	
PSNEXT	$1 \leq f \leq 500$ MHz 42.3 - 15 LOG ($f/100$) dB MIN	
NEXT	$1 \leq f \leq 500$ MHz 44.3 - 15 LOG ($f/100$) dB MIN	
PS ACRF	$1 \leq f \leq 500$ MHz 24.8 - 20 LOG($f/100$) dB MIN	
ACRF	$1 \leq f \leq 500$ MHz 27.8 - 20 LOG($f/100$) dB MIN	
INSERTION LOSS	$1 \leq f \leq 500$ MHz 1.5[1.82 \sqrt{f} + 0.0091(f) + 0.25/ \sqrt{f}] dB MAX	
DELAY	$1 \leq f \leq 500$ MHz 534 + 36/SQRT(f) ns MAX	
DELAY SKEW	$1 \leq f \leq 500$ MHz <45 ns	
TCL	$1 \leq f \leq 500$ MHz 30 - 10 LOG($f/100$) dB MIN	
ELTCTL	$1 \leq f \leq 30$ MHz 35 - 20 LOG(f) dB MIN	
PSANEXT LOSS (6 AROUND 1)	$1 \leq f < 50$ MHz 67 dB MIN $50 \leq f \leq 500$ MHz 62.5 - 15 LOG ($f/100$) dB MIN	
PSAFEXT (6 AROUND 1)	$1 \leq f \leq 500$ MHz 38.2 - 20 LOG($f/100$) dB MIN	
VELOCITY OF PROPAGATION	68%	

*PER ODVA VOLUME 2 ETHERNET/IP

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