

1) CONSTRUCTION:

| | | | |
|-------------|--|------------------------|-----------------------------|
| CONDUCTOR: | 26 AWG 7/34 STRANDED TINNED COPPER | NOM. DIA. | .019" |
| INSULATION: | HIGH DENSITY POLYETHYLENE, .009" NOM. WALL THICKNESS | | .037" |
| PAIRS: | COLOR CODED SINGLES TWISTED INTO PAIRS | | .074" |
| CABLE: | (2) TWISTED PAIRS TWISTED TOGETHER AND WRAPPED WITH A FOAM POLYOLEFIN TAPE (100% COVERAGE) TO FORM A CABLE CORE. | | .120" |
| 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. | | .139" |
| JACKET: | THERMOPLASTIC ELASTOMER, (COLOR, PER CHART 1), .043" NOM. WALL THICKNESS (PRESSURE) | OVERALL CABLE DIAMETER | .225" ± .010" BY PI TAPE |

2) PHYSICAL PROPERTIES:

| | |
|--|---|
| TEMPERATURE RATING, MAX. | 75°C & 80°C |
| TEMPERATURE RATING, MIN. | -40°C (MANUFACTURER'S RECOMMENDED) |
| WT./M', NOM., NET | 28.5 LBS. |
| JACKET IS WELD SPATTER RESISTANT | |
| JACKET IS SUNLIGHT RESISTANT | |
| FLEX LIFE (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 |
| JACKET CUTTING/MACHINING OIL RESISTANCE (6 MONTHS @ 20°C) | |
| TENSILE STRENGTH RETENTION, NOM. | 80% |
| ELONGATION RETENTION, NOM. | 100% |

CHART 1:

| QUABBIN P/N | JACKET COLOR |
|-------------|--------------|
| 5085 | BLACK |
| 5086 | BLUE |
| 5087 | TEAL |

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (UL) CMX OUTDOOR - CM
CEC C(UL) CMX OUTDOOR - CM
EU CE MARK: MEETS EU DIRECTIVE 2011/65/EU (RoHS II)

5) APPLICATION:

PASSES VW-1.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)

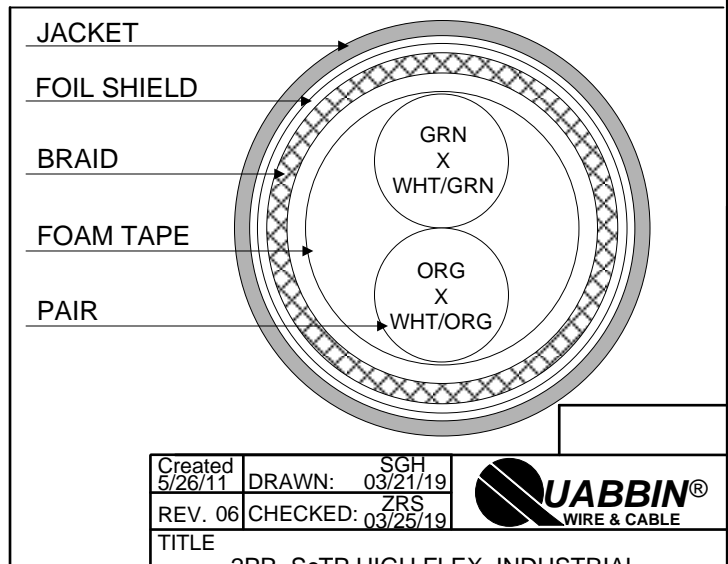
QUABBIN DATAMAX EXTREME HIGH FLEX INDUSTRIAL ETHERNET/IP PATCH CORD 2 PR CAT 5e SF/UTP P/N (**P/N PER CHART 1**) -- C(UL)US TYPE CMX OUTDOOR - CM 2PR 26 AWG 75C SUN RES -- CE RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:

1. GREEN X WHITE/GREEN
2. ORANGE X WHITE/ORANGE

8) PACKAGING:

TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



| | |
|--------------------|--------------------------|
| Created 5/26/11 | DRAWN: SGH 03/21/19 |
| REV. 06 | CHECKED: ZRS 03/25/19 |



TITLE
2PR. ScTP HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD -- CAT 5e

CUSTOMER APPROVAL:

DATE:

3) ELECTRICAL CHARACTERISTICS:

POE COMPLIANT TO 68 METERS WHEN INSTALLED PER RECOMMENDATIONS IN TIA TSB-184
 CABLE WILL MEET CAT 5e CHANNEL REQUIREMENTS TO 68 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 | 100 ± 15 Ω | 1 - 100 MHz |
| IMPEDANCE, SMOOTHED | 100 ± 10 Ω | TYPICAL 5 - 100 MHz |
| RETURN LOSS | 1 ≤ f < 10 MHz | 20 + 6 LOG(f) dB MIN* |
| | 10 ≤ f < 20 MHz | 26 dB MIN* |
| | 20 ≤ f ≤ 100 MHz | 26 - 5 LOG(f/20) dB MIN* |
| NEXT | 1 ≤ f ≤ 100 MHz | 35.3 - 15 LOG(f/100) dB MIN |
| ACRF | 1 ≤ f ≤ 100 MHz | 23.8 - 20 LOG(f/100) dB MIN |
| INSERTION LOSS | 1 ≤ f ≤ 100 MHz | 1.5[1.967 √f + 0.023(f) + 0.050/√f] dB MAX |
| DELAY | 1 ≤ f ≤ 100 MHz | 534 + 36/√f ns MAX |
| DELAY SKEW | 1 ≤ f ≤ 100 MHz | <25 ns |
| TCL | 1 ≤ f ≤ 100 MHz | 30 - 10 LOG(f) dB, 40 dB MAX |
| ELTCTL | 1 ≤ f ≤ 30 MHz | 35 - 20 LOG(f) |
| COUPLING ATTENUATION PER IEC 62153-4-9 | 30 ≤ f ≤ 100 MHz | 60 dB MINIMUM |
| VELOCITY OF PROPAGATION | 68% | |

*PER ODVA VOLUME 2 ETHERNET/IP

| | | |
|--|--------------------------|---|
| Created 5/26/11 | DRAWN: SGH 03/21/19 |  |
| REV. 06 | CHECKED: ZRS 03/25/19 | |
| TITLE 2PR. ScTP HIGH FLEX INDUSTRIAL ETHERNET PATCH CORD -- CAT 5e | | |
| DRAWING # | | QW/C0027 |
| | | 2 of 2 |

CUSTOMER APPROVAL:

DATE: