

1) CONSTRUCTION:

|             |   |                        |                        |
|-------------|---|------------------------|------------------------|
| CONDUCTOR:  | 28 AWG 7/36 STRANDED TINNED COPPER  | NOM. DIA.              | .015"                  |
| INSULATION: | HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS  |                        | .031" MIN.             |
|             |   |                        | .0322" MAX.            |
| PAIRS:      | COLOR CODED SINGLES TWISTED INTO PAIRS  |                        | .064"                  |
| CABLE:      | (4) TWISTED PAIRS TWISTED TOGETHER TO FORM A CABLE CORE   |                        |                        |
| SHIELD:     | AN ALUMINUM POLYESTER ALUMINUM FOIL SHIELD (100% COVERAGE) SHALL BE APPLIED OVER THE CABLE CORE AND SHALL INCLUDE A 28 AWG STRANDED TINNED COPPER DRAIN WIRE IN CONTACT WITH THE OUTER SURFACE. |                        | .146"                  |
| JACKET:     | POLYVINYLCHLORIDE, ( <b>COLOR, PER CHART 1</b> ), .020" NOM. WALL THICKNESS   | OVERALL CABLE DIAMETER | .186" NOM<br>.191" MAX |

2) PHYSICAL PROPERTIES:

|                          |           |
|--------------------------|-----------|
| TEMPERATURE RATING, MAX. | 75°C      |
| TEMPERATURE RATING, MIN. | -20°C     |
| WT./M', NOM., NET.       | 15.2 LBS. |

CHART 1:

| QUABBIN P/N | JACKET COLOR |
|-------------|--------------|
| 2231        | BLACK        |
| 2232        | BROWN        |
| 2233        | RED          |
| 2234        | ORANGE       |
| 2235        | YELLOW       |
| 2236        | GREEN        |
| 2237        | BLUE         |
| 2238        | VIOLET       |
| 2239        | GRAY         |
| 2240        | WHITE        |
| 2241        | BEIGE        |
| 2242        | LIGHT BLUE   |
| 2243        | PINK         |
| 2244        | AQUA         |
| 2245        | LIME         |

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (UL) TYPE CMR  
CEC C(UL) TYPE CMR

5) APPLICATION:

RoHS COMPLIANT MATERIALS. MEETS TIA 568 C.2 CHANNEL REQUIREMENTS AT 56 METERS. 7.8 METERS OF PATCH CABLE WITH A 90 METERS PERMANENT LINK (97.8 METER CHANNEL) OR 10 METERS OF PATCH CABLE WITH AN 86 METER PERMANENT LINK (96 METER CHANNEL). SUPPORTS CAT 6A APPLICATIONS INCLUDING 10GBASE-T AT THESE LENGTHS. PATENT PENDING

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)  
QUABBIN DATAMAX MINI-6a F/UTP PATCH CORD P/N (**QWC P/N PER CHART 1**) -- PATENT PENDING -- C(UL)US TYPE CMR 28 AWG 75C -- RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:

1. WHITE/ORANGE X ORANGE
2. WHITE/BROWN X BROWN
3. WHITE/GREEN X GREEN
4. WHITE/BLUE X BLUE

8) PUT UPS

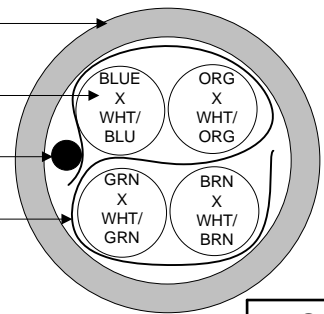
TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING

JACKET

PAIR

DRAIN

SHIELD



PS1584

|                     |                          |
|---------------------|--------------------------|
| Created<br>01/28/15 | BMD<br>DRAWN: 05/25/17   |
| REV. 08             | GBM<br>CHECKED: 05/25/17 |



TITLE  
DATAMAX MINI-6a 28 AWG CAT 6a F/UTP  
PATCH CABLE – TYPE CMR

|          |         |        |
|----------|---------|--------|
| DRAWING# | QWC0085 | 1 of 2 |
|----------|---------|--------|

CUSTOMER APPROVAL:

DATE:

3) ELECTRICAL CHARACTERISTICS: (FOR 100m OF CABLE)

|                               |                               |   |              |
|-------------------------------|-------------------------------|---|--------------|
| CAPACITANCE, MUTUAL, NOM.     | 13.5 PF/FT. AT 1 MHz          |   |              |
| DIELECTRIC WITHSTANDING, MIN. | 1500V RMS                     |   |              |
| VOLTAGE RATING, MAX.          | 300V                          |   |              |
| D.C. RESISTANCE, NOM.         | 68.2 $\Omega$ /1000'          |   |              |
| IMPEDANCE                     | 100 +/- 15 $\Omega$ 1-500 MHz |   |              |
| IMPEDANCE, SMOOTHED           | 100 +/- 10 $\Omega$ TYPICAL   | 5 - 500 MHz   |              |
| RETURN LOSS                   | 1 $\leq f < 2$ MHz            | 17 + 9.5 LOG (f) dB MIN                                       |              |
|                               | 2 $\leq f < 10$ MHz           | 20 + 5 LOG (f) dB MIN   |              |
|                               | 10 $\leq f < 20$ MHz          | 25 dB MIN   |              |
|                               | 20 $\leq f \leq 500$ MHz      | 25 - 8.6 LOG(f/20) dB MIN                                     |              |
| PS NEXT                       | 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                                   |              |
| PSACRF                        | 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       | 1.95 [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       | <45ns MAX   |              |
| TCL                           | 1 $\leq f \leq 500$ MHz       | 30-10LOG(f/100) dB MIN  |              |
| ELTCTL                        | 1 $\leq f \leq 30$ MHz        | 35-20LOG(f) dB MIN  |              |
| PS ANEXT LOSS (6 AROUND 1)    | 1 $\leq f \leq 500$ MHz       | 62.5 - 15 LOG (F/100) dB MIN                                  | 50 - 500 MHz |
|                               |                               | 67 dB MIN   | 1 - 50 MHz   |
| PSAACRF                       | 1-500 MHz                     | 38.2 - 20 LOG(F/100) dB MIN                                   |              |
| VELOCITY OF PROPAGATION       | 68%                           |   |              |

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL, USING 30m LENGTHS.

PS1584

|                     |                          |
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PATCH CABLE – TYPE CMR

CUSTOMER APPROVAL:

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DRAWING# QWC0085

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