

1) CONSTRUCTION:

CONDUCTOR:	26 AWG 7/34 STRANDED TINNED COPPER	NOM. DIA.	.019"
INSULATION:	HIGH DENSITY POLYETHYLENE, .011" NOM. WALL THICKNESS		.0405"
PAIRS:	COLOR CODED SINGLES TWISTED INTO PAIRS		.081"
CABLE:	(4) TWISTED PAIRS TWISTED TOGETHER		.177"
SHIELD:	AN ALUMINUM POLYESTER ALUMINUM FOIL SHIELD (100% COVERAGE) WITH 7 ENDS OF 34 AWG TINNED COPPER DRAIN WIRE IN CONTACT WITH THE METALIZED SURFACE SHALL BE APPLIED OVER THE CABLE CORE.		.185"
JACKET:	POLYVINYLCHLORIDE, ( <b>COLOR, PER CHART 1</b> ), .024" NOM. WALL THICKNESS	OVERALL CABLE DIAMETER	.233" NOM. (BY PI TAPE)

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.	75°C
TEMPERATURE RATING, MIN.	-20°C
WT./M', NOM., NET.	23.6 LBS.

CHART 1:

QUABBIN P/N	JACKET COLOR
2246	BLACK
2247	BROWN
2248	RED
2249	ORANGE
2250	YELLOW
2251	GREEN
2252	BLUE
2253	VIOLET
2254	GRAY
2255	WHITE
2256	BEIGE
2257	PINK
2258	AQUA
2259	LIGHT BLUE

3) ELECTRICAL CHARACTERISTICS:

SEE PAGE 2

4) AGENCY APPROVALS:

NEC (UL) TYPE CMR/CMG  
 CEC C(UL) TYPE CMR/CMG  
 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 6a APPLICATIONS.  
 PATENT PENDING

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

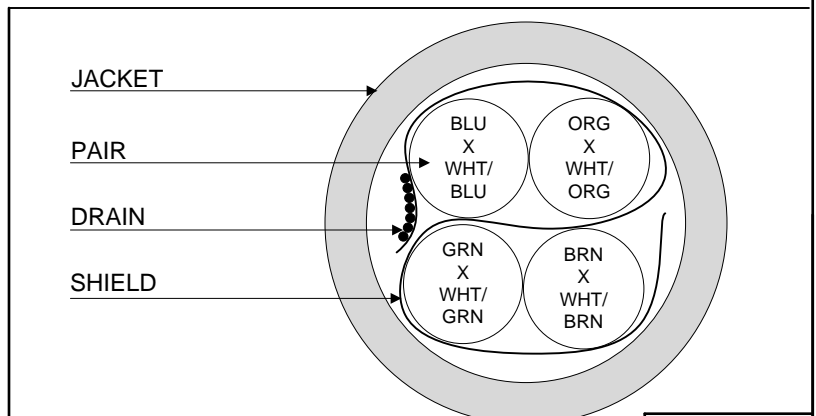
QUABBIN DATAMAX 6a F/UTP 100 OHM PATCH CORD P/N (**QWC P/N PER CHART 1**) -- TYPE CMR C(UL)US CMG 4 PR 26 AWG SHIELDED 75C -- FT4/IEEE 1202 -- CAT 6a TIA-568.2-D -- CE RoHS -- (**LOT DESIGNATOR**) (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:

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

8) PACKAGING:

TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING



CUSTOMER APPROVAL:

DATE:

Created 08/07/15	DRAWN: SGH 02/22/21
REV. 07	CHECKED: ZRS 03/02/21



TITLE  
 4PR. SHIELDED 100 OHM RELAXED PATCH CORD  
 -- CATEGORY 6a

DRAWING # QWC0091


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## 3) ELECTRICAL CHARACTERISTICS:

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 $\Omega$ /1,000' (14.0 $\Omega$ /100m)

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

IMPEDANCE, NOM.	100 $\pm$ 15 $\Omega$ 1 – 100 MHz 100 $\pm$ 20 $\Omega$ 100 – 500 MHz						
RETURN LOSS	<table> <tr> <td><math>1 \leq f &lt; 10</math> MHz</td> <td>20 + 5 LOG(<math>f</math>) dB MIN</td> </tr> <tr> <td><math>10 \leq f &lt; 20</math> MHz</td> <td>25 dB MIN</td> </tr> <tr> <td><math>20 \leq f \leq 500</math> MHz</td> <td>25 – 8.6 LOG(<math>f/20</math>) dB MIN</td> </tr> </table>	$1 \leq f < 10$ 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
$1 \leq f < 10$ 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						
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						
PS ANEXT LOSS (6 AROUND 1)	<table> <tr> <td><math>1 \leq f \leq 500</math> MHz</td> <td>62.5 – 15 LOG (<math>f/100</math>) dB 50 - 500 MHz</td> </tr> <tr> <td></td> <td>67 dB 1 - 50 MHz</td> </tr> </table>	$1 \leq f \leq 500$ MHz	62.5 – 15 LOG ( $f/100$ ) dB 50 - 500 MHz		67 dB 1 - 50 MHz		
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	67 dB 1 - 50 MHz						
PS AACRF (6 AROUND 1)	$1 \leq f \leq 500$ MHz 38.2 – 20 LOG( $f/100$ ) dB, 67 dB MIN						
TCL	$1 \leq f \leq 500$ MHz 30 – 10 LOG( $f/100$ ) dB MIN, 40 dB MIN						
ELTCTL	$1 \leq f \leq 30$ MHz 35 – 20 LOG( $f$ ) dB MIN						
VELOCITY OF PROPAGATION	68%						

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REV. 07	CHECKED: ZRS 03/02/21	
TITLE 4PR. SHIELDED 100 OHM RELAXED PATCH CORD -- CATEGORY 6a		
DRAWING #		QWMC0091
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CUSTOMER APPROVAL:

DATE: