

1) CONSTRUCTION:

CONDUCTOR: 28 AWG 7/36 STRANDED TINNED COPPER
 INSULATION: HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS

NOM. DIA.
 .015"
 .0325" MIN.
 .0331" MAX.
 .064"

PAIRS: COLOR CODED SINGLES TWISTED INTO PAIRS
 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: LOW SMOKE ZERO HALOGEN, (COLOR, PER CHART 1), .023" NOM. WALL THICKNESS OVERALL CABLE DIAMETER

.190" NOM
 .195" MAX
 (BY CALIPER)

2) PHYSICAL PROPERTIES:

TEMPERATURE RATING, MAX.
 TEMPERATURE RATING, MIN.
 WT./M', NOM., NET.
 CHART 1:

75°C
 -20°C
 16.6 LBS.

QUABBIN P/N	JACKET COLOR
2270	BLACK
2271	RED
2272	ORANGE
2273	YELLOW
2274	GREEN
2275	BLUE
2276	VIOLET
2277	GRAY
2278	WHITE

3) ELECTRICAL CHARACTERISTICS:
 SEE PAGE 2

4) AGENCY APPROVALS:
 NEC (UL) TYPE CM-ST1
 CEC C(UL) TYPE CM

5) APPLICATION:
 RoHS COMPLIANT MATERIALS. MEETS TIA 568.2-D 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 NO. US 9,355,759 B2.

6) PRINT: (WHITE INK ON BLACK JACKET, ALL OTHERS BLACK INK)
 QUABBIN DATAMAX LSZH MINI-6a F/UTP PATCH CORD P/N (QWC P/N PER CHART 1) -- PATENT NO. US 9,355,759 B2--
 CM C(UL)US CM-ST1 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

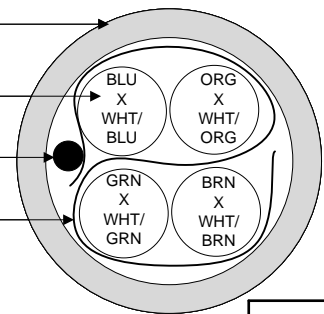
8) PUT UPS
 TO BE PACKAGED AS PER QWC'S STANDARD PACKAGING

JACKET

PAIR

DRAIN

SHIELD



Created 05/19/17
 DRAWN: BMD 05/10/23
 REV. 04
 CHECKED: ZRS 05/11/23



TITLE
 DATAMAX LSZH DUAL RATED MINI-6a 28 AWG
 CAT 6a F/UTP PATCH CABLE – TYPE CM-ST1

DRAWING# QWC0104 1 of 2

CUSTOMER APPROVAL:


DATE:

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, NOM.	22.4 Ω/100m (68.2 Ω/1000')

NOTE: TESTING FOR THE FOLLOWING IS CONDUCTED OFF THE REEL, USING 50m LENGTHS. (FOR 100m OF CABLE)

IMPEDANCE	100 ± 15 Ω 1 – 500 MHz		
IMPEDANCE, SMOOTHED	100 ± 10 Ω TYPICAL 5 – 500 MHz		
RETURN LOSS	1 ≤ f < 2 MHz	17 + 9.5 LOG (f) dB MIN	
	2 ≤ f < 10 MHz	20 + 5 LOG (f) dB MIN	
	10 ≤ f < 20 MHz	25 dB MIN	
	20 ≤ f ≤ 500 MHz	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	1.95 [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	
TCL	1 ≤ f ≤ 500 MHz	30 – 10 LOG(f/100) dB MIN	
ELTCTL	1 ≤ f ≤ 30 MHz	35 – 20 LOG(f) dB MIN	
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	
VELOCITY OF PROPAGATION	68%		

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DRAWING#		QWC0104
		2 of 2

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