

1) CONSTRUCTION:

CONDUCTOR:	28 AWG 7/36 STRANDED TINNED COPPER	NOM. DIA.	.015"
INSULATION:	HIGH DENSITY POLYETHYLENE, .008" NOM. WALL THICKNESS	.0325" MIN.	.0331" 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:	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.	75°C
TEMPERATURE RATING, MIN.	-20°C
WT./M', NOM., NET.	16.6 LBS.
CHART 1:	

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

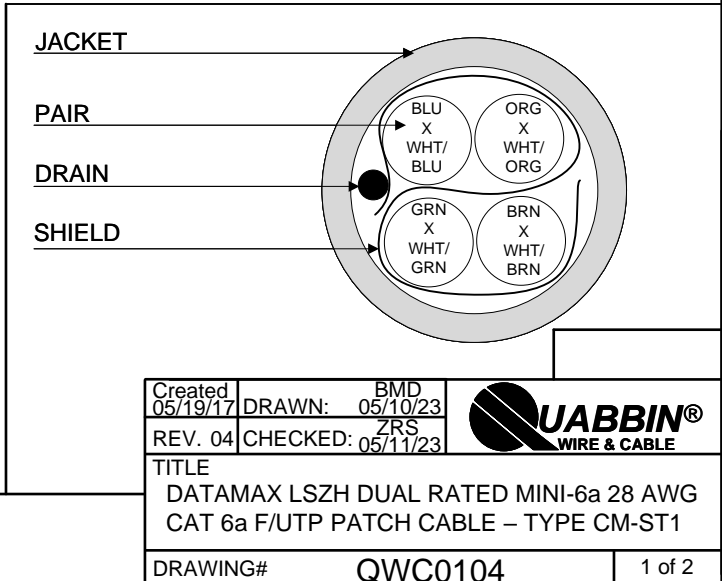
5) APPLICATION:
RoHS COMPLIANT MATERIALS. MEETS TIA 568.2-D CHANNEL REQUIREMENTS AT 56 METERS. 7.8 METERS OF PATCH CABLE WITH A 90 METERS PERMANENT LINK (97.8 METER CHANNEL) OR 10 METERS OF PATCH CABLE WITH AN 86 METER PERMANENT LINK (96 METER CHANNEL). SUPPORTS CAT 6A APPLICATIONS INCLUDING 10GBASE-T 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



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 \pm 15 Ω 1 – 500 MHz	
IMPEDANCE, SMOOTHED	100 \pm 10 Ω 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 <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	
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
PSAACRF	$1 \leq f \leq 500$ MHz 38.2 – 20 LOG (f/100) dB MIN	1 - 50 MHz
VELOCITY OF PROPAGATION	68%	

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
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DRAWING#	QWC0104
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CUSTOMER APPROVAL:

DATE: