

1) CONSTRUCTION: NOM. DIA.  
 CONDUCTOR: 18 AWG 7/26 STRANDED TINNED COPPER .048"  
 INSULATION: FOAMED FEP, .038" WALL THICKNESS .123"  
 CABLE: (2) COLOR CODED SINGLES SHALL BE TWISTED TOGETHER AND  
 WRAPPED WITH AN ALUMINUM POLYESTER ALUMINUM FOIL SHIELD  
 (100% COVERAGE) WITH 7 ENDS OF 28 AWG TINNED COPPER DRAIN  
 WIRE IN CONTACT WITH THE OUTER METALIZED SURFACE. .255"  
 JACKET: POLYVINYLCHLORIDE, (**COLOR PER CHART 1**), .021" NOM. WALL  
 THICKNESS  
 OVERALL CABLE DIAMETER .297"  
 (BY CALIPER ACROSS WIDEST CROSS-SECTION)

2) PHYSICAL PROPERTIES:  
 TEMPERATURE RATING, MAX. 105°C  
 TEMPERATURE RATING, MIN. -20°C  
 WT./M', NOM., NET. 44.7 LBS.  
 CHART 1

QUABBIN P/N	JACKET COLOR
3200	BLACK
3201	BROWN
3202	RED
3203	ORANGE
3204	YELLOW
3205	GREEN
3206	BLUE
3207	VIOLET
3208	CHROME GRAY
3209	WHITE
3210	STARLIGHT BEIGE

3) ELECTRICAL CHARACTERISTICS:  
 SEE PAGE 2

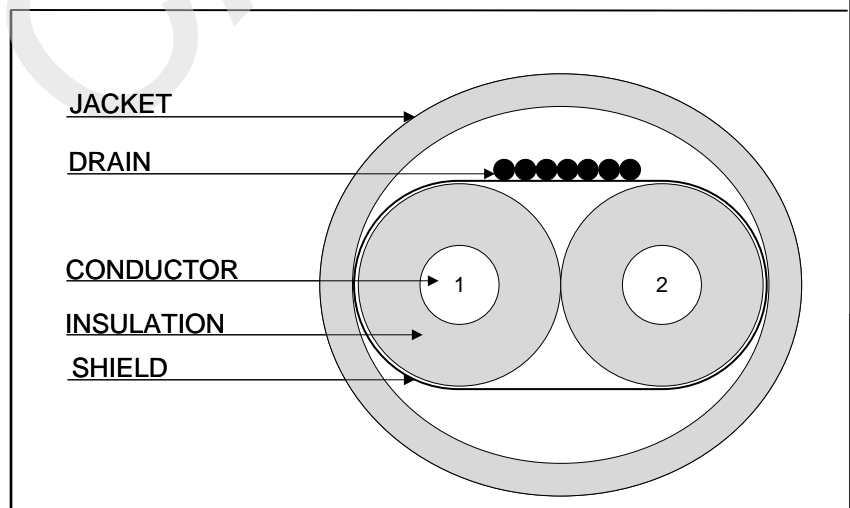
4) AGENCY APPROVALS:  
 NEC (UL) TYPE CMP  
 CEC C(UL) TYPE CMP

5) APPLICATION:  
 COMPLIANT WITH ANSI/TIA-568.5 DRAFT  
 1.5a SP1-1000 CABLING STANDARDS WITH  
 DISTANCE LIMITATIONS SPECIFIED ON  
 PAGE 2. RoHS COMPLIANT MATERIALS.

6) PRINT:  
 QUABBIN DATAMAX P/N (**P/N PER CHART  
 1**) C(UL)US TYPE CMP 18 AWG SHIELDED  
 105C -- RoHS -- (**LOT DESIGNATOR**)  
 (**SEQUENTIAL FOOTAGE**)

7) COLOR CODE:  
 1. BLUE X 2. WHITE

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



PS1739

Created 10/28/20	DRAWN: <sup>BMD</sup> 09/01/22
REV. 02	CHECKED: <sup>ZRS</sup> 09/08/22



TITLE	QUABBIN DATAMAX SPE -- 18 AWG SHIELDED
DRAWING#	QWC0141
	1 of 2

CUSTOMER APPROVAL: \_\_\_\_\_ DATE: \_\_\_\_\_

3) ELECTRICAL CHARACTERISTICS:

CABLE IS DESIGNED TO BE COMPLIANT TO ANSI/TIA-568.5 DRAFT 1.5a SP1-1000 CHANNEL REQUIREMENTS AT THE LENGTHS LISTED BELOW FOR DIFFERENT POWER OVER DATA LINE (PoDL) APPLICATIONS:

PoDL Class	Maximum Length (m)
No Power	1000
10	1000
11	451
12	118
13	1000
14	451
15	118

CAPACITANCE, MUTUAL, NOM. 13 PF/FT. AT 1 MHz  
 DIELECTRIC WITHSTANDING, MIN. 1500V RMS  
 VOLTAGE RATING, MAX. 300V  
 D.C. RESISTANCE, MAX. 2.33 Ω

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

IMPEDANCE, NOM. 100 Ω

RETURN LOSS  
 0.1 ≤ f < 10 MHz 20 + 5 LOG(f) dB MIN  
 10 ≤ f ≤ 20 MHz 25 dB MIN

INSERTION LOSS  
 0.1 ≤ f ≤ 20 MHz 1.23√f + 0.01(f) + 0.2/√f dB MAX

COUPLING ATTENUATION  
 0.1 ≤ f ≤ 20 MHz 55 dB MIN

PSANEXT  
 0.1 ≤ f ≤ 20 MHz 37.5 - 17 LOG(f/20) dB MIN, 67 dB MIN


PSAFEXT  
 0.1 ≤ f ≤ 20 MHz 38 - 18 LOG(f/20) dB MIN, 67 dB MIN

TCL  
 0.1 ≤ f < 20 MHz 50 - 15 LOG(f) dB MIN, 50 dB MIN

ELTCTL  
 0.1 ≤ f < 20 MHz 40 - 20 LOG(f) dB MIN, 40 dB MIN

NOTE: ALL TESTING IS CONDUCTED OFF THE REEL.

PS1739

Created 10/28/20	DRAWN: BMD 09/01/22	
REV. 02	CHECKED: ZRS 09/08/22	
TITLE QUABBIN DATAMAX SPE -- 18 AWG SHIELDED		
DRAWING#		QWC0141
		2 of 2

CUSTOMER APPROVAL:

DATE: