QWC0141

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 (BY CALIPER ACROSS WIDEST CROSS-SECTION)	.297"

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

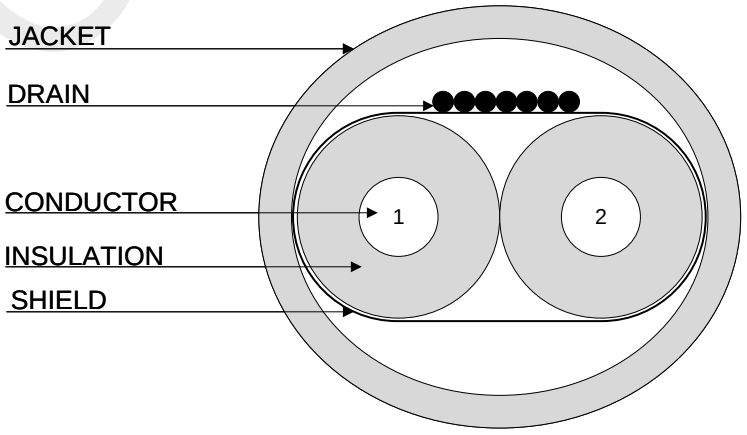
4) AGENCY APPROVALS:
NEC (UL) TYPE CMP
CEC C(UL) TYPE CMP

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:	BMD 09/01/22	QUABBIN® WIRE & CABLE
REV. 02	CHECKED:	ZRS 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	$0.1 \le f < 10$ MHz	$20 + 5 \log(f)$ dB MIN
	$10 \le f \le 20$ MHz	25 dB MIN
INSERTION LOSS	$0.1 \le f \le 20$ MHz	$1.23\sqrt{f} + 0.01(f) + 0.2/\sqrt{f}$ dB MAX
COUPLING ATTENUATION	$0.1 \le f \le 20$ MHz	55 dB MIN
PSANEXT	$0.1 \le f \le 20$ MHz	$37.5 - 17 \log(f/20)$ dB MIN, 67 dB MIN
PSAFEXT	$0.1 \le f \le 20$ MHz	$38 - 18 \log(f/20)$ dB MIN, 67 dB MIN
TCL	$0.1 \le f < 20$ MHz	$50 - 15 \log(f)$ dB MIN, 50 dB MIN
ELTCTL	$0.1 \le f < 20$ 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	QUABBIN® WIRE & CABLE
REV. 02	CHECKED:	ZRS 09/08/22	

TITLE: QUABBIN DATAMAX SPE -- 18 AWG SHIELDED

DRAWING# QWC0141

CUSTOMER APPROVAL: **DATE:**