

**TROMPETER SPECIFICATION SHEET**  
**CABLE, RADIO FREQUENCY, TWIN CONDUCTOR, BALANCED LINE**  
**TWCH-78-2**

MARK: TROMPETER ELECTRONICS TWINAX, TWCH-78-2 (\*)

(\*) – CINCH  
CONNECTIVITY  
SOLUTIONS  
ASSIGNED  
VENDOR NUMBER

**REQUIREMENTS:**

1. IMPEDENCE (OF PAIR) ----- 78 ± 3 OHMS
2. OPERATING VOLTAGE ----- 1 KVRMS MAX/2 KVDC
3. BEND RADIUS ----- 1.25 INCH MIN
4. CAPACITANCE ----- COND TO COND ----- 21.2 PF/FT  
COND TO SHIELD ----- 36.0 PF/FT  
COND TO SHIELD TO COND----- 38.0 PF/FT  
TWO COND TO SHIELD ----- 62.0 PF/FT
5. CONDUCTOR LOOP RESISTANCE ----- 19.0 OHMS/M FT MAX
6. VELOCITY OF PROPAGATION ----- 66% NOM
7. ATTENUATION: FREQUENCY                      dB/100 FT NOM                      FREQUENCY                      dB/100 FT NOM  
  
1 MHz                                              0.70                                              40 MHz                                              4.50  
3 MHz                                              1.10                                              50 MHz                                              5.10  
4 MHz                                              1.40                                              100 MHz                                              7.50  
5 MHz                                              1.55                                              200 MHz                                              10.50  
7 MHz                                              1.80                                              500 MHz                                              16.00  
10 MHz                                              2.20                                              700 MHz                                              18.60  
20 MHz                                              3.10                                              1000 MHz                                              22.50  
30 MHz                                              3.90
8. HEAT AGING ATTENUATION TEST: SUBJECT A 180 FOOT SAMPLE TO 80°C IN AIR CIRCULATING OVEN FOR 72 HRS. REMOVE CABLE FROM THE OVEN AND LET STABILIZE TO ROOM TEMP (4 HRS MIN). THE ATTENUATION AT 7 MHz SHALL NOT INCREASE MORE THAN .48 dB/100 FT FROM ITS UNAGED VALUE
9. WEIGHT ----- .0386 LB/ FT
10. INSULATION RESISTANCE (MIN) ----- 20 MEGOHMS/1000 FT
11. OPERATING TEMPERATURE RANGE ----- -30° C TO +80° C

DATE 10/19/2016

APPR C.MONAHAN

DWN DKC

EO 56534

REV D

DESCRIPTION	CONSTRUCTIONAL DETAILS
INNER CONDUCTORS	TWO CONDUCTORS, EACH 7 STRANDS OF AWG SIZE 28 TINNED COPPER WIRE. NOM DIA .037 (AWG 20)
DIELECTRICS	TWO EACH POLYETHYLENE, ONE BLUE, ONE NATURAL. NOM DIA .076
FILLERS	TWO EACH POLYETHYLENE. NOM DIA .052
CABLE CORE	.154 NOM O.D., .160 MAX DIELECTRICS AND FILLERS TO HAVE A 2.92 ± .25 RIGHT-HAND OR LEFT-HAND LAY, 4 TWISTS PER FOOT. A NYLON THREAD WRAP SHALL BE APPLIED WITH SUFFICIENT COVERAGE TO MAINTAIN THE POSITION OF THE COMPONENTS
SHIELD	SINGLE BRAID, (128 STRANDS 16X8) AWG SIZE 36 TINNED COPPER WIRE. 9.8 PICKS/IN, 32° BRAID ANGLE, 4.2 OHM/M FT D.C. RESISTANCE. SHIELD COVERAGE 93% NOM, MAX O.D. .195
JACKET	BLUE (PER EIA-359-A, MUNSELL COLOR CHART, SYMBOL CENTROID) FLAME RETARDANT HALOGEN FREE POLYOLEFIN .242 ± .005 O.D.



DWN	DKC	12-11-97	MATERIAL	CODE IDENT	DRAWING NO.	REV
CHK	C. M	10-19-97	-----	14949	TWCH-78-2	D
ENG	C.M	10-19-97				
APPR	C.M	10-19-97	SCALE -----	DATE 1-2-97	SHEET	