

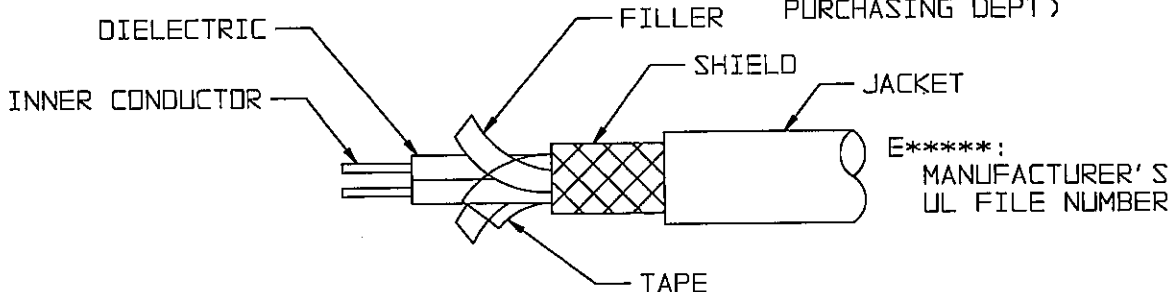
# RED INDICATES ORIGINAL

## TROMPETER SPECIFICATION SHEET CABLE, RADIO FREQUENCY, TWIN CONDUCTOR, BALANCED LINE

TWC-78-2

MARK: TROMPETER ELECTRONICS TWINAX, TWC-78-2 E\*\*\*\*\* RJ AWM STYLE 2092(\*)

\* (VENDOR 4 DIGIT NUMBER  
TO BE ASSIGNED BY TEI  
PURCHASING DEPT)



E\*\*\*\*\*:  
MANUFACTURER'S  
UL FILE NUMBER

**REQUIREMENTS:**

- 1. IMPEDANCE (OF PAIR) - - - - - 78 ±3 ohms
- 2. OPERATING VOLTAGE - - - - - 1 KVRMS/2 KVDC
- 3. BEND RADIUS - - - - - 1.25 in. min
- 4. CAPACITANCE (MAX) - - - - - COND TO COND- - - - - 21.2 PF/FT  
COND TO SHIELD - - - - - 36.0 PF/FT  
COND TO SHIELD & COND - 38.0 PF/FT  
TWO COND TO SHIELD - - - 62.0 PF/FT

- 5. CONDUCTOR LOOP RESISTANCE - - - - - 20.0 ohms/M FT MAX
- 6. VELOCITY OF PROPAGATION - - - - - 66% NOM

7. ATTENUATION: FREQUENCY		dB/100 FT MAX	FREQUENCY		dB/100 FT MAX
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 - - - - - .0353 LB/FT

10. INSULATION RESISTANCE (MIN)- - - - - 20 MEGOHMS/1000 FT

11. OPERATING TEMPERATURE RANGE -40°C TO +80°C

**CONTROL STAMP**  
In This Stamp Is Not Red,  
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REV H ED 12578 DWN DKC APPR W.M. DATE 10/14/98

<b>TROMPETER ELECTRONICS, INC.</b>	DWN	DKC	10-6-98	MATERIAL	CODE IDENT	DRAWING NO.	REV
	CHK	W.M.	10-7-98	_____	14949	TWC-78-2	H
	ENGR	_____	_____	SCALE	DATE 9-27-76	SHEET 1 OF 2	
	APPR	W.M.	10/8/98				

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TABLE 1

DESCRIPTION	CONSTRUCTION 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 AND 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 $2.92 \pm .25$ RIGHT-HAND LAY OR LEFT HAND LAY, 4 TWISTS PER FOOT. A NYLON THREAD WRAP OR POLYPROPYLENE RIBBON SHALL BE APPLIED WITH SUFFICIENT COVERAGE TO MAINTAIN THE POSITION OF THE COMPONENTS
SHIELD	SINGLE BRAID, (128 STRANDS 16 X 8) AWG SIZE 36 TINNED COPPER WIRE, 9.8 PICKS/INCH, 32° BRAID ANGLE, 4.2 ohm/M FT D.C. RESISTANCE. SHIELD COVERAGE 93% NOM, MAX O.D. .195
JACKET	BLUE POLYVINYLCHLORIDE, $.242 \pm .005$ O.D.

DATE

APPR

DWN

EO

REV

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<b>TROMPETER ELECTRONICS, INC.</b>	DWN	DKC	10-6-98	MATERIAL	CODE IDENT	DRAWING NO.	REV
	CHK	WM	10-7-98	_____	14949	TWC-78-2	H
	ENGR	_____	_____	SCALE _____	DATE 9-27-76	SHEET 2	
	APPR	DAM	10/8/98				