

The **HPT 450** Test Assembly series incorporates high performance cable and high performance connectors providing excellent test cables for a wide range of applications to 12 GHz. These assemblies feature low loss triple shielded cable with a standard Polyurethane jacket and optional jackets and protection of FEP Teflon®, and Nomex™. The triple shielded construction of these cables gives outstanding shielding effectiveness of greater than -90dB @ 12 GHz. The assemblies feature precision steel connector designs including N, TNC, HN, SC and 7/16 are available in male or female. All the connector interfaces are designed to meet MIL-C-39012, MIL-STD-348a or applicable industry specs. These cable assemblies feature low loss, excellent VSWR, and good phase stability over a wide range of applications up to 12 GHz.

FEATURES

Precision high performance connectors

FEP outer jacket; options include polyurethane, Nomex™

Triple shielded for >-90 dB leakage at 12 GHz

Low loss PTFE tape dielectric

CONNECTORS

TNC, N, SC, HN, 7/16

Straight male, straight female

CABLE SIZE

.520 inches, nominal outer diameter (polyurethane)

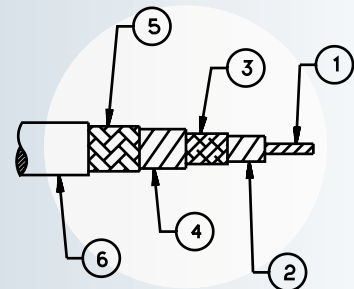
APPLICATIONS

High frequency Automated Test Equipment

High Power testing



Cable Construction



1. Center conductor: Silver plated copper *
 2. Dielectric: Microporous PTFE tape
 3. Outer conductor: Silver plated copper flat braid*
 4. Shield interlayer: Metalized tape
 5. Braid: Silver plated copper round braid *
 6. Jacket options: Extruded FEP, polyurethane, Nomex
- * Silver plating per ASTM-B-298

Nomex™ & Teflon is a registered trademark of the DuPont Corporation

HIGH PERFORMANCE TEST CABLE ASSEMBLY

HPT-450 Group Frequency Range: DC-12 GHz

ELECTRICALS

Velocity of Propagation	%	76.5
RF Leakage Min. @ 18GHz	dB/ft	-90
Impedance	Nominal	50
Capacitance	pF/ft (pF/m)	27 (88.58)
Delay	ns/ft (ns/m)	1.34 (4.40)
Breakdown Voltage	kV	>15
Phase Stability vs Flexure	deg/(deg of bend per GHz)	<.003

MECHANICAL/ENVIRONMENTAL

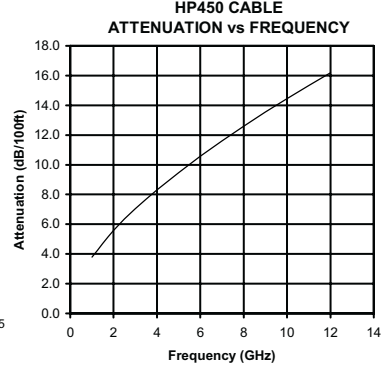
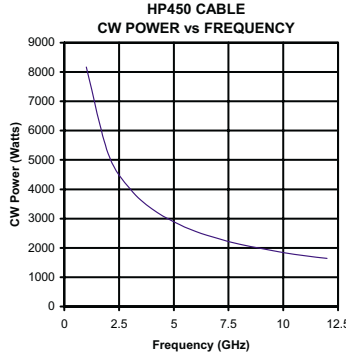
Nominal Diameter	inches (cm)	.520 (1.32)
Minimum Bend Radius	inches (cm)	2.5 (6.35)
Temperature	DEG. C	-65/+200
Weight	lb./ft. (g/m)	.21 (312)

MATERIALS AND FINISHES CONNECTOR

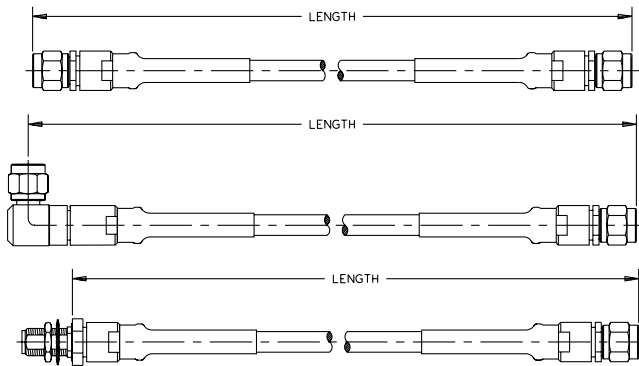
Body	Stainless steel
Nut	Stainless steel
Gasket	Silicon Rubber
Contact	BeCu / Gold plated
Insulator	PTFE

MATERIALS AND FINISHES CABLE

Cable Jacket	Polyurethane
Outer Shield	Silver Copper
Inter Shield	Aluminum Polymer
Inter Conductor	Silver Copper
Dielectric	Micro-porous PTFE
Center Conductor	Silver Copper



HOW TO MEASURE LENGTH



JACKET OPTIONS



DESCRIPTION	CODE
BASIC FEP JACKET	BF
BASIC POLYURETHANE JACKET	BP
NOMEX RUGGEDIZED JACKET OVER FEP	AN

CONNECTOR CODES



CONNECTOR STYLE	MALE			FEMALE		
	STR	RA	SWEPT RA	STR	BULKHD	FLANGE
N TYPE	N1	N2	N6	N3	N4	N5
TNC	T1	T2	T6	T3	T4	T5
SC	SC1	SC2	SC6	SC3	SC4	SC5
HN	HN1			HN3		
7-16	G1	G2		G3	G4	G5

HOW TO SPECIFY PART NUMBER

□ □ □
CONNECTOR TYPE

4 5
CABLE

□ □
OPTION

B
CENTER CONDUCTOR

□ □ □
CONNECTOR TYPE

□ □ □ □
LENGTH (INCHES)

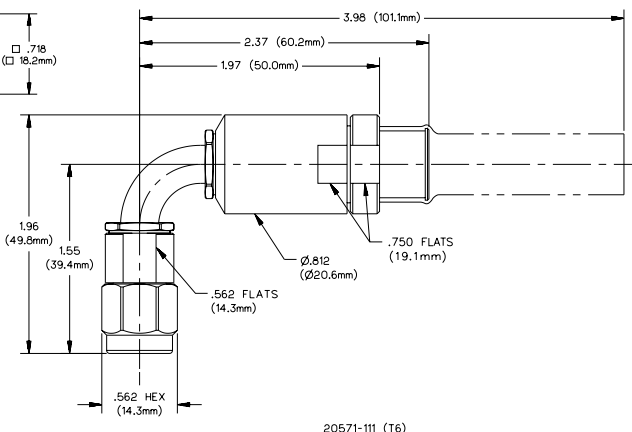
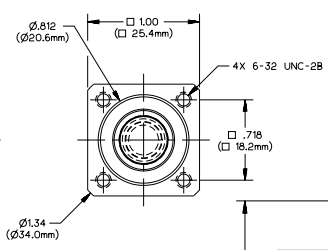
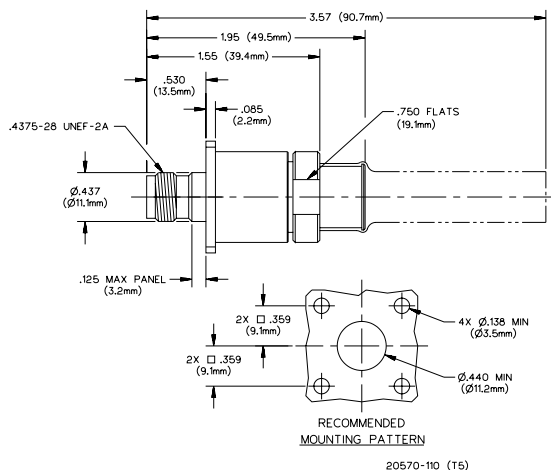
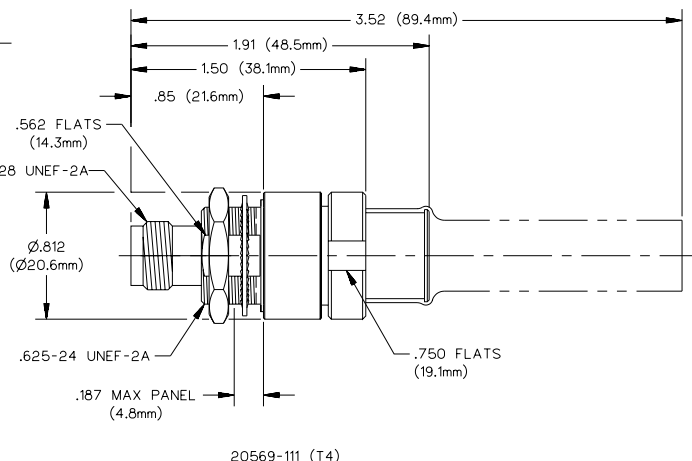
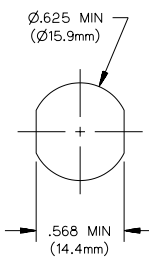
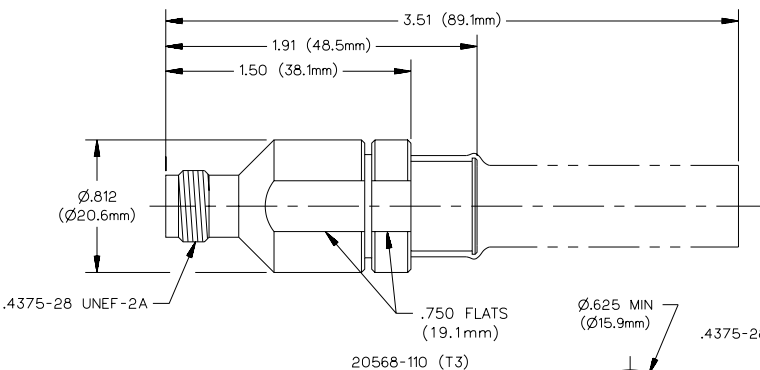
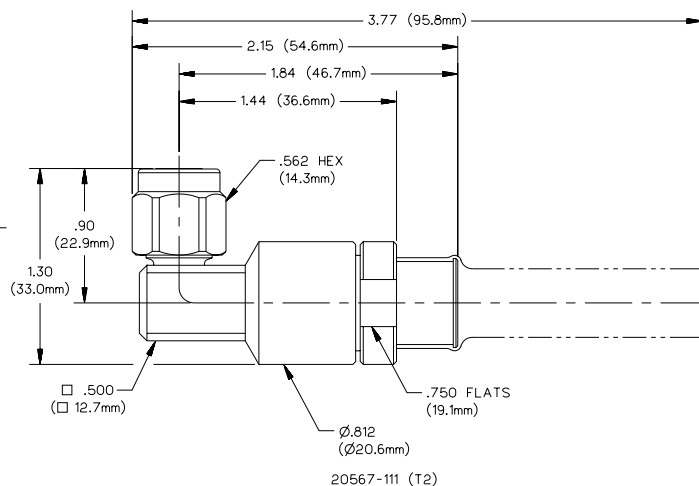
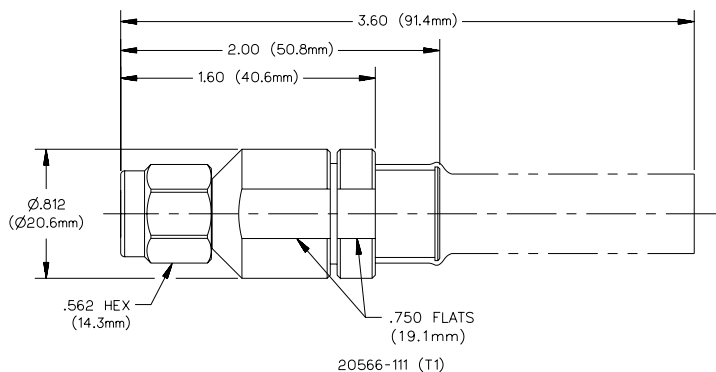
FOR EXAMPLE:

N TYPE STRAIGHT MALE TO SC STRAIGHT FEMALE, BASIC FEP JACKET, 36 INCHES LONG.
NOTE: USE LEADING ZEROS WHEN SPECIFYING LENGTH.

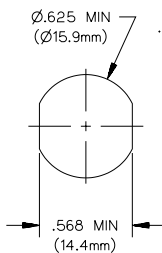
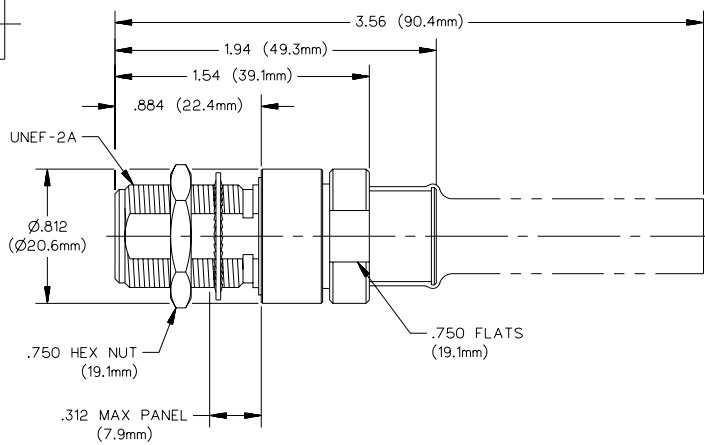
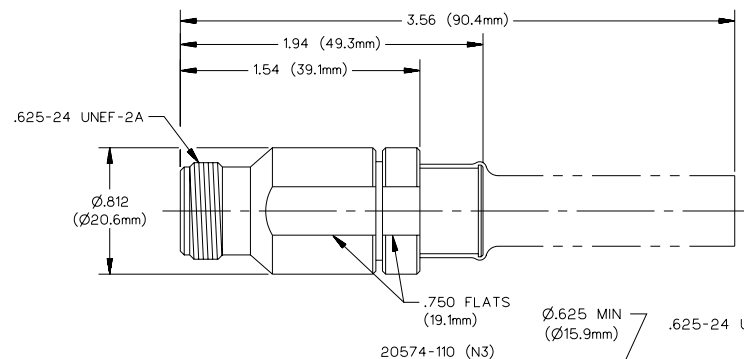
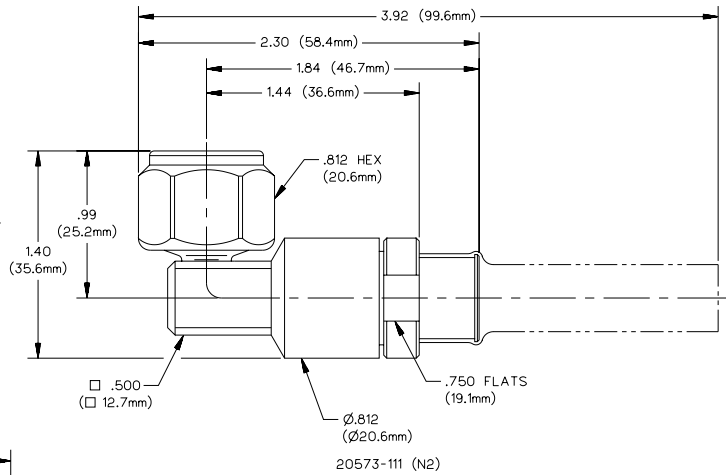
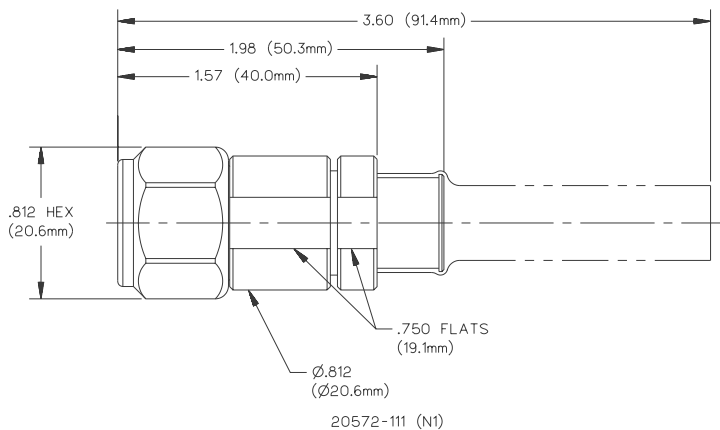
PART NUMBER IS: N 1 4 5 B F B SC 3 0036

CONTACT THE FACTORY FOR LENGTH REQUIREMENTS: customer.service@semflex.com

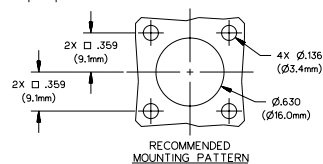
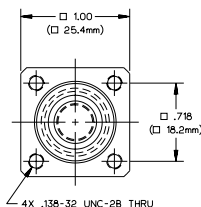
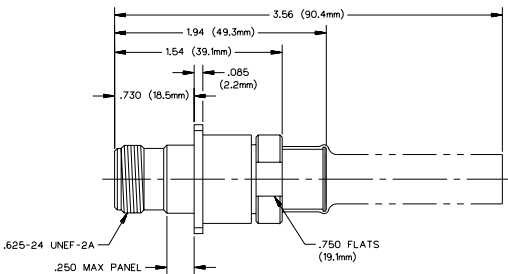
HPT-450 GROUP CONNECTORS



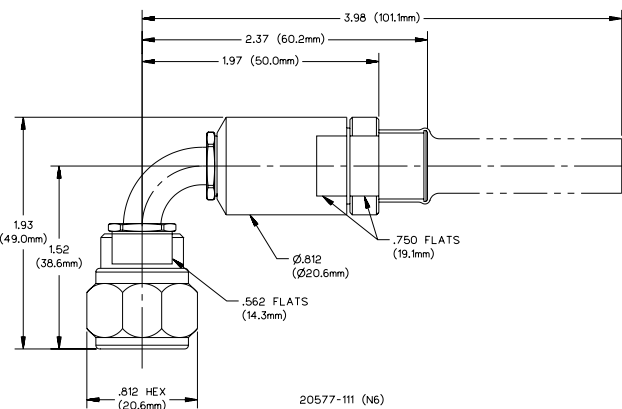
HPT-450 GROUP CONNECTORS (2)



RECOMMENDED MOUNTING HOLE



20576-110 (N5)



20577-111 (N6)

HPT-450 GROUP CONNECTORS (3)

