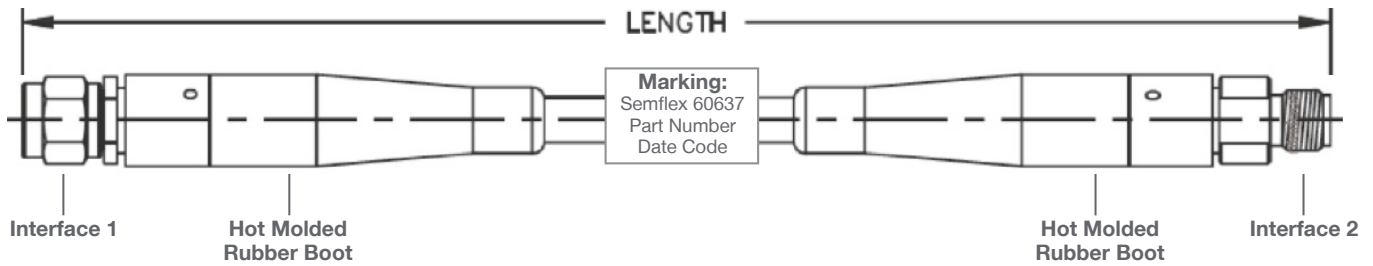


Laboratory RF/Microwave Test Cables

For Network Analyzer and Precision Lab Testing



Specifications

	Frequency GHz, max.	Insertion Loss dB, max.		Shielding dB@ 18 GHz, min.	Phase Matching °/GHz	Inside Bend Radius in., min.	Operating Temperature °C, nominal
		18" Length	24" Length				
SMA	26	1.6 @ 26 GHz	2.1 @ 26 GHz	90	±1	0.90	-65 to +85
2.92mm	40	2.6 @ 40 GHz	2.6 @ 40 GHz	90	±1	0.90	-65 to +85

Insertion Loss Calculator

Cable Insertion Loss, dB/ in @ Freq (GHz) =
 $IL = \text{Cable Loss} + \text{Connector Loss} + \text{Connector Loss}$

Cable Loss, dB/ in @ Freq (GHz) =
 $L \times [(k1 \times \sqrt{F}) + (k2 \times F)] / 1200$

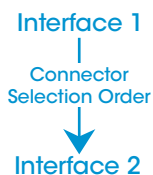
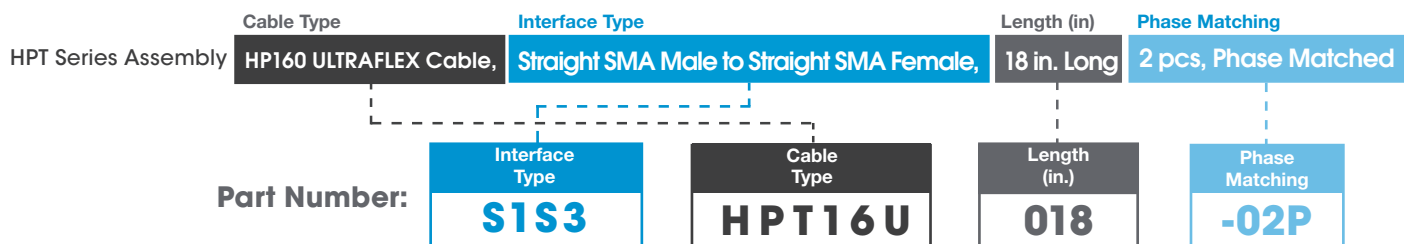
Connector Loss, dB @ Freq (GHz) =
 $k3 \times \sqrt{F}$

IL = Insertion Loss (dB)
 L = Length (in)
 F = Frequency (GHz)

Cable Constants	HP160 ULTRAFLEX
Max, Freq. GHz	40
k1	14.07
k2	0.53
Connector Constants, k3	
2.92mm, SMA	0.03

VSWR Guide	
Freq. GHz	VSWR (max)
8	1.10:1
18	1.20:1
26	1.25:1
40	1.40:1 (2.92mm Only)

Ordering Instructions



Interface Type	
X1	2.92mm Male Straight
X3	2.92mm Female Straight
S1	SMA Male Straight
S3	SMA Female Straight

Length	
018	18" standard length
024	24" standard length

Custom lengths available
 Min. 12", Max. 120"
 Length Tolerance -0", +0.5"

Phase Matching Option	
02-10P	Number of Phase Matched Cables
*Omit for non phase matching option	



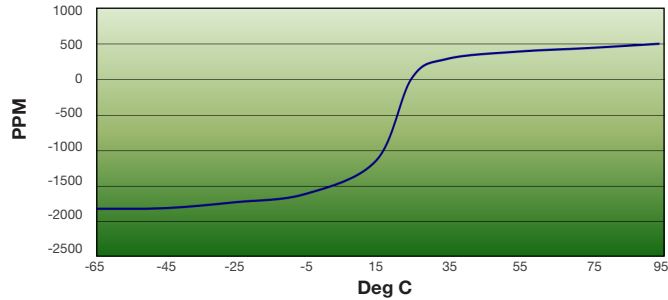
Laboratory RF/Microwave Test Cables

For Network Analyzer and Precision Lab Testing

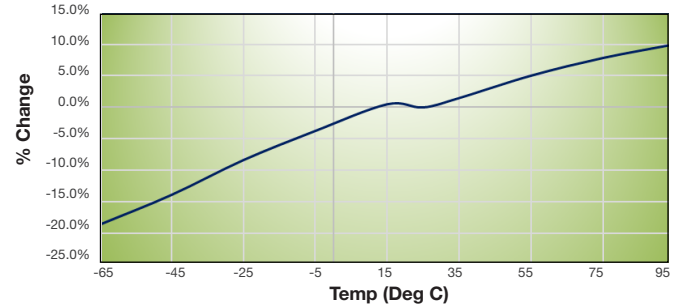


HP160 ULTRAFLEX Cable Specifications

Phase Stability vs. Temperature

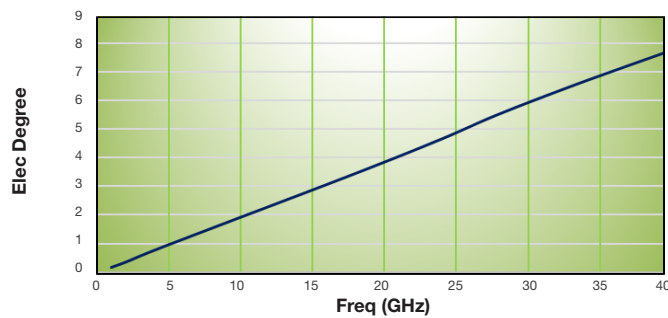


IL Stability vs. Temperature



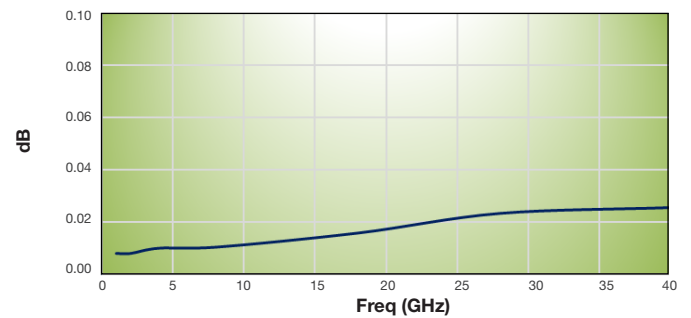
Phase Stability vs. Flexure

Cable is wrapped 360° on a 2" radius mandrel



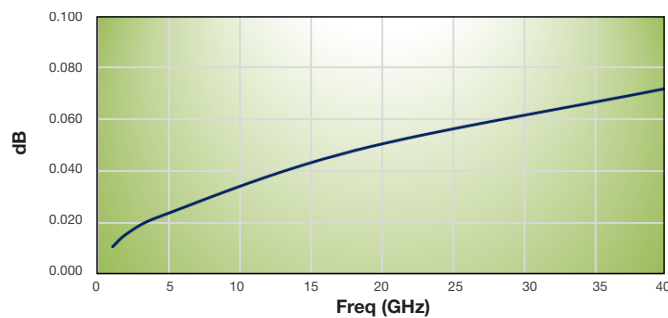
IL Stability vs. Flexure

Cable is wrapped 360° on a 2" radius mandrel



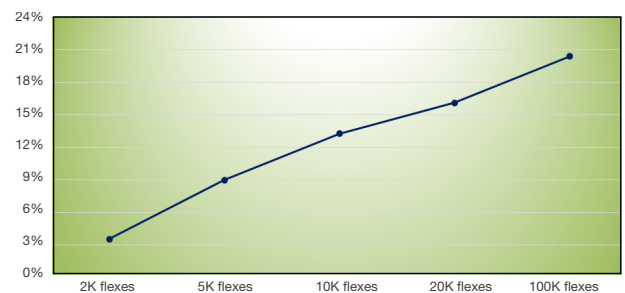
Shake Test

Cable is flexed several times and then hand shaken for 10 sec.



IL Stability vs. Flexure

Cable is flexed +/-90° around a 3.2" OD mandrel (tic-toc test)



Asia Pacific
+86 21 5442 7668
ccs.asia.sales@as.cinch.com

Europe, Middle East & Africa
+44 (0) 1245 342060
CinchConnectivity@eu.cinch.com

North America
+1 507.833.8822
ccsorders@us.cinch.com

belfuse.com/cinch