Phase Stable Assemblies (ANA-Cable Assemblies)

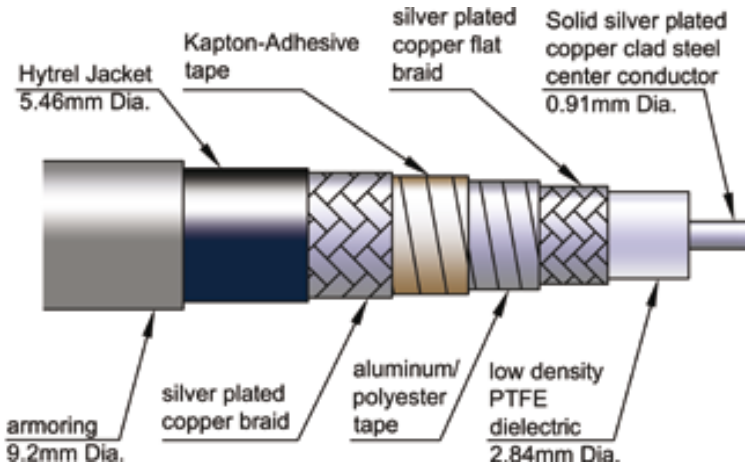
The Cable Assemblies of Series 22 are Phase Stable Assemblies, designed for the Vector Network Analyzers of Agilent and Anritzu.

The Cables of Types 22 operate to 26.5 GHz.

One end of the Assembly is usually terminated with a "special" 2.4mm, 3.5mm, or 2.92mm connector. These connectors are designed with a larger than standard coupling nut for greater stability, mating directly with the RF ports of the Network Analyzers. The other end of the ANA - Assembly may be terminated with any of the connectors available and needed in the customer's test application, mating in direct connection with the device under test. By eliminating expensive adapters the test setup becomes simple and trustworthy.

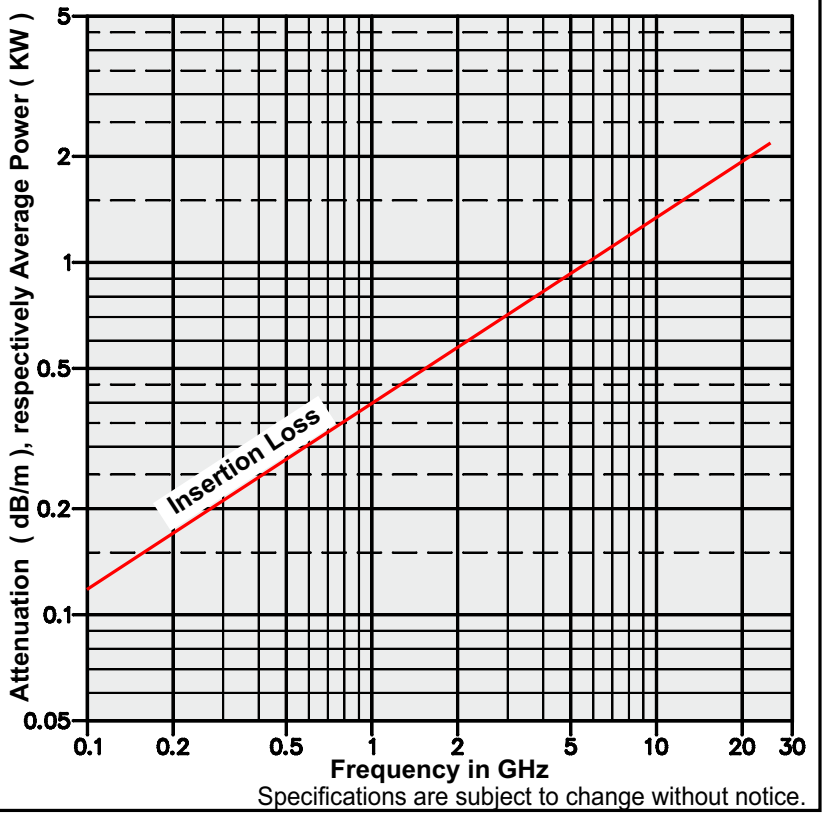
The cable assemblies can be manufactured in various lengths up to 6 meters (20ft.). All necessary piece parts will be carried in stock, helping to facilitate fast deliveries.
Cable assemblies of the most popular lengths, e.g. 30 cm. (11.8") and 45 cm. (17.7"), terminated with preferred connector styles, such as N, 2.4mm and 3.5mm for the Agilent ANAs, 2.92mm and 1.85mm for Anritzu ANAs, will be available, in most cases, within a few days of order placement.

Note:
For special requirements, the cable can be terminated with almost any connector style. Please call your nearest Spectrum Representaive or contact our Marketing or Engineering Staff.



ANA Cable Assembly Characteristics:

Cable Code		22 (= Type 18 armored)
Frequency Range		to 26.5 GHz
Cable Outer diameter		9.2mm (.36")
Mechanical length		custom made up to 6m
Electrical length		~1.36 x mechan. length
Bend radius min.		6 cm. (2.36")
Pull resistance		10 kg. (22 pounds)
Crush resistance		62 kg./cm² (880 psi)
Return loss, min. /Assembly 2.4mm connectors		20 dB up to 26.5 GHz
2.92mm connectors		
3.5mm connectors		
7mm connectors		20 dB up to 18.0 GHz
N connectors		20 dB up to 18.0 GHz
SMA connectors		
TNC connectors		
Return loss stability		40 dB min.
Phase stab., 2 x 45 cm. assies manual flexing/torque		Please see also Diagrams on Page 71. 4.0° max. @ 26.5 GHz
Straight vs. 90° bend		2.5° max. @ 26.5 GHz
Straight after 3 x 90° bends		2.0° max. @ 26.5 GHz
Amplitude stab., 2 x 45 cm. assies manual flexing/torque		-
Straight vs. 90° bend		<0.05dB @ 26.5 GHz
Straight after 3 x 90° bends		<0.05dB @ 26.5 GHz
Insertion Loss/m (39.37")	1.0 GHz	0.40
	10.0 GHz	1.34
	18.0 GHz	1.80
	26.5 GHz	2.20
	40.0 GHz	-
	50.0 GHz	-



Specifications are subject to change without notice.

Kabelkatalog.indd

Connector Selection Chart

Phase Stable Cable Assemblies

Spectrum Elektrotechnik GmbH

Type	Frequency	Sex	Description	Remarks	Connector Code	Finish
1.85 mm	DC - 71.0 GHz1)	Male	straigh		**VM**	passivated Stainless Steel
				Maxi Nut	**MV**	
				The V2M and V2 developed at Spectrum, have larger than standard coupling threads for greater stability. The connectors are used on test ports, test port adapters, and test port cables.	**V2M**	
		Female			**V2**	
					VF	
2.4 mm	DC - 50.0 GHz1)	Male	straight		**HM**	passivated Stainless Steel
				Maxi Nut	**M2**	
				The H2M and H2 developed at Spectrum, have larger than standard coupling threads for greater stability. The connectors are used on test ports, test port adapters, and test port cables.	**H2M**	
		Female			**H2**	
					HF	
2.92 mm	DC - 40.0 GHz1)	Male	straight		**KM**	passivated Stainless Steel
				Maxi-Nut	**MK**	
				The WIM and WI developed at Spectrum, have larger than standard coupling threads for greater stability. The connectors are used on test ports, test port adapters, and test port cables.	**WIM**	
		Female			**WI**	
					KF	
3.5 mm	DC - 26.5 GHz	Male	straight		**91**	passivated Stainless Steel
				Maxi-Nut	**M3**	
				The H3M and H3 developed at Spectrum, have larger than standard coupling threads for greater stability. The connectors are used on test ports, test port adapters, and test port cables.	**H3M**	
		Female			**H3**	
					92	
7 mm	DC - 18.0 GHz	Connector	straight, Contact 4 equally spaced slots		**90**	passivated Stainless Steel
			straight, Contact 6 equally spaced slots		**96**	
N	DC - 18.0 GHz	Male	straight		**51**	passivated Stainless Steel
				PUSH-ON, locking	**NS**	
		Female			**61**	
SMA	DC - 18.0 GHz	Male	straight		**11**	passivated Stainless Steel
				Maxi-Nut	**MA**	
				PUSH-ON, non-locking	**SM**	
		Female			**21**	
TNC	DC - 18.0 GHz	Male	straight		**31**	passivated Stainless Steel
				PUSH-ON, locking	**TS**	
		Female			**41**	

1) DC - 26.5 GHz for Cable Type 18 and 22.
Note: For Connector Outline Drawings please refer to Section Q.

Specifications are subject to change without notice.

Kabelkatalog.indd