

Phase-stable cable assemblies

Description and purpose

For higher phase stability in measurements, cable assemblies are made with special protection and NMD connectors. Cable armor limits a minimum cable bending radius, protects the cable against pinching, longitudinal stress and transverse twisting, which provides longer service life of the cable up to a few hundreds of thousands bends without loss of phase stability. NMD connectors have bigger body and thread in comparison with conventional connectors. Ruggedized male connectors have nuts with two threads: outer ruggedized thread and inner standard thread. Ruggedized female connectors have ruggedized inner thread only. Ruggedized thread provides stronger connection. Inner thread of male connectors provides connection with conventional female connectors. Materials and design of the assemblies provide high stability of parameters for a great number of connect/disconnect cycles at operating temperatures between -60 °C and +85 °C. You may select other cable length and connector type (male-male, female-female and female-male) for your order.



Specifications

Model	Connectors	Insertion loss, dB, max	L1, mm	L2, mm	Frequency range, GHz	VSWR, max (typ.)	Phase stability for bending, grad, max:	Minimum bending radius, mm	Fig.
KSF26-13RN-13N-700	3.5 mm NMD (female) – 3.5 mm NMD (male)	2.2	700	705	0 ... 20	1.3 (1.2)	± 6*	60	1
KSF26-13RN-13N-1000		2.8	1000	1005					
KSF26-13RN-13N-1500		3.2	1500	1505					
KSF50-05RN-05N-700	2.4 mm NMD (female) – 2.4 mm NMD (male)	6	700	705	0 ... 50	1.4 (1.3)	± 9*	60	1
KSF50-05RN-05N-1000		8.5	1000	1005					
KSF50-05RN-05N-1500		12.5	1500	1505					

* For 360° coil around cylinder of 120 mm diameter.

Dimensions

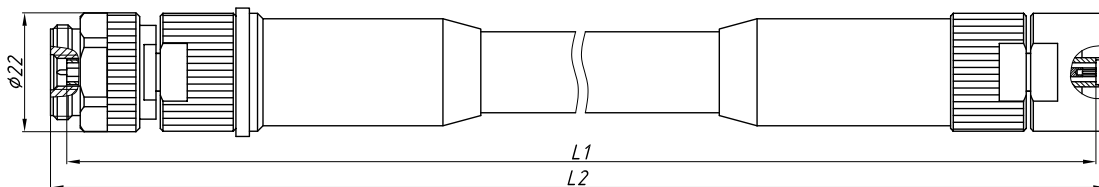


Fig. 1

Ordering example

- KSF26-13RN-13N-700 Phase-stable cable assembly, 3.5 mm NMD (female) – 3.5 mm NMD (male) connectors, 700 mm length.