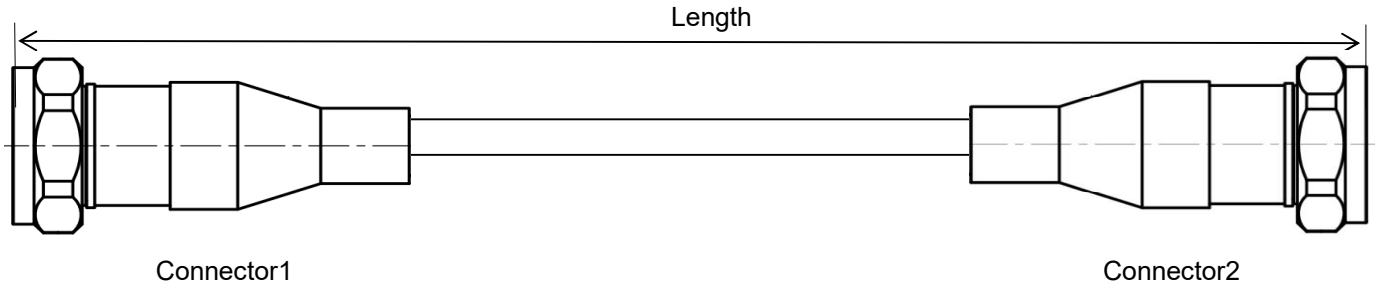
Ultra-Low Loss Phase Stable High Power Cable Assembly, Using PL1200

DC-6 GHz, DIN 7/16 Male to DIN 7/16 Male **PL1200-716M716M-L(L:Length)**

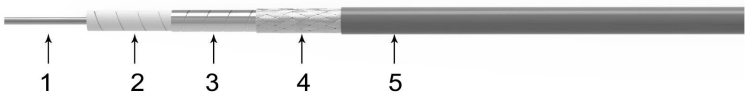


· Length can be in meter or in inch etc, e.g, PL1200-NMNM-1M. Standard length tolerance: ±1.5%. Custom lengths and other connector types available.
· Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

Configuration

Connector 1	DIN 7/16 male	**Connector 2**	DIN 7/16 male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated Phosphor bronze	Center Contact	Gold plated Phosphor bronze
Cable Type	PL1200		

Cable Construction



No.	Construction	Size（mm）	Materials
1	Center Conductor	3.80	Solid silver-plated copper
2	Dielectric	10.40	Ultra-low density PTFE
3	Outer Conductor	10.78	Silver-plated copper tape wrap
4	Outer Sheild	11.35	Silver-plated copper wire braid
5	Jacket	12.00	FEP

Electrical

Frequency	DC-6 GHz
Impedance	50 Ω
VSWR Max	1.3
IL Max(1 meter assembly)	0.5dB
*Mechanical Phase Stability	<±4°
Amplitude Stability vs Shaking	<±0.1dB

Mechanical & Environmental

Min.Bending Radius Static	60mm
Min. Bending Radius Repeated	120mm
Velocity of Propagation	83%
Temperature(Operation)	-50～85 ºC
Temperature(Storage)	-60～85 ºC

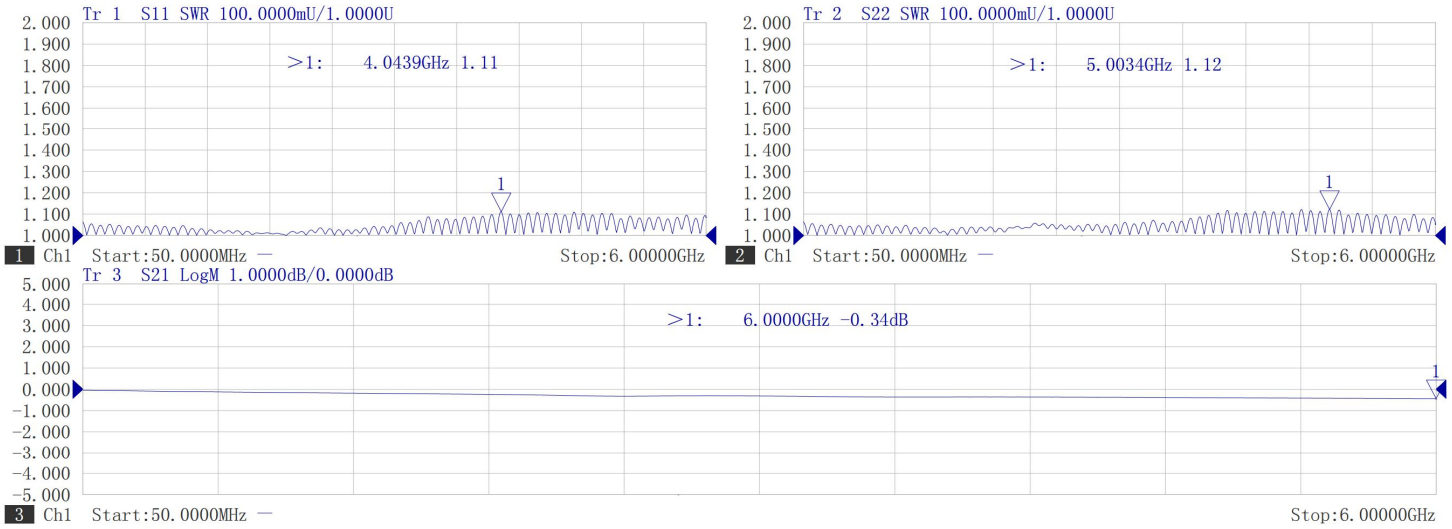
* Wrapped 360˚ around a 120mm radius mandrel.

Bulk Cable Attenuation(Typical@25℃) **& Power**(VSWR=1.0; 40℃; Sea level)

Frequency MHz	100	300	400	500	1000	1250	2000	3000	6000	8000	10000
dB/100 Meter	3.0	5.3	6.2	6.9	9.9	11.2	14.4	17.9	26.2	30.8	35.0
Avg.Power kW	9.978	5.691	4.907	4.372	3.045	2.707	2.108	1.694	1.157	0.984	0.867
Attenuation at any frequency＝[0.298515×SQRT(FMHz)]+[0.00051×FMHz]											

Notes:
1) The above attenuation refers to typical loss of cable only, max loss is 1.1 times of typical loss. Insertion loss per connector is estimated as 0.04dB x SQRT Freq(GHz).
2) Power handling values are calculated based on cable properties. Power handling will vary based on connector type and actual VSWR of the cable assembly.

Typical Test Data (PL1200-716M716M-1M)



	SweepType	Start Frequency	Stop Frequency	Points	IF BW(Hz)	SweepTime(s)	Port1,2Power(dBm)
Ch1	LIN_SWEEP	0.050000000GHz	6.000000000GHz	801	1000	0.745065	-5.0,-5.0