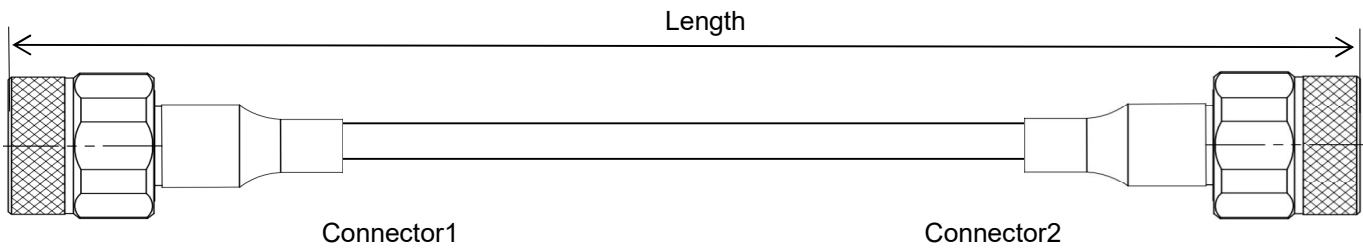


## Low Loss Flexible Cable Replacing Semi-flexible Cable Assembly, Using SP400

DC-18 GHz, N Male to N Male

SP400-NMNM-L(L:Length)

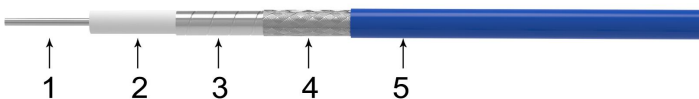


- Length can be in meter or in inch etc, e.g, SP400-NMNM-1M. Standard length tolerance:  $\pm 1.5\%$ . Custom lengths and other connector types available.
- Length is measured from one connector end to the other connector end as shown above. For RA connectors, use the pin center-line.

### Configuration

Connector 1	N male	Connector 2	N male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
<b>Cable Type</b>	SP400		

### Cable Construction



No.	Construction	Size (mm)	Materials
1	Center Conductor	0.91	Silver plated copper
2	Dielectric	3.00	Solid PTFE
3	Outer Conductor	3.20	Silver plated copper tape wrap
4	Outer Shield	3.60	Silver plated copper wire braid
5	Jacket	4.00	FEP



### Electrical

Frequency	DC-18 GHz
Impedance	50 $\Omega$
VSWR Max	1.3
IL Max(1 meter assembly)	2.7dB
Velocity of Propagation	70%

### Mechanical & Environmental

Min.Bending Radius Static	20mm
Min. Bending Radius Repeated	40mm
Temperature(Operation)	-50~105 $^{\circ}\text{C}$
Temperature(Storage)	-60~105 $^{\circ}\text{C}$

## Bulk Cable Attenuation(Typical@25°C) & Power(VSWR=1.0; 40°C; Sea level)

Frequency MHz	300	1500	2000	4000	6000	8000	10000	12000	14000	16000	18000	26500
dB/100 Meter	19.9	47.8	56.3	84.2	107.5	128.3	147.6	165.8	183.2	199.9	216.1	280.5
Avg.Power kW	0.512	0.213	0.181	0.121	0.095	0.080	0.069	0.062	0.056	0.051	0.047	0.036

Attenuation at any frequency= $[1.082400 \times \text{SQRT}(\text{FMHz})] + [0.003937 \times \text{FMHz}]$

- 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  $0.04\text{dB} \times \text{SQRT} \text{Freq}(\text{GHz})$ .
  - 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 (SP400-NMNM-1M)

