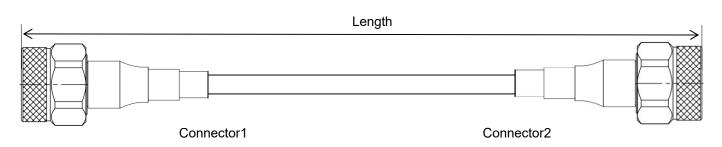


# High Flex Life Economy Test Cable Assembly, Using FL520

## DC-18 GHz, N Male to N Male

### FL520-NMNM-L(L:Length)



• Length can be in meter or in inch etc, e.g, FL520-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	N male	Connector 2	N male
Body	Passivated stainless steel	Body	Passivated stainless steel
Center Contact	Gold plated brass	Center Contact	Gold plated brass
Cable Type	FL520		

### **Cable Construction**

_										
	1	1	1	1	1	1				
	1	2	3	4	5	6				
No.	Cor	Construction			(mm)	Materials				
1	Cer	nter Co	nductor	1.:	29	Solid silver-plated copper				
2	Die	Dielectric			90	Low density PTFE				
3	Out	er Con	ductor	4.	15	Silver-plated flat copper ribbon braid				
4	Inte	Interlayer			28	Aluminum foil wrap				
5	Out	er Shie	əld	4.	73	Silver-plated copper wire braid				
6	Jac	ket		5.2	20	FEP				

**Electrical** 

#### **Mechanical & Environmental**

Frequency	DC-18 GHz	Min.Bending Radius Static	25mm
Impedance	50 Ω	Min. Bending Radius Repeated	52mm
VSWR Max	1.3	Velocity of Propagation	76%
IL Max(1 meter assembly)	1.7dB	Temperature(Operation)	-50∼85 °C
*Mechanical Phase Stability	<±6°	Temperature(Storage)	-60∼85 °C
Amplitude Stability vs Shaking	<±0.2dB		

\* Wrap the cable 360 degree around a mandrel whose diameter is ten times of the cable jacket size.

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

Frequency MHz	400	500	1000	1350	1500	6000	8000	10000	12400	14000	18000
dB/100 Meter	17.4	19.4	27.7	32.3	34.0	69.9	81.3	91.5	102.7	109.6	125.5
Avg.Power kW	1.201	1.072	0.754	0.646	0.612	0.298	0.256	0.228	0.203	0.190	0.166
K1=0.856233								K2:	=0.0005	591	
	Attenuation at any frequency=[K1×SQRT(FMHz)]+[K2×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 (FL520-NMNM-1M)

	lent Technologie					40 - 200 <u>9</u>				-
ndow 1	(1) S11 Units SWR C 2-Port									
2.00	Tr 1 S11 SWR 0.1	00U/ 1.00U							> 1: 17.93268	8 GHz 1.1562
1.90										1.1502
1.80	-									
1.70										
1.60										
1.50										
1.40										
1.30										
1.20										
1.10								A .	1	A.A.A.
1.00	mmmm	mmm	www.ww	MAMMAN	wwwww	wwwww	mmm	mmm	WWWWW	Man Man Man Ma
	Ch1: S	tart 50.0000 MHz								Stop 18.0000 GH
dow 2	(1) S22 Units SWR C 2-Port									
2.00	Tr 2 S22 SWR 0.1	00U/ 1.00U		T			1		47 70004	
1.90									> 1: 17.70831	3 GHz 1.145
1.80										
1.70										
1.60										
1.50										
1.40										
1.30										
1.20										
			_							1
1.00	000000000000000000000000000000000000000	mmmm	www.ww	mmmm	wwwww	MMMM	mmm	nmm	mmm	man
1.00	Ch1: S	tart 50.0000 MHz	-							Stop 18.0000 GH
ndow 3	(1) S21 dB LogMag C 2-Port									
4.00	Tr 3 S21 LogM 1.0	000dB/ 0.00dB								
3.00									> 1: 18.00000	0 GHz -1.4860 d
2.00										
1.00			5							
0.00										
-1.00										
-2.00										
-3.00	-									1
	1								-	1
-4.00										+
-5.00	-									
-6.00			1	1				1		1