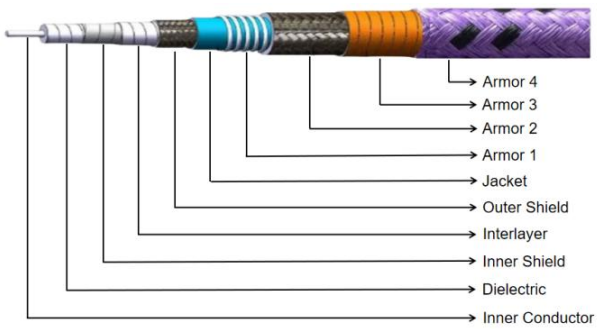
FS26TR

26.5GHz, 50 Ohm, 7.6mm OD, Flexible Test Cable with Integrated Armor Construction

Cable Construction



Construction Details

Description	OD (mm)	Material
Inner Conductor	1.44	Silver-plated copper
Dielectric	3.85	Low-density PTFE
Inner Shield	4.05	Silver-plated copper strip
Interlayer	4.30	Low-density PTFE
Outer Shield	4.65	Silver-plated copper braid
Jacket	5.10	FEP
Armor Layers 1-2	6.70	Silver-plated copper
Armor Layers 3-4	7.60	PTFE

Electrical Specifications:

Frequency Range: DC-26.5 GHz
Cutoff Frequency: 29 GHz
Nominal Impedance: 50 Ω
Phase Stability vs. Flexure[5]: ±5°@ 26.5 GHz
Amplitude Stability vs Flexure[5]: ±0.05dB @ 26.5 GHz
Velocity of Propagation: 82% nominal
Shielding Effectiveness: ≥90 dB
Dielectric Withstanding Voltage: 1500 VDC

Mechanical Specifications:

Minimum Static Bend Radius: 38 mm
Minimum Dynamic Bend Radius: 76 mm
Flex Life: ≥600,000 cycles
Durability (Mating): ≥2,000 cycles
Weight: 135 g/m

Environmental Specifications:

Operating Temperature: -55°C ~+125°C

Typical Attenuation(dB/100m)[1] and Power handling (W)[2]

Freq. (GHz)	1	2	3	6	8	10	12.4	18	26.5
Attenuation	27.1	38.9	48.1	69.6	81.3	91.9	103.5	127.4	158.8
Avg. Power	821	573	463	320	274	242	215	175	140
K1: 0.828800, K2: 0.000900									

1: Typical values at +25°C with VSWR=1.0.
2: Typical values at +40°C, sea level, with VSWR=1.0.
3: Typical Cable Attenuation Calculation Formula: $K1 * \sqrt{F(MHz)} + K2 * F(MHz)$.
4: Typical Connector insertion loss: $0.03*\sqrt{F(GHz)}$; multiply by the number of connectors.
5: Based on 360°bending on a Ø76 mm mandrel.

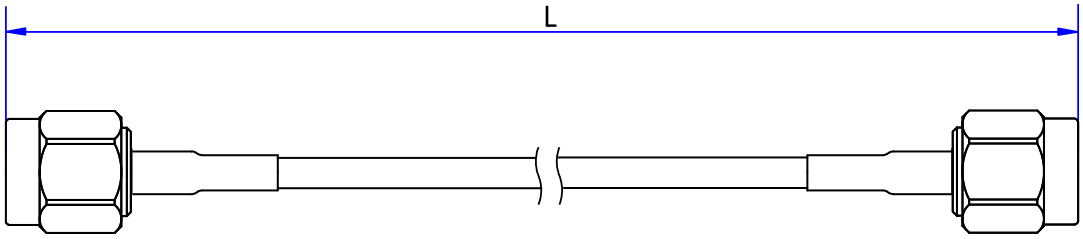
Connector Options

Connector Type	Male Code	Female Code	Max. Frequency	Max. VSWR
SMA	SM	SF	18 GHz	1.25:1
N	NM	NF	18 GHz	1.30:1
TNC	TM	TF	18 GHz	1.30:1

Notes:

- Other connector types and configurations are available upon request.
- Add suffix “R” for a right-angle connector and “H” for a bulkhead connector, e.g., SMR and SFH.

Typical Cable Assembly Outline



Notes:

- Connector styles shown are for illustration only. Actual connector types and geometries depend on the selected configuration.
- L = cable assembly length. For straight and bulkhead connectors, L is measured end to end. For right-angle connectors, L is measured from the connector centerline.
- Standard label content includes the part number, serial number, and company logo, unless otherwise specified.

Ordering Information

PN: Cable-Max. Freq.-Connector Configuration-Length (m)
E.g.: *FS26TR-26.5-SMSF-1* means an FS26TR armored cable assembly, DC to 26.5 GHz, SMA(m)-SMA(f), 1m.
For identical connectors on both ends, add “2” to the connector code, e.g., SM2; otherwise, list both codes in End A-to-End B order, e.g., SMSF.