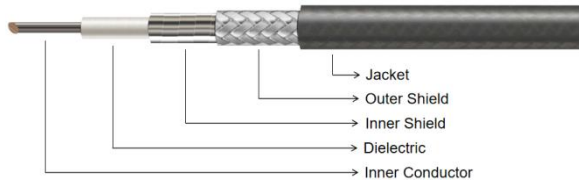


FS400A

40GHz, 50 Ohm, 4.0mm OD, Low-Loss Phase-Stable Flexible Cable, FEP Jacket.

Cable Construction



Construction Details

Description	OD (mm)	Material
Inner Conductor	1.05	Silver-plated copper
Dielectric	2.85	Low-density PTFE
Inner Shield	3.05	Silver-plated copper strip
Outer Shield	3.40	Silver-plated copper braid
Jacket	4.00	FEP

Electrical Specifications:

Operating Frequency: DC to 40 GHz

Cutoff Frequency: 41 GHz

Nominal Impedance: 50 Ω

Velocity of Propagation: 82%

Shielding Effectiveness: ≥90 dB

Dielectric Withstanding Voltage: 1500 V DC

Passive Intermodulation (PIM): ≤-155dBc

Phase Change vs. Temperature: ≤1000 ppm over -55 °C to +85 °C

Mechanical Specifications:

Minimum Static Bend Radius: 20 mm

Minimum Dynamic Bend Radius: 40 mm

Weight: 36 g/m

Environmental Specifications:

Temperature: -55 °C to +165 °C

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

Freq. (GHz)	1	2	3	6	8	10	12.4	18	26.5	40
Attenuation ¹	33.5	47.5	58.3	82.8	95.8	107.2	119.7	144.7	176.4	218.1
Avg. Power ²	634	447	365	257	222	198	178	147	120	97
K1: 1.054470, K2: 0.000180										

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.

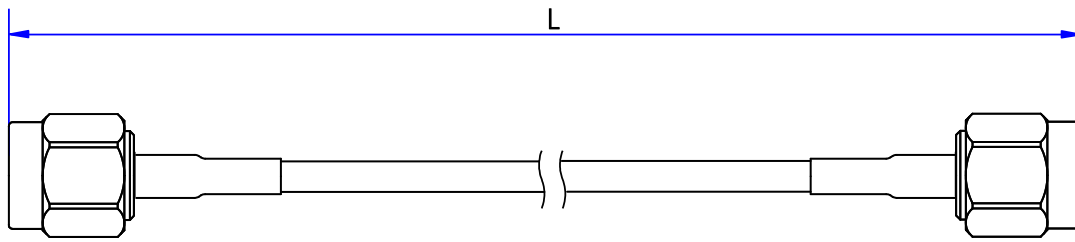
Connector Options

Connector Type	Male Code	Female Code	Max. Frequency	Max. VSWR
2.9mm	KM	KF	40 GHz	1.30:1
3.5mm	3M	3F	33 GHz	1.30:1
SMA	SM	SF	26.5 GHz	1.25:1
N	NM	NF	18 GHz	1.25:1
TNC	TM	TF	18 GHz	1.25:1

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.: *FS400A-40-KMKF-1* means an FS400A cable assembly, DC to 40 GHz, 2.92mm(m)-2.92mm(f), 1m.

For identical connectors on both ends, add “2” to the connector code, e.g., KM2; otherwise, list both codes in End A-to-End B order, e.g., KMKF.