



CELLFLEX® 1/2" superflexible cable

FEATURES / BENEFITS

- **Ultra Low Attenuation**

The reduced attenuation of CELLFLEX® coaxial cable results in extremely efficient signal transfer in your RF system, especially at high frequencies.

- **Complete Shielding**

The solid outer conductor of CELLFLEX® coaxial cable creates a continuous RFI/EMI shield that minimizes system interference.

- **Low VSWR**

Special low VSWR versions of CELLFLEX® coaxial cables contribute to low system noise.

- **Outstanding Intermodulation Performance**

CELLFLEX® coaxial cable's solid inner and outer conductors virtually eliminate intermods. Intermodulation performance is also confirmed with state-of-the-art equipment at the RFS factory.

- **High Power Rating**

Due to their low attenuation, outstanding heat transfer properties and temperature stabilized dielectric materials, CELLFLEX® cable provides safe long term operating life at high transmit power levels.

- **Wide Range of Application**

Typical areas of application are: feedlines for broadcast and terrestrial microwave antennas, wireless cellular, PCS and ESMR base stations, cabling of antenna arrays, and radio equipment interconnects



Technical features

INFORMATION

Applications	OEM jumpers, Main feed transitions to equipment, GPS lines, intended for outdoor usage
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STRUCTURE

Size		1/2
Inner Conductor Diameter	mm (in)	2.1 (0.083)
Inner Conductor Material		Copper-Clad Aluminum Wire
Dielectric Diameter	mm (in)	8.3 (0.327)
Dielectric Material		Foam Polyethylene
Outer Conductor Diameter	mm (in)	12.2 (0.48)
Outer Conductor Material		Corrugated Copper
Jacket Diameter	mm (in)	15 (0.591)
Jacket Material		Black Polyethylene

TESTING AND ENVIRONMENTAL

Phase Stabilized		Phase stabilized and phase matched cables and accessories are available upon request.
Compliance		DIN EN ISO 9001:2015 ISO 14001:2015 RoHS 2011/65/EU - China RoHS SJ/T 11364-2006 REACH (EC 1907/2006) UL1581 - UV Resistance Jacket IEC 60754-1/-2
Installation Temperature	°C(°F)	-40 to 60 (-40 to 140)
Storage Temperature	°C (°F)	-70 to 85 (-94 to 185)
Operation Temperature	°C(°F)	-50 to 85 (-58 to 185)

**ELECTRICAL SPECIFICATIONS**

Impedance	Ω	75 +/- 1
Maximum Frequency	GHz	13
Velocity	%	81
Capacitance	pF/m (pF/ft)	55 (16.8)
Peak Power Rating	kW	12.1
RF Peak Voltage	Volts	1350
Jacket Spark	Volt RMS	3500
Inner Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	7.85 (2.39)
Outer Conductor dc Resistance	Ω/1000 m (Ω/1000 ft)	4.95 (1.51)
Return Loss (VSWR) Performance		Standard 20dB (1.222) / Premium 23/24dB (1.152/1.135) on specified frequencies

MECHANICAL SPECIFICATIONS

Cable Weight, Nominal	kg/m (lb/ft)	0.2 (0.134)
Minimum Bending Radius, Repeated Bends	mm (in)	30 (1.181)
Bending Moment	Nm (lb-ft)	1.8 (1.33)
Tensile Strength	N (lb)	520 (117)
Recommended / Maximum Clamp Spacing	m (ft)	0.3 / 0.3 (1 / 1)

ATTENUATION @ 20°C (68°F) AND POWER RATING @ 40°C (104°F)

Frequency, MHz	dB per 100m	dB per 100ft	Power, kW
1	0.3	0.09	22.29
100	3.16	0.96	2.15
200	4.53	1.38	1.5
450	6.98	2.13	0.97
700	8.87	2.7	0.77
800	9.55	2.91	0.71
900	10.19	3.11	0.67
1800	15.04	4.58	0.45
2000	15.98	4.87	0.43
2200	16.88	5.15	0.4
2400	17.75	5.41	0.38
2700	19.01	5.8	0.36
3000	20.23	6.17	0.34
3500	22.16	6.76	0.31
4000	24	7.32	0.28
5000	27.47	8.37	0.25
13000	50.21	15.31	0.14



1/2" CELLFLEX® Superflexible Foam-Dielectric Coaxial Cable

Notes

SCF12-75J

REV : A

REV DATE : 16 Jan 2025

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