



Telco Antennas 1/2" Corrugated Fire-Retardant Coaxial Cable

SKU: TEL450-fr

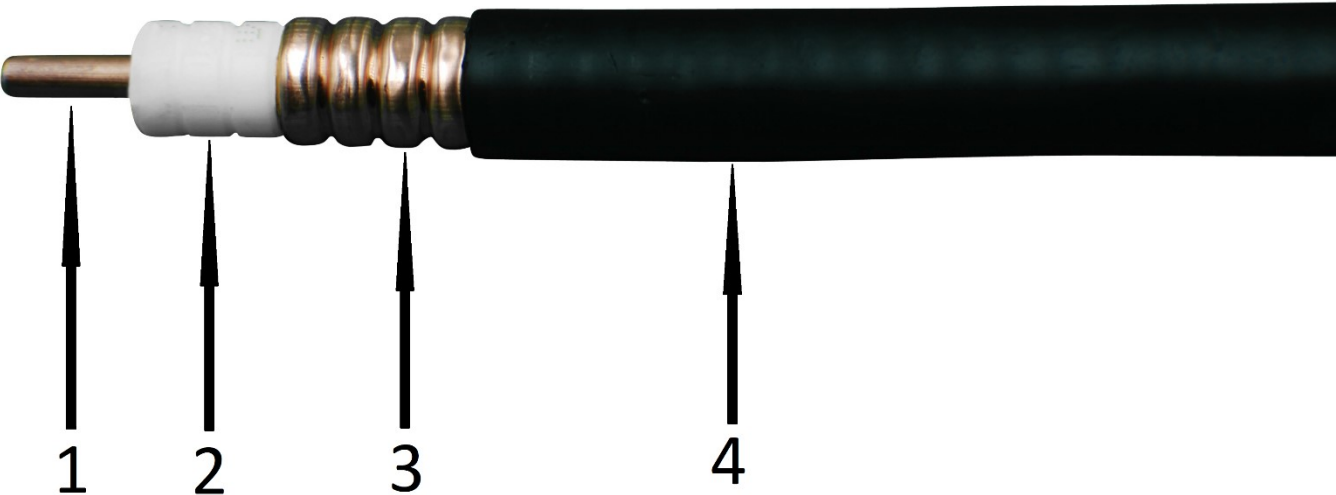
Telco TEL450 is a 50Ω 24.3mm diameter ultra-low loss corrugated coaxial cable, designed for high frequency microwave, radar, GPS, UHF, and cellular communications with a service life in excess of 20 years.

Telco TEL450 cabling is designed for maximum weather resistance and usability.

A low smoke halogen free polyethylene construction means this cable is Fire Retardant.

Telco TEL450 has a UV-stable jacket designed for harsh outdoor environments.

The corrugated design of the TEL450 cable helps to maintain maximum flexibility and allow for easier cable runs.



Construction Specifications		
Descriptor	Material	Diameter (mm)
1. Inner Conductor	Copper Clad Aluminium Wire	4.8
2. Dielectric	Physical Foam Polyethylene	12.3
3. Outer Conductor	Corrugated Copper Tube	13.8
4. Jacket	Low Smoke Halogen Free Fire Retardant	15.7



Electrical Specifications

Operating Frequency Band	1 – 8800MHz	
Capacitance	76pF/m	
Impedance	50Ω	
Velocity	88%	
Peak Power Rating	40kW	
RF Peak Voltage	1.6kV	
Insulation Resistance	> 5000mΩ*km min	
Insulation Voltage	6kV	
Inner Conductor DC Resistance	1.48Ω/km	
Outer Conductor DC Resistance	1.9Ω/km	
Jacket Spark	8kV	
Shielding Effectiveness (dB)	1.2dB	
VSWR ≤ (Return Loss ≥ dB)	1-3000MHz	1.15dB (23dB)
	800 – 1000MHz	1.1dB (26dB)
	1700 – 2000MHz	1.1dB (26dB)
	2000 – 2400MHz	1.1dB (26dB)

Mechanical Specifications

Minimum Single Bending Radius	50mm
Minimum Repeated Bending Radius	125mm
No. of Bends	55
Mobile Apply	350m m
Bending Moment	5 Nm
Tensile Strength	110kg
Storage Temperature Range	-55°C to +85°C
Installation Temperature Range	-40°C to +60°C
Operating Temperature Range	-55°C to +85°C



Attenuation (VSWR 1.0 & Cable Temp. 20°C) & **Average Power** (VSWR 1.0 & Ambient Temp. 40°C)

Frequency (MHz)	Attenuation (> dB/100m)	Average Power (kW)
100	2.15	3.94
200	3.08	2.75
450	4.70	1.80
800	6.35	1.33
900	6.75	1.25
100	7.20	1.18
1500	9.05	0.95
1800	9.90	0.86
2000	10.50	0.81
2200	11.10	0.77
2400	11.60	0.75
2500	11.95	0.73
3000	13.20	0.65