

YSROL-500Y

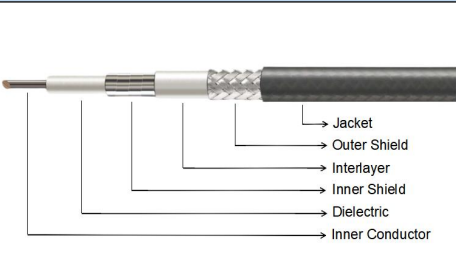
18 GHz, ϕ 5.00 mm Rugged Outdoor Low-Loss RF Cable Assembly

Key Features

- Rugged Outdoor Construction
- Ultra-Low Insertion Loss
- Excellent Environmental Resistance
- Rodent-Resistant PUR Jacket
- 20+ Years Outdoor Service Life

Applications

- Armored & Tactical Vehicles
- Military Communication Systems
- Naval Communication Equipment
- Phased Array Radar Antennas
- Military & Commercial Base Stations

Cable Construction									
			Cable Type		Dia.(mm)		Material		
			Inner Conductor		ϕ 1.02		Silver plated Copper		
			Dielectric		ϕ 3.07		Low Density PTFE		
			Inner Shield		ϕ 3.27		Silver Plated Copper Strip		
			Interlayer		ϕ 3.43		High-Temperature Aluminum Foil		
			Outer Shield		ϕ 4.00		Silver Plated Copper Braid		
			Jacket		ϕ 5.00		Rodent-Resistant PUR Jacket		
Electrical Specifications					Mechanical Specifications				
Operating Freq.		18 GHz			Static Bending Radius		25 mm		
Cut-off Freq.		35 GHz			Dynamic Bending Radius		50 mm		
Impedance		50 Ω			Weight		57 g/m		
Velocity of Propagation		76%			Environmental Specifications				
Shielding Effectiveness		>70 dB			Operating Temperature		-55 to +85°C		
Dielectric Withstanding Voltage		1500 VDC							
Attenuation (dB/100 M, Typical at +25°C) & Power Handling (W, Typical at +40°C)									
Freq.(GHz)	1	2	3	6	8	10	12.4	16	18
Attenuation	35.4	50.4	62.0	88.8	103.2	116.0	129.9	148.7	158.3
Avg. Power	199	140	113	79	68	61	54	47	44
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F(\text{MHz})} + K2*F(\text{MHz})$									
K1=1.099485, K2=0.000602									
Connectors Options									
Connectors	Freq.(Max)	VSWR (Max)			Connectors	Freq.(Max)	VSWR (Max)		
SMA (S)	27 GHz	1.25:1			N(N)	18 GHz	1.25:1		

Cable Assemblies Naming Rule:

PN: Cable-Length(M)-Connector 1-Connector 2

Eq.: YSROL-500Y-1M-SM-SF means YSROL-500Y cable, L=1M, SMA(M)-SMA(F).

Add "R" for Right-Angle Connector, Add "H" for Bulkhead Connector (e.g., SMR, SFH).