

# YSUFL-800Z

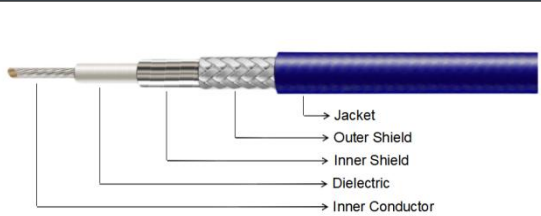
18 GHz,  $\phi$ 8.00 mm Ultra-Flexible Low-Loss RF Cable Assembly

## Key Features

- Multi-Core Ultra-Flexible Construction
- Excellent Mechanical Flexibility
- Harsh Environment Resistance
- Stable RF Performance
- Optimized for Complex Routing

## Applications

- Armored Vehicle Systems
- Tactical Communication Platforms
- Military RF Equipment
- Compact RF Interconnect Systems
- Precision RF Test Applications

Cable Construction								
			Cable Type	Dia.(mm)	Material			
			Inner Conductor	$\phi$ 1.88	Silver plated Copper			
			Dielectric	$\phi$ 5.50	Low Density PTFE			
			Inner Shield	$\phi$ 5.74	Silver Plated Copper Strip			
			Outer Shield	$\phi$ 6.31	Silver Plated Copper Braid			
			Jacket	$\phi$ 8.00	PUR			
Electrical Specifications				Mechanical Specifications				
Operating Freq.	18 GHz			Static Bending Radius	40 mm			
Cut-off Freq.	20 GHz			Dynamic Bending Radius	80 mm			
Impedance	50 $\Omega$			Weight	116 g/m			
Velocity of Propagation	76%			Environmental Specifications				
Shielding Effectiveness	>90 dB			Operating Temperature	-55 to +85°C			
Dielectric Withstanding Voltage	2000 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	18
Attenuation	18.2	26.7	33.8	50.9	60.7	69.8	80.0	101.9
Avg. Power	327	222	176	117	98	85	74	58
Typical Cable Attenuation Calculation Formula: $K1*\sqrt{F}(\text{MHz}) + K2*F(\text{MHz})$ $K1=0.517315, K2=0.001806$								
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

Ex.: YSUFL-800Z-1M-SM-SF means YSUFL-800Z cable, L=1M, SMA(M)-SMA(F).

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