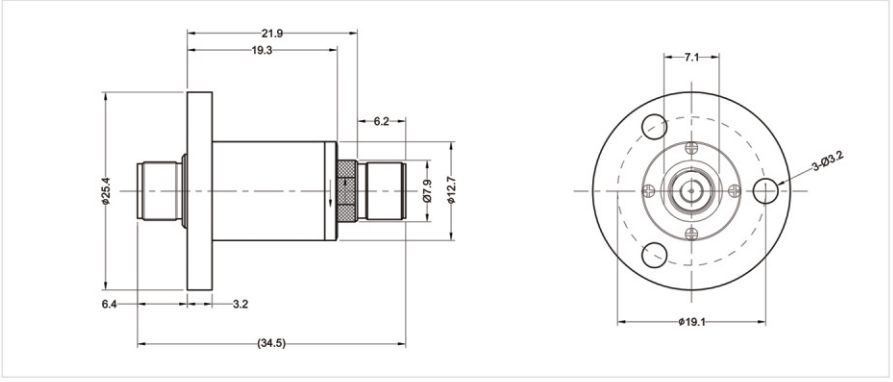
Coaxial Rotary Joints

Coaxial Rotary joints are needed wherever high frequency signals have to be transmitted between a fixed platform and a second platform in continuous rotation. Typical applications include traditional radar technology for air traffic control or anti-missile defence, medical engineering, V-Sat and SatCom technology as well as TV camera systems or cable drums that allow sensitive cables to be wound up without twisting them, thus increasing their reliability.

AOOD coaxial rotary joints allow signal transmission in the frequency range from DC up to 20 GHz. Single channel , dual channel and multi-channel RF solutions are available. The special benefits of AOOD coaxial rotary joints include their compact design, excellent VSWR and low attenuation loss, low variation of transmission properties during rotation and high crosstalk attenuation between the individual channels over the whole frequency range.

HFRJ-118 Specification

RF	Channel count	1
	Frequency range	DC to 18 GHz
	Peak Power(kW)	3.0
	Average power at 1GHz	500
	VSWR	≤1.5
	VSWR - WOW	≤0.1
	Insertion loss(dB)	≤1
	Insertion loss - WOW(dB)	≤0.1
	Phase - WOW	≤ 1°
	Connection	SMA socket
Mechanical	Working speed	300rpm
	Rotating torque(Max)	4 N.cm
	Housing	Aluminium alloy
	Weight (g)	120g
	Protection	IP54
	Life	2000HRS@300RPM
Environmental	Working temp (C)	-40 to 85
	Storage temp (C)	-50 to 85
	Humidity	Max 95%



HFRJ-218 Specification

RF	Channel	Channel 1	Channel 2	
	Frequency range	DC to 18 GHz	DC to 2 GHz	2 to 4 GHz
	Peak Power(kW)	3.0	3.0	3.0
	Average power at 1GHz	200	200	200
	VSWR	≤1.8	≤1.4	≤2.5
	VSWR - WOW	≤0.05	≤0.1	≤0.4
	Insertion loss(dB)	≤0.7	≤0.5	≤1.5
	Insertion loss - WOW(dB)	≤0.05	≤0.1	≤0.3
	Phase - WOW	≤ 1°	≤ 2°	≤ 2°
	Connection	SMA socket	SMA socket	SMA socket
Mechanical	Working speed		300rpm	
	Rotating torque(Max)		6 N.cm	
	Housing		Aluminium alloy	
	Weight (g)		180g	
	Protection		IP54	
	Life		2000HRS@300RPM	
Environmental	Working temp (C)		-40 to 85	
	Storage temp (C)		-50 to 85	
	Humidity		Max 95%