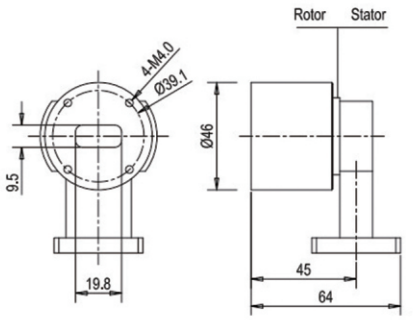
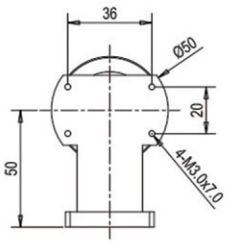
Waveguide Rotary Joints

Waveguide rotary joints allow the microwave transmission from a stationary platform to a 360° rotating rectangular waveguide, the highest frequency up to 94Ghz. They can handle greater power and have less attenuation than coaxial rotary joints, especially after exceeding a certain frequency, the two advantages of waveguide rotary joints are very obvious. AOOD provides single channel waveguide units and combination of waveguide and coaxial units. These units can be used with electrical slip rings to provide waveguide, coaxial power and data transmission together. Typical applications include radar, satellite and mobile antenna systems etc.

ADSR-RW01 Specification

RF	Channel count	1
	Style	L
	Frequency range	13.75 to14.5 GHz
	Peak Power	5kW max
	Average power	100W max
	VSWR	1.2 max
	VSWR - WOW	0.1 max
	Insertion loss	0.2dB max
	Insertion loss - WOW	0.05dB max
Mechanical	Working speed	50rpm
	Rotating torque	0.25 N.m max
	Housing	Aluminium alloy
	Weight (g)	300g
	Protection	IP65
	Life	10 million revolutions
Environmental	Working temp (C)	-40 to 85
	Storage temp (C)	-50 to 85
	Humidity	95%





1W141R2 Specification

RF	Channel	Channel 1 (waveguide)	Channel 2 (coaxial)
	Interface	R120°special flange	SMA-F(50Ω)
	Style	I	U
	Frequency range	14 GHz	2 GHz
	Peak Power	10kW max	3kW max
	Average power	100W	10W
	VSWR	1.2 max	1.2 max
	VSWR - WOW	0.1 max	0.05 max
	Insertion loss	0.2dB max	0.4dB max
	Insertion loss - WOW	0.05dB max	0.1dB max
	Isolation	60dB	
	Phase - WOW	1° max	≤ 2° max
Mechanical	Working speed		60rpm
	Rotating torque(Max)		0.2 N.m
	Housing		Aluminium alloy
	Weight (g)		600g
	Protection		IP64
	Life		10 million revolutions
Environmental	Working temp (C)		-40 to 85
	Storage temp (C)		-50 to 85
	Humidity		Max 95%