# MHF100 Series

## 1 Channel Rf Rotary Joints

MHF100 is single channel high frequency rotary joint, which is specifically designed for high-speed serial digital signals or analog signal transmission. It can support maximum transfer rate 30GHz. MHF series can support single channel or high-frequency signal transmission by itself. Also MHF series can be customized to combine high-frequency signal with 24V control signal, communication signal, power supply and fluid media. Please refer to MHF108 series.

#### Typical application:

- Military radar antenna, multi shaft 3D simulator
- Antenna rotating platform with radio-frequency signal support 1080P. 1080I, etc HD-SDI high definition rotary table
- Support 1080P、1080I, etc HD-SDI all-in-one machine (high speed dome)

#### Part# Explanation

## MHF100-SMA-18G

MHF: High frequency slip ring

100: 1 channel high frequency SMA: SMA connector; N: N connector;

SMA: SMA connector; N: N connecto W50: Exit RG316 Wires/50Ω

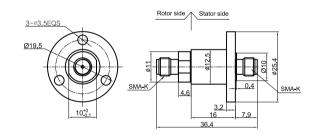
W75: Exit RG179 Wires/75Ω

18G: Max frequency 18GHZ

#### MHF100-SMA-30G Picture

#### MHF100-SMA-30G Dimensions

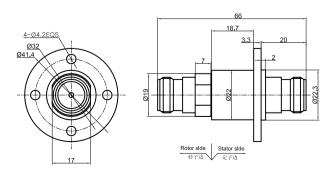


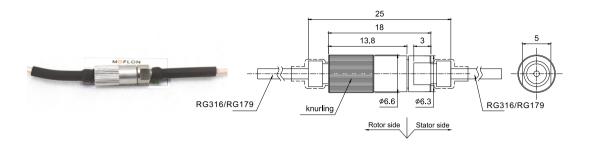


### MHF100-N-12G Picture

#### MHF100-N-12G Dimensions







## Part# List

MHF100 - 1 channel RF rotary joint part list								
Part#	RF Channel	Frquency	Connector Type	Characteristic Impedance	Insertion Loss	VSWR	VSWR Ripple	
MHF100-SMA-30G	1	DC-30GHz	SMA	50Ω	0.3db	≤1.3	≤0.05	
MHF100-N-12G	1	DC-12GHz	N	50Ω	0.3db	≤1.3	≤0.05	
MHF100-W50-3G	1	DC-3GHz	coaxial-cable RG316	50Ω	0.3db	≤1.3	≤0.05	
MHF100-W75-3G	1	DC-3GHz	coaxial-cable RG179	75Ω	0.3db	≤1.3	≤0.05	

### **Specifications**

	Mechanical data
Parameter	Value
Working Life	50 million revs
Rotating Speed	100RPM
Working Temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	Gold-Gold
Housing Material	stainless steel
Torque	0.1N.m; +0.03N.m/6 rings
Protection Grade	IP51