TMRJ-HF18G186-1212-S

RF Rotary Joint Slip Ring, Single Channel DC~18GHz, OD 86mm, SMA female

FEATURES

- Low Contact Resistance
- Large Volume Data Transmission without Delay
- Long Lifetime

APPLICATIONS

- Radar Antennas
- Satellite Communication Systems
- Medical Treatment Equipment
- Robotics

Electrical Specifications[Rotary Joint]

Frequency	DC~18GHz
VSWR	1.3 max@DC~10GHz
	1.4 max@10~18GHz
VSWR Ripple	0.05 max
Insertion Loss	0.25dB@DC~10GHz
	0.3dB@10~18GHz
Insertion Loss Ripple	0.05dB max
Phase WOW	1° max
Average Power	500W max@1GHz
	200W max@6GHz
	100W max@12GHz
	30W max@18GHz
Peak Power	3kW max
Protection Degree	IP 40 acc. EN 60529

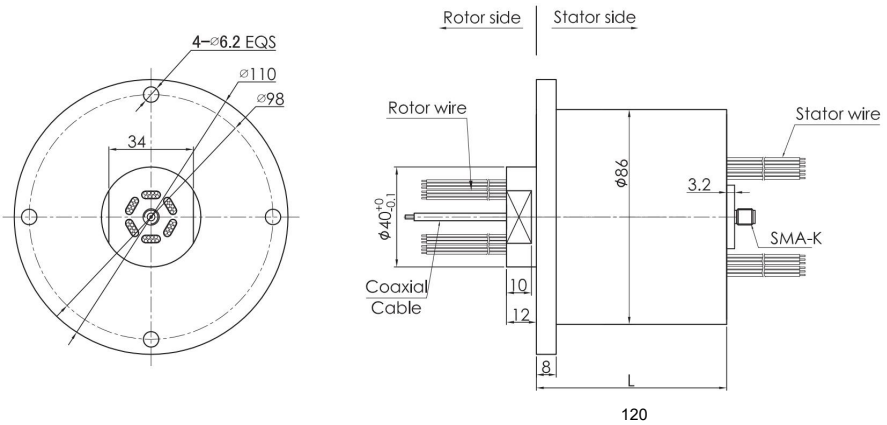
Mechanical Specifications[Rotary Joint]

Connector Type	SMA female
Working Life	10 Million Revs
Rotating Speed	250 rpm max
Starting Torque	0.5N.cm max
Rotating Torque	0.5N.cm max
Connector Axial Load	±0.1N max
Connector Radial Load	±0.1N max
Contact Material	PTFE
Operating Humidity	0~85%RH
Operating Temperature	-55℃~+85℃
Storage Temperature	-55℃~+85℃

Specifications[Slip Ring]

Voltage Range(power)	0~440VAC/VDC
Voltage Range(signal)	0~240VAC/VDC
Insolution Resistance(power)	≥500MΩ@500VDC
Insolution Resistance(signal)	≥300MΩ@300VDC
Lead Cable Size(power)	AWG#17 Silver-plated teflon
Lead Cable Size(signal)	AWG#22 Silver-plated teflon
Lead Cable Length	Standard 250mm(rotor/stator)
Dielectric Strength	300VAC@50Hz, 60s
Dielectric Noise	0.01Ω max
Working Life	10 Million Revs
Rotating Speed	250 rpm max
Contact Material	Gold-Gold
Housing Material	Aluminum alloy
Temperature	-30℃~+80℃
Operating Humidity	0~85%RH
Torque	0.05N.m+0.01N.m/6 channels
Protection Degree	IP51

Dimensions[mm]



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Ordering Information

TMRJ - HF 18G 1 86 - 12 12 - S

- **S**: Connector Type
  - S: SMA female
- **12**: 12 Rings for Signal Transmission
- **12**: 12 Rings for Power Transmission
- **86**: Outer Diameter(mm)
  - (86: OD 86mm)
- **1**: Number of Coax Channels
- **18G**: Max Operating Frequency(GHz)
- **HF**: Hybrid Slip Rings Coax+Electric
- **TMRJ**: Titan Microwave Rotary Joint

✧ *Customization is available upon specific requests* ✧