BMHF107 SERIES

1 Channel Rf Rotary Joints+electric Slip Ring

BMHF107 is 1 channel RF + electric combining high frequency rotary joint. High frequency + electric slip ring is specifically designed to support high-speed serial digital signals or analog signal transmission. It can support maximum rate 3GHz. This series product can support single channel high frequency transmissions, also high-frequency signal transmission combining with 24V control signal, communication signal, power supply and fluid media. Video signal adopt 50Ω characteristic impedance. High-frequency signal adopts 50Ω characteristic impedance RF coaxial connector. (other specified connectors are switchable, also Lead wire size are optional, such as RG178、RG316、RG174, etc.)

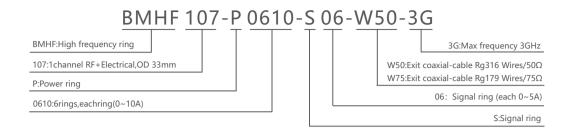
Product images



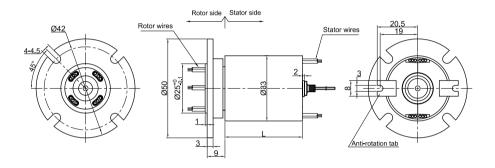
The pictures are for reference only

If there are changes in the appearance and size of the product, the actual product should prevail.

Part# Explanation



Dimensions



BMHF107 channel RF rotary joint part list

Part#	RF Channel	Frquency	10A	Signal 5A	Length (mm)
BMHF107-S06	1	DC-3GHz	0	6	25.4
BMHF107-S12	1	DC-3GHz	0	12	39.2
BMHF107-S18	1	DC-3GHz	0	18	53
BMHF107-S24	1	DC-3GHz	0	24	66.8

Note: 1) N channels 10A rings parallel can be used as 1 channel N*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A 2) circuit number and current strength can be customized, please contact customer service for more details.

RF Rotary joints Specifications

Parameter	Numerical value
Frequency	0~3GHz
Rated Power	5W
VSWR	<1.3
Insertion Loss	0.3db
VSWR Ripple	< 0.05
Insertion Loss Ripple	0.05db
Connector Types	Exit coaxial-cable directiy
Characteristic Impedance	50Ω or 75Ω

Mechanical Data

Parameter	Numerical 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	Aluminum alloy
Torque	0.1N.m; +0.03N.m/6 rings
Protection Grade	IP51

Electrical Data

Project	Power	Signal	
Rated Voltage	0~400VAC/VDC	0~240VAC/VDC	
Insulation Resistance	≥500MΩ/300VDC	≥200MΩ/300VDC	
Lead Wires	AWG22#Teflon	AWG22#Teflon	
Lead Length	Standard length 300mm(adjustable)		
Insulating Strength	200VAC@50Hz,60s		
Electrical Noise	<0.01Ω	<0.01Ω	

Options for custom slip ring

Note: Below special demands can be customized According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular which can save the cost and lead time.

- 1. Cable exit way and cable length can be customized for both rotor and stator.
- 2. Because of the structure limitation, length/height/OD can be customized on your request.
- 3. Support current or signal up to 200 rings.
- 4. Aviation plug, terminal and heat-shrink tube are optional.
- 5. Hybrid slip ring for Yaskawa/Panasonic/Siemens servo control signal, power line and encoder line.
- 6. Support mixed high speed data transmission (including Ethernet, USB, RS232, RS485, Profibus, CanBUS, CANOPEN, DeviceNET, CC-LINK, ProfiNET, EtherCAT, etc.)
- 7. Can combine temperature control signal with thermocouple signal.
- 8. Special environment can be customized, such as quakeproof, high temperature, etc.
- 9. Hybrid Pneumatic/hydraulic and electric slip ring can be mixed.
- 10. High temperature can up to 500 degrees.
- 11. High pressure can up to 110KV
- 12. Rotating speed can up to 10000RPM
- 13. Maximum current can up to 5000 amperes.
- 14. Military grade
- 15. Optional for underwater IP65, IP68.
- 16. Optional for stainless steel housing

Technical support: Info@orbinexus.com