



HF0118-56 series rf rotary joint slip ring

Signal Channel, Frequency DC~18GHz, OD 56mm

Sending HF0118-56 series RF rotary joint is used transmitting of analog and digital signals, RF Channel, can be customized to combine power/signal transmitting (6~48 wires), 2.4(K)-F connector, stator flange installation.

Part No. Description

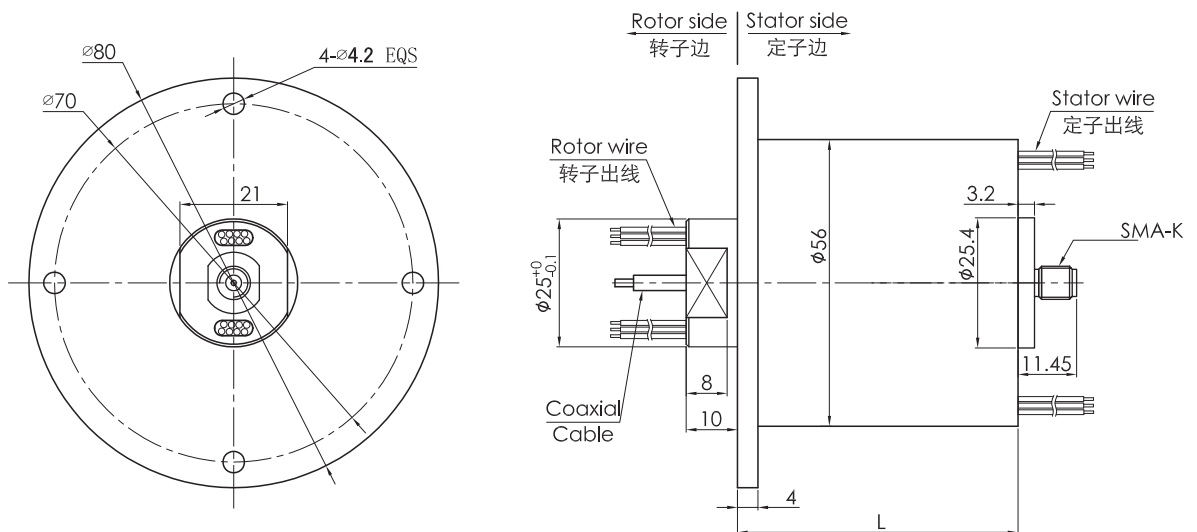
HF0118-56 - Power Circuits - Signal Circuits	
Single Channel RF Rotary Joint Frequency DC~18GHz, OD 56mm	For example: 06S: 6 circuits signal@2A 12S: 12 circuits signal@2A For example: 0610: 6 circuits@10A 1230: 12 circuits@30A

Examples

HF0118-56: 1 channel RF rotary joint, frequency DC~18GHz, OD 56mm;

HF0118-56-12S: 1 channel RF rotary joint+12 circuits signal@2A, frequency DC~18GHz, OD 56mm;

HF0118-56-0610-12S: 1 channel RF rotary joint +6 circuits@10A+12 circuits signal@2A, frequency DC~18GHz, OD



Standard Model List

Model	ListRF Channel	Frequency	Circuits no. (10A)	Circuits no. (0~2A)	Length L(mm)
HF0118-56-0610	1 channel	DC~18GHz	6channels	0	38mm
HF0118-56-06S	1 channel	DC~18GHz	0	6channels	38mm
HF0118-56-0610-06S	1 channel	DC~18GHz	6channels	6channels	55mm
HF0118-56-1210	1 channel	DC~18GHz	12channels	0	55mm
HF0118-56-12S	1 channel	DC~18GHz	0	12channels	55mm
HF0118-56-0610-12S	1 channel	DC~18GHz	6channels	12channels	71.5mm
HF0118-56-1810	1 channel	DC~18GHz	18channels	0channels	71.5mm
HF0118-56-18S	1 channel	DC~18GHz	0	18channels	71.5mm
HF0118-56-0610-18S	1 channel	DC~18GHz	6channels	18channels	88.5mm
HF0118-56-1210-12S	1 channel	DC~18GHz	12channels	12channels	88.5mm
HF0118-56-2410	1 channel	DC~18GHz	24channels	0	88.5mm
HF0118-56-24S	1 channel	DC~18GHz	0	24channels	88.5mm
HF0118-56-36S	1 channel	DC~18GHz	0	36channels	122mm
HF0118-56-48S	1 channel	DC~18GHz	0	48channels	156mm

Rotary joint Spec.

Connector type	SMA-K (50Ω)	Style	I type
Frequency	DC to 18 GHz	Phase WOW (Max degree)	1°
VSWR(max)	1.3@DC to 10 GHz 1.4@DC to 18 GHz	Insertion loss	0.25 dB @ DC to 10 GHz 0.30 dB @10 to 18 GHz
VSWR fluctuation(max)	0.05	Insertion loss fluctuation	0.05 dB
Peak power(max)	3000W	Average power(max)	500 W @1 GHz 200 W @6GHz 100 W @12GHz 30 W @18GHz
Rotating speed(max)	250RPM	working life	> 10 millions for ref(depe-nds on working conditions)
Starting torque(max)	0.5N.cm	Rotating torque(max)	0.5 N.cm
Connector axial load(max)	± 0.1N	Connector radial load(max)	± 0.1N
Insulating material	PTFE	IP grade	IP 40 acc. EN 60529
Temperature	-55 to +85°C(work temperature) -55 to +85°C(storage temperature)	Humidity	95% (work humidity) 85% (storage humidity)

Electrical slip ring Spec.

Mechanical		Electrical		
Working life	> 10 millions for ref (depends on working conditions)	Spec.	Power	Signal
		Voltage range	0 ~ 440VAC/VDC	0 ~ 240VAC/VDC
Rotating speed	250RPM	Insulation resistance	≥ 500MΩ/500VDC	≥ 300MΩ/300VDC
Temperature	-30°C ~ 80°C	Lead wire spec.	AWG#17	AWG#26
Humidity	0 ~ 85% RH		Silver-plated teflon	Silver-plated teflon
Contact material	gold-gold	Lead wire length	standard 250mm(can be customized)	
Housing material	Aluminum alloy	Insulation resistance	500VAC@50Hz,60s	
Torque	0.05N.m+0.01N.m/6 channels	Electrical noise	< 0.01Ω	
IP grade	IP51			

Color Code of Lead Wire

ring #	1	2	3	4	5	6	7	8	9	10	11	12
color	BLK	BRN	RED	ORG	YEL	GRN	BLU	PUR	GRY	WHT	PINK	LGT BLU
ring #	13	14	15	16	17	18	19	20	21	22	23	24
color	WHT/BLK	WHT/BRN	WHT/RED	WHT/ORG	WHT/YEL	WHT/GRN	WHT/BLU	WHT/PUR	WHT/GRY	BLK/RED	BLK/BRN	Transparent

Remark: "1" : the first wire from rotor side , HF0118-56-12S wire color sequence: BLK/BRN/RED/ORG/YEL/GRN/BLU PUR/GRY/WHT/PINK/LGT BLU , 24 color wires asone group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....