



HF0118-86 series rf rotary joint slip ring

Signal Channel, Frequency DC~18GHz, OD 86mm

Senring HF0118-86 series RF rotary joint is used transmitting of analog and digital signals, RF Channel, can be customized to combine power/signal transmitting(6~12 wires), 2.4(K)-F connector, stator flange installation.

Part No. Description

HF0118-86 - Power Circuits - Signal Circuits

Single Channel RF Rotary Joint
Frequency DC~18GHz, OD 86mm

For example:

06S:6 circuits signal@2A
12S:12 circuits signal@2A

For example:

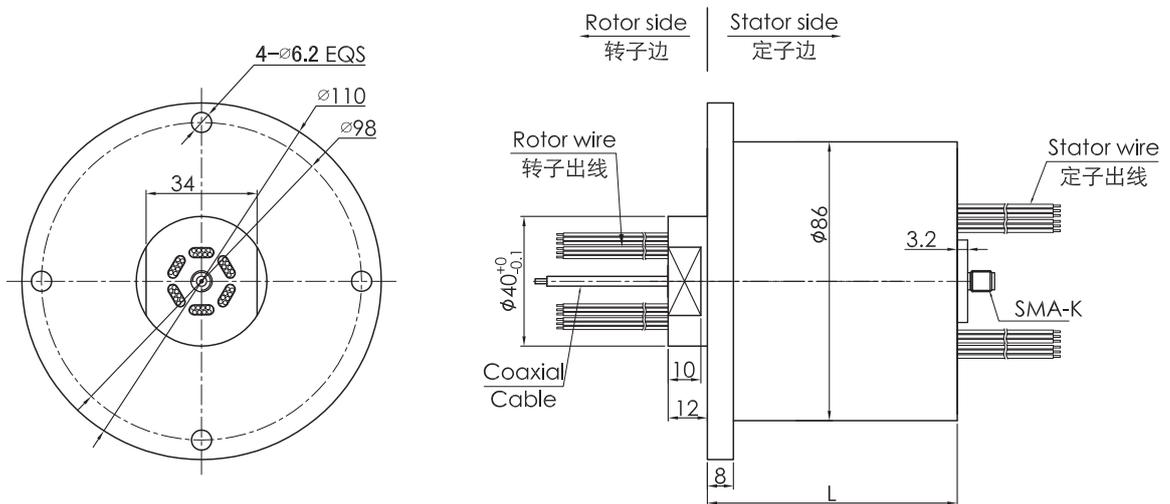
0610:6 circuits@10A
1230:12 circuits@30A

Examples

HF0118-86: 1 channel RF rotary joint, frequency DC~18GHz, OD 86mm;

HF0118-86-12S: 1 channel RF Rotary Joint+12 circuits signal@2A, frequency DC~18GHz, OD 86mm;

HF0118-86-0610-12S: 1 channel RF+6 circuits@10A+12 circuits signal@2A, frequency DC~18GHz, OD 86mm;



Standard Model List

Model	ListRF Channel	Frequency	Circuits no. (10A)	Circuits no. (0~2A)	Length L(mm)
HF0118-86-0610	1 channel	DC-18GHz	6channels	0	48mm
HF0118-86-06S	1 channel	DC-18GHz	0	6channels	48mm
HF0118-86-0610-06S	1 channel	DC-18GHz	6channels	6channels	72mm
HF0118-86-1210	1 channel	DC-18GHz	12channels	0	72mm
HF0118-86-12S	1 channel	DC-18GHz	0	12channels	72mm
HF0118-86-0610-12S	1 channel	DC-18GHz	6channels	12channels	96mm
HF0118-86-1810	1 channel	DC-18GHz	18channels	0channels	96mm
HF0118-86-18S	1 channel	DC-18GHz	0	18channels	96mm
HF0118-86-0610-18S	1 channel	DC-18GHz	6channels	18channels	120mm
HF0118-86-1210-12S	1 channel	DC-18GHz	12channels	12channels	120mm
HF0118-86-2410	1 channel	DC-18GHz	24channels	0	120mm
HF0118-86-24S	1 channel	DC-18GHz	0	24channels	120mm
HF0118-86-0610-30S	1 channel	DC-18GHz	6channels	30channels	168mm
HF0118-86-1210-24S	1 channel	DC-18GHz	12channels	24channels	168mm
HF0118-86-3610	1 channel	DC-18GHz	36channels	0	168mm
HF0118-86-36S	1 channel	DC-18GHz	0	36channels	168mm
HF0118-86-0610-42S	1 channel	DC-18GHz	6channels	42channels	216mm

Model	ListRF Channel	Frequency	Circuits no. (10A)	Circuits no. (0~2A)	Length L(mm)
HF0118-86-1210-36S	1 channel	DC-18GHz	12channels	36channels	216mm
HF0118-86-2410-24S	1 channel	DC-18GHz	24channels	24channels	216mm
HF0118-86-4810	1 channel	DC-18GHz	48channels	0	216mm
HF0118-86-48S	1 channel	DC-18GHz	0	48channels	216mm
HF0118-86-2410-36S	1 channel	DC-18GHz	24channels	36channels	264mm
HF0118-86-6010	1 channel	DC-18GHz	60channels	0	264mm
HF0118-86-60S	1 channel	DC-18GHz	0	60channels	264mm
HF0118-86-2410-48S	1 channel	DC-18GHz	24channels	48channels	312mm
HF0118-86-7210	1 channel	DC-18GHz	72channels	0	312mm
HF0118-86-72S	1 channel	DC-18GHz	0	72channels	312mm
HF0118-86-96S	1 channel	DC-18GHz	0	96channels	360mm
HF0118-86-120S	1 channel	DC-18GHz	0	120channels	408mm

Rotary joint Spec.

Connector type	2.4(K)-F (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#22
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	300VAC@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 , HF0118-86-12S 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#....