



FO102 series 1 channel fiber-electric slip ring

SenRing FO102 series Fiber-Electric rotary joint, 1 channel fiber (support single mode/multi-mode) @ 12/24 circuits signal to transmit data without loss when 360° unrestricted rotating. Specially suitable for some applications which require to keep unrestricted, continuous or intermittent rotating and transmit mass data/signal from static side to rotation side, which can improve mechanical performance, simplify system operation and avoid damages to fiber.

Part No. Description

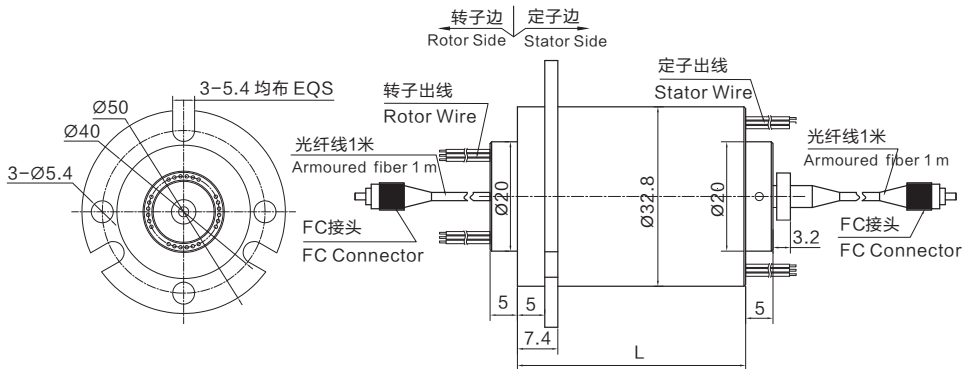
FO102	- Power circuits no.	- Signal circuits no.	- Fiber type	- Connector type	- wavelength
1 channel Fiber-Electric slip ring Fiber Optic rotary joint					
Example : 0610:06 means 6 circuits, 10 means 10A per circuit					
Example : 06S:06 means 6 circuits, S means signal					
				Connector type code : FC:FC connector ST:ST connector SC:SC connector LC:LC connector t connector interface is PC by default, if need APC FC/APC pls add APC, as FC/APC	
				Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)	Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)

Examples

FO102-06S-01-FC-01: FO102 means single channel Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, with the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength : 1310/1550;

FO102-06S-03-LC/APC-02: FO102 means 1 channel Fiber-Electric rotary joint, 06S means can be combined to transmit 6 circuits signal, 03 means Fiber type 62.5/125m(multi-mode), LC/APC means LC connector, APC interface, 02 means wavelength : 850/1310;

*Remark: If you have special requirements for fiber channel no., electric circuit no., Fiber connector type, wavelength or wire exiting, pls contact SenRing salesman.



Model List

FO102 - compact size+slip ring model selection table

Model	Fiber Channel no.	Power circuits no.(10A)	Signal circuits no.(2A/5A)	Length L(mm)
FO102-06S	1 channel	0	6	41.7
FO102-12S	1 channel	0	12	41.7
FO102-18S	1 channel	0	18	41.7
FO102-24S	1 channel	0	24	41.7

Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		± 50	
Max insertion Loss, 23℃(dB)		2	2
Insertion loss fluctuation(dB)		≤1.5	≤1.5
Return loss(dB)		≥40(without connector)	≥30(without connector)
max power(W)		0.5	
Storage temperature(℃)		-50~85	
IP grade		IP68	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥300mΩ/300VDC	≥1000mΩ/500VDC
lead wire spec.	AWG26# Silver-plated teflon	AWG26# Silver-plated teflon
lead wire length	standard 300mm (can be customized)	
Dielectric Strength	500VAC@50Hz, 60s	
Electrical noise	<0.01Ω	

Mechanical Data	
spec	data
working life	8000 millions for ref(depends on working conditions)
Rotating speed	250RPM
Work Temperature	-20℃~60℃
work humidity	0~85% RH
contact material	precious metal
housing material	aluminum alloy
torque	0.1N.m;+0.03N.m/6 circuits
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, FO102-06S wire color sequence: BLK/BRN/RED/ORG/YEL/GRN , 24 color wires as one group , if more than 24wires, repeat as sequence , use number tube to tell group 1#, 2#....