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 date without loss when 360° unrestricted roating.Specially suitable for some applications which requires 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 avoiding 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

Wavelength：
01:1310/1550 (Single mode)
02:850/1310 (multi mode)

Connector type code ：
FC:FC connector ST:ST connector
SC:SC connector LC:LC connector
t connecter interface is PC by defaul, if need APC
FC/APC pls add APC,as FC/APC

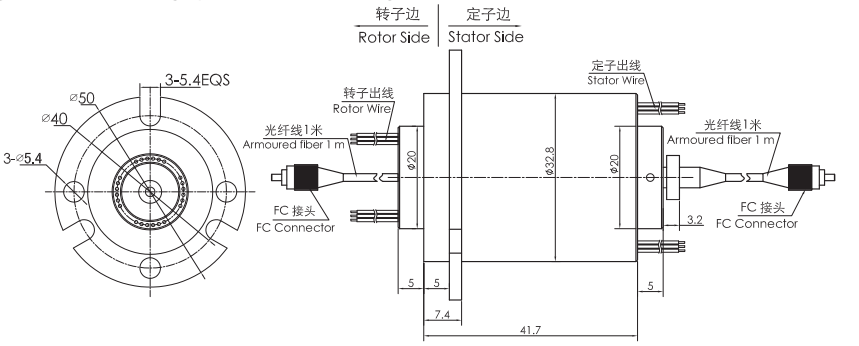
Fiber type code：
01:9/125um(Single mode)
02:50/125um(multi mode)
03:62.5/125um(multi mode)

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

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Technical Specification of the slip ring

item \ type	Single mode（SM）	multi mode (MM)
Bandwidth(nm)	±50	
Max insertion Loss，23℃(dB)	1.2	0.7
Insertion loss fluctuation(dB)	≤0.6	≤0.4
Return loss(dB)	≥55(without connector)	≥40(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	≥1000mΩ /500VDC	≥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#....

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