

## FO series Fiber Optic slip ring (Fiber-Electric rotary joint)

FO series Fiber Optic slip ring also called Fiber-Electric slip ring, Fiber Optic Rotary Joint. Adopt fiber to transmit signal, used to any devices to transmit electricity and Fiber signal when 360° rotating, such as HD video transmission system, microwave communication, medical equipment, sensor signal measurement, radar and video monitoring system, etc. Specially suitable for some applications which requires to keep continuous or intermittent rotating and transmit mass data from static side to rotation side, which can improve mechanical performance, simplify system operation and avoiding damages to fiber when rotating. Can be combined with the traditional electric slip ring to transmit power and high-speed data.

### Main Features:

- Can transmit single or multi channels fiber optic signal; Fiber
- connector : FC、SC、ST、SMA or LC (PC /APC), etc optional;
- Can be combined to transmit power, control signal, micropower signal of computer automotive control ;
- Can be combined with the traditional electric slip ring to transmit power and high-speed data;
- Non contact, no friction, long working life, >100 million revolutions (2-3 millions revolutions for signal channel model);
- Safe and reliable, no electromagnetic interference long-distance transmission.

### Photos of Some Products



Single Channel Fiber Optic slip ring



2 channels Fiber Optic slip ring



4 channels Fiber Optic slip ring



1 channel fiber @12 circuits signal(flange)



3 channel fiber+4 wires 50A+ 3 circuits signal(thermocouple signal)



4 channel fiber+6 wires 5A



1 channel fiber+12 wires 5A(flange)



1 channel fiber+@12 circuits signal(flange)



Small size fiber optic slip ring (optional 2~6 channels)



8 channels Fiber Optic slip ring



8 channel fiber+6 wires 80A(IP68 Waterproof)



## Part No. Description

FO-	Fiber Channel no.	Power circuits no.	Signal circuits no.	Fiber type	Connector type	wavelength
Fiber/Fiber-Electric slip ring code						Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 100 : signal channel Fiber optic rotary joint 200 : two channels Fiber optic rotary joint					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	
Example: 0610:06 means 6 circuits, 10 means 10A per circuit					Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)	
Example: 06S:06 means 6 circuits, S means signal						

## Examples

FO100-01-FC-01: FO100 means single channel Fiber Optic rotary joint, the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO208-06S-LC/APC-02: FO208 means 2 channels Fiber-Electric rotary joint, 06S means 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

Model	Fiber channel	max circuits (power/signal)	OD(mm)
FO100	1 channel	0	10
FO100A	1 channel	0	6.8
FO100B	1 channel	0	12.7
FO102	1 channel	30	32.8
FO108	1 channel	48	56
FO109	1 channel	96	86
FO200	2 channel	0	67
FO200B	2 channel	0	67
FO200C	2 channel	0	35
FO208	2 channel	96	86
FO209	2 channel	24	56
FO400	4 channel	0	67
FO400B	4 channel	0	67
FO408	4 channel	96	86
FO409	4 channel	24	56
FO600	6 channel	0	67
FO608	6 channel	24	86
FO609	6 channel	96	56
FO800	8 channel	0	67
Fo808	8 channel	96	86





## FO100 series Single Channel Fiber Optic rotary joint

SenRing FO100 Single Channel Fiber Optic rotary joint, 1 channel fiber (support single mode/multi-mode) can transmit data with no loss when 360° rotating. Especially applied to those devices need to unlimited, continuous or intermittent rotation and transmit large capacity data or signal from stator side to rotor side. With the advantages of improving mechanical performance, simplifying system operation and avoiding damages to fiber optic caused by rotation of movable joints.

### Part No. Description

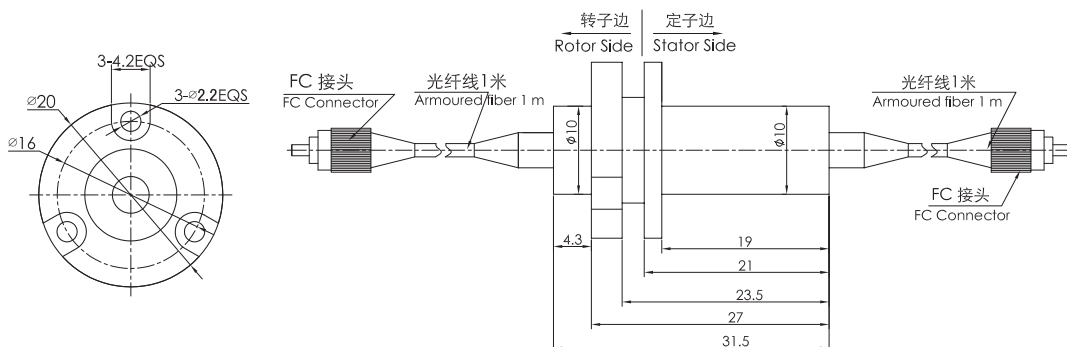
FO100	- Fiber type	- Connector type	- wavelength
FO100: signal channel Fiber optic rotary joint			Wavelength : 01: 1310/1550 (Single mode) 02: 850/1310 (multi mode)
Fiber type code : 01: 9/125um (Single mode) 02: 50/125um (multi mode) 03: 62.5/125um (multi mode)		Connector type code : FC: FC connector 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	

### Examples

FO100-01-FC-01: FO100 means single channel Fiber Optic rotary joint, the first 01 means Fiber type 9/125um (single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength : 1310/1550;

FO100-03-LC/APC-02: FO100 means single channel Fiber-Electric rotary joint, 03 means Fiber type 62.5/125um (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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		± 50	
Max insertion Loss, 23 °C (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	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(°C)		-45~85	
Storage temperature(°C)		-50~85	
IP grade		IP68	



# FO100A Single Channel Fiber Optic slip ring

1 channel fiber(support single mode/multi-mode),suitable for devices need to unlimited,continuous or intermittent rotation and transmit large capacity data or signal from stator side to rotor side.With the advantages of improving mechanical performance, simplifying system operation and avoiding damages to fiber optic caused by rotation of movable joints.

## Part No. Description

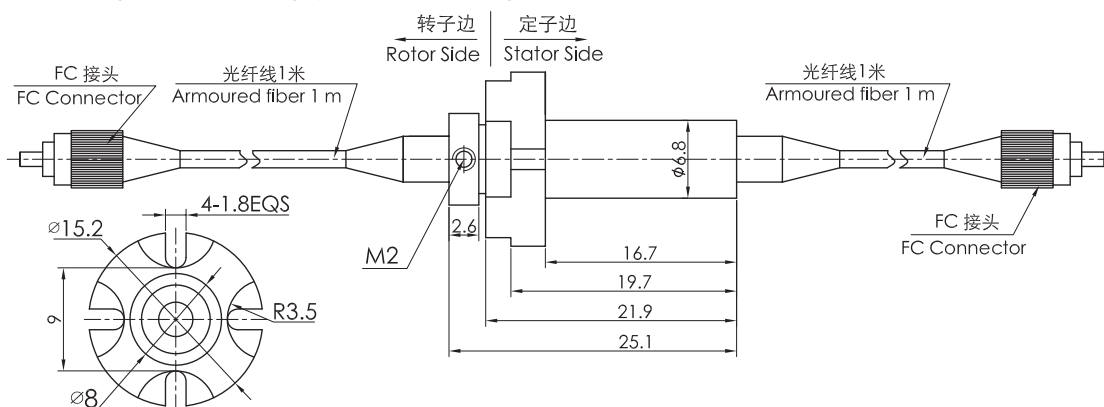
FO100A	Fiber type	Connector type	wavelength
FO100A:signal channel Fiber optic rotary joint appearance in type A			Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)			Connector type code : FC:FC 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

## Examples

FO100A-01-FC-01: FO100A means Single Channel Fiber Optic rotary joint(appearance in type A),the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO100A-03-LC/APC-02: FO100A means single channel Fiber-Electric rotary joint(appearance in type A), 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.



## 技术规格参数

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		1.2	0.7
Insertion loss fluctuation(dB)		$\leq 0.6$	$\leq 0.4$
Return loss(dB)		$\geq 55$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	
IP grade		IP68	



## FO100B Single Channel Fiber Optic slip ring



1 channel fiber(support single mode/multi-mode),suitable for devices need to unlimited,continuous or intermittent rotation and transmit large capacity data or signal from stator side to rotor side.With the advantages of improving mechanical performance, simplifying system operation and avoiding damages to fiber optic caused by rotation of movable joints.

### Part No. Description

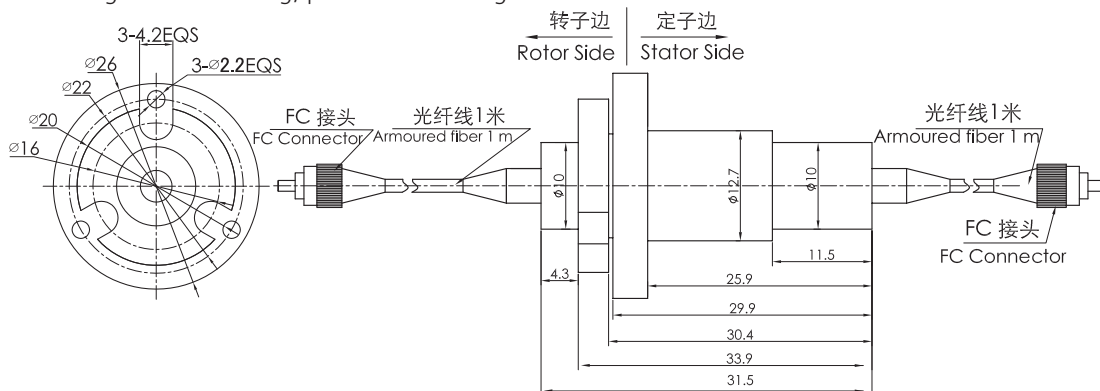
FO100B	- Fiber type	- Connector type	- wavelength
FO100B:signal channel Fiber optic rotary joint appearance in type B		Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)	
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)		Connector type code : FC:FC 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	

### Examples

FO100-01-FC-01: FO100 means Single Channel Fiber Optic rotary joint,the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO100-03-LC/APC-02: FO100 means single channel Fiber-Electric rotary joint, 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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		1.2	0.7
Insertion loss fluctuation(dB)		$\leq 0.6$	$\leq 0.4$
Return loss(dB)		$\geq 55$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	
IP grade		IP68	



## 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

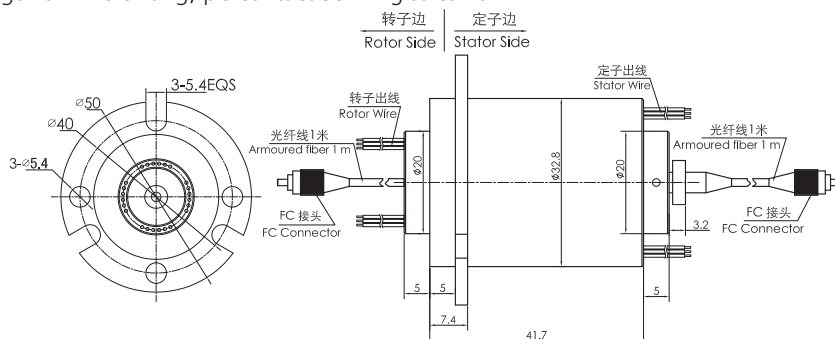
FO102	-	Power circuits no.	-	Signal circuits no.	-	Fiber type	-	Connector type	-	wavelength
1 channel Fiber -Electric slip ring Fiber Optic rotary joint								Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)		
Example : 0610:06 means 6 circuits, 10 means 10A per circuit								Connector 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		
Example : 06S:06 means 6 circuits, S means signal								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 62.5/125um (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)		$\pm 50$	
Max insertion Loss, 23℃(dB)		1.2	0.7
Insertion loss fluctuation(dB)		$\leq 0.6$	$\leq 0.4$
Return loss(dB)		$\geq 55$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(℃)		-45~85	
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	-30℃ ~80℃	
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#....



## FO108 series 1 channel Fiber-Electric slip ring



SenRing FO108 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

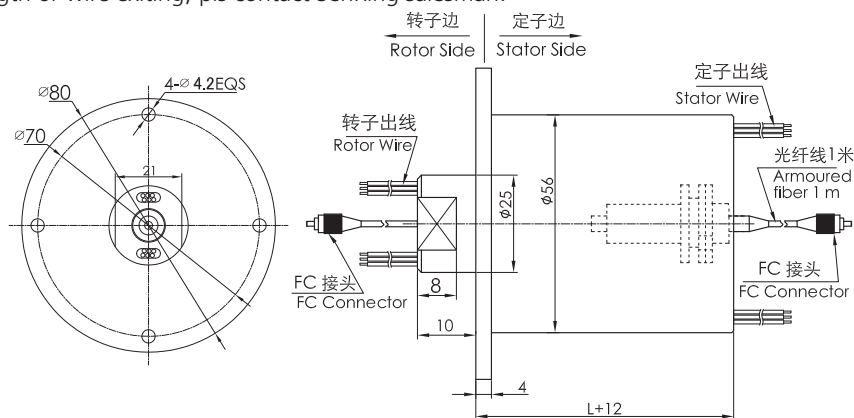
FO108 -	Power circuits no.	Signal circuits no.	Fiber type	Connector type	Wavelength
<p>1 channel Fiber-Electric slip ring Fiber Optic rotary joint</p> <p>Example : 0610:06 means 6 circuits, 10 means 10A per circuit</p> <p>Example : 06S:06 means 6 circuits, S means signal</p>					
<p>Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)</p> <p>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</p> <p>Fiber type code : 01:9/125um (Single mode) 02:50/125um (multi mode) 03:62.5/125um (multi mode)</p>					

### Examples

FO108-06S-01-FC-01: FO108 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;

FO108-1210-12S-03-LC/APC-02: FO108 means 1 channel Fiber-Electric rotary joint, 1210 means 12 circuits 10A, 12S means can be combined to transmit 12 circuits signal, 03 means Fiber type 62.5/125um (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.



### 选型表

FO108 series 1 channel Fiber-Electric slip ring model selection table				
Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO108-06S	1 channel	0	6	38
FO108-0610	1 channel	6	0	38
FO108-12S	1 channel	0	12	55
FO108-1210	1 channel	12	0	55
FO108-0610-06S	1 channel	6	6	55



FO108 series 1 channel Fiber-Electric slip ring model selection table

Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO108-18S	1 channel	0	18	71.5
FO108-1810	1 channel	18	0	71.5
FO108-24S	1 channel	0	24	88.5
FO108-1210-12S	1 channel	12	12	88.5
FO108-0610-18S	1 channel	6	18	88.5
FO108-30S	1 channel	0	30	104
FO108-36S	1 channel	0	36	122
FO108-42S	1 channel	0	42	140
FO108-48S	1 channel	0	48	156

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		1.2	0.7
Insertion loss fluctuation(dB)		$\leq 0.6$	$\leq 0.4$
Return loss(dB)		$\geq 55$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	$\geq 1000\text{m}\Omega$ /500VDC	$\geq 1000\text{m}\Omega$ /500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# Silver-plated teflon
lead wire length	standard 300mm (can be customized)	
Dielectric Strength	500VAC@50Hz, 60s	
Electrical noise	<0.01 $\Omega$	

Mechanical Data		
spec	data	
working life	8000 millions for ref(depends on working conditions)	
Rotating speed	250RPM	
Work Temperature	-30℃~80℃	
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 , FO108-06S 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#....



# FO109 series 1 channel fiber-electric slip ring



1 channel fiber(support single mode/multi-mode), can transmit 1 channel fiber@1~72 circuits signal at the same time. Suitable for some applications which requires to keep 360° 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.

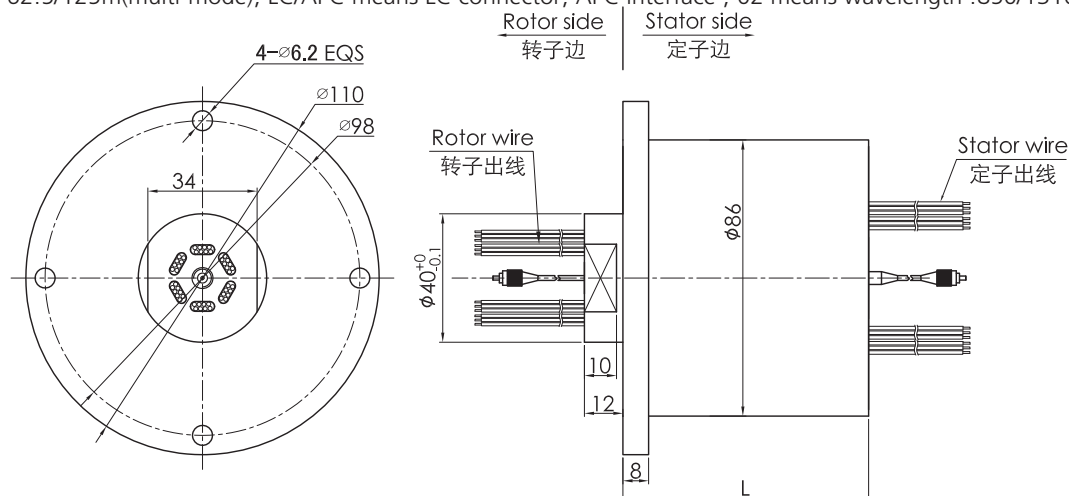
## Part No. Description

FO109	- Power circuits no.	- Signal circuits no.	- Fiber type	- Connector type	- wavelength	
1 channel Fiber -Electric slip ring Fiber Optic rotary joint						Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 0610:06 means 6 circuits, 10 means 10A per circuit						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
Example : 06S:06 means 6 circuits, S means signal						Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)

## Examples

FO109-06S-01-FC-01: FO109 means single channel Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, with the 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO109-1210-12S-03-LC/APC-02: FO109 means 1 channel Fiber-Electric rotary joint, 1210 means 12 circuits 10A, 12S means can be combined to transmit 12 circuits signal, 03 means Fiber type 62.5/125um(multi-mode), LC/APC means LC connector, APC interface, 02 means wavelength :850/1310;



## Model List

FO109 series 1 channel Fiber-Electric slip ring model selection table									
Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO109-02S	1	0	2	32	FO109-1210-12S	1	12	12	120
FO109-0210	1	2	0	32	FO109-1810-06S	1	18	6	120
FO109-03S	1	0	3	36	FO109-2410	1	24	0	120
FO109-0310	1	3	0	36	FO109-30S	1	0	30	144
FO109-06S	1	0	6	48	FO109-0610-24S	1	6	24	144
FO109-0210-04S	1	2	4	48	FO109-1210-18S	1	12	18	144
FO109-0410-02S	1	4	2	48	FO109-1810-12S	1	18	12	144
FO109-0610	1	6	0	48	FO109-2410-06S	1	24	6	144
FO109-12S	1	0	12	72	FO109-3010	1	30	0	144



Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO109-0210-10S	1	2	10	72	FO109-36S	1	0	36	168
FO109-0310-09S	1	3	9	72	FO109-0610-30S	1	6	30	168
FO109-0610-06S	1	6	6	72	FO109-1210-24S	1	12	24	168
FO109-0810-04S	1	8	4	72	FO109-3610	1	36	0	168
FO109-1010-02S	1	10	2	72	FO109-42S	1	0	42	192
FO109-1210	1	12	0	72	FO109-0610-36S	1	6	36	192
FO109-18S	1	0	18	96	FO109-1210-30S	1	12	30	192
FO109-0210-16S	1	2	16	96	FO109-48S	1	0	48	216
FO109-0410-14S	1	4	14	96	FO109-0610-42S	1	6	42	216
FO109-0610-12S	1	6	12	96	FO109-0910-39S	1	9	39	216
FO109-0810-10S	1	8	10	96	FO109-1210-36S	1	12	36	216
FO109-1010-08S	1	10	8	96	FO109-1810-30S	1	18	30	216
FO109-1210-06S	1	12	6	96	FO109-2410-24S	1	24	24	216
FO109-1410-04S	1	14	4	96	FO109-60S	1	0	60	264
FO109-1610-02S	1	16	2	96	FO109-0610-54S	1	6	54	264
FO109-24S	1	0	24	120	FO109-0910-51S	1	9	51	264
FO109-0410-20S	1	4	20	120	FO109-1210-48S	1	12	48	264
FO109-0610-18S	1	6	18	120	FO109-72S	1	0	72	312

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		1.2	0.7
Insertion loss fluctuation(dB)		$\leq 0.6$	$\leq 0.4$
Return loss(dB)		$\geq 55$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥ 1000mΩ /500VDC	≥ 1000mΩ /500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# 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	-30℃ ~80℃	
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



## FO200 series 2 channels Fiber Optic rotary joint

SenRing FO200 Fiber Optic rotary joint ,2 channels fiber(support single mode/multi-mode) can transmit data without loss when 360° unrestricted rotating. 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

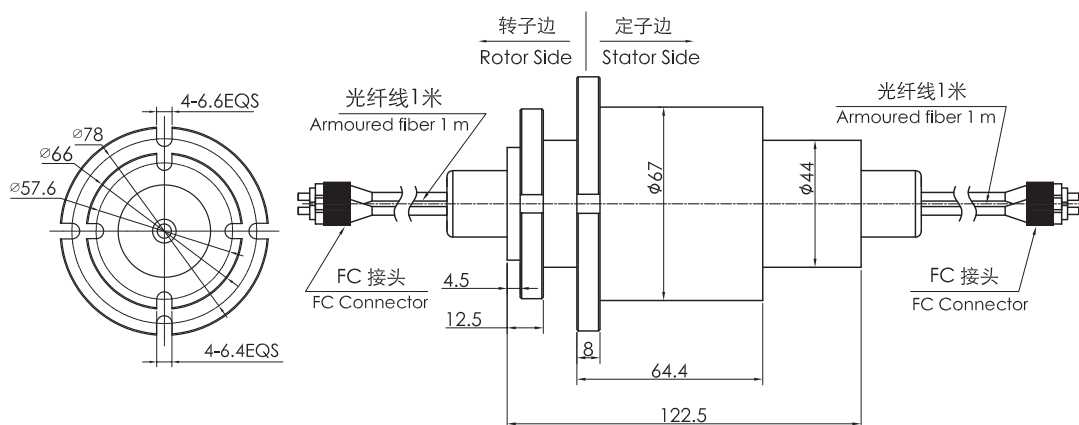
FO200	- Fiber type -	Connector type-	wavelength
FO200:two channels Fiber optic rotary joint	Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)	Connector type code : FC:FC connector ST:ST connector SC:SC connector LC:LC connector t connector interface is PC by default, if need APC FC/APC pls add APC, as FC/APC	Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)

### Examples

FO200-01-FC-01: FO200 means 2 channels Fiber Optic rotary joint, 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;

FO200-03-LC/APC-02: FO200 means 2 channels Fiber Optic rotary joint, 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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ ( without connector)	$\geq 40$ ( PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	



## FO200B series 2 channels Fiber Optic slip ring

2 channels Fiber(support single mode/multi-mode).Suitable for some applications which requires to keep 360° 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

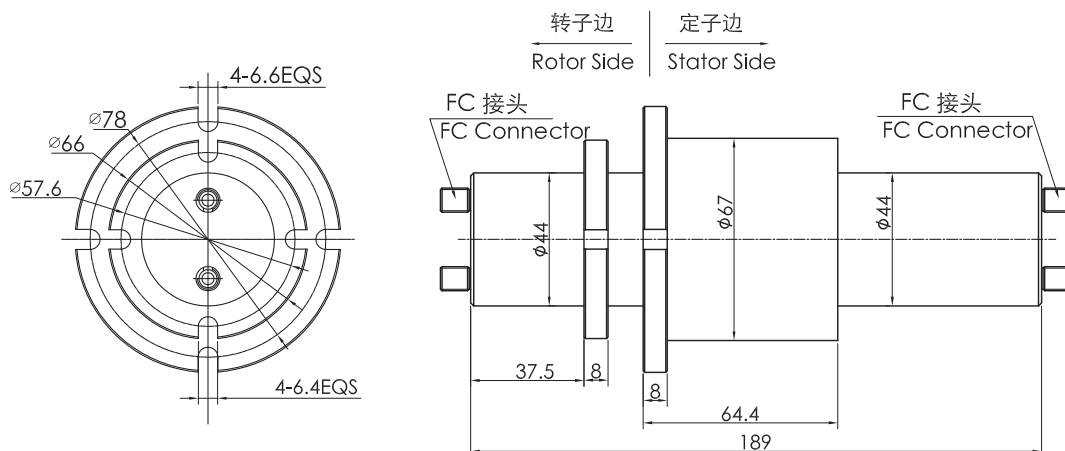
FO200B-	Fiber type	Connector type-	wavelength
FO200B:two channels Fiber optic rotary joint appearance in type B			Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)		Connector type code : FC:FC connector 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	

### Examples

FO200B-01-FC-01: FO200B means Single Channel Fiber Optic rotary joint(appearance in type B),the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO200B-03-LC/APC-02: FO200B means single channel Fiber-Electric rotary joint(appearance in type B), 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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		± 50	
Max insertion Loss, 23℃ (dB)		4	3.5
Insertion loss fluctuation(dB)		≤2	≤1
Return loss(dB)		≥55( APC)	≥40( PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	



## FO200C series 2 channels Fiber Optic slip ring



2 channels Fiber(support single mode/multi-mode).Suitable for some applications which requires to keep 360° 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

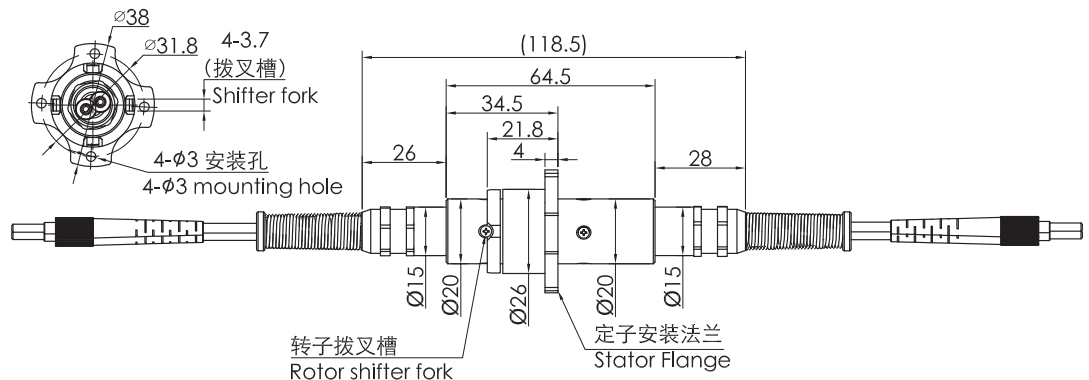
FO200C-	Fiber type	Connector type-	wavelength
FO200C:two channels Fiber optic rotary joint appearance in type C			Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)		Connector type code : FC:FC connector 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	

### Examples

FO200C-01-FC-01: FO200C means Single Channel Fiber Optic rotary joint(appearance in type C),the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO200C-03-LC/APC-02: FO200C means single channel Fiber-Electric rotary joint(appearance in type B), 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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23 ℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 55$ ( APC)	$\geq 40$ ( PC)
max power(W)		0.5	
Max speed(rpm)		2000	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	



# FO208 series 2 channels Fiber-Electric slip ring



2 channels Fiber(support single mode/multi-mode)can transmit 2 channels fiber@1~72 circuits signal at the same time.Suitable for some applications which requires to keep 360° 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

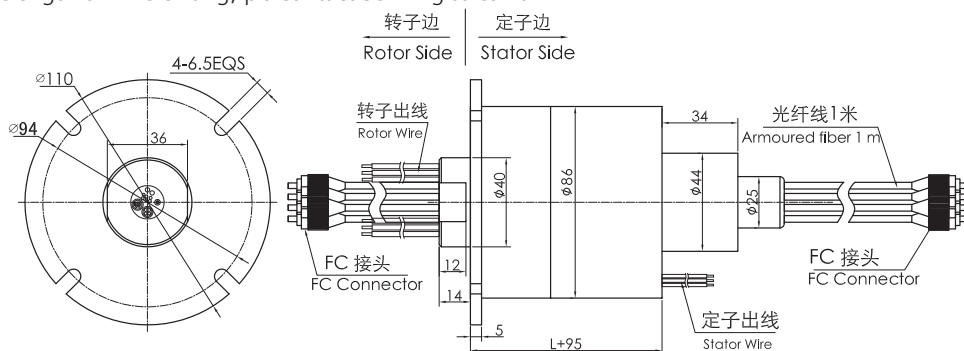
FO208 -	Power circuits no.	Signal circuits no.	Fiber type	Connector type	wavelength	
2 channel Fiber-Electric slip ring Fiber Optic rotary joint						Wavelength :
						01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 0610:06 means 6 circuits, 10 means 10A per circuit						Connector type 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
Example : 06S:06 means 6 circuits, S means signal						Fiber type code :
						01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)

## Examples

FO208-06S-01-FC-01: FO208 means 2 Channels Fiber Optic rotary joint,06S means can be combined to transmit 6 circuits signal,the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO208-1810-06S-03-LC/APC-02: FO208 means single channel Fiber-Electric rotary joint,1810 means 18 circuits 10A ,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

FO208 series 2 channels Fiber Optic @ Fiber-Electric slip ring model selection table									
Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO208-02S	2	0	2	32	FO208-1210-12S	2	12	12	120
FO208-0210	2	2	0	32	FO208-1810-06S	2	18	6	120
FO208-03S	2	0	3	36	FO208-2410	2	24	0	120
FO208-0310	2	3	0	36	FO208-30S	2	0	30	144
FO208-06S	2	0	6	48	FO208-0610-24S	2	6	24	144
FO208-0210-04S	2	2	4	48	FO208-1210-18S	2	12	18	144
FO208-0410-02S	2	4	2	48	FO208-1810-12S	2	18	12	144
FO208-0610	2	6	0	48	FO208-2410-06S	2	24	6	144
FO208-12S	2	0	12	72	FO208-3010	2	30	0	144
FO208-0210-10S	2	2	10	72	FO208-36S	2	0	36	168
FO208-0310-09S	2	3	9	72	FO208-0610-30S	2	6	30	168
FO208-0610-06S	2	6	6	72	FO208-1210-24S	2	12	24	168
FO208-0810-04S	2	8	4	72	FO208-3610	2	36	0	168
FO208-1010-02S	2	10	2	72	FO208-42S	2	0	42	192



Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO208-1210	2	12	0	72	FO208-0610-36S	2	6	36	192
FO208-18S	2	0	18	96	FO208-1210-30S	2	12	30	192
FO208-0210-16S	2	2	16	96	FO208-48S	2	0	48	216
FO208-0410-14S	2	4	14	96	FO208-0610-42S	2	6	42	216
FO208-0610-12S	2	6	12	96	FO208-0910-39S	2	9	39	216
FO208-0810-10S	2	8	10	96	FO208-1210-36S	2	12	36	216
FO208-1010-08S	2	10	8	96	FO208-1810-30S	2	18	30	216
FO208-1210-06S	2	12	6	96	FO208-2410-24S	2	24	24	216
FO208-1410-04S	2	14	4	96	FO208-60S	2	0	60	264
FO208-1610-02S	2	16	2	96	FO208-0610-54S	2	6	54	264
FO208-24S	2	0	24	120	FO208-0910-51S	2	9	51	264
FO208-0410-20S	2	4	20	120	FO208-1210-48S	2	12	48	264
FO208-0610-18S	2	6	18	120	FO208-72S	2	0	72	312

### 技术规格参数

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥ 1000mΩ/500VDC	≥ 1000mΩ/500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# 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	-30℃ ~80℃	
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 , FO208-06S 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#....



# FO209 series 2 channels Fiber-Electric slip ring



2 channels Fiber(support single mode/multi-mode) can be combined to transmit 1~24 circuits signal. Suitable for some applications which requires to keep 360° 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

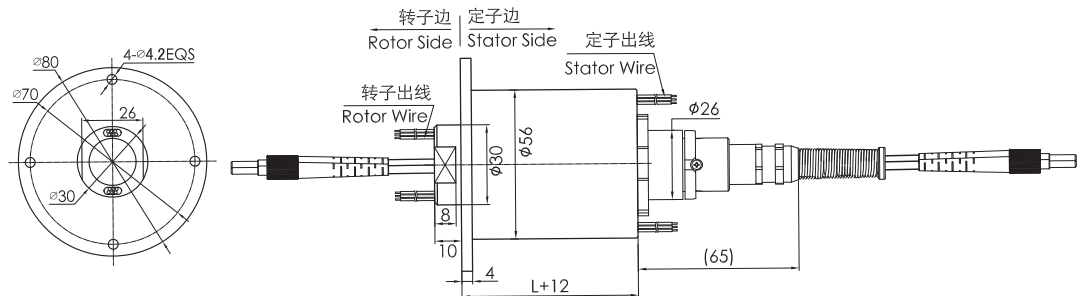
FO209	Power circuits no.	Signal circuits no.	Fiber type	Connector type	Wavelength
2 channel Fiber-Electric slip ring Fiber Optic rotary joint					Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 0610:06 means 6 circuits, 10 means 10A per circuit				Connector type code : FC:FC 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	
Example : 06S:06 means 6 circuits, S means signal				Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)	

## Examples

FO209-06S-01-FC-01: FO209 means 2 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO209-1210-12S-03-LC/APC-02: FO209 means single channel Fiber-Electric rotary joint, 1210 means 12 circuits 10A, 12S means can be combined to transmit 12 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

FO209 2 channels Fiber-Electric slip ring model selection table				
Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO209-02S	2	0	2	34
FO209-0210	2	2	0	34
FO209-03S	2	0	3	34
FO209-0310	2	3	0	34
FO209-06S	2	0	6	34
FO209-0210-04S	2	2	4	34
FO209-0410-02S	2	4	2	34
FO209-0610	2	6	0	34
FO209-12S	2	0	12	52
FO209-0210-10S	2	2	10	52
FO209-0310-09S	2	3	9	52
FO209-0610-06S	2	6	6	52



Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO209-0810-04S	2	8	4	52
FO209-1010-02S	2	10	2	52
FO209-1210	2	12	0	52
FO209-18S	2	0	18	68.5
FO209-0210-16S	2	2	16	68.5
FO209-0610-12S	2	6	12	68.5
FO209-0810-10S	2	8	10	68.5
FO209-1010-08S	2	10	8	68.5
FO209-1210-06S	2	12	6	68.5
FO209-1610-02S	2	16	2	68.5
FO209-24S	2	0	24	68.5
FO209-0410-20S	2	4	20	85.5
FO209-0610-18S	2	6	18	85.5

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	$\geq 1000\text{m}\Omega/500\text{VDC}$	$\geq 1000\text{m}\Omega/500\text{VDC}$
lead wire spec.	AWG17# Silver-plated teflon	AWG22# Silver-plated teflon
lead wire length	standard 300mm (can be customized)	
Dielectric Strength	500VAC@50Hz, 60s	
Electrical noise	<0.01 $\Omega$	

Mechanical Data		
spec	data	
working life	8000 millions for ref(depends on working conditions)	
Rotating speed	250RPM	
Work Temperature	-30℃~80℃	
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 , FO209-06S 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#....





## FO400 series 4 channels Fiber-Electric slip ring

4 channels fiber(support single mode/multi-mode). Suitable for some applications which requires to keep 360° 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
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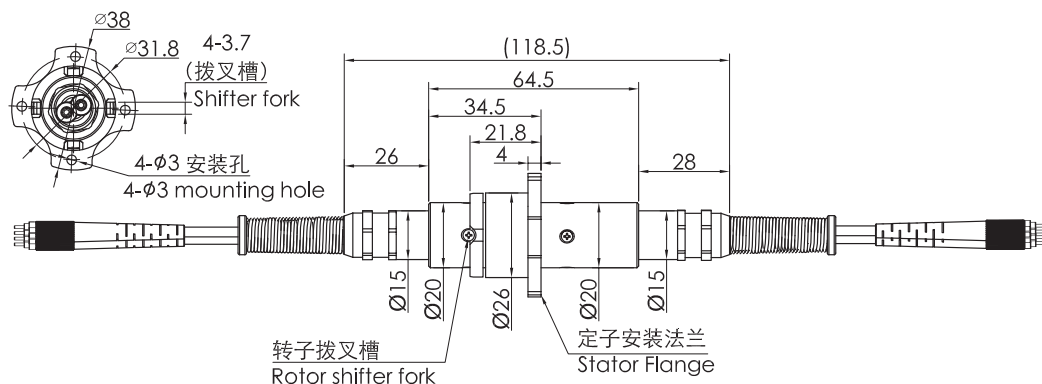
FO400	-	Fiber type	-	Connector type-	wavelength
FO400:four channels Fiber optic rotary joint					Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)					Connector type code : FC:FC connector    ST:ST 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

## Examples

FO400-01-FC-01: FO400 means 2 Channels Fiber Optic rotary joint, the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550:

FO400-03-LC/APC-02: FO400 means single channel Fiber-Electric rotary joint, 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.



## Technical Specification of the slip ring

item \ type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)	$\pm 50$	
Max insertion Loss, 23℃(dB)	4	3.5
Insertion loss fluctuation(dB)	$\leq 2$	$\leq 1$
Return loss(dB)	$\geq 50$ ( APC)	$\geq 40$ ( PC)
max power(W)	0.5	
Max speed(rpm)	400	
Working life	>20 million	
Work Temperature(℃)	-45~85	
Storage temperature(℃)	-50~85	



## FO400B series 4 channels Fiber Optic slip ring

4 channels Fiber(support single mode/multi-mode) .Suitable for some applications which requires to keep 360° 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

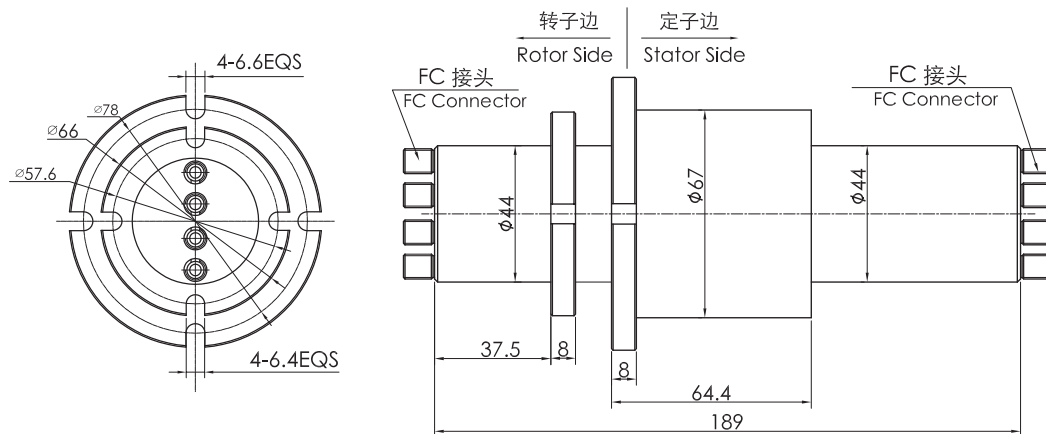
FO400B-	Fiber type	- Connector type-	wavelength
FO400:four channels Fiber optic rotary joint appearance in type B			Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)			Connector type code : FC:FC 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

### Examples

FO400-01-FC-01: FO400 means 4 Channels Fiber Optic rotary joint,the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO400-03-LC/APC-02: FO400 means 4 channels Fiber-Electric rotary joint,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.



### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ ( APC)	$\geq 40$ ( PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	



# FO408 series 4 channels Fiber-Electric slip ring



SenRing FO408 series Fiber Optic rotary joint, 4 channels fiber (support single mode/multi-mode) can transmit data without loss when 360° unrestricted rotating. 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

Part No. Description

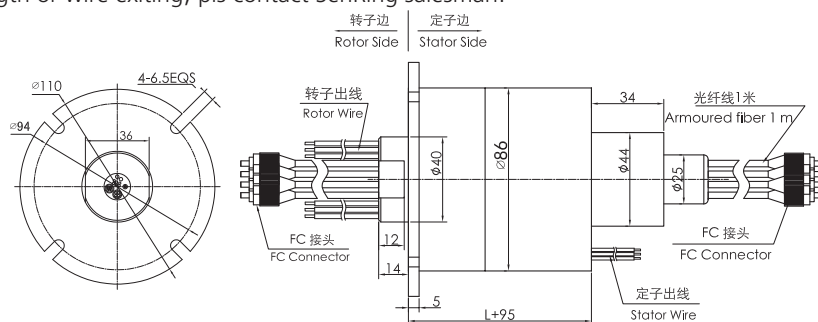
FO408	-	Power circuits no.	-	Signal circuits no.	-	Fiber type	-	Connector type	-	wavelength
4 channel Fiber -Electric slip ring Fiber Optic rotary joint						Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)				
Example : 0610:06 means 6 circuits, 10 means 10A per circuit						Connector 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				
Example : 06S:06 means 6 circuits, S means signal						Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)				

## Examples

FO408-06S-01-FC-01: FO408 means 4 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um (single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength : 1310/1550;

FO408-0610-06S-03-LC/APC-02: FO408 means 4 channels Fiber-Electric rotary joint, 0610 means 6 circuits 10A, 06S means can be combined to transmit 6 circuits signal, 03 means Fiber type 62.5/125um (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

FO408 series 4 channels Fiber-Electric slip ring model selection table									
Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO408-02S	4	0	2	32	FO408-1210-12S	4	12	12	120
FO408-0210	4	2	0	32	FO408-1810-06S	4	18	6	120
FO408-03S	4	0	3	36	FO408-2410	4	24	0	120
FO408-0310	4	3	0	36	FO408-30S	4	0	30	144
FO408-06S	4	0	6	48	FO408-0610-24S	4	6	24	144
FO408-0210-04S	4	2	4	48	FO408-1210-18S	4	12	18	144
FO408-0410-02S	4	4	2	48	FO408-1810-12S	4	18	12	144
FO408-0610	4	6	0	48	FO408-2410-06S	4	24	6	144
FO408-12S	4	0	12	72	FO408-3010	4	30	0	144
FO408-0210-10S	4	2	10	72	FO408-36S	4	0	36	168
FO408-0310-09S	4	3	9	72	FO408-0610-30S	4	6	30	168
FO408-0610-06S	4	6	6	72	FO408-1210-24S	4	12	24	168
FO408-0810-04S	4	8	4	72	FO408-3610	4	36	0	168



FO408 series 4 channels Fiber-Electric slip ring model selection table

Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO408-1010-02S	4	10	2	72	FO408-42S	4	0	42	192
FO408-1210	4	12	0	72	FO408-0610-36S	4	6	36	192
FO408-18S	4	0	18	96	FO408-1210-30S	4	12	30	192
FO408-0210-16S	4	2	16	96	FO408-48S	4	0	48	216
FO408-0410-14S	4	4	14	96	FO408-0610-42S	4	6	42	216
FO408-0610-12S	4	6	12	96	FO408-0910-39S	4	9	39	216
FO408-0810-10S	4	8	10	96	FO408-1210-36S	4	12	36	216
FO408-1010-08S	4	10	8	96	FO408-1810-30S	4	18	30	216
FO408-1210-06S	4	12	6	96	FO408-2410-24S	4	24	24	216
FO408-1410-04S	4	14	4	96	FO408-60S	4	0	60	264
FO408-1610-02S	4	16	2	96	FO408-0610-54S	4	6	54	264
FO408-24S	4	0	24	120	FO408-0910-51S	4	9	51	264
FO408-0410-20S	4	4	20	120	FO408-1210-48S	4	12	48	264
FO408-0610-18S	4	6	18	120	FO408-72S	4	0	72	312

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥ 1000mΩ /500VDC	≥ 1000mΩ /500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# 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	-30℃ ~80℃	
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 , FO408-06S 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#....



## FO409 series 4 channels Fiber-Electric slip ring

4 channels Fiber(support single mode/multi-mode) can be combined to transmit 1~24 circuits signal. Suitable for some applications which requires to keep 360° 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

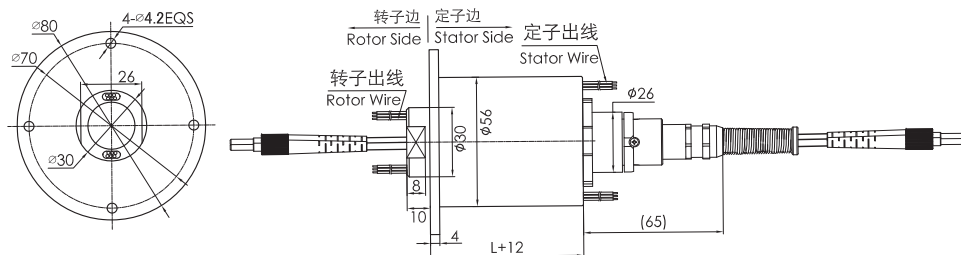
FO409	-	Power circuits no.	-	Signal circuits no.	-	Fiber type	-	Connector type	-	wavelength	
<div>4 channel Fiber -Electric slip ring Fiber Optic rotary joint</div>											Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
<div>Example : 0610:06 means 6 circuits, 10 means 10A per circuit</div>											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
<div>Example : 06S:06 means 6 circuits, S means signal</div>											Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)

### Examples

FO409-06S-01-FC-01: FO409 means 4 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO409-1210-12S-03-LC/APC-02: FO409 means 4 channels Fiber-Electric rotary joint, 1210 means 12 circuits 10A, 12S means can be combined to transmit 12 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

FO409 series 4 channels Fiber-Electric slip ring model selection table				
Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO409-02S	4	0	2	34
FO409-0210	4	2	0	34
FO409-03S	4	0	3	34
FO409-0310	4	3	0	34
FO409-06S	4	0	6	34
FO409-0210-04S	4	2	4	34
FO409-0410-02S	4	4	2	34
FO409-0610	4	6	0	34
FO409-12S	4	0	12	52
FO409-0210-10S	4	2	10	52
FO409-0310-09S	4	3	9	52
FO409-0610-06S	4	6	6	52



Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO409-0810-04S	4	8	4	52
FO409-1010-02S	4	10	2	52
FO409-1210	4	12	0	52
FO409-18S	4	0	18	68.5
FO409-0210-16S	4	2	16	68.5
FO409-0610-12S	4	6	12	68.5
FO409-0810-10S	4	8	10	68.5
FO409-1010-08S	4	10	8	68.5
FO409-1210-06S	4	12	6	68.5
FO409-1610-02S	4	16	2	68.5
FO409-24S	4	0	24	68.5
FO409-0410-20S	4	4	20	85.5
FO409-0610-18S	4	6	18	85.5

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥ 1000mΩ /500VDC	≥ 1000mΩ /500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# 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	-30℃ ~80℃	
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,FO409-0610-06S 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#....



Part No.	Description
1	1.000000
2	2.000000
3	3.000000
4	4.000000
5	5.000000
6	6.000000
7	7.000000
8	8.000000
9	9.000000
10	10.000000
11	11.000000
12	12.000000
13	13.000000
14	14.000000
15	15.000000
16	16.000000
17	17.000000
18	18.000000
19	19.000000
20	20.000000
21	21.000000
22	22.000000
23	23.000000
24	24.000000
25	25.000000
26	26.000000
27	27.000000
28	28.000000
29	29.000000
30	30.000000
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90	90.000000
91	91.000000
92	92.000000
93	93.000000
94	94.000000
95	95.000000
96	96.000000
97	97.000000
98	98.000000
99	99.000000
100	100.000000

## Examples

The technical drawing illustrates the rotor assembly with two views:

- Front View (Top Left):** Shows a circular component with four mounting holes. Dimensions include a central hole diameter of  $\varnothing 38$ , a slot width of 4-3.7 (labeled as 拨叉槽 / Shifter fork), and four mounting holes labeled 4- $\varnothing 3$  安装孔 (4- $\varnothing 3$  mounting hole).
- Side View (Main):** Shows the profile of the rotor assembly with various diameters and lengths. Key dimensions include:
  - Total length: 118.5
  - Shaft diameter at the left end:  $\varnothing 15$
  - Rotor body diameter:  $\varnothing 20$
  - Stator flange diameter:  $\varnothing 26$
  - Stator housing diameter:  $\varnothing 20$
  - Shaft diameter at the right end:  $\varnothing 15$
  - Lengths from the left shaft: 26, 34.5, 64.5, and 28.
  - A small dimension of 4 is shown near the stator flange.

Labels in Chinese and English are provided for key components:

- 转子拨叉槽 / Rotor shifter fork
- 定子安装法兰 / Stator Flange

item \ type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)	$\pm 50$	
Max insertion Loss, 23 ℃(dB)	4	3.5
Insertion loss fluctuation(dB)	$\leq 2$	$\leq 1$
Return loss(dB)	$\geq 50$ ( without connector)	$\geq 40$ ( without connector)
max power(W)	0.5	
Max speed(rpm)	400	
Working life	>20 million	
Work Temperature( ℃ )	-45~85	
Storage temperature( ℃ )	-50~85	



# FO608 series 6 channels Fiber Optic slip ring



6 channels fiber(support single mode/multi-mode) can transmit 1 channel fiber@1~72 circuits signal at the same time. Suitable for some applications which requires to keep 360° 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

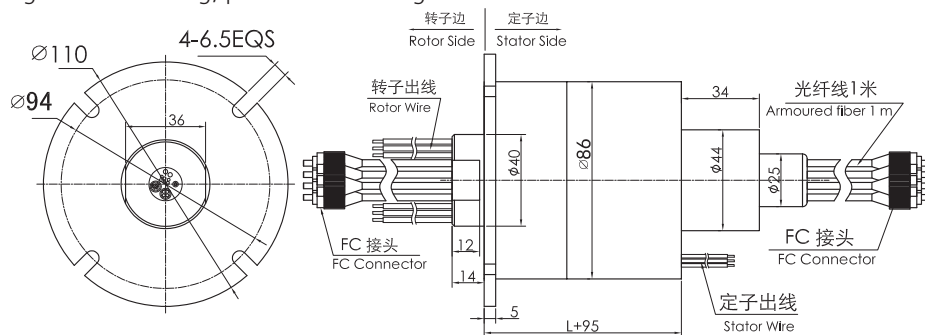
FO608	-	Power circuits no.	-	Signal circuits no.	-	Fiber type	-	Connector type	-	wavelength	
6 channel Fiber -Electric slip ring Fiber Optic rotary joint											Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 0610:06 means 6 circuits, 10 means 10A per circuit											Connector 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
Example : 06S:06 means 6 circuits, S means signal											Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)

## Examples

FO608-06S-01-FC-01: FO608 means 6 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO608-0610-06S-03-LC/APC-02: FO608 means 6 channels Fiber-Electric rotary joint, 0610 means 6 circuits 10A, 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

FO608 series 6 channels Fiber-Electric slip ring model selection table									
Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO608-02S	6	0	2	32	FO608-1210-12S	6	12	12	120
FO608-0210	6	2	0	32	FO608-1810-06S	6	18	6	120
FO608-03S	6	0	3	36	FO608-2410	6	24	0	120
FO608-0310	6	3	0	36	FO608-30S	6	0	30	144
FO608-06S	6	0	6	48	FO608-0610-24S	6	6	24	144
FO608-0210-04S	6	2	4	48	FO608-1210-18S	6	12	18	144
FO608-0410-02S	6	4	2	48	FO608-1810-12S	6	18	12	144
FO608-0610	6	6	0	48	FO608-2410-06S	6	24	6	144
FO608-12S	6	0	12	72	FO608-3010	6	30	0	144
FO608-0210-10S	6	2	10	72	FO608-36S	6	0	36	168



FO608 series 6 channels Fiber-Electric slip ring model selection table

Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO608-0310-09S	6	3	9	72	FO608-0610-30S	6	6	30	168
FO608-0610-06S	6	6	6	72	FO608-1210-24S	6	12	24	168
FO608-0810-04S	6	8	4	72	FO608-3610	6	36	0	168
FO608-1010-02S	6	10	2	72	FO608-42S	6	0	42	192
FO608-1210	6	12	0	72	FO608-0610-36S	6	6	36	192
FO608-18S	6	0	18	96	FO608-1210-30S	6	12	30	192
FO608-0210-16S	6	2	16	96	FO608-48S	6	0	48	216
FO608-0410-14S	6	4	14	96	FO608-0610-42S	6	6	42	216
FO608-0610-12S	6	6	12	96	FO608-0910-39S	6	9	39	216
FO608-0810-10S	6	8	10	96	FO608-1210-36S	6	12	36	216
FO608-1010-08S	6	10	8	96	FO608-1810-30S	6	18	30	216
FO608-1210-06S	6	12	6	96	FO608-2410-24S	6	24	24	216
FO608-1410-04S	6	14	4	96	FO608-60S	6	0	60	264
FO608-1610-02S	6	16	2	96	FO608-0610-54S	6	6	54	264
FO608-24S	6	0	24	120	FO608-0910-51S	6	9	51	264
FO608-0410-20S	6	4	20	120	FO608-1210-48S	6	12	48	264
FO608-0610-18S	6	6	18	120	FO608-72S	6	0	72	312

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	≥ 1000mΩ /500VDC	≥ 1000mΩ/500VDC
lead wire spec.	AWG17# Silver-plated teflon	AWG22# 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	-30℃ ~80℃	
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



6 channels Fiber(support single mode/multi-mode) can be combined to transmit 1~24 circuits signal.Suitable for some applications which requires to keep 360° 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.

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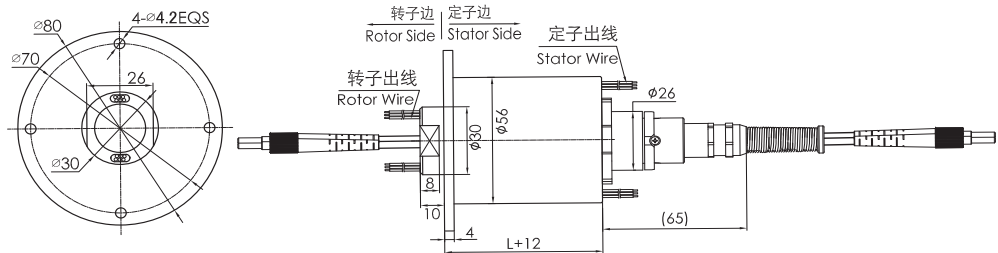
FO609	Power circuits no.	Signal circuits no.	Fiber type	Connector type	wavelength
<p>6 channel Fiber</p> <p>-Electric slip ring Fiber Optic rotary joint</p> <p>Example :</p> <p>0610:06 means 6 circuits, 10 means 10A per circuit</p> <p>Example :</p> <p>06S:06 means 6 circuits, S means signal</p>				<p>Connector type code :</p> <p>FC:FC connector    ST:ST connector</p> <p>SC:SC connector    LC:LC connector</p> <p>t connector interface is PC by default, if need APC</p> <p>FC/APC pls add APC, as FC/APC</p> <p>Fiber type code :</p> <p>01:9/125um(Single mode)</p> <p>02:50/125um(multi mode)</p> <p>03:62.5/125um(multi mode)</p>	<p>Wavelength :</p> <p>01:1310/1550 (Single mode)</p> <p>02:850/1310 (multi mode)</p>

## Examples

FO609-06S-01-FC-01: FO609 means 6 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO609-1210-12S-03-LC/APC-02: FO609 means 6 channels Fiber-Electric rotary joint, 1210 means 12 circuits 10A, 12S means can be combined to transmit 12 circuits signal, 03 means Fiber type 62.5/125μm(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

F0609 series 6 channels Fiber-Electric slip ring model selection table

FO609 series 6 channels Fiber-Electric slip ring model selection table				
Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO609-02S	6	0	2	34
FO609-0210	6	2	0	34
FO609-03S	6	0	3	34
FO609-0310	6	3	0	34
FO609-06S	6	0	6	34
FO609-0210-04S	6	2	4	34
FO609-0410-02S	6	4	2	34
FO609-0610	6	6	0	34
FO609-12S	6	0	12	52
FO609-0210-10S	6	2	10	52
FO609-0310-09S	6	3	9	52
FO609-0610-06S	6	6	6	52



Model	Fiber Channel no.	10A	Signal/5A	Length L(mm)
FO609-0810-04S	6	8	4	52
FO609-1010-02S	6	10	2	52
FO609-1210	6	12	0	52
FO609-18S	6	0	18	68.5
FO609-0210-16S	6	2	16	68.5
FO609-0610-12S	6	6	12	68.5
FO609-0810-10S	6	8	10	68.5
FO609-1010-08S	6	10	8	68.5
FO609-1210-06S	6	12	6	68.5
FO609-1610-02S	6	16	2	68.5
FO609-24S	6	0	24	68.5
FO609-0410-20S	6	4	20	85.5
FO609-0610-18S	6	6	18	85.5

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	$\geq 1000\text{m}\Omega / 500\text{VDC}$	$\geq 1000\text{m}\Omega / 500\text{VDC}$
lead wire spec.	AWG17# Silver-plated teflon	AWG22# Silver-plated teflon
lead wire length	standard 300mm (can be customized)	
Dielectric Strength	500VAC@50Hz, 60s	
Electrical noise	<0.01 $\Omega$	

Mechanical Data		
spec	data	
working life	8000 millions for ref(depends on working conditions)	
Rotating speed	250RPM	
Work Temperature	-30℃~80℃	
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





## FO800 series 8 channels Fiber Optic slip ring

8 channels Fiber(support single mode/multi-mode) .Suitable for some applications which requires to keep 360° 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

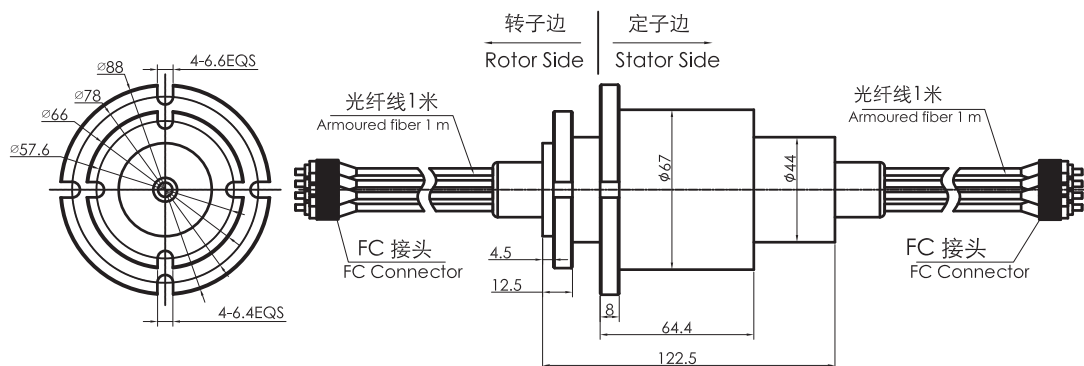
FO800	- Fiber type -	Connector type-	wavelength
FO800:eight channels Fiber optic rotary joint	Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)	Connector type code : FC:FC connector ST:ST connector SC:SC connector LC:LC connector t connector interface is PC by default, if need APC FC/APC pls add APC,as FC/APC	Wavelength : 01:1310/1550 (Single mode) 02:850/1310 (multi mode)

### Examples

FO800-01-FC-01: FO800 means 8 Channels Fiber Optic rotary joint,the first 01 means Fiber type 9/125um(single mode) , FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO800-03-LC/APC-02: FO800 means 8 channels Fiber-Electric rotary joint,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.



### 技术规格参数

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃ (dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ ( without connector)	$\geq 40$ ( without connector)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	



# FO808 series 8 channels Fiber-Electric slip ring



8 channels fiber(support single mode/multi-mode) can transmit 2 channels fiber@1~72 circuits signal at the same time. Suitable for some applications which requires to keep 360° 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

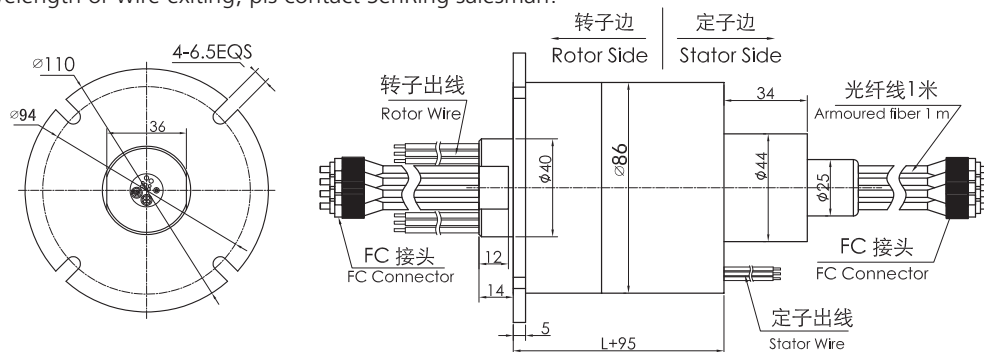
FO808	- Power circuits no.	- Signal circuits no.	- Fiber type	- Connector type	- wavelength	Wavelength :
8 channel Fiber-Electric slip ring Fiber Optic rotary joint						01:1310/1550 (Single mode) 02:850/1310 (multi mode)
Example : 0610:06 means 6 circuits, 10 means 10A per circuit				Connector type 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		
Example : 06S:06 means 6 circuits, S means signal				Fiber type code : 01:9/125um(Single mode) 02:50/125um(multi mode) 03:62.5/125um(multi mode)		

## Examples

FO808-06S-01-FC-01: FO808 means 8 Channels Fiber Optic rotary joint, 06S means can be combined to transmit 6 circuits signal, the first 01 means Fiber type 9/125um(single mode), FC means FC connector, fiber interface PC, the second 01 means wavelength :1310/1550;

FO808-0610-06S-03-LC/APC-02: FO808 means 8 channels Fiber-Electric rotary joint, 0610 means 6 circuits 10A, 06S means can be combined to transmit 6 circuits signal, 03 means Fiber type 62.5/125um(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

FO808 series 6 channels Fiber-Electric slip ring model selection table									
Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO808-02S	8	0	2	32	FO808-1210-12S	8	12	12	120
FO808-0210	8	2	0	32	FO808-1810-06S	8	18	6	120
FO808-03S	8	0	3	36	FO808-2410	8	24	0	120
FO808-0310	8	3	0	36	FO808-30S	8	0	30	144
FO808-06S	8	0	6	48	FO808-0610-24S	8	6	24	144
FO808-0210-04S	8	2	4	48	FO808-1210-18S	8	12	18	144
FO808-0410-02S	8	4	2	48	FO808-1810-12S	8	18	12	144
FO808-0610	8	6	0	48	FO808-2410-06S	8	24	6	144
FO808-12S	8	0	12	72	FO808-3010	8	30	0	144
FO808-0210-10S	8	2	10	72	FO808-36S	8	0	36	168
FO808-0310-09S	8	3	9	72	FO808-0610-30S	8	6	30	168
FO808-0610-06S	8	6	6	72	FO808-1210-24S	8	12	24	168



Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)	Model	Fiber Channel no.	10A	Signal /5A	Length L(mm)
FO808-0810-04S	8	8	4	72	FO808-3610	8	36	0	168
FO808-1010-02S	8	10	2	72	FO808-42S	8	0	42	192
FO808-1210	8	12	0	72	FO808-0610-36S	8	6	36	192
FO808-18S	8	0	18	96	FO808-1210-30S	8	12	30	192
FO808-0210-16S	8	2	16	96	FO808-48S	8	0	48	216
FO808-0410-14S	8	4	14	96	FO808-0610-42S	8	6	42	216
FO808-0610-12S	8	6	12	96	FO808-0910-39S	8	9	39	216
FO808-0810-10S	8	8	10	96	FO808-1210-36S	8	12	36	216
FO808-1010-08S	8	10	8	96	FO808-1810-30S	8	18	30	216
FO808-1210-06S	8	12	6	96	FO808-2410-24S	8	24	24	216
FO808-1410-04S	8	14	4	96	FO808-60S	8	0	60	264
FO808-1610-02S	8	16	2	96	FO808-0610-54S	8	6	54	264
FO808-24S	8	0	24	120	FO808-0910-51S	8	9	51	264
FO808-0410-20S	8	4	20	120	FO808-1210-48S	8	12	48	264
FO808-0610-18S	8	6	18	120	FO808-72S	8	0	72	312

### Technical Specification of the slip ring

item	type	Single mode (SM)	multi mode (MM)
Bandwidth(nm)		$\pm 50$	
Max insertion Loss, 23℃(dB)		4	3.5
Insertion loss fluctuation(dB)		$\leq 2$	$\leq 1$
Return loss(dB)		$\geq 50$ (APC)	$\geq 40$ (PC)
max power(W)		0.5	
Max speed(rpm)		400	
Working life		>20 million	
Work Temperature(℃)		-45~85	
Storage temperature(℃)		-50~85	

spec	data	
	power	signal
voltage range	0~440VAC/VDC	0~440VAC/VDC
insulation resistance	$\geq 1000\text{m}\Omega / 500\text{VDC}$	$\geq 1000\text{m}\Omega / 500\text{VDC}$
lead wire spec.	AWG17# Silver-plated teflon	AWG22# Silver-plated teflon
lead wire length	standard 300mm (can be customized)	
Dielectric Strength	500VAC@50Hz, 60s	
Electrical noise	<0.01 $\Omega$	

### Mechanical Data

spec	data
working life	8000 millions for ref(depends on working conditions)
Rotating speed	250RPM
Work Temperature	-30℃ ~80℃
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