

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

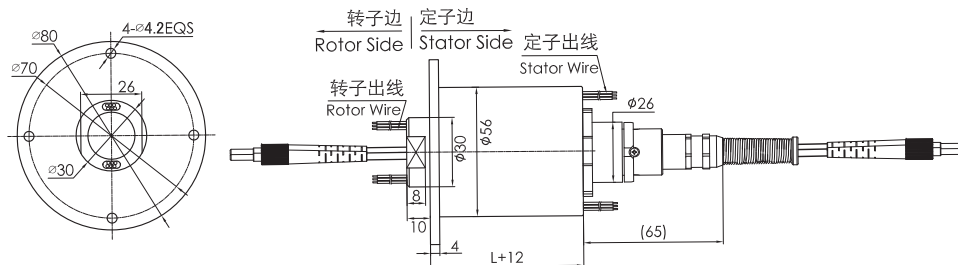
| FO409 | - Power circuits no. | - Signal circuits no. | - Fiber type | - Connector type | - wavelength | Wavelength : |
|---|----------------------|-----------------------|--------------|------------------|--------------|---|
| 4 channel Fiber-Electric slip ring Fiber Optic rotary joint | | | | | | 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

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

| 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) | | ± 50 | |
| Max insertion Loss, 23℃(dB) | | 4 | 3.5 |
| Insertion loss fluctuation(dB) | | ≤2 | ≤1 |
| Return loss(dB) | | ≥ 50(APC) | ≥40(PC) |
| max power(W) | | 0.5 | |
| 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 | -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,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#....