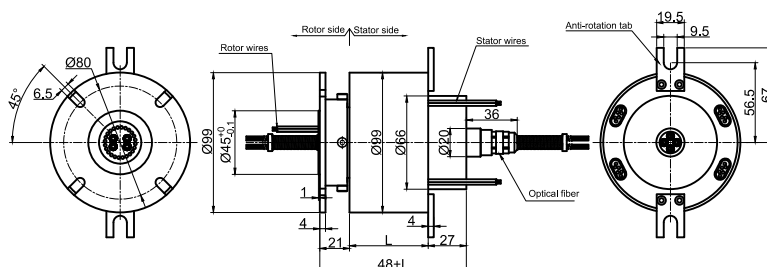


# MFO408 series

## 4 Channels Fiber Optic Slip Rings

MFO408 can combine 4 channels optic fiber and electric(1~72wires). It adopt complete aluminum alloy structure, can support signal(5A).

Rotary joint of FORJ+Electric is also called photoelectric slip ring, photoelectricity collector ring, which adopts fiber optic as data transmission media to solve the data transmission between system units. It can perfectly transmit data on 360° rotating. It is also especially suitable for occasion where it needs to transmit large volume data/signal from permanent position to rotation position on unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroy fiber optics. Fiber optic rotary joint can be combined with traditional electric slip ring to transmit power and high-speed data.



### Part # Explanation

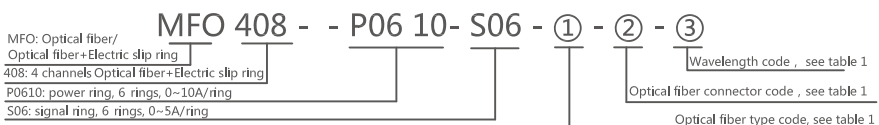


Table 1

Fiber Type Code	Fiber Connector Code	Wavelength Code
01: 9/125um, Single-mode	FC: FC Connector ST: ST Connector	01: 1310/1550(Single-mode)
02: 50/125um, Multiple-mode	SC: SC Connector LC: LC Connector	02: 850/1310(Multiple-mode)
03: 62.5/125m, Multiple-mode	The connector face is PC by default , If APC is needed, APC should be added behind APC, such as FC/APC.	

### Part#List

MFO408 - 2 channels optic fiber+electric slip ring part list									
Part	Optic Fiber Channel	10A	Signal or 5A	Length L (mm)	Part	Optic Fiber Channel	10A	Signal or 5A	Length L (mm)
MFO408-S02	4	0	2	55.6	MFO408-P1210-S12	2	12	12	124
MFO408-P0210	4	2	0	55.6	MFO408-P1810-S06	2	18	6	124
MFO408-S03	4	0	3	55.6	MFO408-P2410	2	24	0	124
MFO408-P0310	4	3	0	55.6	MFO408-S30	2	0	30	151.8
MFO408-S06	4	0	6	55.6	MFO408-P0610-S24	2	6	24	151.8
MFO408-P0210-S04	4	2	4	55.6	MFO408-P1210-S18	2	12	18	151.8
MFO408-P0410-S02	4	4	2	55.6	MFO408-P1810-S12	2	18	12	151.8
MFO408-P0610	4	6	0	55.6	MFO408-P2410-S06	2	24	6	151.8
MFO408-S12	4	0	12	78.4	MFO408-P3010	2	30	0	151.8
MFO408-P0210-S10	4	2	10	78.4	MFO408-S36	2	0	36	174.6
MFO408-P0310-S09	4	3	9	78.4	MFO408-P0610-S30	2	6	30	174.6
MFO408-P0610-S06	4	6	6	78.4	MFO408-P1210-S24	2	12	24	174.6
MFO408-P0810-S04	4	8	4	78.4	MFO408-P3610	2	36	0	174.6
MFO408-P1010-S02	4	10	2	78.4	MFO408-S42	2	0	42	220.2
MFO408-P1210	4	12	0	78.4	MFO408-P0610-S36	2	6	36	220.2
MFO408-S18	4	0	18	101.2	MFO408-P1210-S30	2	12	30	220.2
MFO408-P0210-S16	4	2	16	101.2	MFO208-S48	2	0	48	220.2
MFO408-P0410-S14	4	4	14	101.2	MFO408-P0610-S42	2	6	42	220.2
MFO408-P0610-S12	4	6	12	101.2	MFO408-P0910-S39	2	9	39	220.2

MFO408-P0810-S10	4	8	10	101.2	MFO408-P1210-S36	2	12	36	220.2
MFO408-P1010-S08	4	10	8	101.2	MFO408-P1810-S30	2	18	30	220.2
MFO408-P1210-S06	4	12	6	101.2	MFO408-P2410-S24	2	24	24	220.2
MFO408-P1410-S04	4	14	4	101.2	MFO408-S60	2	0	60	270.8
MFO408-P1610-S02	4	16	2	101.2	MFO408-P0610-S54	2	6	54	270.8
MFO408-P1810	4	18	0	101.2	MFO408-P0810-S52	2	8	52	270.8
MFO408-S24	4	0	24	124	MFO408-P1010-S0	2	10	50	270.8

Circuit numbers and high current can be customized, please contact customer service for more models.

## Specifications

Item	Type	Single-Mode		Multiple-Mode	
		Value	Value	Value	Value
WaveWidth(nm)		±50			
Max insert Loss, 23°C(dB)		4		3.5	
Insert Loss Ripple(dB)		2		1	
Return Loss(dB)		≥50(APC)		≥40(PC)	
Max Power(W)		0.5			
Weight(g)		200			
Max Rotating Speed(rpm)		250			
Working Life		> 100 million turn			
Working Temperature(°C)		-45~85			
Storage Temperature(°C)		-50~85			
Parameter		Power		Signal	
Rated Voltage		0~440VAC/VDC		0~440VAC/VDC	
Insulation Resistance		≥1000MΩ/500VDC		≥1000MΩ/500VDC	
Lead Wires		AWG16#Teflon		AWG22#Teflon	
Lead Length		Standard 300mm(can be extend)			
Dielectric Strength		500VAC@50Hz, 60s			
Electrical Noise		<0.01Ω			
		Mechanical Data			
Parameter		Value			
Working Life		> 100 million turn			
Rotating Speed		250 RPM			
Working Temperature		-30°C~80°C			
Operating Humidity		0~85% RH			
Contact Material		gold-gold			
Housing Material		aluminium alloy			
Torque		0.1N.m; +0.03N.m/6ring			
Protection Grade		IP51			
Fiber length		1M			

## Options for custom slip ring

Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Cable exit way and cable length can be customized for both rotor and stator.
- ② Because of the structure limitation, length/height/OD can be customized on your request.
- ③ Support current or signal up to 200 rings.
- ④ Aviation plug, terminal and heat-shrink tube are optional.
- ⑤ Hybrid slip ring for Yaskawa/Panasonic/Siemens servo control signal, power line and encoder line.
- ⑥ Support mixed high speed data transmission (including Ethernet, USB, RS232, RS485, Profibus, CanBUS, CANOPEN, DeviceNET, CC-LINK, ProfiNET, EtherCAT, etc.)
- ⑦ Can combine temperature control signal with thermocouple signal.
- ⑧ Special environment can be customized, such as quakeproof, high temperature, etc.
- ⑨ Hybrid Pneumatic/hydraulic and electric slip ring can be mixed.
- ⑩ Optical fiber connector, optical fiber type and fiber pigtail length can be customized.
- ⑪ *Optic fiber channels can be customized.*
- ⑫ *Optic fiber wavelength can be customized.*
- ⑬ Maximum current can up to 5000 amperes.
- ⑭ Military grade.
- ⑮ Optional for underwater IP65, IP68.
- ⑯ Optional for stainless steel housing.

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