MFO Series Fiber Optic Slip Ring(FORJ)

MFO series fiber optic slip ring is an optic+electromechanical device that allows the transmission of power and fiber optic signals from a stationary to a rotating structure. 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid destroying fiber optics. also can be combined with electric slip ring to transmit power and high-speed data too.

Features

- Options for single mode & multiple mode
- FC, SC, ST, SMA, or LC (PC and APC) on your request
- Large amounts of data transmittings.
- Anti-electromagnetic interference
- Could support 1,2,4,6,8 channel fiber optic on 360 rotating.
- Combine with 1~96circuits power/signal.
- Much higher rotating speed

MFO Series Models

Model#	Optic Fiber Channel	Circuits Num	OD(mm)
MFO100	1	0	10.1
MFO100C	1	0	6.8
MFO100 D	1	0	6.8
MFO102	1	1~18	24.8
MFO107	1	1~24	33
MFO108	1	1~48	56
MFO109	1	1~72	86
MFO200	2	0	67
MFO200C	2	0	26
MFO208	2	1~96	99
MFO400	4	0	67
MFO408	4	1~96	99
MFO600	6	0	67
MFO608	6	1~96	99
MFO800	8	0	67
MFO808	8	1~96	119
MFO1000C	10	0	38
MFO1200C	12	0	38
MFO1600C	16	0	38
MFO2000C	20	0	38
MFO2400C	24	0	38
MFO2600C	26	0	67

Web: http://www.moflon.com Email: sales@moflon.com

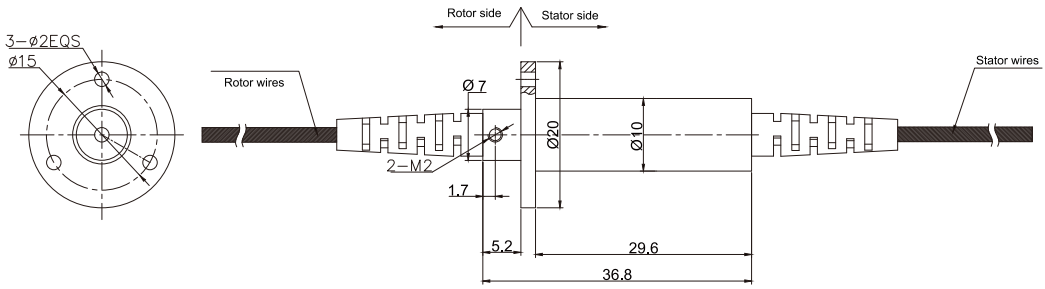
MFO100 series

1 Channel (FORJ) Fiber Optic Slip Rings

MFO100 fiber optic slip ring support 1 channel fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, 1 channel can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optic transmitting signal, no electromagnetic interference, long-distance transmission



Part # Explanation

MFO 100 - ① - ② - ③

MFO: Optical fiber/ Optical fiber+Electric slip ring

100: 1 channel optical fiber

③ Wavelength code , see table 1

② Optical fiber connector code , see table 1

① Optical fiber type code, see table 1

Table 1

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

Specifications

Itmes \ Type	Single-mode	Multiple-mode
Wavewidth(nm)	±50	
Max Insert Loss, 23℃(db)	1.5	1.5
Insert Loss Ripple(db)	0.7	0.7
Return Loss(db)	≥50(APC) ≥40(PC)	≥30
Max Power(w)	0.5	
Weight(g)	25g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	1000	
Working Life	>100 million rpm	
Working Temperature(℃)	-20~60℃ (Civil use) -40~85℃ (military)	
Storage Temperature(℃)	-50~85	
Protection Grade	IP54 / IP65	
Fiber length	1m	

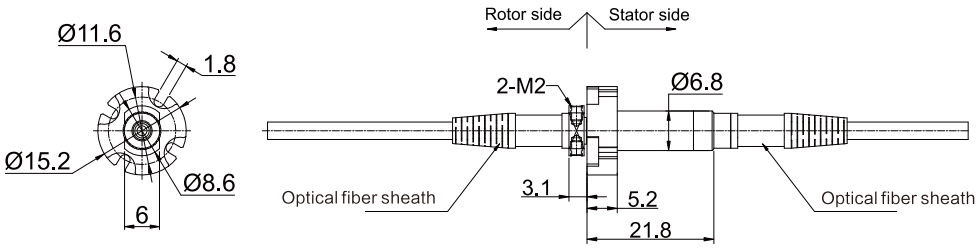
MFO100C series

1 Channel (FORJ) Fiber Optic Slip Rings

MFO100C fiber optic slip ring support 1 channel fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, 1 channel can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optic transmitting signal, no electromagnetic interference, long-distance transmission



Part # Explanation

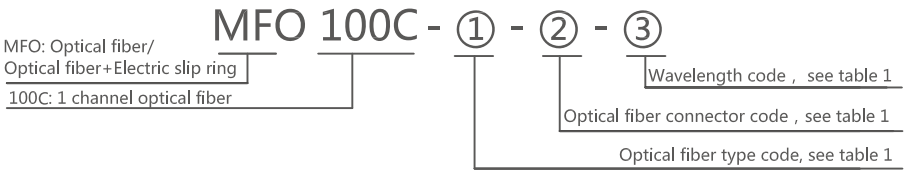


Table 1

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

Specifications

Entry name	Numerical value	
Wavewidth(nm)	Single-mode1310/1550	Multiple-mode 850/1310
Max Insert Loss, 23℃(db)	≤1.5dB	
Insert Loss Ripple(db)	≤0.7dB / (±0.35dB)	
Return Loss(db)	Single-mode ≥50(APC) ≥40(PC)	Multiple-mode ≥30(PC)
Max Power(w)	23dB	
Weight(g)	2000rpm	
Max Rotating Speed(rpm)	>100 million rpm	
Working Life	≤0.01N.m	
Rotating torque	-20~60℃(-40~85℃ optional)	
Working Temperature(℃)	-45~85℃	
Storage Temperature(℃)	15g	
Protection Grade	IP60(IP65、IP67 optional)	
Fiber length	1m	

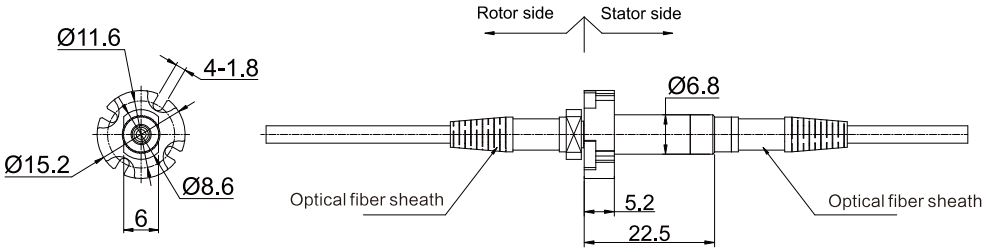
MFO100D series

1 Channel (FORJ) Fiber Optic Slip Rings

MFO100D fiber optic slip ring support 1 channel fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, 1 channel can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optic transmitting signal, no electromagnetic interference, long-distance transmission



Part # Explanation

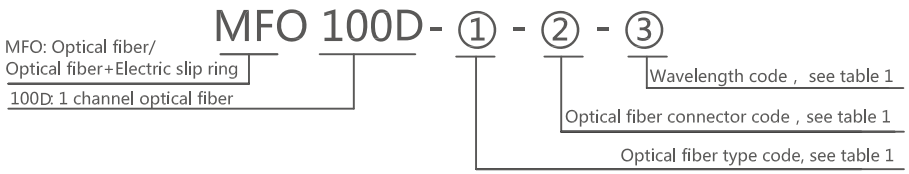


Table 1

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

Specifications

Entry name	Numerical value	
Wavewidth(nm)	Single-mode1310/1550	Multiple-mode 850/1310
Max Insert Loss, 23℃(db)	≤1.5dB	
Insert Loss Ripple(db)	≤0.7dB	
Max Power(w)	23dB	
Weight(g)	0~2000rpm	
Max Rotating Speed(rpm)	>100 million rpm	
Working Life	≤0.01N.m	
Rotating torque	-20~60℃(-40~85℃ optional)	
Working Temperature(℃)	-45~85℃	
Storage Temperature(℃)	15g	
Protection Grade	IP60(IP65、IP67 optional)	
Fiber length	1m	

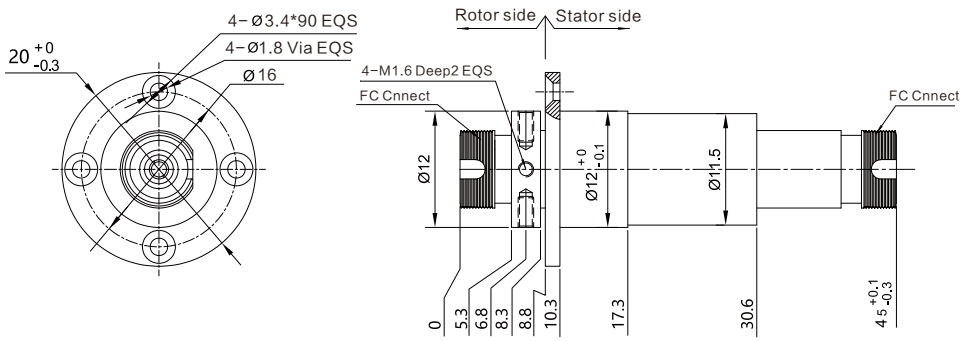
MFO100B2 series

1 Channel (FORJ) Fiber Optic Slip Rings

MFO100B2 fiber optic slip ring support 1 channel fiber optic(SM/MM).It can perfectlyansmit data on 360° rotating. It is also especially suitable for occasion where it needs totransmit large volume data/signal from permanent position to rotation position undeunlimited, continuous or discontinuous rotating, which can improve mechanical property,simplify system operation and avoid the rotating of turning joints destroying fiber optics

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, 1 channel can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optic transmitting signal, no electromagnetic interference, long-distance transmission



Part # Explanation

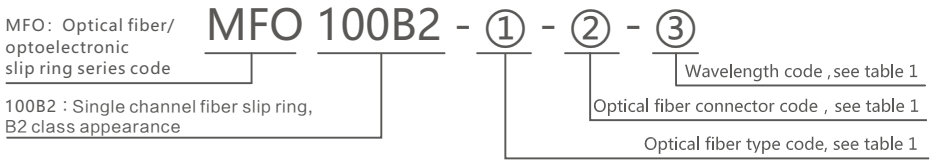


Table 1

Fiber Type Code	Fiber Connector Code	Wavelength Code
01: 9/125um, Single-mode 02: 50/125um, Multiple-mode 03: 62.5/125um, Multiple-mode	FC: FC Connector	01: 1310/1550(Single-mode) 02: 850/1310(Multiple-mode)

Specifications

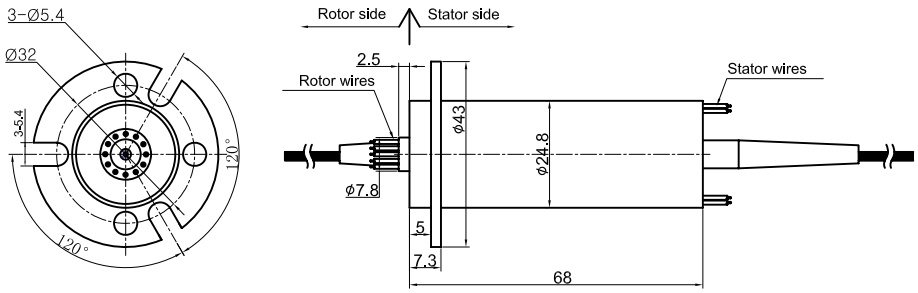
Entry name	Numerical value	
Wavewidth(nm)	Single−mode1310/1550	Multiple−mode 850/1310
Max Insert Loss, 23℃(db)	2	
Insert Loss Ripple(db)	≤0.7dB	
Max Power(w)	23dB	
Weight(g)	0~2000rpm	
Max Rotating Speed(rpm)	>100 million rpm	
Working Life	≤0.01N.m	
Rotating torque	-20~60℃(-40~85℃ optional)	
Working Temperature(℃)	-45~85℃	
Storage Temperature(℃)	15g	
Protection Grade	IP60(IP65、IP67 optional)	
Fiber length	1m	

MFO102 series

1 Channel Fiber Optic+electric Slip Rings

MFO102 can combine 1 channel optic fiber and electric(1~36wires). It adopt complete aluminum alloy structure, can support signal(5A).

Rotary joint of FORJ+Electric is also called photoelectrical 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

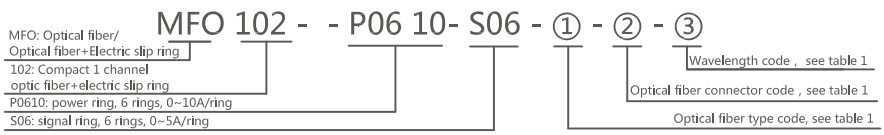


Table 1

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

Part#List

MFO102 - Compact 1 channel optic fiber+electric slip ring part list				
Part#	Optic Fiber Channel	10A	Signal or 2A	Length(mm)
MFO102-S06	1 channel	0	6	68
MFO102-S12	1 channel	0	12	68
MFO102-S18	1 channel	0	18	68

If you have any special requirements,please contact customer service for specific model and customization.

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	≤1.5dB	
Insert Loss Ripple(dB)	≤0.7dB / ±0.35dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30(PC)
Max Power(W)	0.5	
Max Rotating Speed(rpm)	2000	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃（-40~85℃ Optional）	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	Power	Signal
Rated Voltage	0~220VAC/VDC	0~220VAC/VDC
Insulation Resistance	≥100MΩ/220VDC	≥100MΩ/220VDC
Lead Wires	AWG28#Teflon	AWG28#Teflon
Lead Length	Standard 300mm(can be extend)	
Dielectric Strength	500VAC@50Hz，60s	
Electrical Noise	<0.01Ω	
Mechanical Data		
Parameter	Value	
Working Life	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	aluminium alloy	
Torque	0.1N.m；+0.03N.m/6ring	
Protection Grade	IP51	

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.

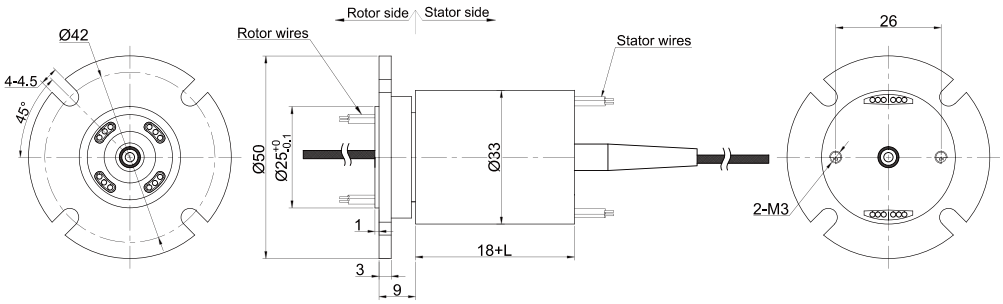
① Cable exit way and cable length can be customized for both rotor and stator.
② Because of the structure limitation, length/height/OD can be customized on your request.
③ Support current or signal up to 200 rings.
④ Aviation plug, terminal and heat-shrink tube are optional.
⑤ Hybrid slip ring for Yaskawa/Panasonic/Siemens 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.
Technical support: technical@moflon.com

MFO107 series

1 Channel Fiber Optic+electric Slip Rings

MFO107 can combine 1 channel optic fiber and electric(1~24wires). It adopt complete aluminum alloy structure, can support signal(5A).

Rotary joint of FORJ+Electric is also called photoelectrical 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

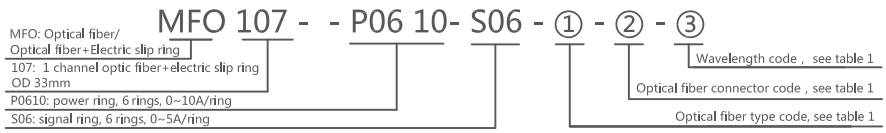


Table 1

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

Part#List

MFO107 - 1 channel optic fiber+electric slip ring part list				
Part	Optic Fiber Channel	10A	Signal or 5A	Length(mm)
MFO107-S06	1 channel	0	6	25.4
MFO107-S12	1 channel	0	12	39.2
MFO107-S18	1 channel	0	18	53
MFO107-S24	1 channel	0	24	66.8

Products can be customized, please contact customer service for more slip ring models.

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	1.5dB	
Insert Loss Ripple(dB)	0.7dB / ±0.35dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30(PC)
Max Power(W)	0.5	
Max Rotating Speed(rpm)	2000	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃（-40~85℃ Optional）	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	Power	Signal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC
Insulation Resistance	≥500MΩ/300VDC	≥200MΩ/300VDC
Lead Wires	AWG22#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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.

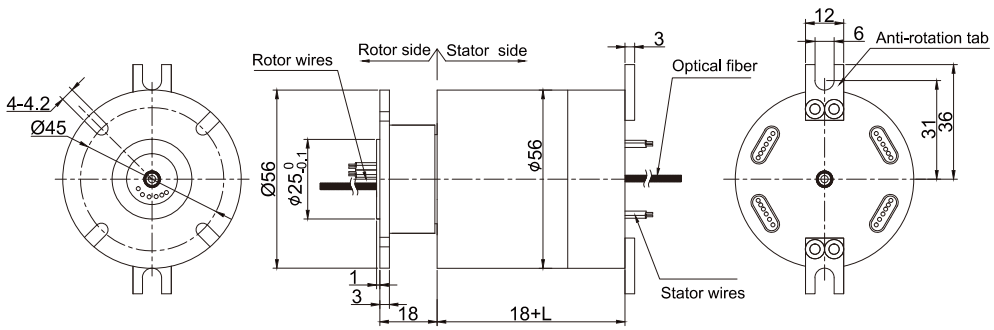
① Cable exit way and cable length can be customized for both rotor and stator.
② Because of the structure limitation, length/height/OD can be customized on your request.
③ Support current or signal up to 200 rings.
④ Aviation plug, terminal and heat-shrink tube are optional.
⑤ Hybrid slip ring for Yaskawa/Panasonic/Siemens 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.
Technical support: technical@moflon.com

MFO108 series

1 Channel Fiber Optic+electric Slip Rings

MFO108 can combine 1 channel optic fiber and electric(1~48wires). It adopt complete aluminum alloy structure, can support signal(5A).

Rotary joint of FORJ+Electric is also called photoelectrical 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

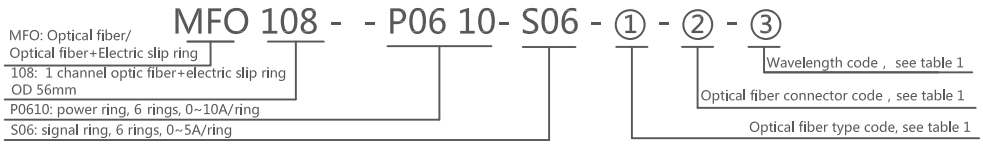


Table 1

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

Part#List

MFO108 - 1 channel optic fiber+electric slip ring part list				
Part	Optic Fiber Channel	10A	Signal or 5A	Length(mm)
MFO108-S06	1 channel	0	6	38
MFO108-P0610	1 channel	6	0	38
MFO108-S12	1 channel	0	12	54.8
MFO108-P1210	1 channel	12	0	54.8
MFO108-P0610-S06	1 channel	6	6	54.8
MFO108-S18	1 channel	0	18	71.6
MFO108-P1810	1 channel	18	0	71.6
MFO108-S24	1 channel	0	24	88.4
MFO108-P1210-S12	1 channel	12	12	88.4
MFO108-P0610-S18	1 channel	6	18	88.4
MFO108-S30	1 channel	0	30	105.2
MFO108-S36	1 channel	0	36	125
MFO108-S42	1 channel	0	42	141.8
MFO108-S48	1 channel	0	48	158.6

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
Wave Width(nm)	±50	
Max insert Loss，23℃(dB)	1.5dB	
Insert Loss Ripple(dB)	0.7dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30(PC)
Max Power(W)	0.5	
Max Rotating Speed(rpm)	2000	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	Power	Signal
Rated Voltage	0~440VAC/VDC	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG17#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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	aluminium alloy	
Torque	0.1N.m； +0.03N.m/6ring	
Protection Grade	Ip51	
Fiber length	1M	

Options for custom slip ring

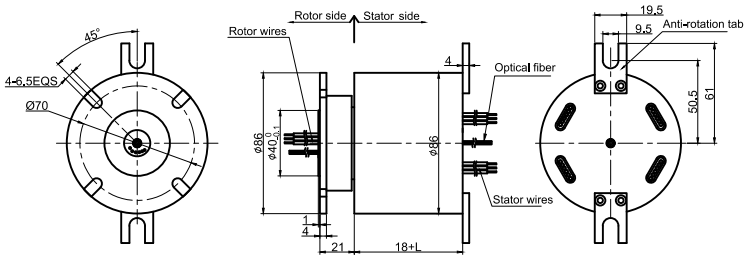
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

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.
Technical support: technical@moflon.com

MFO109 series

1 Channel Fiber Optic+electric Slip Rings

MFO109 can combine 1 channel optic fiber and electric(1~96wires). It adopt complete aluminum alloy structure, can support signal(5A).
Rotary joint of FORJ+Electric is also called photoelectrical 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

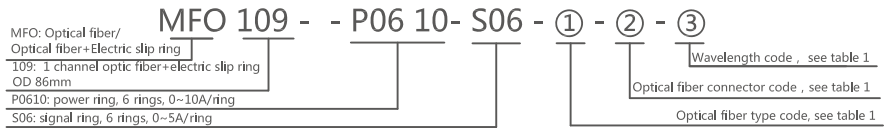


Table 1

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

Part#List

MFO109 - 1 channel 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)
MFO109-S02	1	0	2	31.6	MFO109-P1210-S12	1	12	12	106.4
MFO109-P0210	1	2	0	31.6	MFO109-P1810-S06	1	18	6	106.4
MFO109-S03	1	0	3	35	MFO109-P2410	1	24	0	106.4
MFO109-P0310	1	3	0	35	MFO109-S30	1	0	30	126.8
MFO109-S06	1	0	6	45.2	MFO109-P0610-S24	1	6	24	126.8
MFO109-P0210-S04	1	2	4	45.2	MFO109-P1210-S18	1	12	18	126.8
MFO109-P0410-S02	1	4	2	45.2	MFO109-P1810-S12	1	18	12	126.8
MFO109-P0610	1	6	0	45.2	MFO109-P2410-S06	1	24	6	126.8
MFO109-S12	1	0	12	65.6	MFO109-P3010	1	30	0	126.8
MFO109-P0210-S10	1	2	10	65.6	MFO109-S36	1	0	36	150.2
MFO109-P0310-S09	1	3	9	65.6	MFO109-P0610-S30	1	6	30	150.2
MFO109-P0610-S06	1	6	6	65.6	MFO109-P1210-S24	1	12	24	150.2
MFO109-P0810-S04	1	8	4	65.6	MFO109-P3610	1	36	0	150.2
MFO109-P1010-S02	1	10	2	65.6	MFO109-S42	1	0	42	170.6
MFO109-P1210	1	12	0	65.6	MFO109-P0610-S36	1	6	36	170.6
MFO109-S18	1	0	18	86	MFO109-P1210-S30	1	12	30	170.6
MFO109-P0210-S16	1	2	16	86	MFO109-S48	1	0	48	193.2
MFO109-P0410-S14	1	4	14	86	MFO109-P0610-S42	1	6	42	193.2
MFO109-P0610-S12	1	6	12	86	MFO109-P0910-S39	1	9	39	193.2
MFO109-P0810-S10	1	8	10	86	MFO109-P1210-S36	1	12	36	193.2
MFO109-P1010-S08	1	10	8	86	MFO109-P1810-S30	1	18	30	193.2
MFO109-P1210-S06	1	12	6	86	MFO109-P2410-S24	1	24	24	193.2
MFO109-P1410-S04	1	14	4	86	MFO109-S60	1	0	60	234
MFO109-P1610-S02	1	16	2	86	MFO109-P0610-S54	1	6	54	234
MFO109-S24	1	0	24	106.4	MFO109-P0910-S51	1	9	51	234
MFO109-P0410-S20	1	4	20	106.4	MFO109-P1210-S48	1	12	48	234
MFO109-P0610-S18	1	6	18	106.4	MFO109-S72	1	0	72	277.8

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	1.5dB	
Insert Loss Ripple(dB)	0.7dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30(multimode)
Max Power(W)	0.5	
Max Rotating Speed(rpm)	1000	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	Power	Signal
Rated Voltage	0~440VAC/VDC	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC
Lead Wires	AWG22#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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.
Technical support: technical@moflon.com

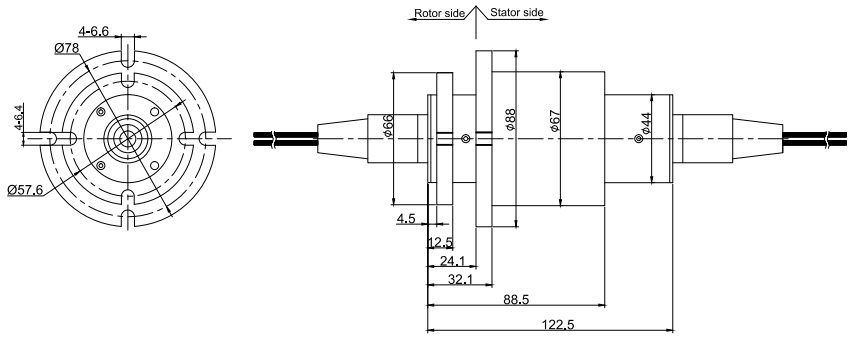
MFO200 series

2 Channels (FORJ)Fiber Optic Slip Rings

MFO200 fiber optic slip ring support 2 channels fiber optic(SM/MM). It can perfectly transmit data o 360° rotating. It is also especially suitable for occasion where it needs to transmit large volum data/signal from permanent position to rotation position under unlimited, continuous or discontinuou rotating, which can improve mechanical property, simplify system operation and avoid the rotating o turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks， no electromagnetic interference, long-distance transmission



Part # Explanation

MFO 200 - ① - ② - ③

MFO: Optical fiber/ Optical fiber+Electric slip ring

200: 2 channels optical fiber

③ Wavelength code， see table 1

② Optical fiber connector code，see table 1

① Optical fiber type code, see table 1

Table 1

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

Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC)　≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	1.6Kg(Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use）　-40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
IP68	IP65	
Fiber length	1m	

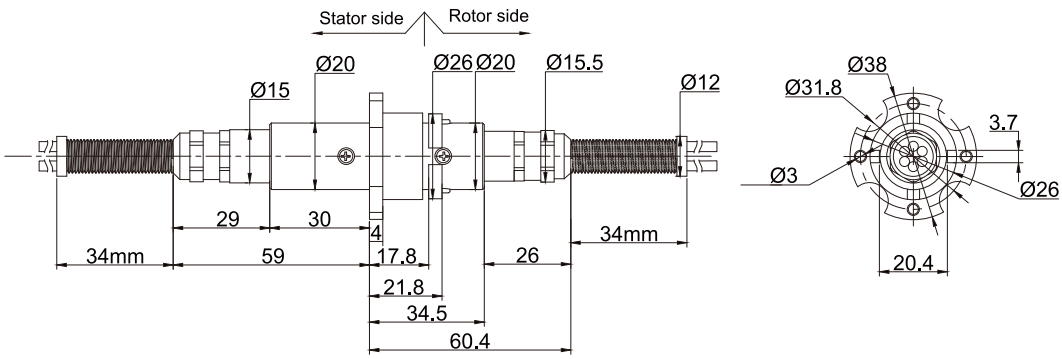
MFO200C series

2 Channels (FORJ)Fiber Optic Slip Rings

MFO200C fiber optic slip ring support 2 channels fiber optic(SM/MM).It can perfectly transmit data on 36° rotating. It is also especially suitable for occasion where it needs to transmit large volume data/signal from permanent position to rotation position under unlimited, continuous or discontinuous rotating, which can improve mechanical property simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks， no electromagnetic interference, long-distance transmission
- Loss below 1.5-2db can be customized



Part # Explanation

MFO 200C - ① - ② - ③

MFO: Optical fiber/ Optical fiber+Electric slip ring

200: 2 channels optical fiber, C type shape

③ Wavelength code， see table 1

② Optical fiber connector code , see table 1

① Optical fiber type code, see table 1

Table 1

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

Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5	3.5
Insert Loss Ripple(dB)	1.5	1.5
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	200Kg (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	

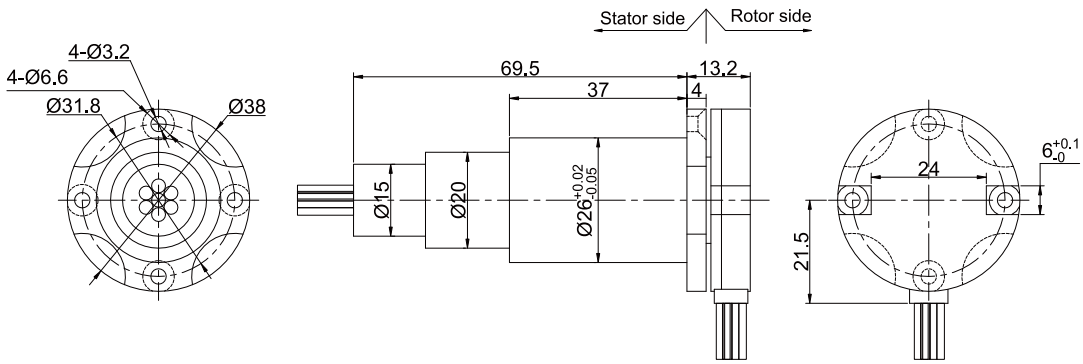
MFO200E series

2 Channels (FORJ)Fiber Optic Slip Rings

MFO200E fiber optic slip ring support 2 channels fiber optic(SM/MM).It can perfectly transmit data on 36° rotating. It is also especially suitable for occasion where it needs to transmit large volume data/signal from permanent position to rotation position under unlimited, continuous or discontinuous rotating, which can improve mechanical property simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks，no electromagnetic interference, long-distance transmission
- Loss below 1.5-2db can be customized
- One end is a side exit, saving axial space



Part # Explanation

MFO 200E - ① - ② - ③

MFO: Optical fiber/ Optical fiber+Electric slip ring

200: 2 channels optical fiber, E type shape

③ Wavelength code，see table 1

② Optical fiber connector code，see table 1

① Optical fiber type code, see table 1

Table 1

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

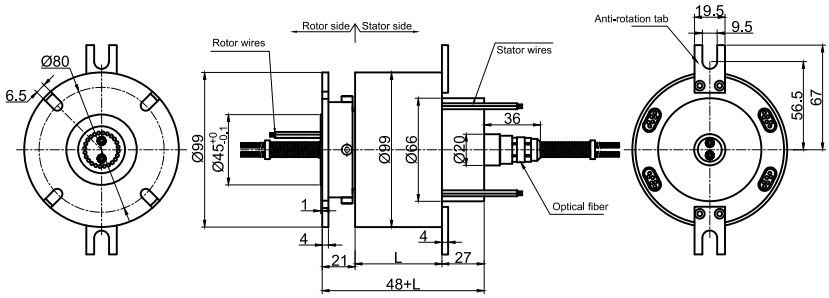
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5	3.5
Insert Loss Ripple(dB)	1.5	1.5
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	200Kg (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	

MFO208 series

2 Channels Fiber Optic+electric Slip Rings

MFO208 can combine 2 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 photoelectrical 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

MFO 208 - - P06 10- S06 - ① - ② - ③

MFO: Optical fiber/ Optical fiber+Electric slip ring
208: 2 channels Optical fiber+Electric slip ring
P0610: power ring, 6 rings, 0~10A/ring
S06: signal ring, 6 rings, 0~5A/ring
Wavelength code , see table 1
Optical fiber connector code , see table 1
Optical fiber type code, see table 1

Part#List

MFO208 - 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)
MFO208-S02	2	0	2	55.6	MFO208-P1210-S12	2	12	12	124
MFO208-P0210	2	2	0	55.6	MFO208-P1810-S06	2	18	6	124
MFO208-S03	2	0	3	55.6	MFO208-P2410	2	24	0	124
MFO208-P0310	2	3	0	55.6	MFO208-S30	2	0	30	151.8
MFO208-S06	2	0	6	55.6	MFO208-P0610-S24	2	6	24	151.8
MFO208-P0210-S04	2	2	4	55.6	MFO208-P1210-S18	2	12	18	151.8
MFO208-P0410-S02	2	4	2	55.6	MFO208-P1810-S12	2	18	12	151.8
MFO208-P0610	2	6	0	55.6	MFO208-P2410-S06	2	24	6	151.8
MFO208-S12	2	0	12	78.4	MFO208-P3010	2	30	0	151.8
MFO208-P0210-S10	2	2	10	78.4	MFO208-S36	2	0	36	174.6
MFO208-P0310-S09	2	3	9	78.4	MFO208-P0610-S30	2	6	30	174.6
MFO208-P0610-S06	2	6	6	78.4	MFO208-P1210-S24	2	12	24	174.6
MFO208-P0810-S04	2	8	4	78.4	MFO208-P3610	2	36	0	174.6
MFO208-P1010-S02	2	10	2	78.4	MFO208-S42	2	0	42	220.2
MFO208-P1210	2	12	0	78.4	MFO208-P0610-S36	2	6	36	220.2
MFO208-S18	2	0	18	101.2	MFO208-P1210-S30	2	12	30	220.2
MFO208-P0210-S16	2	2	16	101.2	MFO208-S48	2	0	48	220.2
MFO208-P0410-S14	2	4	14	101.2	MFO208-P0610-S42	2	6	42	220.2
MFO208-P0610-S12	2	6	12	101.2	MFO208-P0910-S39	2	9	39	220.2
MFO208-P0810-S10	2	8	10	101.2	MFO208-P1210-S36	2	12	36	220.2
MFO208-P1010-S08	2	10	8	101.2	MFO208-P1810-S30	2	18	30	220.2
MFO208-P1210-S06	2	12	6	101.2	MFO208-P2410-S24	2	24	24	220.2
MFO208-P1410-S04	2	14	4	101.2	MFO208-S60	2	0	60	270.8
MFO208-P1610-S02	2	16	2	101.2	MFO208-P0610-S54	2	6	54	270.8
MFO208-P1810	2	18	0	101.2	MFO208-P0810-S52	2	8	52	270.8
MFO208-S24	2	0	24	124	MFO208-P1010-S0	2	10	50	270.8

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

Table 1

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

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5dB	
Insert Loss Ripple(dB)	1.5 dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30
Max Power(W)	0.5	
Max Rotating Speed(rpm)	300	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.

Technical support: technical@moflon.com

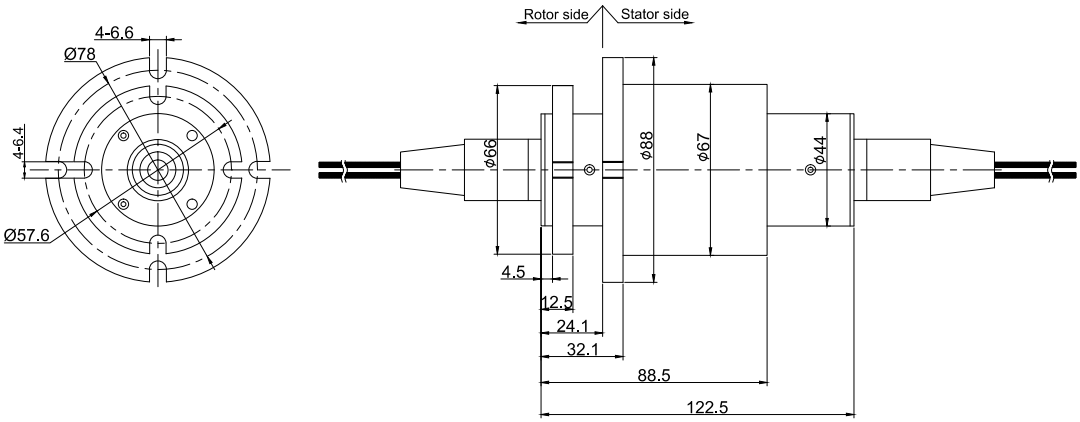
MFO400 series

4 Channels (forj)fiber Optic Slip Rings

MFO400 fiber optic slip ring support 4 channels fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks， no electromagnetic interference, long-distance transmission



Part # Explanation

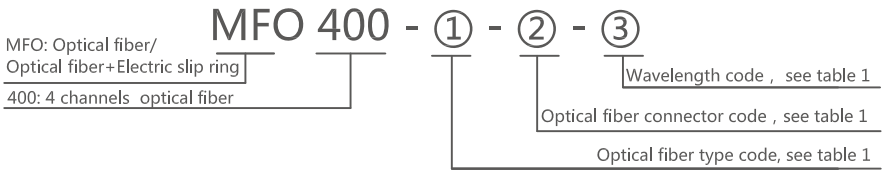


Table 1

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

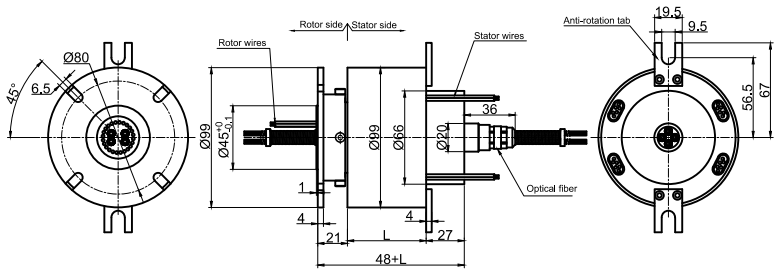
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	1.6Kg(Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

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 photoelectrical 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

MFO 408 - - P06 10- S06 - ① - ② - ③

- MFO: Optical fiber/ Optical fiber+Electric slip ring
- 408: 4 channels Optical fiber+Electric slip ring
- P0610: power ring, 6 rings, 0~10A/ring
- S06: signal ring, 6 rings, 0~5A/ring
- ③ Wavelength code , see table 1
- ② Optical fiber connector code , see table 1
- ① Optical fiber type code, see table 1

Table 1

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

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

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5dB	
Insert Loss Ripple(dB)	1.5 dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30
Max Power(W)	0.5	
Max Rotating Speed(rpm)	300	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	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℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.
Technical support: technical@moflon.com

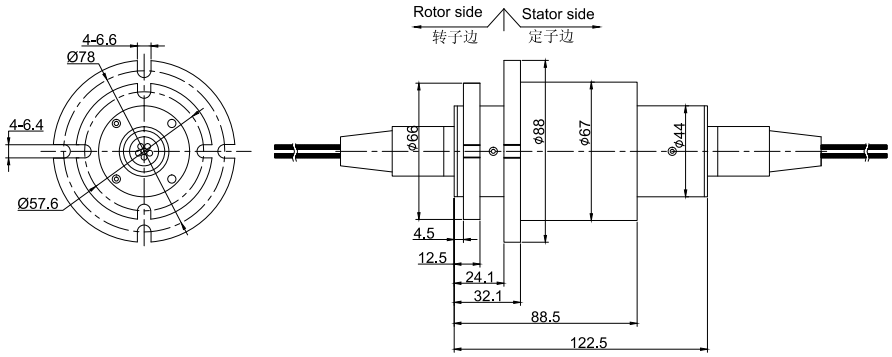
MFO600 series

6 Channels Fiber Optic Slip Rings

MFO600 fiber optic slip ring support 6 channels fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks， no electromagnetic interference, long-distance transmission



Part # Explanation

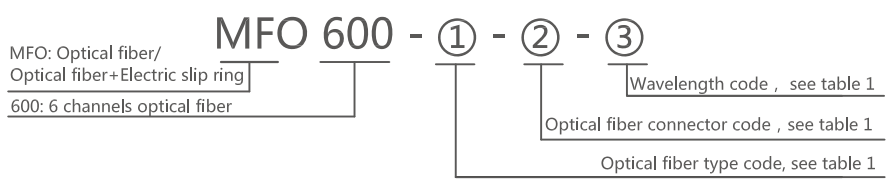


Table 1

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

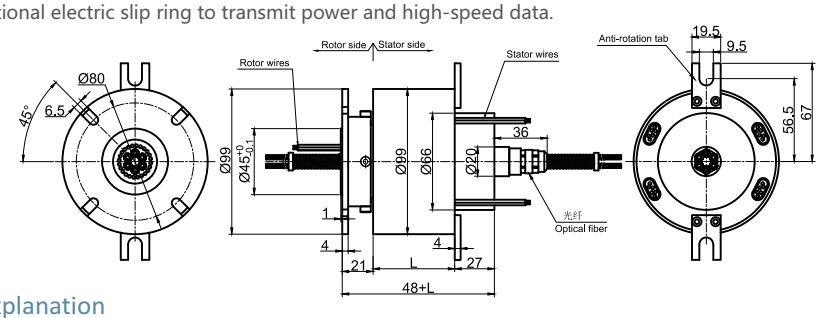
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	1.6Kg (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO608 series

6 Channels Fiber Optic+electric Slip Rings

MFO608 can combine 6 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 photoelectrical 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

MFO 608 - - P06 10- S06 - ① - ② - ③

- MFO: Optical fiber/ Optical fiber+Electric slip ring
- 608: 6 channels Optical fiber+Electric slip ring
- P0610: power ring, 6 rings, 0~10A/ring
- S06: signal ring, 6 rings, 0~5A/ring
- ③ Wavelength code , see table 1
- ② Optical fiber connector code , see table 1
- ① Optical fiber type code, see table 1

Table 1

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

Part#List

MFO608 - 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)
MFO608-S02	6	0	2	55.6	MFO608-P1210-S12	2	12	12	124
MFO608-P0210	6	2	0	55.6	MFO608-P1810-S06	2	18	6	124
MFO608-S03	6	0	3	55.6	MFO608-P2410	2	24	0	124
MFO608-P0310	6	3	0	55.6	MFO608-S30	2	0	30	151.8
MFO608-S06	6	0	6	55.6	MFO608-P0610-S24	2	6	24	151.8
MFO608-P0210-S04	6	2	4	55.6	MFO608-P1210-S18	2	12	18	151.8
MFO608-P0410-S02	6	4	2	55.6	MFO608-P1810-S12	2	18	12	151.8
MFO608-P0610	6	6	0	55.6	MFO608-P2410-S06	2	24	6	151.8
MFO608-S12	6	0	12	78.4	MFO608-P3010	2	30	0	151.8
MFO608-P0210-S10	6	2	10	78.4	MFO608-S36	2	0	36	174.6
MFO608-P0310-S09	6	3	9	78.4	MFO608-P0610-S30	2	6	30	174.6
MFO608-P0610-S06	6	6	6	78.4	MFO608-P1210-S24	2	12	24	174.6
MFO608-P0810-S04	6	8	4	78.4	MFO608-P3610	2	36	0	174.6
MFO608-P1010-S02	6	10	2	78.4	MFO608-S42	2	0	42	220.2
MFO608-P1210	6	12	0	78.4	MFO608-P0610-S36	2	6	36	220.2
MFO608-S18	6	0	18	101.2	MFO608-P1210-S30	2	12	30	220.2
MFO608-P0210-S16	6	2	16	101.2	MFO608-S48	2	0	48	220.2
MFO608-P0410-S14	6	4	14	101.2	MFO608-P0610-S42	2	6	42	220.2
MFO608-P0610-S12	6	6	12	101.2	MFO608-P0910-S39	2	9	39	220.2
MFO608-P0810-S10	6	8	10	101.2	MFO608-P1210-S36	2	12	36	220.2

MFO608-P1010-S08	6	10	8	101.2	MFO608-P1810-S30	2	18	30	220.2
MFO608-P1210-S06	6	12	6	101.2	MFO608-P2410-S24	2	24	24	220.2
MFO608-P1410-S04	6	14	4	101.2	MFO608-S60	2	0	60	270.8
MFO608-P1610-S02	6	16	2	101.2	MFO608-P0610-S54	2	6	54	270.8
MFO608-P1810	6	18	0	101.2	MFO608-P0810-S52	2	8	52	270.8
MFO608-S24	6	0	24	124	MFO608-P1010-S0	2	10	50	270.8

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5dB	
Insert Loss Ripple(dB)	1.5 dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30
Max Power(W)	0.5	
Max Rotating Speed(rpm)	300	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.
Technical support: technical@moflon.com

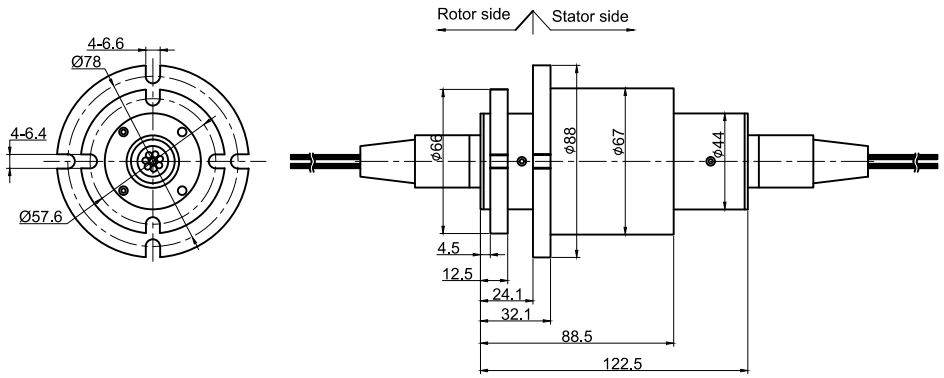
MFO800

8 Channels fiber optic+electric slip rings

MFO800 fiber optic slip ring support 8 channels fiber optic(SM/MM). 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 under unlimited, continuous or discontinuous rotating, which can improve mechanical property, simplify system operation and avoid the rotating of turning joints destroying fiber optics.

Features:

- Low insertion loss, high rotation speed
- Non-contact, zero friction, long working life, single core can achieve one hundred million revolutions
- Small size, light weight, high sealing class
- Fiber optics transmitting signal, no leaks, no electromagnetic interference, long-distance transmission



Part # Explanation

MFO 800 - ① - ② - ③

- MFO: Optical fiber/ Optical fiber+Electric slip ring
- 800: 8 channels optical fiber
- ③ Wavelength code , see table 1
- ② Optical fiber connector code , see table 1
- ① Optical fiber type code, see table 1

Table 1

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

Specifications

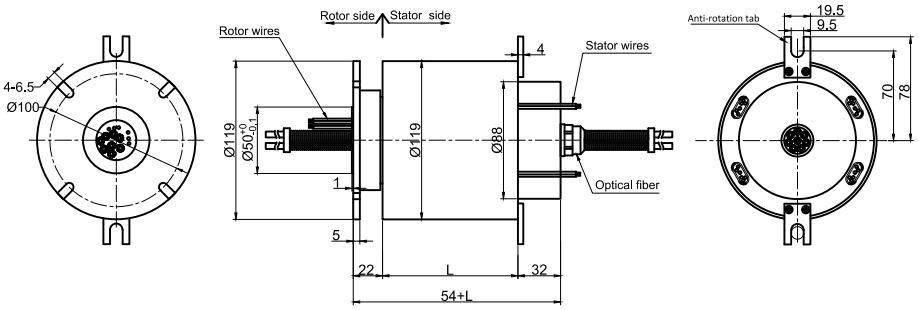
Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	4	±50
Max insert Loss, 23℃(dB)	2	4
Insert Loss Ripple(dB)	≥50(APC) ≥40(PC)	2
Return Loss(dB)	0.5	≥30
Max Power(W)	1.6Kg(Excluding tail cables and connectors)	
Weight(g)	300RPM	
Max Rotating Speed(rpm)	> 200 million rpm	
Working Life	-20~60℃ (Civil use) -40~85℃ (military)	
Working Temperature(℃)	-50~85℃	
Storage Temperature(℃)	IP65	
Protection Grade	1m	

MFO808 series

8 Channels fiber optic+electric slip rings

MFO808 can combine 8 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 photoelectrical 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

MFO 808 - - P06 10- S06 - ① - ② - ③

- MFO: Optical fiber/ Optical fiber+Electric slip ring
- 808: 8 channels Optical fiber+Electric slip ring
- P0610: power ring, 6 rings, 0~10A/ring
- S06: signal ring, 6 rings, 0~5A/ring
- ③ Wavelength code , see table 1
- ② Optical fiber connector code , see table 1
- ① Optical fiber type code, see table 1

Part#List

MFO808 - 8 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)
MFO808-S02	8	0	2	58.6	MFO808-P0610-S24	8	6	24	154.8
MFO808-P0210	8	2	0	58.6	MFO808-P1210-S18	8	12	18	154.8
MFO808-S03	8	0	3	58.6	MFO808-P1810-S12	8	18	12	154.8
MFO808-P0310	8	3	0	58.6	MFO808-P2410-S06	8	24	6	154.8
MFO808-S06	8	0	6	58.6	MFO808-P3010	8	30	0	154.8
MFO808-P0210-S04	8	2	4	58.6	MFO808-S36	8	0	36	177.6
MFO808-P0410-S02	8	4	2	58.6	MFO808-P0610-S30	8	6	30	177.6
MFO808-P0610	8	6	0	58.6	MFO808-P1210-S24	8	12	24	177.6
MFO808-S12	8	0	12	814	MFO808-P3610	8	36	0	177.6
MFO808-P0210-S10	8	2	10	81.4	MFO808-S42	8	0	42	223.2
MFO808-P0310-S09	8	3	9	81.4	MFO808-P0610-S36	8	6	36	223.2
MFO808-P0610-S06	8	6	6	81.4	MFO808-P1210-S30	8	12	30	223.2
MFO808-P0810-S04	8	8	4	81.4	MFO808-S48	8	0	48	223.2
MFO808-P1010-S02	8	10	2	81.4	MFO808-P0610-S42	8	6	42	223.2
MFO808-P1210	8	12	0	81.4	MFO808-P0910-S39	8	9	39	223.2
MFO808-S18	8	0	18	104.2	MFO808-P1210-S36	8	12	36	223.2
MFO808-P0210-S16	8	2	16	104.2	MFO808-P1810-S30	8	18	30	223.2
MFO808-P0410-S14	8	4	14	104.2	MFO808-P2410-S24	8	24	24	223.2
MFO808-P0610-S12	8	6	12	104.2	MFO808-S60	8	0	60	273.8
MFO808-P0810-S10	8	8	10	104.2	MFO808-P0610-S54	8	6	54	273.8
MFO808-P1010-S08	8	10	8	104.2	MFO808-P0910-S51	8	9	51	273.8
MFO808-P1210-S06	8	12	6	104.2	MFO808-P1210-S48	8	12	48	273.8
MFO808-P1410-S04	8	14	4	104.2	MFO808-S72	8	0	72	319.4
MFO808-P1610-S02	8	16	2	104.2	MFO808-P0610-S66	8	6	66	319.4
MFO808-P1810	8	18	0	104.2	MFO808-P1210-S60	8	12	60	319.4
MFO808-S24	8	0	24	127	MFO808-P2410-S48	8	24	48	319.4
MFO808-P0410-S20	8	4	20	127	MFO808-P3610-S36	8	36	36	319.4
MFO808-P0610-S18	8	6	18	127	MFO808-S84	8	0	84	368
MFO808-P1210-S12	8	12	12	127	MFO808-P1210-S72	8	12	72	368
MFO808-P1810-S06	8	18	6	127	MFO808-P2410-S60	8	24	60	368
MFO808-P2410	8	24	0	127	MFO808-P3610-S48	8	36	48	368
MFO808-S30	8	0	30	154.8	MFO808-S96	8	0	96	413.6

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

Table 1

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

Specifications

Itmes \ Type	Single-Mode	Multiple-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	3.5dB	
Insert Loss Ripple(dB)	1.5 dB	
Return Loss(dB)	≥50（APC） ≥40(PC)	≥30
Max Power(W)	0.5	
Max Rotating Speed(rpm)	300	
Working Life	> 100Million turn	
Working Temperature(℃)	-20~60℃(civil) -40~85℃(military)	
Storage Temperature(℃)	-45~85℃	

Parameter	Value	
	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	20 million turn	
Rotating Speed	250 RPM	
Working Temperature	-30℃~80℃	
Operating Humidity	0~85% RH	
Contact Material	gold-gold	
Housing Materia	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.

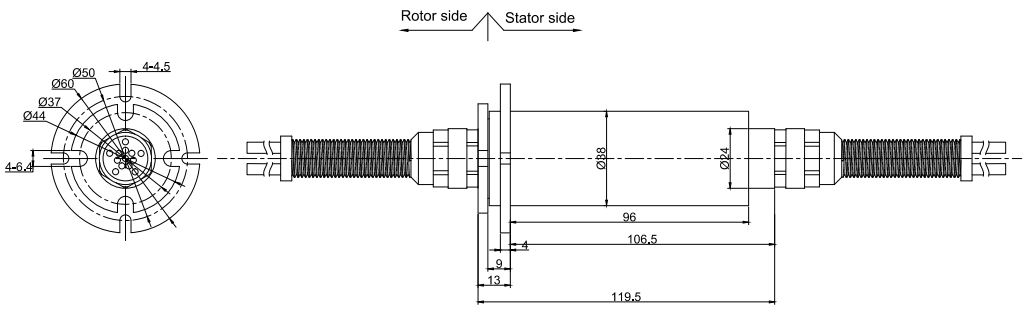
① Cable exit way and cable length can be customized for both rotor and stator.
② Because of the structure limitation, length/height/OD can be customized on your request.
③ Support current or signal up to 200 rings.
④ Aviation plug, terminal and heat-shrink tube are optional.
⑤ Hybrid slip ring for Yaskawa/Panasonic/Siemens 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.

Technical support: technical@moflon.com

MFO1000C series

10 Channels fiber optic+electric slip rings

MFO1000C can combine 10 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 photoelectrical 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

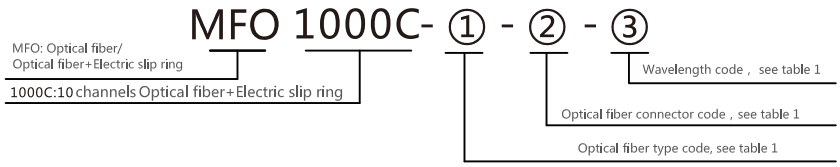


Table 1

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

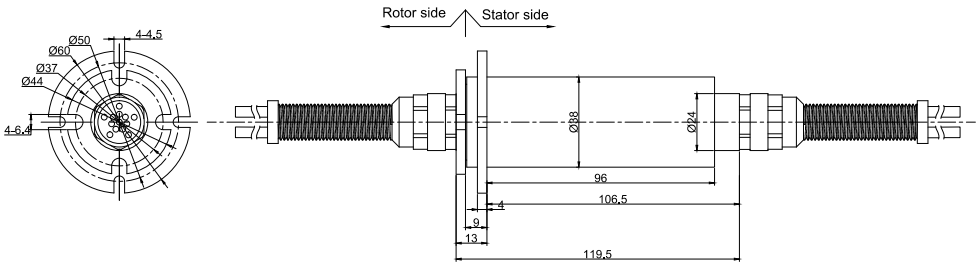
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	620g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO1200C series

12 Channels fiber optic+electric slip rings

MFO1200C can combine 12 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 photoelectrical 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

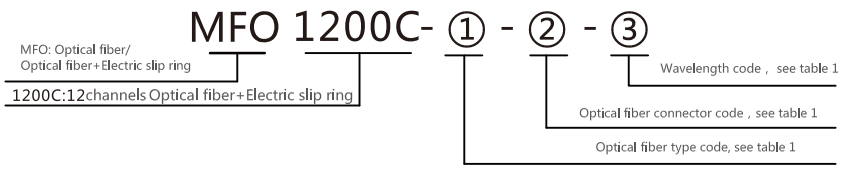


Table 1

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

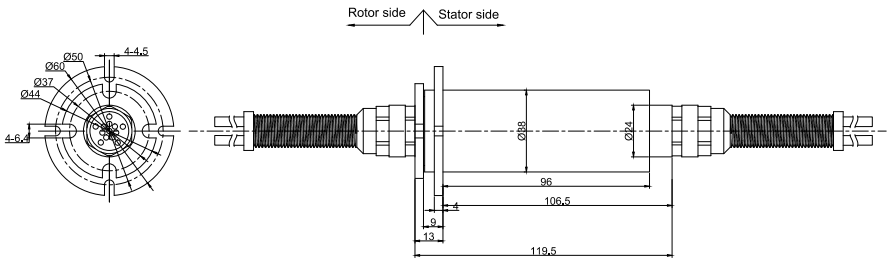
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	620g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO1600C series

16 Channels fiber optic+electric slip rings

MFO1600C can combine 16 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 photoelectrical 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

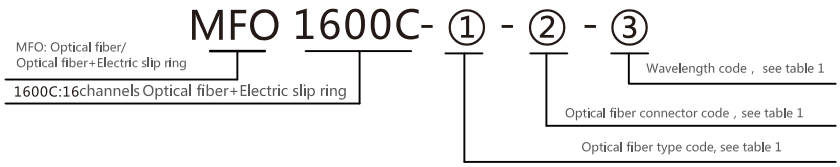


Table 1

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

Specifications

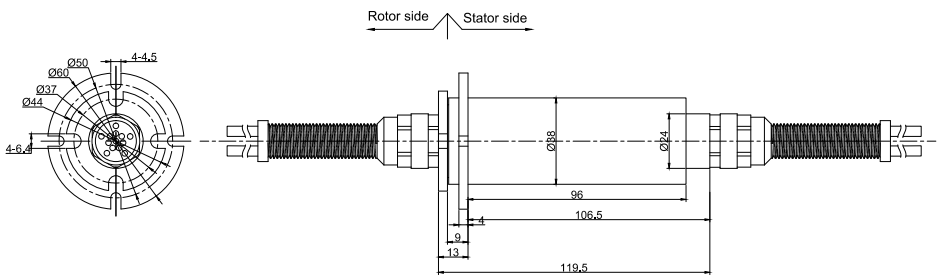
Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	620g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	250RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO2000C series

20 Channels fiber optic+electric slip rings

MFO2000C can combine 20 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 photoelectrical 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

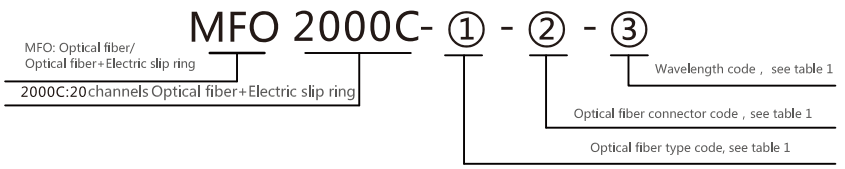


Table 1

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

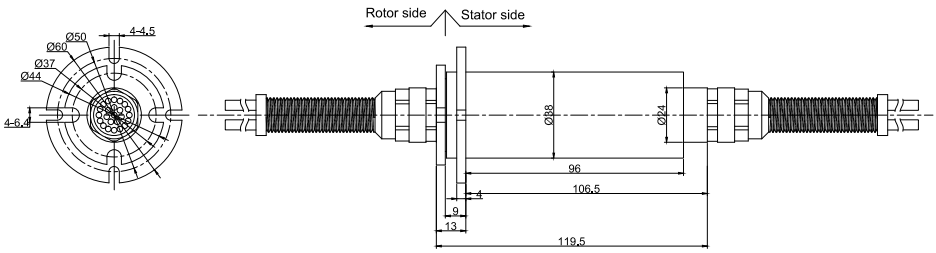
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	620g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	250RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO2400C series

24 Channels fiber optic+electric slip rings

MFO2400C can combine 24 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 photoelectrical 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

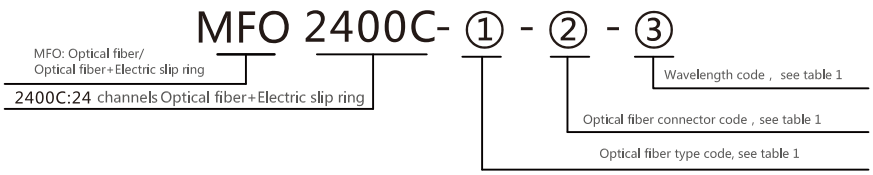


Table 1

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

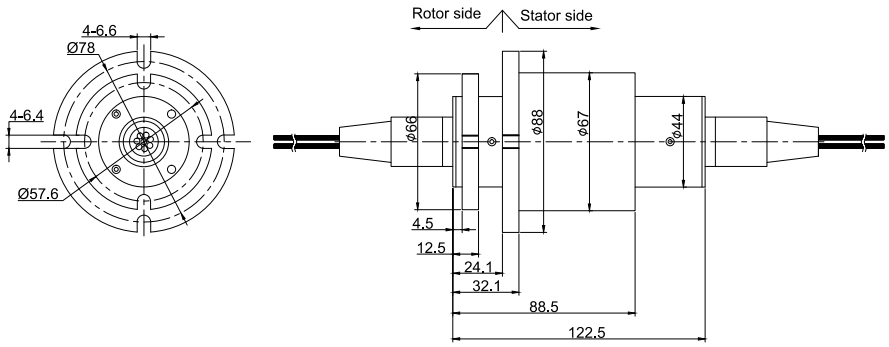
Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(PC)	≥30
Max Power(W)	0.5	
Weight(g)	620g (Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	250RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃ (Civil use) -40~85℃ (military)	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

MFO2600 series

26 Channels fiber optic+electric slip rings

MFO2600 can combine 26 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 photoelectrical 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

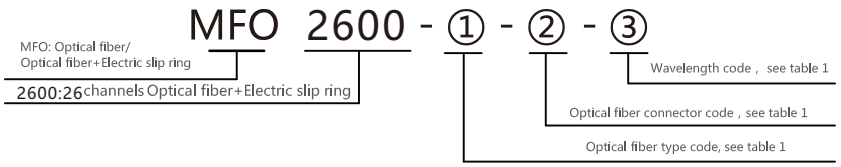


Table 1

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

Specifications

Itmes \ Type	Single-Mode	Single-Mode
WaveWidth(nm)	±50	
Max insert Loss，23℃(dB)	4	4
Insert Loss Ripple(dB)	2	2
Return Loss(dB)	≥50(APC) ≥40(APC)	≥30
Max Power(W)	0.5	
Weight(g)	1.6Kg(Excluding tail cables and connectors)	
Max Rotating Speed(rpm)	300RPM	
Working Life	> 100 million rpm	
Working Temperature(℃)	-20~60℃（Civil use） -40~85℃（military）	
Storage Temperature(℃)	-50~85℃	
Protection Grade	IP65	
Fiber length	1m	

Web: http://www.moflon.com Email: sales@moflon.com