

## MZ Series Rotor Flange Slip Rings

MZ series slip ring is a general name for the slip ring with rotor part connecting flange. This series slip ring, without through bore, is suitable for flange face mounting. Rotor wiring method has flange end face wiring and flange side face wiring. Because there is no hole in center, with the same OD(outer diameter)size, it can achieve more circuits and higher current. With ample inner space, this series product is easily to build with inner wiring and special shielding module, which is very stable and reliable. This series product is often used to customize sensitive signals or encoder signals.



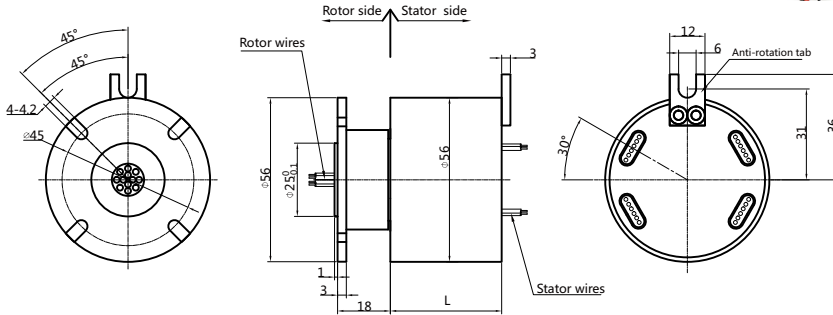
### MZ Series models

Model#	OD(mm)	Circuit Number (rings)	Power/each ring (A)	Voltage (VAC/VDC)
MZ056	56	1~48	signal(2A)~10A	0~440
MZ056F	56	1~48	signal(2A)~10A	0~440
MZ086	86	1~72	signal(2A)~10A	0~690
MZ086F	86	1~72	signal(2A)~10A	0~690
MZ119	119	1~119	signal(2A)~10A	0~690
MZ119F	119	1~119	signal(2A)~10A	0~690

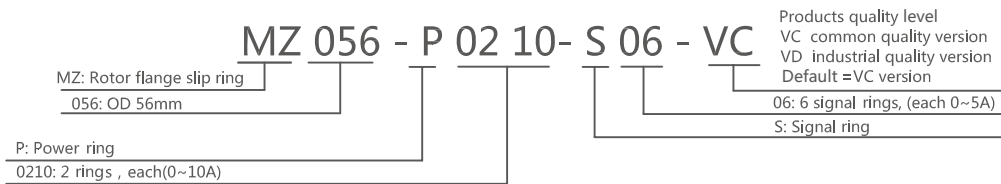
60% of MOFLON's sales are customized solutions, please contact customer service for special requirements.

# MZ056 Series Slip Rings

MZ056 series slip ring is a general name for those rotor flange slip rings with OD(outer diameter) 56mm. Rotor wiring method is flange end face wiring.



## Part# Explanation



## Part# List

MZ056 series slip ring part# list							
Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ056-S02	0	2	26.8	MZ056-P1010-S08	10	8	71.5
MZ056-P0210	2	0	26.8	MZ056-P1210-S06	12	6	71.5
MZ056-S03	0	3	29.6	MZ056-P1410-S04	14	4	71.5
MZ056-P0310	3	0	29.6	MZ056-P1610-S02	16	2	71.5
MZ056-S06	0	6	38	MZ056-S24	0	24	88.4
MZ056-P0210-S04	2	4	38	MZ056-P0410-S20	4	20	88.4
MZ056-P0410-S02	4	2	38	MZ056-P0610-S18	6	18	88.4
MZ056-P0610	6	0	38	MZ056-P1210-S12	12	12	88.4
MZ056-S12	0	12	54.8	MZ056-P1810-S06	18	6	88.4
MZ056-P0210-S10	2	10	54.8	MZ056-P2410	24	0	88.4
MZ056-P0310-S09	3	9	54.8	MZ056-S30	0	30	105.2
MZ056-P0610-S06	6	6	54.8	MZ056-P0210-S28	2	28	105.2
MZ056-P0810-S04	8	4	54.8	MZ056-P0410-S26	4	26	105.2
MZ056-P1010-S02	10	2	54.8	MZ056-P0610-S24	6	24	105.2
MZ056-P1210	12	0	54.8	MZ056-S36	0	36	122
MZ056-S18	0	18	71.5	MZ056-P0410-S32	4	32	122
MZ056-P0210-S16	2	16	71.5	MZ056-P0610-S30	6	30	122
MZ056-P0410-S14	4	14	71.5	MZ056-S42	0	42	138.8
MZ056-P0610-S12	6	12	71.5	MZ056-P0410-S38	4	38	138.8
MZ056-P0810-S10	8	10	71.5	MZ056-S48	0	48	155.6

Note:1.N rings 10A in parallel can be used as 1 channel N\*10A. For example: 2 rings 10A in parallel can be used as 1 channel 20A

2.10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more details

## Specifications

Electrical Data	
Parameter	Value
	Power Signal
Rated Voltage	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC
Lead Wire	AWG16#Teflon
Lead Length	standard length 300mm(adjustable)
Insulating Strength	500VAC@50Hz,60s
Electrical Noise	<0.01Ω
Mechanical Data	
Parameter	Value
Working Life	See product quality level table
Rotating Speed	See product quality level table
Working Temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See product quality level table
Housing Material	aluminum alloy
Torque	0.1N.m;+0.03N.m/6 rings
Protection Grade	IP51

## Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

## Options for custom slip ring

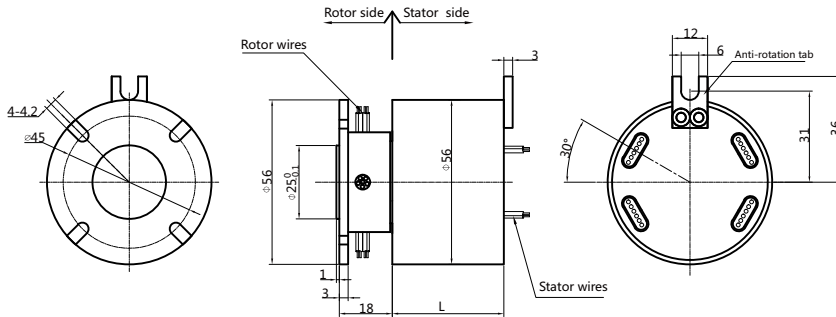
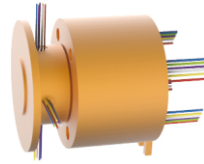
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Flange size can be customized; 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 High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- 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](mailto:technical@moflon.com)

# MZ056F Series Slip Rings

MZ056F series slip ring is a general name for those rotor flange slip rings with OD(outer diameter) 56mm. Rotor wiring method is flange side face wiring.



## Part# Explanation

MZ 056 F - P 02 10- S 06 - VC

MZ: Rotor flange slip ring

056: OD 56mm

F: Rotor flange with cable exit from side

P: Power ring

0210: 2 rings , each(0~10A)

Products quality level

VC common quality version

VD industrial quality version

Default =VC version

06: 6 signal rings, (each 0~5A)

S: Signal ring

## Part# List

MZ056F series slip ring part# list

Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ056F-S02	0	2	26.8	MZ056F-P1010-S08	10	8	71.5
MZ056F-P0210	2	0	26.8	MZ056F-P1210-S06	12	6	71.5
MZ056F-S03	0	3	29.6	MZ056F-P1410-S04	14	4	71.5
MZ056F-P0310	3	0	29.6	MZ056F-P1610-S02	16	2	71.5
MZ056F-S06	0	6	38	MZ056F-S24	0	24	88.4
MZ056F-P0210-S04	2	4	38	MZ056F-P0410-S20	4	20	88.4
MZ056F-P0410-S02	4	2	38	MZ056F-P0610-S18	6	18	88.4
MZ056F-P0610	6	0	38	MZ056F-P1210-S12	12	12	88.4
MZ056F-S12	0	12	54.8	MZ056F-P1810-S06	18	6	88.4
MZ056F-P0210-S10	2	10	54.8	MZ056F-P2410	24	0	88.4
MZ056F-P0310-S09	3	9	54.8	MZ056F-S30	0	30	105.2
MZ056F-P0610-S06	6	6	54.8	MZ056F-P0210-S28	2	28	105.2
MZ056F-P0810-S04	8	4	54.8	MZ056F-P0410-S26	4	26	105.2
MZ056F-P1010-S02	10	2	54.8	MZ056F-P0610-S24	6	24	105.2
MZ056F-P1210	12	0	54.8	MZ056F-S36	0	36	122
MZ056F-S18	0	18	71.5	MZ056F-P0410-S32	4	32	122
MZ056F-P0210-S16	2	16	71.5	MZ056F-P0610-S30	6	30	122
MZ056F-P0410-S14	4	14	71.5	MZ056F-S42	0	42	138.8
MZ056F-P0610-S12	6	12	71.5	MZ056F-P0410-S38	4	38	138.8
MZ056F-P0810-S10	8	10	71.5	MZ056F-S48	0	48	155.6

Note:1. N channels 10A rings parallel can be used as 1 channel N\*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A.

2. 10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more detmalls.

Specifications

Electrical Data	
Parameter	Value
	Power Signal
Rated Voltage	0~440VAC/VDC 0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC ≥1000MΩ/500VDC
Lead Wire	AWG16#Teflon AWG22#Teflon
Lead Length	standard length 300mm(adjustable)
Insulating Strength	500VAC@50Hz,60s
Electrical Noise	<0.01Ω
Mechanical Data	
Parameter	Value
Working Life	See product quality level table
Rotating Speed	See product quality level table
Working Temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See product quality level table
Housing Material	aluminum alloy
Torque	0.1N.m;+0.03N.m/6 rings
Protection Grade	IP51

Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

Options for custom slip ring

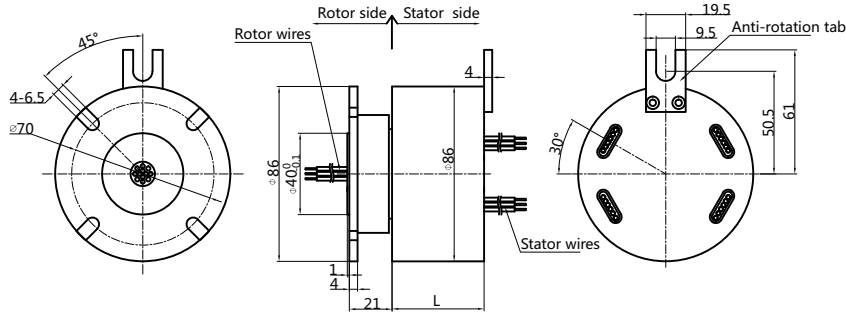
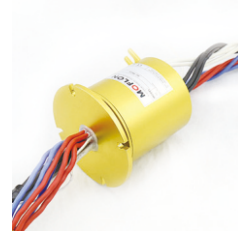
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Flange size can be customized; 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 High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- ⑬ Maximum current can up to 5000 amperes.
- ⑭ Military grade
- ⑮ Optional for underwater IP65, IP68.
- ⑯ Optional for stainless steel housing

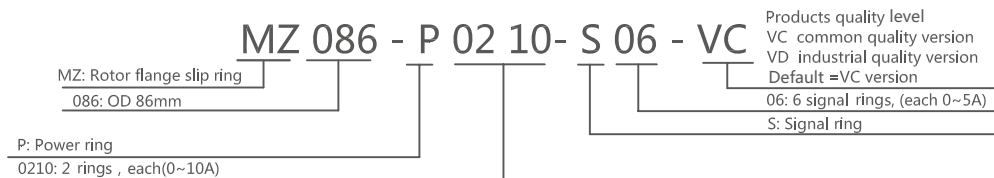
Technical support: technical@moflon.com

# MZ086 Series Slip Rings

MZ086 series slip ring is a general name for those rotor flange slip rings with OD(outer diameter) 86mm. Rotor wiring method is flange end face wiring.



## Part# Explanation



## Part# List

MZ086 series slip ring part list							
Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ086-S02	0	2	31.6	MZ086-P1210-S12	12	12	106.4
MZ086-P0210	2	0	31.6	MZ086-P1810-S06	18	6	106.4
MZ086-S03	0	3	35	MZ086-P2410	24	0	106.4
MZ086-P0310	3	0	35	MZ086-S30	0	30	126.8
MZ086-S06	0	6	45.2	MZ086-P0610-S24	6	24	126.8
MZ086-P0210-S04	2	4	45.2	MZ086-P1210-S18	12	18	126.8
MZ086-P0410-S02	4	2	45.2	MZ086-P1810-S12	18	12	126.8
MZ086-P0610	6	0	45.2	MZ086-P2410-S06	24	6	126.8
MZ086-S12	0	12	65.6	MZ086-P3010	30	0	126.8
MZ086-P0210-S10	2	10	65.6	MZ086-S36	0	36	147.2
MZ086-P0310-S09	3	9	65.6	MZ086-P0610-S30	6	30	147.2
MZ086-P0610-S06	6	6	65.6	MZ086-P1210-S24	12	24	147.2
MZ086-P0810-S04	8	4	65.6	MZ086-P3610	36	0	147.2
MZ086-P1010-S02	10	2	65.6	MZ086-S42	0	42	167.6
MZ086-P1210	12	0	65.6	MZ086-P0610-S36	6	36	167.6
MZ086-S18	0	18	86	MZ086-P1210-S30	12	30	167.6
MZ086-P0210-S16	2	16	86	MZ086-S48	0	48	188
MZ086-P0410-S14	4	14	86	MZ086-P0610-S42	6	42	188
MZ086-P0610-S12	6	12	86	MZ086-P0910-S39	9	39	188
MZ086-P0810-S10	8	10	86	MZ086-P1210-S36	12	36	188
MZ086-P1010-S08	10	8	86	MZ086-P1810-S30	18	30	188
MZ086-P1210-S06	12	6	86	MZ086-P2410-S24	24	24	188
MZ086-P1410-S04	14	4	86	MZ086-S60	0	60	238.8
MZ086-P1610-S02	16	2	86	MZ086-P0610-S54	6	54	238.8
MZ086-S24	0	24	106.4	MZ086-P0910-S51	9	51	238.8
MZ086-P0410-S20	4	20	106.4	MZ086-P1210-S48	12	48	238.8
MZ086-P0610-S18	6	18	106.4	MZ086-S72	0	72	289.6

Note:1. N channels 10A rings parallel can be used as 1 channel N\*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A.  
2. 10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more detmails.

## Specifications

Electrical Data		
Parameter	Value	
	Power	Signal
Rated Voltage	0~690VAC/VDC	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC
Lead Wire	AWG16#Teflon	AWG22#Teflon
Lead Length	standard length 300mm(adjustable)	
Insulating Strength	500VAC@50Hz,60s	
Electrical Noise	<0.01Ω	
Mechanical Data		
Parameter	Value	
Working Life	See product quality level table	
Rotating Speed	See product quality level table	
Working Temperature	-30°C~80°C	
Operating Humidity	0~85% RH	
Contact Material	See product quality level table	
Housing Material	aluminum alloy	
Torque	0.1N.m;+0.03N.m/6 rings	
Protection Grade	IP51	

## Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

## Options for custom slip ring

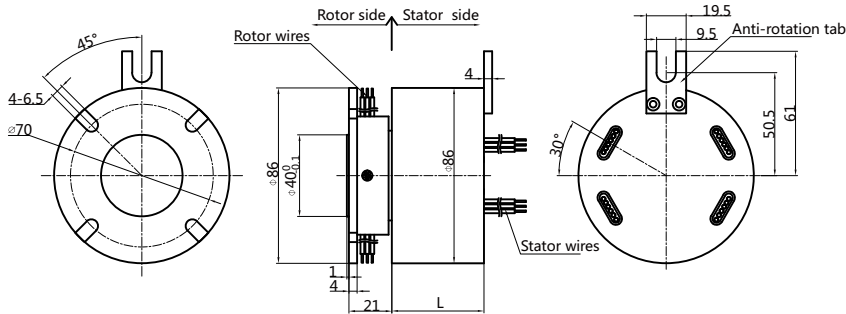
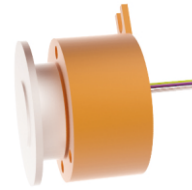
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Flange size can be customized; 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 High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- 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](mailto:technical@moflon.com)

# MZ086F Series Slip Rings

MZ086F series slip ring is a general name for those rotor flange slip rings with OD(outer diameter) 86mm. Rotor wiring method is flange side face wiring.



## Part# Explanation



## Part# List

MZ086F series slip ring part list

Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ086F-S02	0	2	31.6	MZ086F-P1210-S12	12	12	106.4
MZ086F-P0210	2	0	31.6	MZ086F-P1810-S06	18	6	106.4
MZ086F-S03	0	3	35	MZ086F-P2410	24	0	106.4
MZ086F-P0310	3	0	35	MZ086F-S30	0	30	126.8
MZ086F-S06	0	6	45.2	MZ086F-P0610-S24	6	24	126.8
MZ086F-P0210-S04	2	4	45.2	MZ086F-P1210-S18	12	18	126.8
MZ086F-P0410-S02	4	2	45.2	MZ086F-P1810-S12	18	12	126.8
MZ086F-P0610	6	0	45.2	MZ086F-P2410-S06	24	6	126.8
MZ086F-S12	0	12	65.6	MZ086F-P3010	30	0	126.8
MZ086F-P0210-S10	2	10	65.6	MZ086F-S36	0	36	147.2
MZ086F-P0310-S09	3	9	65.6	MZ086F-P0610-S30	6	30	147.2
MZ086F-P0610-S06	6	6	65.6	MZ086F-P1210-S24	12	24	147.2
MZ086F-P0810-S04	8	4	65.6	MZ086F-P3610	36	0	147.2
MZ086F-P1010-S02	10	2	65.6	MZ086F-S42	0	42	167.6
MZ086F-P1210	12	0	65.6	MZ086F-P0610-S36	6	36	167.6
MZ086F-S18	0	18	86	MZ086F-P1210-S30	12	30	167.6
MZ086F-P0210-S16	2	16	86	MZ086F-S48	0	48	188
MZ086F-P0410-S14	4	14	86	MZ086F-P0610-S42	6	42	188
MZ086F-P0610-S12	6	12	86	MZ086F-P0910-S39	9	39	188
MZ086F-P0810-S10	8	10	86	MZ086F-P1210-S36	12	36	188
MZ086F-P1010-S08	10	8	86	MZ086F-P1810-S30	18	30	188
MZ086F-P1210-S06	12	6	86	MZ086F-P2410-S24	24	24	188
MZ086F-P1410-S04	14	4	86	MZ086F-S60	0	60	238.8
MZ086F-P1610-S02	16	2	86	MZ086F-P0610-S54	6	54	238.8
MZ086F-S24	0	24	106.4	MZ086F-P0910-S51	9	51	238.8
MZ086F-P0410-S20	4	20	106.4	MZ086F-P1210-S48	12	48	238.8
MZ086F-P0610-S18	6	18	106.4	MZ086F-S72	0	72	289.6

Note:1. N channels 10A rings parallel can be used as 1 channel N\*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A.

2. 10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more detmalls.



## Specifications

Electrical Data	
Parameter	Value
	Power Signal
Rated Voltage	0~690VAC/VDC 0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC ≥1000MΩ/500VDC
Lead Wire	AWG16#Teflon AWG22#Teflon
Lead Length	standard length 300mm(adjustable)
Insulating Strength	500VAC@50Hz,60s
Electrical Noise	<0.01Ω
Mechanical Data	
Parameter	Value
Working Life	See product quality level table
Rotating Speed	See product quality level table
Working Temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See product quality level table
Housing Material	aluminum alloy
Torque	0.1N.m;+0.03N.m/6 rings
Protection Grade	IP51

## Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

## Options for custom slip ring

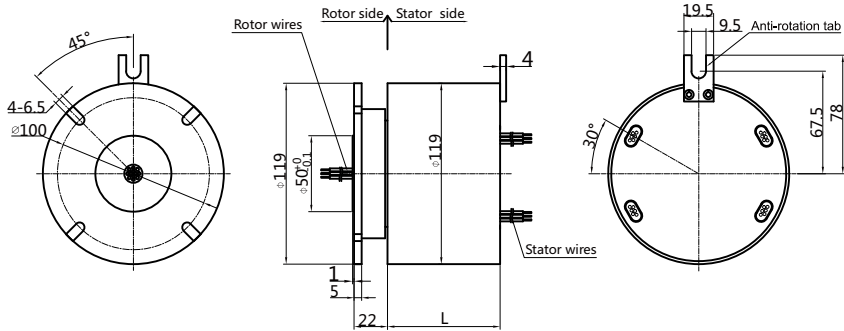
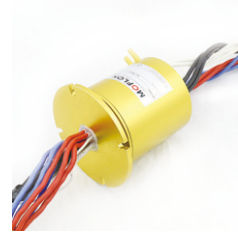
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Flange size can be customized; 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 High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- ⑬ Maximum current can up to 5000 amperes.
- ⑭ Military grade
- ⑮ Optional for underwater IP65, IP68.
- ⑯ Optional for stainless steel housing

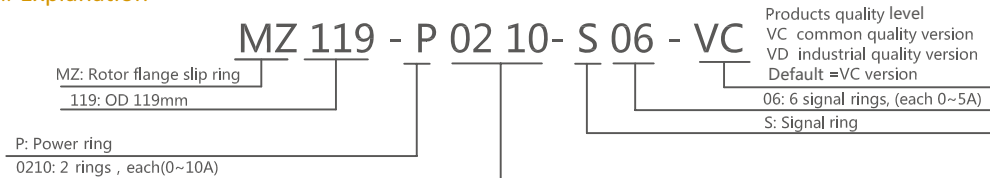
Technical support: [technical@moflon.com](mailto:technical@moflon.com)

# MZ119 Series Slip Rings

MZ119 series slip ring is a general name for those rotor flange slip rings with OD(outer diameter) 119mm. Rotor wiring method is flange end face wiring.



## Part# Explanation



## Part# List

MZ119 series slip ring part list							
Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ119-S02	0	2	36	MZ119-S36	0	36	165.2
MZ119-P0210	2	0	36	MZ119-P0610-S30	6	30	165.2
MZ119-S03	0	3	39.8	MZ119-P1210-S24	12	24	165.2
MZ119-P0310	3	0	39.8	MZ119-P3610	36	0	165.2
MZ119-S06	0	6	51.2	MZ119-S42	0	42	188
MZ119-P0210-S04	2	4	51.2	MZ119-P0610-S36	6	36	188
MZ119-P0410-S02	4	2	51.2	MZ119-P1210-S30	12	30	188
MZ119-P0610	6	0	51.2	MZ119-S48	0	48	210.8
MZ119-S12	0	12	74	MZ119-P0610-S42	6	42	210.8
MZ119-P0210-S10	2	10	74	MZ119-P0910-S39	9	39	210.8
MZ119-P0310-S09	3	9	74	MZ119-P1210-S36	12	36	210.8
MZ119-P0610-S06	6	6	74	MZ119-P1810-S30	18	30	210.8
MZ119-P0810-S04	8	4	74	MZ119-P2410-S24	24	24	210.8
MZ119-P1010-S02	10	2	74	MZ119-S60	0	60	256.4
MZ119-P1210	12	0	74	MZ119-P0610-S54	6	54	256.4
MZ119-S18	0	18	96.8	MZ119-P0910-S51	9	51	256.4
MZ119-P0210-S16	2	16	96.8	MZ119-P1210-S48	12	48	256.4
MZ119-P0410-S14	4	14	96.8	MZ119-S72	0	72	312
MZ119-P0610-S12	6	12	96.8	MZ119-P0610-S66	6	66	312
MZ119-P0810-S10	8	10	96.8	MZ119-P1210-S60	12	60	312
MZ119-P1010-S08	10	8	96.8	MZ119-P2410-S48	24	48	312
MZ119-P1210-S06	12	6	96.8	MZ119-P3610-S36	36	36	312
MZ119-P1410-S04	14	4	96.8	MZ119-S84	0	84	367.6
MZ119-P1610-S02	16	2	96.8	MZ119-P1210-S72	12	72	367.6
MZ119-S24	0	24	119.6	MZ119-P2410-S60	24	60	367.6
MZ119-P0410-S20	4	20	119.6	MZ119-P3610-S48	36	48	367.6
MZ119-P0610-S18	6	18	119.6	MZ119-S96	0	96	413.2
MZ119-P1210-S12	12	12	119.6	MZ119-P1210-S84	12	84	413.2
MZ119-P1810-S06	18	6	119.6	MZ119-P2410-S72	24	72	413.2
MZ119-P2410	24	0	119.6	MZ119-P3610-S60	36	60	413.2
MZ119-S30	0	30	142.4	MZ119-P4210-S54	42	54	413.2
MZ119-P0610-S24	6	24	142.4	MZ119-S108	0	108	458.8
MZ119-P1210-S18	12	18	142.4	MZ119-P1210-S96	12	96	458.8
MZ119-P1810-S12	18	12	142.4	MZ119-P2410-S84	24	84	458.8
MZ119-P2410-S06	24	6	142.4	MZ119-P3610-S72	36	72	458.8
MZ119-P3010	30	0	142.4	MZ119-P4810-S60	48	60	458.8

Note:1. N channels 10A rings parallel can be used as 1 channel N\*10A current. For example: 2 rings 10A parallel could be used as 1 wires 20A.

2. 10A,5A (signal) can combine freely in any way.It can be customized based on standard slip ring,please contact customer service for more detmalls.

## Specifications

Electrical Data	
Parameter	Value
	Power Signal
Rated Voltage	0~690VAC/VDC 0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC ≥1000MΩ/500VDC
Lead Wire	AWG16#Teflon AWG22#Teflon
Lead Length	standard length 300mm(adjustable)
Insulating Strength	500VAC@50Hz,60s
Electrical Noise	<0.01Ω
Mechanical Data	
Parameter	Value
Working Life	See product quality level table
Rotating Speed	See product quality level table
Working Temperature	-30°C~80°C
Operating Humidity	0~85% RH
Contact Material	See product quality level table
Housing Material	aluminum alloy
Torque	0.1N.m;+0.03N.m/6 rings
Protection Grade	IP51

## Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

## Options for custom slip ring

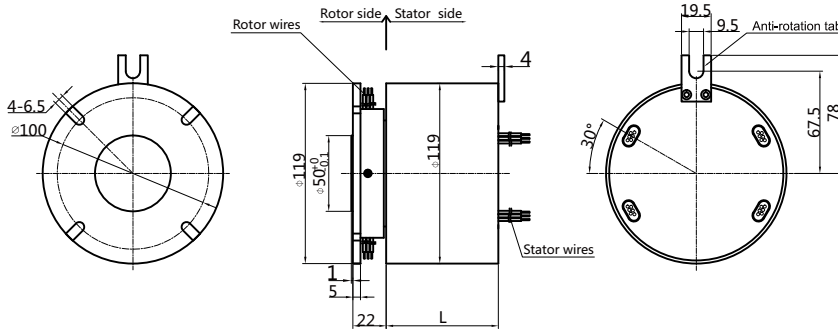
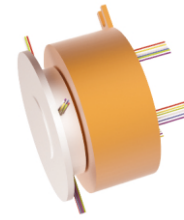
Note: Below special demands can be customized. According, the delivery date will be extended 3 to 15 days; also the cost will be increased 30% to 50%. Most of our basic parts are standard and modular, which can save the cost and lead time.

- ① Flange size can be customized; 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 High temperature can up to 500 degrees.
- ⑪ High pressure can up to 110KV
- ⑫ Rotating speed can up to 10000RPM
- 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](mailto:technical@moflon.com)

# MZ119F Series Slip Rings

MZ119F series slip ring is a general name for those rotor wires exit from the side, slip rings with OD(outer diameter) 119mm, which is suitable for end face mounting.



## Part# Explanation

MZ 119 F - P 02 10- S 06 - VC

MZ: Rotor flange slip ring	VC: Products quality level
119: OD 119mm	VD: industrial quality version
F: Rotor flange with cable exit from side	Default =VC version
P: Power ring	06: 6 signal rings, (each 0~5A)
0210: 2 rings , each(0~10A)	S: Signal ring

## Part# List

MZ119F series slip ring part list							
Part#	10A	Signal 5A	Length(mm)	Part#	10A	Signal 5A	Length(mm)
MZ119F-S02	0	2	36	MZ119F-S36	0	36	165.2
MZ119F-P0210	2	0	36	MZ119F-P0610-S30	6	30	165.2
MZ119F-S03	0	3	39.8	MZ119F-P1210-S24	12	24	165.2
MZ119F-P0310	3	0	39.8	MZ119F-P3610	36	0	165.2
MZ119F-S06	0	6	51.2	MZ119F-S42	0	42	188
MZ119F-P0210-S04	2	4	51.2	MZ119F-P0610-S36	6	36	188
MZ119F-P0410-S02	4	2	51.2	MZ119F-P1210-S30	12	30	188
MZ119F-P0610	6	0	51.2	MZ119F-S48	0	48	210.8
MZ119F-S12	0	12	74	MZ119F-P0610-S42	6	42	210.8
MZ119F-P0210-S10	2	10	74	MZ119F-P0910-S39	9	39	210.8
MZ119F-P0310-S09	3	9	74	MZ119F-P1210-S36	12	36	210.8
MZ119F-P0610-S06	6	6	74	MZ119F-P1810-S30	18	30	210.8
MZ119F-P0810-S04	8	4	74	MZ119F-P2410-S24	24	24	210.8
MZ119F-P1010-S02	10	2	74	MZ119F-S60	0	60	256.4
MZ119F-P1210	12	0	74	MZ119F-P0610-S54	6	54	256.4
MZ119F-S18	0	18	96.8	MZ119F-P0910-S51	9	51	256.4
MZ119F-P0210-S16	2	16	96.8	MZ119F-P1210-S48	12	48	256.4
MZ119F-P0410-S14	4	14	96.8	MZ119F-S72	0	72	312
MZ119F-P0610-S12	6	12	96.8	MZ119F-P0610-S66	6	66	312
MZ119F-P0810-S10	8	10	96.8	MZ119F-P1210-S60	12	60	312
MZ119F-P1010-S08	10	8	96.8	MZ119F-P2410-S48	24	48	312
MZ119F-P1210-S06	12	6	96.8	MZ119F-P3610-S36	36	36	312
MZ119F-P1410-S04	14	4	96.8	MZ119F-S84	0	84	367.6
MZ119F-P1610-S02	16	2	96.8	MZ119F-P1210-S72	12	72	367.6
MZ119F-S24	0	24	119.6	MZ119F-P2410-S60	24	60	367.6
MZ119F-P0410-S20	4	20	119.6	MZ119F-P3610-S48	36	48	367.6
MZ119F-P0610-S18	6	18	119.6	MZ119F-S96	0	96	413.2
MZ119F-P1210-S12	12	12	119.6	MZ119F-P1210-S84	12	84	413.2
MZ119F-P1810-S06	18	6	119.6	MZ119F-P2410-S72	24	72	413.2
MZ119F-P2410	24	0	119.6	MZ119F-P3610-S60	36	60	413.2
MZ119F-S30	0	30	142.4	MZ119F-P4210-S54	42	54	413.2
MZ119F-P0610-S24	6	24	142.4	MZ119F-S108	0	108	458.8
MZ119F-P1210-S18	12	18	142.4	MZ119F-P1210-S96	12	96	458.8
MZ119F-P1810-S12	18	12	142.4	MZ119F-P2410-S84	24	84	458.8
MZ119F-P2410-S06	24	6	142.4	MZ119F-P3610-S72	36	72	458.8
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## Specifications

Electrical Data		
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Rated Voltage	0~690VAC/VDC	0~440VAC/VDC
Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC
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Lead Length	standard length 300mm(adjustable)	
Insulating Strength	500VAC@50Hz,60s	
Electrical Noise	<0.01Ω	
Mechanical Data		
Parameter	Value	
Working Life	See product quality level table	
Rotating Speed	See product quality level table	
Working Temperature	-30°C~80°C	
Operating Humidity	0~85% RH	
Contact Material	See product quality level table	
Housing Material	aluminum alloy	
Torque	0.1N.m;+0.03N.m/6 rings	
Protection Grade	IP51	

## Product Quality Level Table

Quality Level Code	Max Rotating Speed	Working Life	Contact Material
VC	250RPM	15 Million Revs	Precious Metal
VD	1000RPM	80 Million Revs	Gold-Gold

## Lead Wires Color Code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT

(6 wires for 1 group color, from 7-12, repeat the same color as 1...6, indicated with number code pipe)

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