

MMC SERIES

MMC Series Miniature slip rings with capsules

MMC series slip rings are miniature with OD 12.5mm or smaller. (See other miniature type slip rings - MSP series)

Special designed for CCTV or tiny rotating system, Special fit for miniature

rotating system of transmitting low controlling signal.

Standard, off-the-shelf, no through bore, solid

Circuits combination is available (such as video, control, sensor, power, Ethernet and so on)

Lower torque low contact wear rates

Support video, control, sensor, power, Ethernet signals

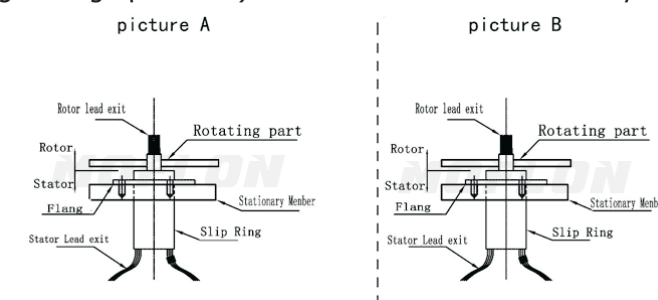


MODEL#	OD*LENGTH (MM)	RINGS	CURRENT	VOLTAGE	MAX SPEED
MMC182	12.5*18.2 (0.49"*0.72")	6	Signal(2A)	240VAC/VDC	250RPM
MMC250	12.5*25 (0.49"*0.98")	12	Signal(2A)	240VAC/VDC	250RPM
MMC397	15.5*39.7 (0.59"*1.56")	24	Signal(2A)	240VAC/VDC	250RPM

Flange Mounting Instructions

1. Align the mounting holes in the flange to mounting base and install flat washers and thread forming screws (NOT SUPPLIED) for plastic. Securely tighten screws.
2. Route the wiring and make the necessary connections. Do not allow the wiring to restrict free rotation of the slip ring.
3. Position a screw or dowel (NOT SUPPLIED) in the anti-rotation tab to the dimension as shown.

CAUTION: Because of possible geometric mismatching between the customer's application and the slip ring, 'hard mounting' of both ends of the slip ring (i.e., securing the rotor and stator such that there is NO floating during operation) is not recommended and may cause premature failure



MMC182 - MMC SERIES

MMC182 - MMC SERIES

MMC182 Slip Rings

OD 12.50mm(0.49"), Length 18.2mm(0.72"), 6wires* 2A(signal)

MMC182 slip rings are small and compact with OD 12.5mm * L 18.2mm, standard, off-the-shelf. Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

MMC1829 is the high-end version corresponding to MMC182, See difference as below:

	Max Speed	Working life	Torque	Housing Material	Electrical noise ^① @10Rpm
MMC182	250RPM	50million	0.02 N·m	Plastics	10mΩ
MMC1829	10000RPM	1500million	0.005 N·m	Metal	4mΩ



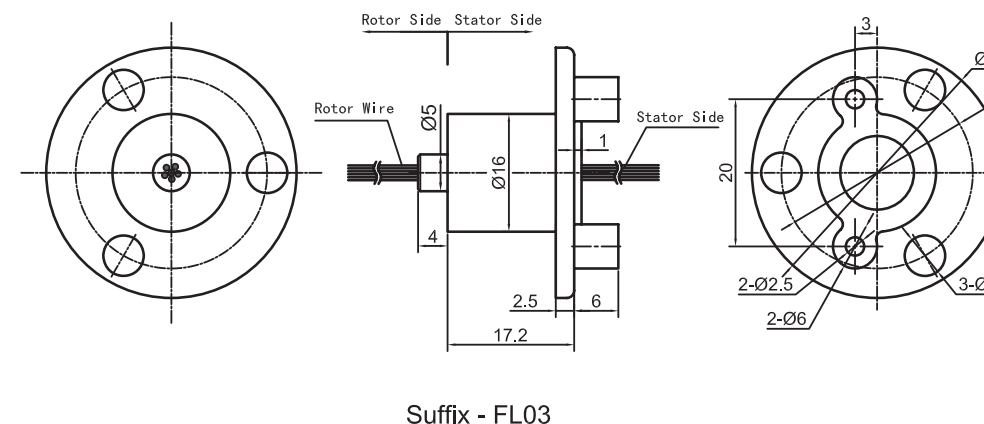
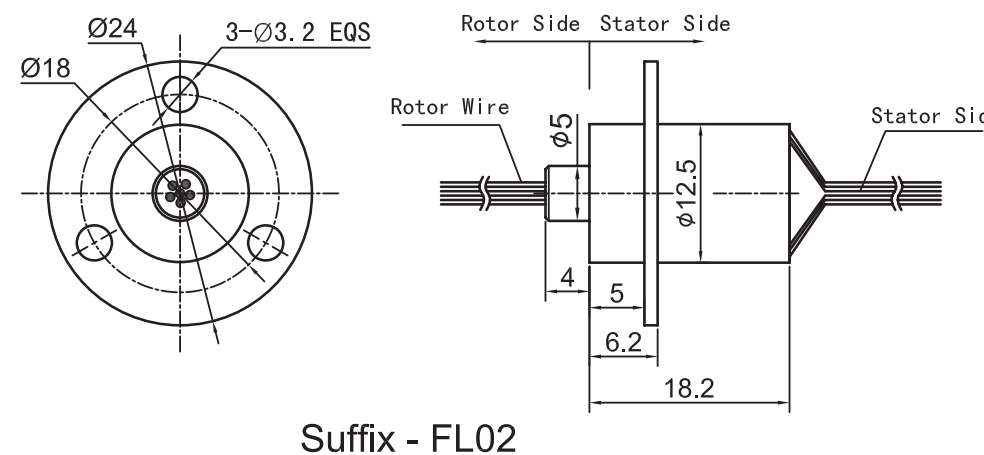
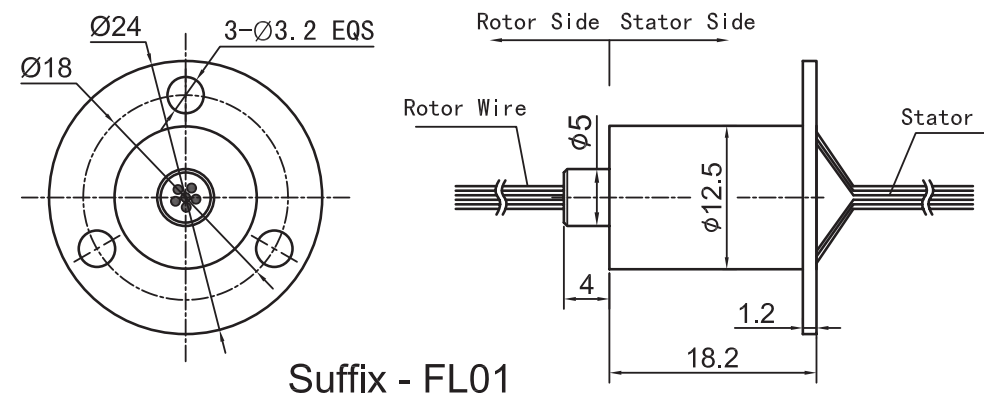
Lead wire Color codes					
Rings#	Color Code	Rings#	Color Code	Rings#	Color Code
1	BLK	3	RED	5	YEL
2	BRN	4	ORN	6	GRN

Optional Flanges drawings:

At sometimes, we need a different flange for mounting instead, how should we do?

Great! Moflon supply many flange style as below:

(when you order, pls add FL01 ... FL06 at the suffix of Part#, for example: MMC182-06S-FL01 means MMC182-06S with optional flange FL01.)



Specifications

PART #	OD * L	SIGNAL/2A	4A	8A	15A	TOTAL WIRES	DOWNLOAD
MMC182	12.5mm*18.2mm	6	0	0	0	6	

Shared Specifications

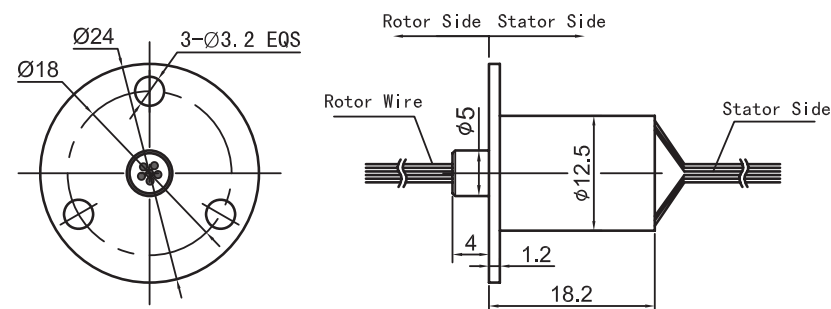
Wires	6(see table as above)	Current	Signal(2A)
Voltage	240 VDC/VAC	Max speed	250RPM
Overall diameter	12.5mm(0.49")	Length	18.2mm(0.72")
Contact Material	Precious Metal:gold-gold	Contact Resistance	<150mOhm(AWG28#,250mm)
Housing Material	Plastics	Torque	0.02N.m
Working life	50million	Electrical noise	<10mΩ
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg28
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibration	MIL-SID-810E	Humidity	10% to 90% RH
Materials	Lead Free,RoHS compliant	CE Certified	YES

Notes:

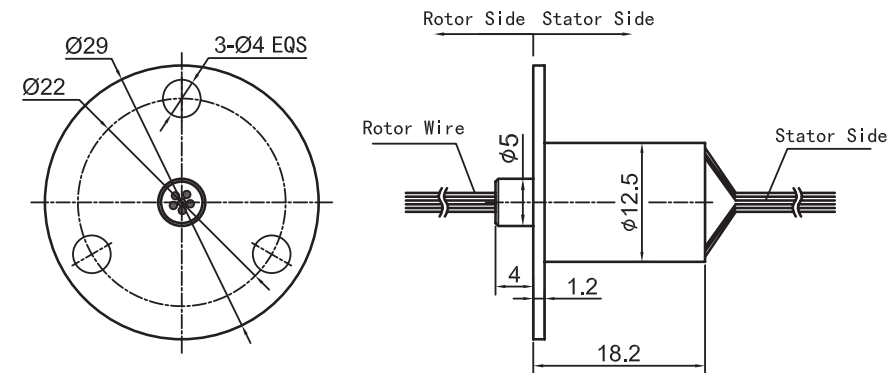
- 1)The operational life of the unit is dependent upon rotational speed, environment and temperature.
- 2)Lead Wire size: 2A/signal -> AWG30, colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

Drawings

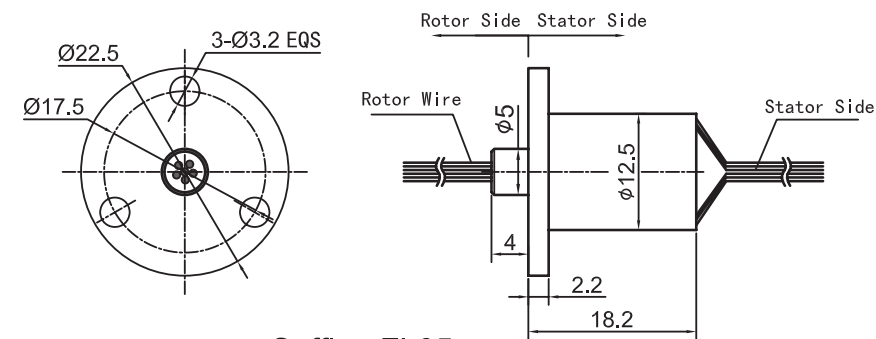
Standard drawings:



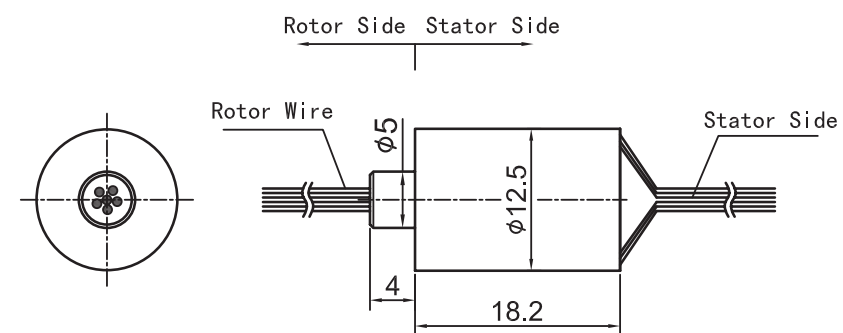
MMC182



Suffix - FL04



Suffix - FL05



Suffix - FL06

Options

- ▶ MMC1829 is the high-end version corresponding to MMC182.
- ▶ Optional flange mounting.
- ▶ Specified connectors and Heat-shrink tube.
- ▶ Longer lead lengths available.
- ▶ High temperature is optional.
- ▶ Military Grade.

Application

CCTV Monitoring System.
 Electrical test equipment.
 Medical equipment.
 Rotary table
 Robotics
 Laboratory equipment
 Manufacturing and process control equipment
 and so on...

if you want to use this series slip ring on your mechanism, pls contact us for more application: technical@moflon.com

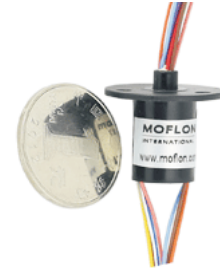
MMC250 Slip Rings

OD 12.50mm(0.49"), Length 25mm(0.98"), 12wires* 2A(signal)

MMC250 slip rings are small and compact with OD 12.5mm * L 25mm, standard, off-the-shelf. Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

MMC2509 is the high-end version corresponding to MMC250, See difference as below:

	Max Speed	Working life	Torque	Housing Material	Electrical noise① @10Rpm
MMC250	250RPM	50million	0.02 N·m	Plastics	10mΩ
MMC2509	800RPM	150million	0.005 N·m	Metal	4mΩ



Specifications

PART #	OD*L	SIGNAL/2A	4A	8A	15A	TOTAL WIRES	DOWNLOAD
MMC250	12.5mm*25mm	12	0	0	0	12	

Shared Specifications

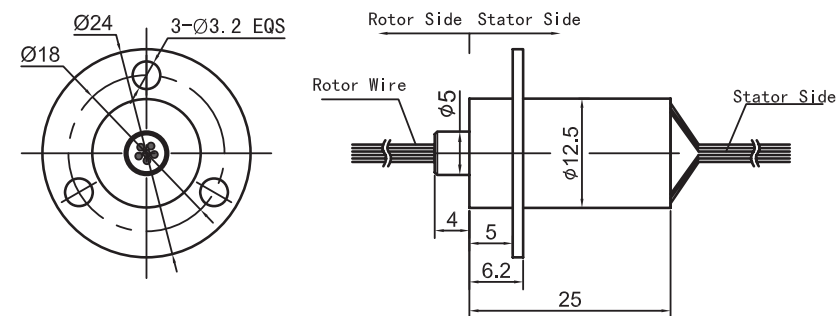
Wires	12(see table as above)	Current	Signal(2A)
Voltage	240 VDC/VAC	Max speed	250RPM
Overall diameter	12.5mm(0.49")	Length	25mm(0.98")
Contact Material	Precious Metal:gold-gold	Contact Resistance	<150mOhm(AWG28#,250mm)
Housing Material	Plastics	Torque	0.02N.m
Working life	50million	Electrical noise	<10mΩ
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg30
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibration	MIL-SID-810E	Humidity	10% to 90% RH
Materials	Lead Free,RoHS compliant	CE Certified	YES

Notes:

- 1)The operational life of the unit is dependent upon rotational speed, environment and temperature.
- 2)Lead Wire size: 2A/signal -> AWG30, colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

Drawings

Standard drawings:



MMC250

Lead wire Color codes

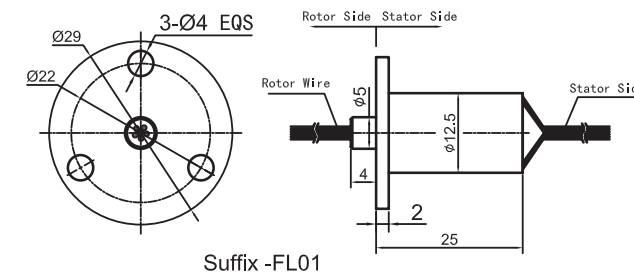
Rings#	Color Code	Rings#	Color Code	Rings#	Color Code
1	BLK	3	RED	5	YEL
2	BRN	4	ORN	6	GRN
7	BLU	9	GRY	11	PINK
8	PURPLE	10	WHT	12	AZURY

Optional Flanges drawings:

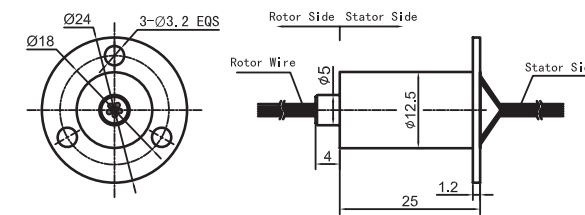
At sometimes, we need a different flange for mounting instead, how should we do?

Great! Moflon supply many flange style as below:

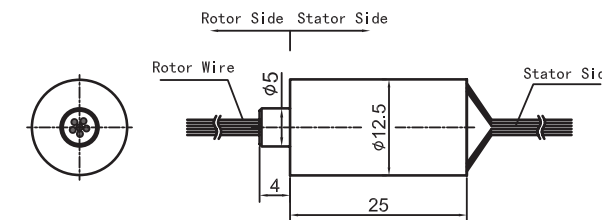
(when you order, pls add FL01 ... FL03 at the suffix of Part#, for example: MMC250-12S-FL01 means MMC250-12S with optional flange FL01.)



Suffix -FL01



Suffix -FL02



Suffix -FL03

MMC397 Slip Rings

OD 15.50mm(0.59"), Length 29.7mm(1.56"), 24wires* 2A(signal)

MMC397 slip rings are small and compact with OD 12.5mm * L 39.7mm, standard, off-the-shelf. Color-coded lead wires are used on both the stator and rotor for simplified electrical connections. Using a 90° V-groove ring design for each ring.

MMC3979 is the high-end version corresponding to MMC397, See difference as below:

	Max Speed	Working life	Torque	Housing Material	Electrical noise① @10Rpm
MMC397	150RPM	50million	0.06 N·m	Plastics	10mΩ
MMC3979	600RPM	150million	0.01 N·m	Metal	4mΩ



Specifications

PART #	OD * L	SIGNAL/2A	4A	8A	15A	TOTAL WIRES	DOWNLOAD
MMC397-S24	12.5mm*39.7mm	24	0	0	0	24	
MMC397-P0215	12.5mm*39.7mm	0	0	0	2	2	

Shared Specifications

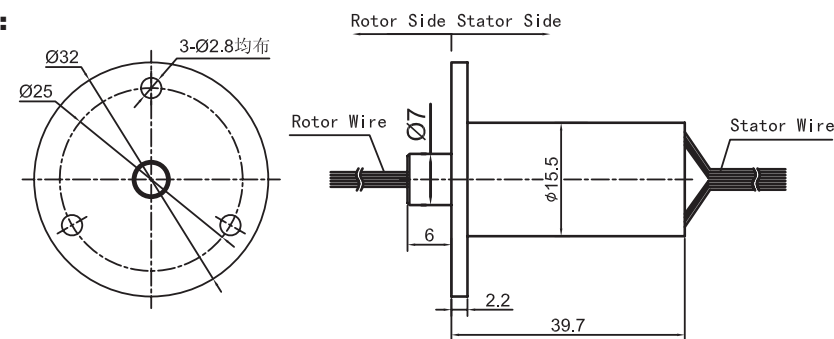
Wires	24(see table as above)	Current	Signal(2A)
Voltage	240 VDC/VAC	Max speed	150RPM
Overall diameter	15.5mm(0.59")	Length	39.7mm(1.56")
Contact Material	Precious Metal:gold-gold	Contact Resistance	<150mOhm(AWG28#,250mm)
Housing Material	Plastics	Torque	0.02N.m
Working life	50million	Electrical noise	<10mΩ
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg30
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibration	MIL-SID-810E	Humidity	10% to 90% RH
Materials	Lead Free,RoHS compliant	CE Certified	YES

Notes:

- 1)The operational life of the unit is dependent upon rotational speed, environment and temperature.
- 2)Lead Wire size: 2A/signal -> AWG30, colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

Drawings

Standard drawings:



Lead wire Color codes

Rings#	Color Code	Rings#	Color Code	Rings#	Color Code
1	BLK	9	GRY	17	WHT YEL
2	BRN	10	ORN	18	WHT GRN
3	RED	11	PINK	19	WHT BLU
4	ORN	12	AZURY	20	WHT PURPLE
5	YEL	13	WHT BLK	21	WHT GRY
6	GRN	14	WHT BRN	22	CRY STAL
7	BLU	15	WHT RED	23	BLK RED
8	PURPLE	16	WHT ORG	24	WHT BRN