

## MSP SERIES

**MSP Series separated slip rings**

At sometime, MSP series(separate slip ring) (rotor) and brush block(stator) could settle down the problem of dimension limitation.

2-24 wires of brush and rotor suits are available.

9.5mm to 25.4mm through bore or no through bore are option.

It is specially fit for kinds of precise instruments or limited space for installation



MODEL#	MAX OD(MM)	CIRCUITS	BORE	MAX SPEED
MSP103	2.9mm	Signal(2A) each @ 3 wires	SOLID	250RPM
MSP104	3.5mm	Signal(2A) each @ 4 wires	SOLID	250RPM
MSP106	14.73mm	Signal(2A) each @ 6 wires	9.5mm	250RPM
MSP112	14.73mm	Signal(2A) each @ 12 wires	9.5mm	250RPM

## MSP103 Slip Rings

MSP103 slip rings are miniature, separated slip ring, with 3 rings signal/2A, are 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.

MSP1039 is the high-end version corresponding to MSP103, See difference as below:

	Max Speed	Working life	Torque	Electrical noise① @10Rpm
MSP103	250RPM	20million	0.02 N·m	10mΩ
MSP1039	1000RPM	100million	0.005 N·m	4mΩ



### Specifications

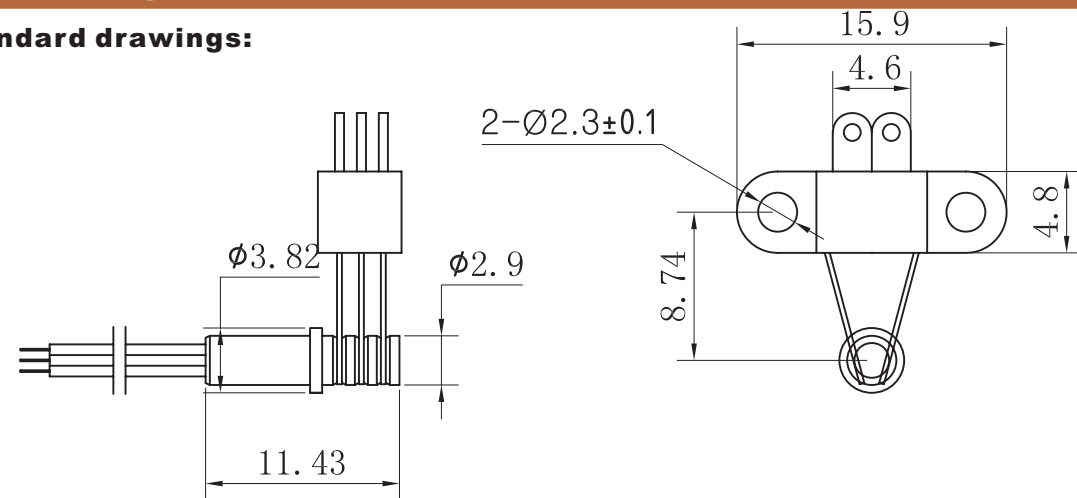
Specifications			
Circuits Num	3	current	2A/signal
Rating voltage	210 VDC / 240 VAC	Contact material	Precious Metal:Gold-Gold
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg28
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibratio	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 -> AWG28 colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

### Drawings

Standard drawings:



### Application

Typical Application

- ▶ CCTV Monitoring System.
- ▶ Electrical test equipment.
- ▶ Medical equipment.
- ▶ Rotary table
- ▶ Robotics
- ▶ Laboratory equipmen
- ▶ 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](mailto:technical@moflon.com)

## MSP104 Slip Rings

MSP104 slip rings are miniature, separated slip ring, with 4 rings signal/2A, are 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.

MSP1049 is the high-end version corresponding to MSP104, See difference as below:

	Max Speed	Working life	Torque	Electrical noise① @10Rpm
MSP104	250RPM	20million	0.02 N·m	10mΩ
MSP1049	1000RPM	100million	0.005 N·m	4mΩ



### Specifications

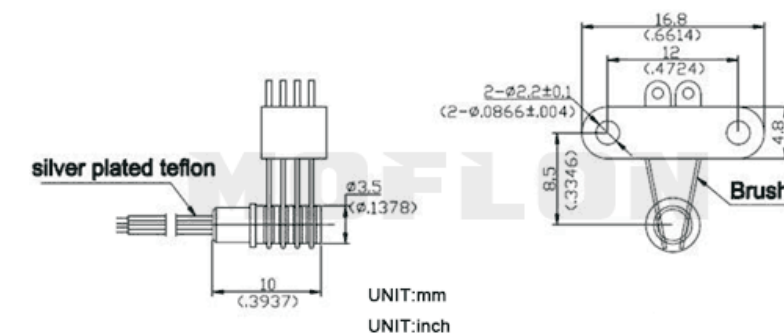
Specifications			
Circuits Num	4	current	2A/signal
Rating voltage	210 VDC / 240 VAC	Contact material	Precious Metal:Gold-Gold
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg28
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibratio	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 -> AWG28 colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

### Drawings

Standard drawings:



### Application

Typical Application

- ▶ CCTV Monitoring System.
- ▶ Electrical test equipment.
- ▶ Medical equipment.
- ▶ Rotary table
- ▶ Robotics
- ▶ Laboratory equipmen
- ▶ Manufacturing and process control equipment
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## MSP106 - MSP SERIES

## MSP112 - MSP SERIES

## MSP106 Slip Rings

MSP106 slip rings are miniature, separated slip ring, with 6 rings signal/2A, are 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.

MSP1069 is the high-end version corresponding to MSP106, See difference as below:

	Max Speed	Working life	Torque	Electrical noise <sup>①</sup> @10Rpm
MSP106	250RPM	20million	0.02 N·m	10mΩ
MSP1069	1000RPM	100million	0.005 N·m	4mΩ



### Specifications

#### Specifications

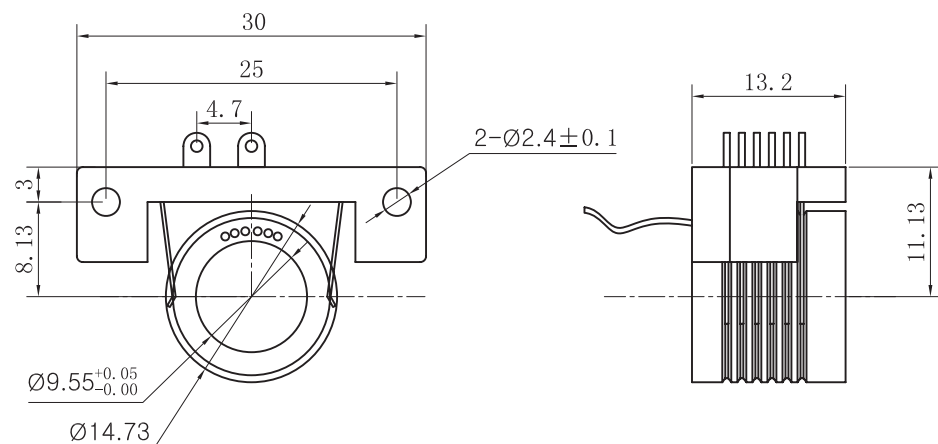
Circuits Num	6	current	2A/signal
Rating voltage	210 VDC / 240 VAC	Contact material	Precious Metal:Gold-Gold
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg28
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibratio	MIL-SID-810E	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 -> AWG28 colored code.
- 3)Electrical noise is dependent upon the rotating speed and current, voltage.

### Drawings

#### Standard drawings:



### Application

#### Typical Application

- ▶ CCTV Monitoring System.
- ▶ Electrical test equipment.
- ▶ Medical equipment.
- ▶ Rotary table
- ▶ Robotics
- ▶ Laboratory equipmen
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## MSP112 Slip Rings

MSP112 slip rings are miniature, separated slip ring, with 12 rings signal/2A, are 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.

MSP1069 is the high-end version corresponding to MSP106, See difference as below:

	Max Speed	Working life	Torque	Electrical noise <sup>①</sup> @10Rpm
MSP112	250RPM	20million	0.02 N·m	10mΩ
MSP1129	1000RPM	100million	0.005 N·m	4mΩ



### Specifications

#### Specifications

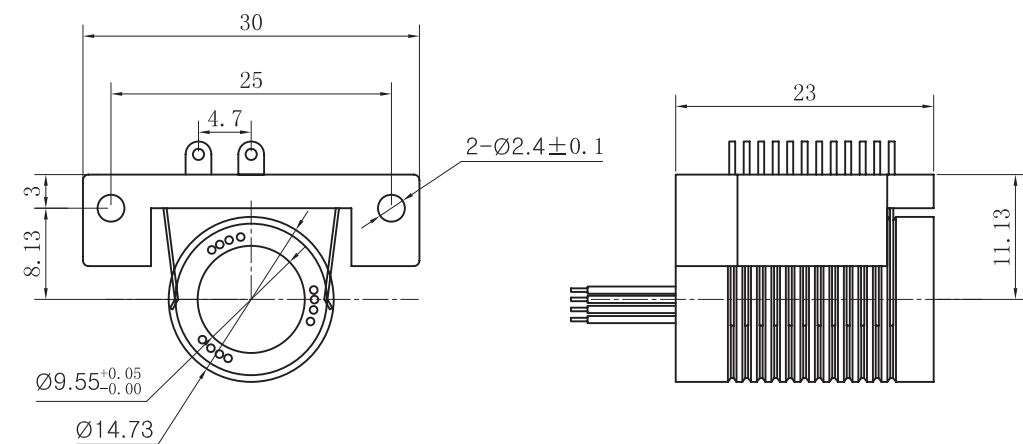
Circuits Num	12	current	2A/signal
Rating voltage	210 VDC / 240 VAC	Contact material	Precious Metal:Gold-Gold
Dielectric strength	600VDC@50Hz	Lead Wire	UL Teflon® Awg28
Insulation resistance	1000MΩ@500VDC	Lead Lengths	250mm
Operating Temp.	-40°C to 80°C	Protection	IP51
Mechanical vibratio	MIL-SID-810E	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 -> AWG28 colored code.
- 3)Electrical noise is dependent upon the rotating speed and current, voltage.

### Drawings

#### Standard drawings:



### Application

#### Typical Application

- ▶ CCTV Monitoring System.
- ▶ Electrical test equipment.
- ▶ Medical equipment.
- ▶ Rotary table
- ▶ Robotics
- ▶ Laboratory equipmen
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