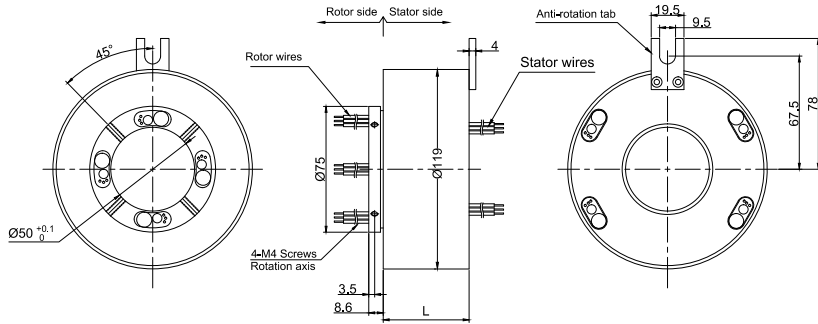


# MSE2050 Series Slip Rings

Special servo slip ring designed for Yaskawa, Panasonic, Mitsubishi, Siemens servo motor with stable and reliable performance. It can combine with any power, switching signal or bus signal. For example: Profibus, Profinet... It can also be combined with rotary joint. Inner wiring and shield structure can totally prevent the mistake of encoder error. Gold-gold contact, high performance, many years of experience for Simens/Heidenhain control system.



## Part# Explanation

**MSE 2050 - 01A10 - P0610 - S06 - VC**

- MSE:** Servo-Encoder Slip Rings
- 1086:** Flange Mounting, OD 86mm
- 01:** Servo Motor Num: 01: 1 set, 02: 2 set, 03: 3 set, 04: 4 set  
Note: 1set motor has 1 power cable(4 cores), and Control-Encoder cable(6 cores) in and out.
- A10:** Servo Motor Power Current, Max 10A. Omit is 10A
- P0610:** Other Power Rings, 6rings, 10A/ring
- S06:** Other Signal rings, 6rings, signal(5A)/ring
- VC:** Products quality level  
VC common quality version  
VD industrial quality version  
Default = VC version

## Part# List

MSE2050 Series Servo Encoder Slip Ring Part List

Part#	Cable for power (4 cores in total, A10 = 10A/core, And by this analogy)	Cable for encoder control(6-core shield)	Signal or 5A	20A	Length (mm)
MSE2050-01	1	1	0	0	74
MSE2050-01-S06	1	1	6	0	96.8
MSE2050-01-S12	1	1	12	0	119.6
MSE2050-01-S18	1	1	18	0	142.4
MSE2050-01-S24	1	1	24	0	165.2
MSE2050-01-P0620-S12	1	1	12	6	165.2
MSE2050-01-S36	1	1	36	0	214.8
MSE2050-02	2	2	0	0	119.6
MSE2050-02-S06	2	2	6	0	142.4
MSE2050-02-S12	2	2	12	0	165.2
MSE2050-02-S18	2	2	18	0	188
MSE2050-02-S24	2	2	24	0	214.8
MSE2050-02-P0620-S12	2	2	12	6	214.8
MSE2050-02-S36	2	2	36	0	260.4
MSE2050-03	3	3	0	0	165.2
MSE2050-03-S06	3	3	6	0	192
MSE2050-03-S12	3	3	12	0	214.8
MSE2050-03-S18	3	3	18	0	237.6
MSE2050-03-S24	3	3	24	0	260.4
MSE2050-03-P0620-S12	3	3	12	6	260.4
MSE2050-03-S36	3	3	36	0	310
MSE2050-04	4	4	0	0	210.8
MSE2050-04-S06	4	4	6	0	237.6
MSE2050-04-S12	4	4	12	0	260.4
MSE2050-04-S18	4	4	18	0	283.2
MSE2050-04-S24	4	4	24	0	310
MSE2050-04-P0620-S12	4	4	12	6	310
MSE2050-04-S36	4	4	36	0	355.6

Note: N channels 5A rings parallel can be used as 1 channel N\*5A current. For example: 2 rings 5A parallel could be used as 1 wires 10A

## Specifications

Mechanical Data		Electrical Data		
Parameter	Value	Parameter	Value	
Working Life	See product quality level table		Power	Signal
Rotating Speed	See product quality level table	Rated Voltage	0~440VAC/VDC	0~440VAC/VDC
Working Temperature	-30°C~80°C	Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC
Operating Humidity	0~85% RH	Lead Wires	Power wire AWG#16	6 cores shielded cable or AWG#22
Contact Material	See product quality level table	Lead Length	Standard 300mm ( adjustable )	
Housing Material	aluminium alloy	Dielectric Strength	500VAC@50Hz , 60s	
Torque	0.1N.m ; +0.03N.m/6 circuits	Electrical Noise	<0.01Ω	
Protection Grade	IP51			

## Product Quality Level Table

Products Level Code	Max Rotating Speed	Working Life	Contact Material
VC	150RPM	15 Million Rev	Precious Metal
VD	1000RPM	60 Million Rev	Gold-Gold

## Lead Wires Color Code

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

(6 wires for 1 group colors, 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 Bore diameter 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

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