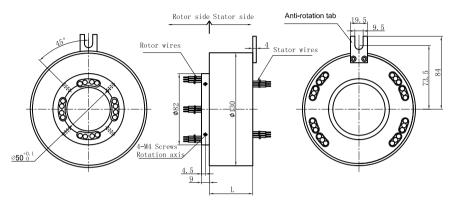
# MW2050 Series Slip Rings

MW2050 series is large current slip ring with bore diameter 50mm. The through bore slip ring can be used for shaft installation or through gas-liquid catheter. This series slip ring can be with rated current 20A/30A/50A to over 100A.





# Part# Explanation

MW 2050 - P02100-S06 - VC

MW:large current series slip ring

2 : through bore with cable exit

050 : bore size 50mm

P02100 : P-power ring, 02-2 rings ( wire), 100-rated current 100A S06 : S-signal ring ( or 5A) 06-6 rings ( wire) Product quality level VC-common quality version VD-industrial quality version Default=VC

## Part# List

| Mw2050 Series slip ring part# list |     |      |      |      |      |      |                  |                   |     |      |      |      |      |      |                               |                  |
|------------------------------------|-----|------|------|------|------|------|------------------|-------------------|-----|------|------|------|------|------|-------------------------------|------------------|
| Part#                              | 60A | 100A | 150A | 200A | 300A | 500A | length<br>( mm ) | part#             | 60A | 100A | 150A | 200A | 300A | 500A | Signal ring<br>(Thermocouple) | Length<br>( mm ) |
| MW2050-P0160                       | 1   | 0    | 0    | 0    | 0    | 0    | 39.2             | MW2050-P0160-S06  | 1   | 0    | 0    | 0    | 0    | 0    | 6                             | 60.8             |
| MW2050-P01100                      | 0   | 1    | 0    | 0    | 0    | 0    | 50               | MW2050-P01100-S06 | 0   | 1    | 0    | 0    | 0    | 0    | 6                             | 71.6             |
| MW2050-P01150                      | 0   | 0    | 1    | 0    | 0    | 0    | 65               | MW2050-P01150-S06 | 0   | 0    | 1    | 0    | 0    | 0    | 6                             | 95               |
| MW2050-P01200                      | 0   | 0    | 0    | 1    | 0    | 0    | 65               | MW2050-P01200-S06 | 0   | 0    | 0    | 1    | 0    | 0    | 6                             | 95               |
| MW2050-P01300                      | 0   | 0    | 0    | 0    | 1    | 0    | 95               | MW2050-P01300-S06 | 0   | 0    | 0    | 0    | 1    | 0    | 6                             | 125              |
| MW2050-P01500                      | 0   | 0    | 0    | 0    | 0    | 1    | 125              | MW2050-P01500-S06 | 0   | 0    | 0    | 0    | 0    | 1    | 6                             | 155              |
| MW2050-P0260                       | 2   | 0    | 0    | 0    | 0    | 0    | 50               | MW2050-P0260-S06  | 2   | 0    | 0    | 0    | 0    | 0    | 6                             | 71.6             |
| MW2050-P02100                      | 0   | 2    | 0    | 0    | 0    | 0    | 71.6             | MW2050-P02100-S06 | 0   | 2    | 0    | 0    | 0    | 0    | 6                             | 93.2             |
| MW2050-P02150                      | 0   | 0    | 2    | 0    | 0    | 0    | 95               | MW2050-P02150-S06 | 0   | 0    | 2    | 0    | 0    | 0    | 6                             | 125              |
| MW2050-P02200                      | 0   | 0    | 0    | 2    | 0    | 0    | 95               | MW2050-P02200S-06 | 0   | 0    | 0    | 2    | 0    | 0    | 6                             | 125              |
| MW2050-P02300                      | 0   | 0    | 0    | 0    | 2    | 0    | 155              | MW2050-P02300-S06 | 0   | 0    | 0    | 0    | 2    | 0    | 6                             | 185              |
| MW2050-P02500                      | 0   | 0    | 0    | 0    | 0    | 2    | 215              | MW2050-P02500-S06 | 0   | 0    | 0    | 0    | 0    | 2    | 6                             | 245              |
| MW2050-P0360                       | 3   | 0    | 0    | 0    | 0    | 0    | 60.8             | MW2050-P0360-S06  | 3   | 0    | 0    | 0    | 0    | 0    | 6                             | 82.4             |
| MW2050-P03100                      | 0   | 3    | 0    | 0    | 0    | 0    | 93.2             | MW2050-P03100-S06 | 0   | 3    | 0    | 0    | 0    | 0    | 6                             | 114.8            |
| MW2050-P03150                      | 0   | 0    | 3    | 0    | 0    | 0    | 125              | MW2050-P03150-S06 | 0   | 0    | 3    | 0    | 0    | 0    | 6                             | 155              |
| MW2050-P03200                      | 0   | 0    | 0    | 3    | 0    | 0    | 125              | MW2050-P03200-S06 | 0   | 0    | 0    | 3    | 0    | 0    | 6                             | 155              |
| MW2050-P03300                      | 0   | 0    | 0    | 0    | 3    | 0    | 215              | MW2050-P03300-S06 | 0   | 0    | 0    | 0    | 3    | 0    | 6                             | 245              |
| MW2050-P03500                      | 0   | 0    | 0    | 0    | 0    | 3    | 215              | MW2050-P03500-S06 | 0   | 0    | 0    | 0    | 0    | 3    | 6                             | 245              |
| MW2050-P0460                       | 4   | 0    | 0    | 0    | 0    | 0    | 71.6             | MW2050-P0460-S06  | 4   | 0    | 0    | 0    | 0    | 0    | 6                             | 93.2             |
| MW2050-P04100                      | 0   | 4    | 0    | 0    | 0    | 0    | 114.8            | MW2050-P04100-S06 | 0   | 4    | 0    | 0    | 0    | 0    | 6                             | 136.4            |
| MW2050-P04150                      | 0   | 0    | 4    | 0    | 0    | 0    | 155              | MW2050-P04150-S06 | 0   | 0    | 4    | 0    | 0    | 0    | 6                             | 185              |
| MW2050-P04200                      | 0   | 0    | 0    | 4    | 0    | 0    | 155              | MW2050-P04200-S06 | 0   | 0    | 0    | 4    | 0    | 0    | 6                             | 185              |
| MW2050-P04300                      | 0   | 0    | 0    | 0    | 4    | 0    | 275              | MW2050-P04300-S06 | 0   | 0    | 0    | 0    | 4    | 0    | 6                             | 305              |
| MW2050-P0660                       | 6   | 0    | 0    | 0    | 0    | 0    | 93.2             | MW2050-P0660-S06  | 6   | 0    | 0    | 0    | 0    | 0    | 6                             | 114.8            |

| MW2050-P06100 | 0 | 6 | 0 | 0 | 0 | 0 | 161 | MW2050-P06100-S06 | 0 | 6 | 0 | 0 | 0 | 0 | 6 | 182.6 |
|---------------|---|---|---|---|---|---|-----|-------------------|---|---|---|---|---|---|---|-------|
| MW2050-P06150 | 0 | 0 | 6 | 0 | 0 | 0 | 215 | MW2050-P06150-S06 | 0 | 0 | 6 | 0 | 0 | 0 | 6 | 245   |
| MW2050-P06200 | 0 | 0 | 0 | 6 | 0 | 0 | 215 | MW2050-P06200-S06 | 0 | 0 | 0 | 6 | 0 | 0 | 6 | 245   |

Note: 1. N channels 60A rings parallel can be used as 1 channel N \* 60A current. For example: 2 rings 60A parallel could be used as 1 wires 120A

# Specification

|                       | Electrical Data                 |  |  |  |  |  |
|-----------------------|---------------------------------|--|--|--|--|--|
| Parameter             | Value                           |  |  |  |  |  |
|                       | Power                           |  |  |  |  |  |
| Rated Voltage         | 0~690VAC/VDC                    |  |  |  |  |  |
| Insulation Resistance | ≥1000MΩ/500VDC                  |  |  |  |  |  |
| Lead Wires            | AWG8#=50A or AWG8 parallel      |  |  |  |  |  |
| Lead Length           | Standard 300mm                  |  |  |  |  |  |
| Dielectric 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      | aluminium alloy                 |  |  |  |  |  |
| Torque                | 0.1N.m; +0.03N.m/6rings         |  |  |  |  |  |
| Protection Grade      | IP51                            |  |  |  |  |  |

## **Product Quality Level Table**

| Products Level Code | Max Rotating Speed | Working Life    | Contact Material |  |  |
|---------------------|--------------------|-----------------|------------------|--|--|
| VC                  | 100RPM             | 10 Million Revs | Precious Metal   |  |  |
| VD                  | 200RPM             | 30 Million Revs | Gold-plated      |  |  |

## 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.
- (a) Support mixed high speed data transmission (including Ethernet, USB, RS232, RS485, Profibus, CanBUS, CANOPEN, DeviceNET, CC-LINK, ProfiNET, EtherCAT, etc.)
- $\ensuremath{\bigcirc}$  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
- $\ensuremath{\textcircled{\scriptsize{12}}}$  Rotating speed can up to 10000RPM
- (3) Maximum current can up to 5000 amperes.
- (4) Military grade
- (5) Optional for underwater IP65, IP68.
- (6) Optional for stainless steel housing

Technical support: technical@moflon.com

<sup>2.</sup> Optional for adding signal wire, thermocouple signal wire and high temperature resistance, it can be customized on customer's request. Please contact customer service for more information.