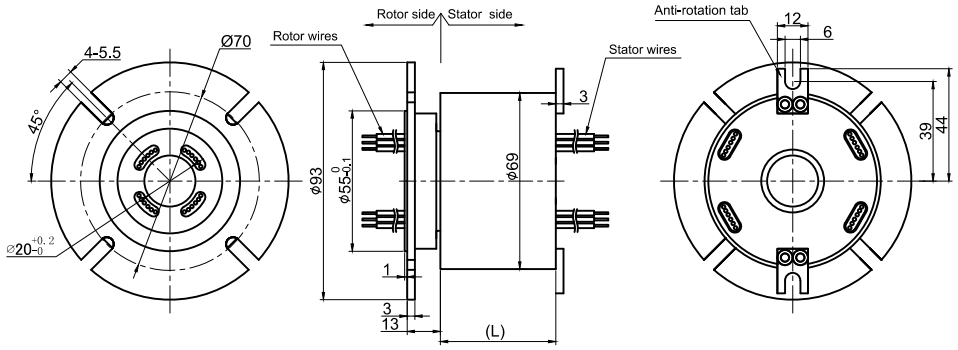
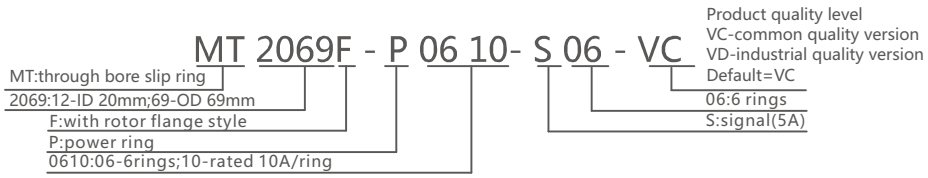
# MT2069F Series

MT2069F series provides a 20mm through-bore for routing of hydraulic or pneumatic lines or hydraulic or pneumatic rotating shaft installation, and a compact 69mm outside diameter,features long life, fiber brush contact technology for ultimate performance in manychallenging applications.
MT2069F series are standard, off-the-shelf products, Color-coded lead wires are used onboth the stator and rotor for simplified electrical connections.It can transmit signal(2A), 10A, multiple 10A current when 360° degree free rotating.




## Part# Explanation




## Part# List

| MT2069F Series Parts# List | | | | | | | |
|---|---|---|---|---|---|---|---|
| Part# | 10A | Signal or 5A | Length-L (mm) | Part# | 10A | Signal or 5A | Length-L (mm) |
| MT2069F-S02 | 0 | 2 | 31.6 | MT2069F-P1010-S08 | 10 | 8 | 86 |
| MT2069F-P0210 | 2 | 0 | 31.6 | MT2069F-P1210-S06 | 12 | 6 | 86 |
| MT2069F-S03 | 0 | 3 | 35 | MT2069F-P1410-S04 | 14 | 4 | 86 |
| MT2069F-P0310 | 3 | 0 | 35 | MT2069F-P1610-S02 | 16 | 2 | 86 |
| MT2069F-S06 | 0 | 6 | 45.2 | MT2069F-S24 | 0 | 24 | 106.4 |
| MT2069F-P0210-S04 | 2 | 4 | 45.2 | MT2069F-P0410-S20 | 4 | 20 | 106.4 |
| MT2069F-P0410-S02 | 4 | 2 | 45.2 | MT2069F-P0610-S18 | 6 | 18 | 106.4 |
| MT2069F-P0610 | 6 | 0 | 45.2 | MT2069F-P1210-S12 | 12 | 12 | 106.4 |
| MT2069F-S12 | 0 | 12 | 65.6 | MT2069F-P1810-S06 | 18 | 6 | 106.4 |
| MT2069F-P0210-S10 | 2 | 10 | 65.6 | MT2069F-P2410 | 24 | 0 | 106.4 |
| MT2069F-P0310-S09 | 3 | 9 | 65.6 | MT2069F-S30 | 0 | 30 | 126.8 |
| MT2069F-P0610-S06 | 6 | 6 | 65.6 | MT2069F-P0210-S28 | 2 | 28 | 126.8 |
| MT2069F-P0810-S04 | 8 | 4 | 65.6 | MT2069F-P0410-S26 | 4 | 26 | 126.8 |
| MT2069F-P1010-S02 | 10 | 2 | 65.6 | MT2069F-P0610-S24 | 6 | 24 | 126.8 |
| MT2069F-P1210 | 12 | 0 | 65.6 | MT2069F-S36 | 0 | 36 | 150.2 |
| MT2069F-S18 | 0 | 18 | 86 | MT2069F-P0410-S32 | 4 | 32 | 150.2 |
| MT2069F-P0210-S16 | 2 | 16 | 86 | MT2069F-P0610-S30 | 6 | 30 | 150.2 |
| MT2069F-P0410-S14 | 4 | 14 | 86 | MT2069F-S42 | 0 | 42 | 170.6 |
| MT2069F-P0610-S12 | 6 | 12 | 86 | MT2069F-P0410-S38 | 4 | 38 | 193.2 |
| MT2069F-P0810-S10 | 8 | 10 | 86 | MT2069F-S48 | 0 | 48 | 193.2 |

Note: 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. 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 | 0~440VAC/VDC | 0~440VAC/VDC |
| Insulation Resistance | ≥1000MΩ/500VDC | ≥1000MΩ/500VDC |
| Lead Wires | AWG17#Teflon | AWG22#Teflon |
| Lead Length | Standard 300mm(adjustable) | |
| Insulation Strength | 800VAC@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℃~80℃ | |
| 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 | 250RPM | 20 Million Revs | Precious Metal |
| VD | 600RPM | 80 Million Revs | Gold-plated |
| VH | 1000RPM | 150 Million Revs | 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 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 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