

ME series(1000M baseT Ethernet)

MOFLON's Ethernet slip ring solutions have been developed to provide reliable products to allow transfer of the Ethernet protocol through a rotating interface. The innovative designs meet the challenge of matching impedance, controlling crosstalk and managing losses. Wide range of product solutions are offered with combinations of data and power in multiple mechanical configurations to meet your application needs.

Configured for Ethernet transmission
RJ45 connector for direct plug-and-play
High performance contact technology
Available with multiple Ethernet, power and signal combinations



| MODEL# | 1000M BASET ETHERNET | POWER/SIGNAL WIRES | BORE | OVERALL DIAMETER |
|--------|----------------------|--------------------|--------|------------------|
| ME2121 | 1 | 1~24 | 12.7MM | 56MM |
| ME2122 | 2 | 1~24 | 12.7MM | 56MM |
| ME2251 | 1 | 1~48 | 25.4MM | 86MM |
| ME2252 | 2 | 1~48 | 25.4MM | 86MM |
| ME2381 | 1 | 1~56 | 38.1MM | 99MM |
| ME2382 | 2 | 1~56 | 38.1MM | 99MM |
| ME2501 | 1 | 1~72 | 50.8MM | 120MM |
| ME2502 | 2 | 1~72 | 50.8MM | 120MM |
| ME1221 | 1 | 1~12 | solid | 22MM |



ME2121 (1000M baseT Ethernet)

ME2121, support 1 channel 1000M baseT ethernet slip rings, with through bore size 12.7mm(0.5"), overall diameter 56mm, are standard, off-the-shelf, Color-coded lead wires are used on both the stator and rotor for simplified electrical connections.



PART# Explanation:

ME2121 - P0610 - S06

S06: signal/2A each @ 6 circuits

P0610: 10A each @ 6 circuits

Specifications

| PART # | OD *L | SIGNAL/5A | 10A | 20A | 1000M BASET |
|------------------|-------------|-----------|-----|-----|-------------|
| ME2121-S04 | 56mm*54mm | 4 | 0 | 0 | 1 |
| ME2121-P0410 | 56mm*54mm | 0 | 4 | 0 | 1 |
| ME2121-P0420 | 56mm*62mm | 0 | 0 | 4 | 1 |
| ME2121-S10 | 56mm*70.5mm | 10 | 0 | 0 | 1 |
| ME2121-P0210-S08 | 56mm*70.5mm | 8 | 2 | 0 | 1 |
| ME2121-P0610-S04 | 56mm*70.5mm | 4 | 6 | 0 | 1 |
| ME2121-S16 | 56mm*87.5mm | 16 | 0 | 0 | 1 |
| ME2121-P1610 | 56mm*87.5mm | 0 | 16 | 0 | 1 |
| ME2121-P0410-S12 | 56mm*87.5mm | 12 | 4 | 0 | 1 |

Ethernet Specifications

| | | | |
|----------|-------------|---------------------|------|
| Ethernet | 1000M baseT | Ethernet connectors | Rj45 |
| BER | 10E-11 | Insert loss | 2db |

Power/signal Specifications

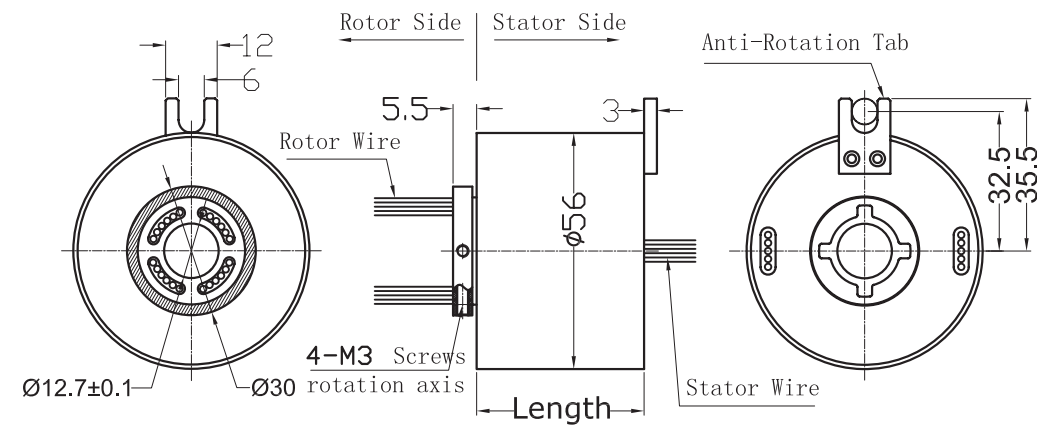
| | | | |
|-----------------------|--------------------------|------------------|--------------------------|
| Rating voltage | 400 VDC/VAC | Contact material | Precious Metal:Gold-Gold |
| Dielectric strength | 1000VDC@50Hz | Lead Wire | CAT6,AWG#22,#16 |
| Insulation resistance | 1000MΩ@600VDC | Lead Lengths | 250mm |
| Operating Temp. | - 40°C to 80°C | Protection | Ip51 |
| Max Speed | 1000RPM | 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: 5A/signal -> AWG22, 10A -> AWG16, 20A -> Awg14, colored code.
- 3)Electrical noise is dependent upon the rotating speed and current,voltage.

Drawings

Standard drawings:



ME2121

12 wires for one group color. from 13 ... 24, repeat the same color as 1 ... 12, indicated with number code pipe.

Lead wire Color codes

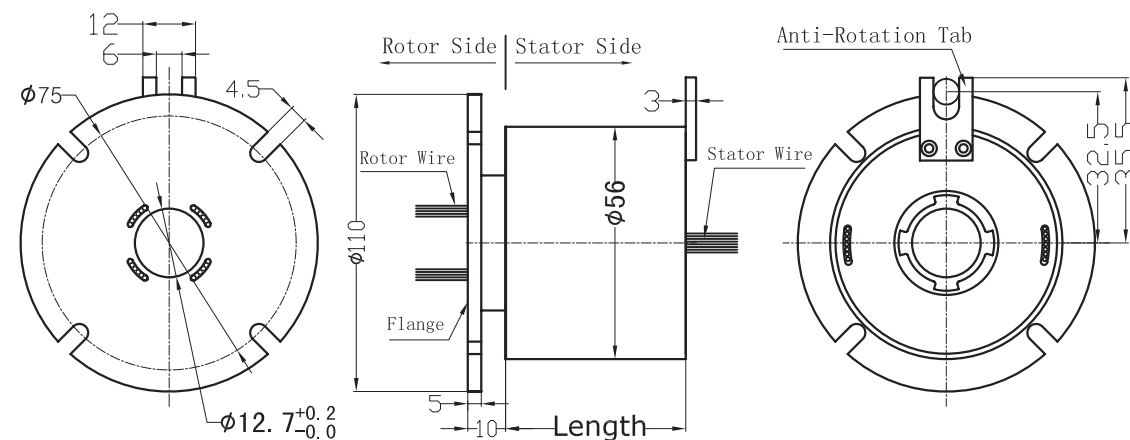
| Rings# | Color Code | Rings# | Color Code | Rings# | Color Code |
|--------|------------|--------|------------|--------|------------|
| 1 | BLK | 5 | YEL | 9 | GRY |
| 2 | BRN | 6 | GRN | 10 | WHT |
| 3 | RED | 7 | BLU | 11 | PINK |
| 4 | ORN | 8 | PURPLE | 12 | AZURY |

Optional Flanges mounting:

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

Great! Moflon supply flange style as below:

(when you order, pls add FL01 at the suffix of Part#, for example: ME2121-06S-FL01 means ME2121-06S with optional flange FL01.)



Suffix - FL01

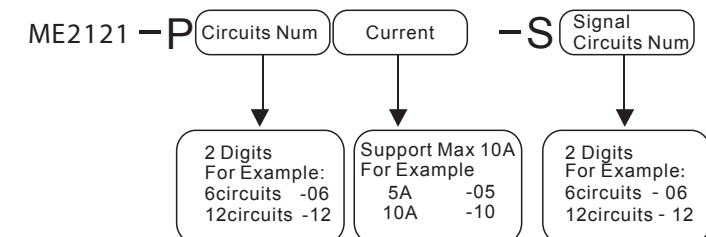
Options

- ▶ Can combine more wires:1-96Ring
- ▶ Specified connectors and Heat-shrink tube.
- ▶ Longer lead lengths available.
- ▶ Shielded cables
- ▶ Connectors
- ▶ Frequencies up to 500 MHz
- ▶ High-speed data transmission for fast Ethernet and EtherCat
- ▶ Signal, Coax, and Power combinations
- ▶ Thermocouples
- ▶ Shock, Vibration, and Temperature Qualified
- ▶ Pneumatic/Hydraulic Capability
- ▶ High temperature---up to 450 degree
- ▶ High Voltage & large Current(1000A)
- ▶ Military Grade.

Build On Request

how to build on request?

Please see ordering information instructions as below :



For example:

- ▶ if order ME2121 with 6wires*signal, the model should be ME2121-S06.
- ▶ if order ME2121 with 12wires*signal + 3wires*10A, the model should be ME2121-P0310-S12
- ▶ if you have other optional requirements, such as lead wire length, connectors, military grade, Please descrip in your email.

After Finishing above, pls send email to us: technical@moflon.com for further technical support.