

MQR Series Rotary Unions(can combine with electric wires)



Features

- Compact body size
- Very low torque
- Can support 1/2/4/6/8/12/16 passages pneumatic or vacuum
- Standard connection size M5
- Air tube size can be customized on customer' s request
- Solid, no hole bore, small in size

Part list

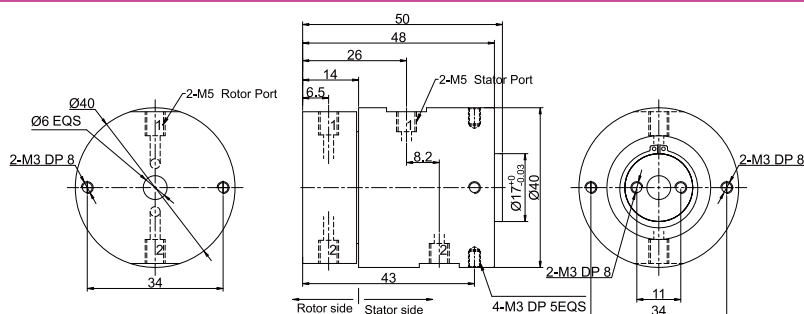
MQR series Pneumatic rotary union parts list						
Model	Pneumatic Passages	Signal/2A	Torque	Negative Vacuum	Max Pressure	Max Rotating Speed
MQR2	2 passages, M5	/	0.2N.m	-1.5kPa	1MPa	300RPM
MQR2-S12	2 passages, M5	12 wires	0.2N.m	-1.5kPa	1MPa	300RPM
MQR2-S24	2 passages, M5	24 wires	0.2N.m	-1.5kPa	1MPa	300RPM
MQR4	4 passages, M5	/	0.3N.m	-1.5kPa	1MPa	300RPM
MQR4-S12	4 passages, M5	12 wires	0.3N.m	-1.5kPa	1MPa	300RPM
MQR4-S24	4 passages, M5	24 wires	0.3N.m	-1.5kPa	1MPa	300RPM
MQR6	6 passages, M5	/	0.5N.m	-1.5kPa	1MPa	300RPM
MQR6-S12	6 passages, M5	12 wires	0.5N.m	-1.5kPa	1MPa	300RPM
MQR6-S24	6 passages, M5	24 wires	0.5N.m	-1.5kPa	1MPa	300RPM
MQR8	8 passages, M5	/	0.6N.m	-1.5kPa	1MPa	300RPM
MQR8-S12	8 passages, M5	12 wires	0.6N.m	-1.5kPa	1MPa	300RPM
MQR8-S24	8 passages, M5	24 wires	0.6N.m	-1.5kPa	1MPa	300RPM
MQR12	12 passages, M5	/	1.0N.m	-1.5kPa	1MPa	300RPM
MQR12-S12	12 passages, M5	12 wires	1.0N.m	-1.5kPa	1MPa	300RPM
MQR12-S24	12 passages, M5	24 wires	1.0N.m	-1.5kPa	1MPa	300RPM
MQR16	16 passages, M5	/	1.3N.m	-1.5kPa	1MPa	300RPM
MQR16-S12	16 passages, M5	12 wires	1.3N.m	-1.5kPa	1MPa	300RPM
MQR16-S24	16 passages, M5	24 wires	1.3N.m	-1.5kPa	1MPa	300RPM

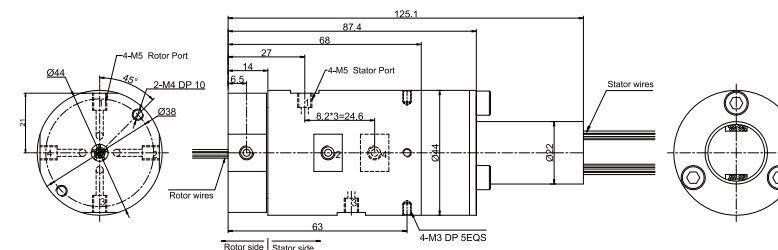
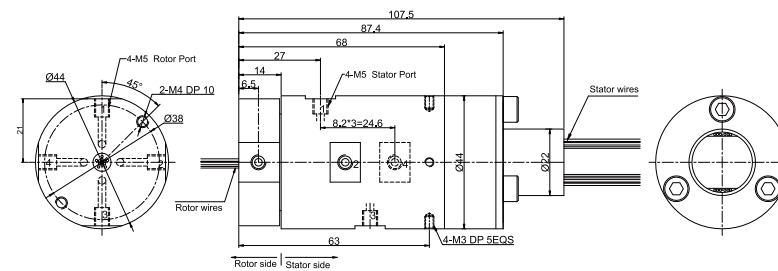
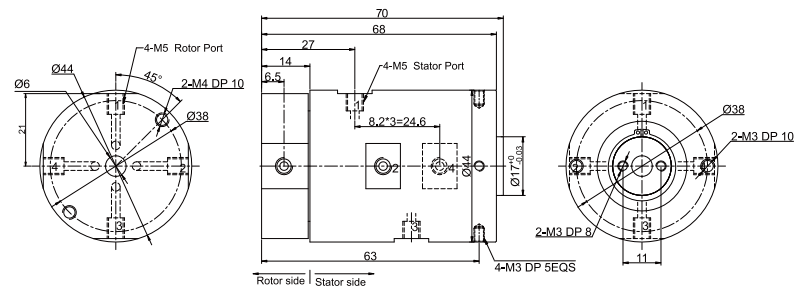
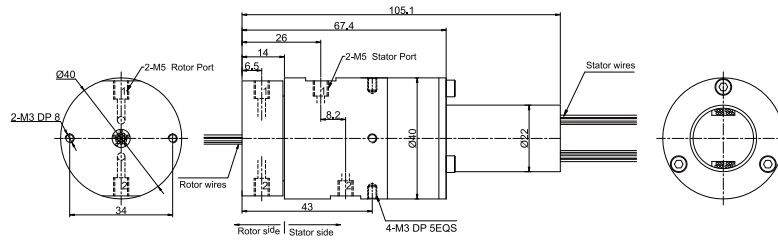
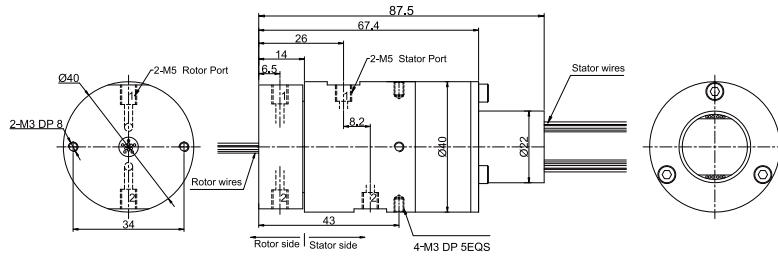
Specifications

Parameters			
Passages	1~16 passages	Max Pressure	1MPa
Vacuum Pressure	-80KPa	Max Rotating Speed	300RPM
Housing Material	Stainless Steel/Aluminium Alloy	Working Temperature	-20°C to 80°C
Connection Size	M5	Protection Grade	IP51
Shockproof Level	MIL-SID-810E	Operating Humidity	10% to 85% RH
Material	RoHs Compliant	CE Compliant	Yes

Standard Model Drawing

MQR2 drawing 2 in 2 out, connection size M5





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Technical drawing of the 16M5 Stator Port, showing front, side, and end views with dimensions.

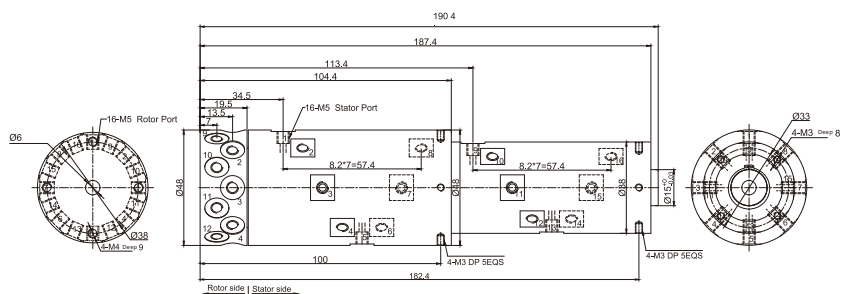
Front View (Left): Circular view showing 16 ports. Dimensions include $\varnothing 6$ EQS, 16-M5 Rotor Port, $\varnothing 38$, and 4-M5 DP REG.

Side View (Middle): Rectangular view showing the stator port layout. Dimensions include 190.4, 187.4, 113.4, 104.4, 94.5, 16.5, 13.5, 16-M5 Stator Port, 6.2" $\pm$ 57.4, 100, 182.4, 4-M5 DP REG, and $\varnothing 157.4$.

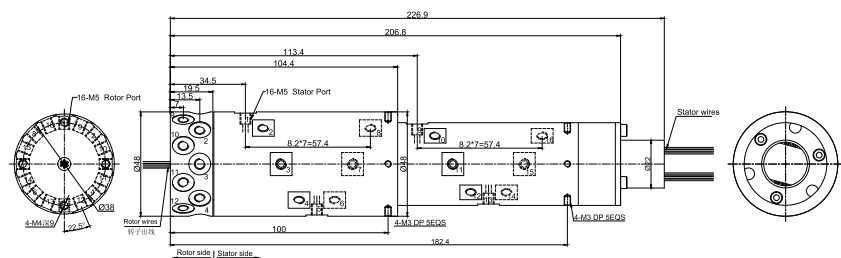
End View (Right): Circular view showing the rotor port layout. Dimensions include $\varnothing 33$ and 4-M5 DP REG.

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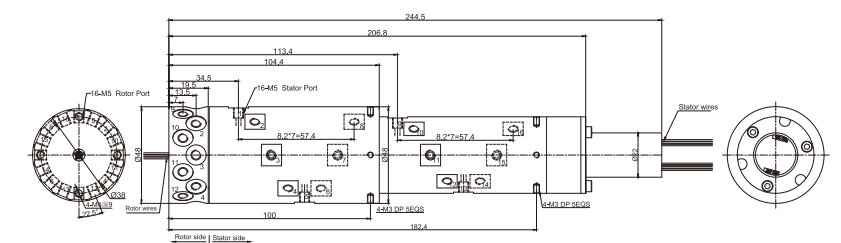
MQR16 drawing 16 in 16 out, connection size M5



MQR16-S12 drawing 16 in 16 out, connection size M5 + 12 wires x signal(2A)



MQR16-S24 drawing 16 in 16 out, connection size M5 + 24 wires x signal(2A)



Product Quality Level Table

Products Level Code	Max Rotating Speed	Working Life	Sealing element
Common Quality Level	100RPM	10 Million Revs	Domestic famous brand seals
Industrial Quality Level	200RPM	30 Million Revs	Imported sealing elements

Rings lead color code

Ring	1	2	3	4	5	6	7	8	9	10	11	12
Color	BLK	RED	YLW	GRN	BLU	WHT	BLK	RED	YLW	GRN	BLU	WHT
Ring	13	14	15	16	17	18	19	20	21	22	23	24
Color	BLU,BLK	BLU,WHT	BLU,BLK	BLU,GRN	BLU,YLW	BLU,RED	BLU,GRN	BRU,YLW	BRU,BLU	WHT,BLK	WHT,BLK	YLW,RED

Note: 6 wires for one group color, from 7-12, repeat the same color as 1...6, indicate with number code pipe.

Options for Custom Slip Ring

Note: Below special demands can be customized. The delivery date will be extended about 3 to 15 days;also the cost will be increased about 5% to 50%. Most of our basic parts are standard and modular,which can save the cost and lead time.

- 1、 Inner bore size, cable exit way and cable length for both rotor and stator can be customized.
- 2、 Because of the structure limitation, length/height/OD can be customized on your request.
- 3、 Max support 200 rings of power/signal.
- 4、 Aviation plug, terminal and heat-shrink tube are optional.
- 5、 Combined slip ring for Yaskawa, Panasonic and 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、 Combined Pneumatic/hydraulic joint with electric slip ring.
- 10、 High temperature can up to 500 degree centigrade.
- 11、 High voltage can up to 110KV.
- 12、 Rotating speed can up to 10000RPM.
- 13、 Maximum current can up to 5000(A) amperes.
- 14、 Military Grade.
- 15、 Optional for underwater IP65, IP68.
- 16、 Optional for stainless steel housing.

Technical support: technical@moflon.com