

## MKD Series Rotary Unions(can combine with electric wires)



### Features

- Light weight, compact size, and low torque.
  - Transmitting gas, vacuum on 360° rotating, can
- combine with electrical power, signal and/or data transfer.
- Support 1/2/3/4/5/6/8/10/12/16/24 Pneumatic passages.
- Support 1~128 wires electrical power/signal.
- Standard connection size G1/8", G3/8" and so on.
- Different pipe size for gas can be customized.
- Can transmit compressed air, vacuum, steam and other media.
- High speed and high voltage can be customized.

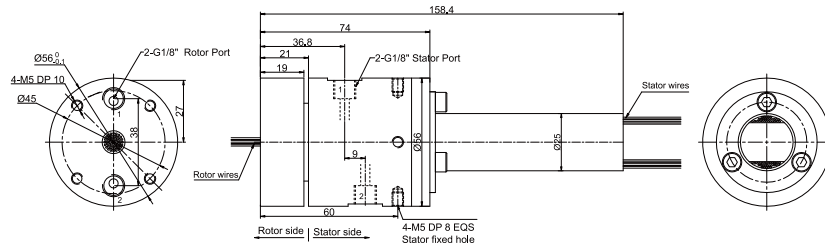
### Part List

MKD series - G1/8" connection size parts list				
Model	Passages	Connection Size	adaptive tube	Circuit Number(power/signal(2A))
MKD21	2 passages	G1/8"	6~8mm	Note:Pure pneumatic rotary union
MKD21-XXX	2 passages	G1/8"	6~8mm	2~128 circuits electric
MKD41	4 passages	G1/8"	6~8mm	Note:Pure pneumatic rotary union
MKD41-XXX	4 passages	G1/8"	6~8mm	2~128 circuits electric

MKD series - G3/8" connection size parts list				
Model	Passages	Connection Size	adaptive tube	Circuit Number(power/signal(2A))
MKD23	2 passages	G3/8"	10~12mm	Note:Pure pneumatic rotary union
MKD23-XXX	2 passages	G3/8"	10~12mm	2~128 circuits electric
MKD43	4 passages	G3/8"	10~12mm	Note:Pure pneumatic rotary union
MKD43-XXX	4 passages	G3/8"	10~12mm	2~128 circuits electric



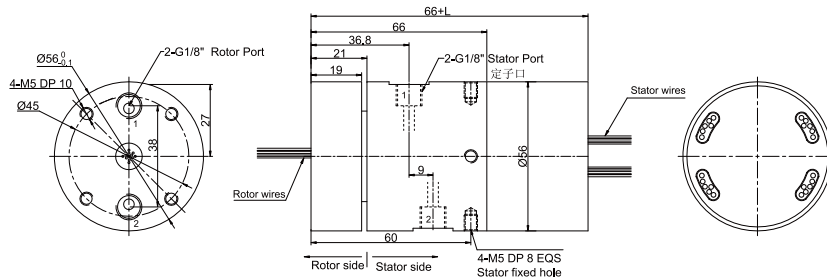
## MKD21S-S56 drawing 2 in 2 out, connection size G1/8"



### Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)
MKD21S-S56	2	G1/8"	6~8mm	56

## MKD21S-S56 drawing 2 in 2 out, connection size G1/8" + Signal(5A)/10A



### Part list

Model	Passages	Connection Size	Adaptive tube	10A	Signal(5A)	L(mm)
MKD21-P0610	2	G1/8"	6~8mm	6	0	38
MKD21-S06	2	G1/8"	6~8mm	0	6	38
MKD21-P1210	2	G1/8"	6~8mm	12	0	54.8
MKD21-P0610-S06	2	G1/8"	6~8mm	6	6	54.8
MKD21-S12	2	G1/8"	6~8mm	0	12	54.8
MKD21-P1810	2	G1/8"	6~8mm	18	0	71.5
MKD21-P0610-S12	2	G1/8"	6~8mm	6	12	71.5
MKD21-P1210-S06	2	G1/8"	6~8mm	12	6	71.5
MKD21-S18	2	G1/8"	6~8mm	0	18	71.5
MKD21-S24	2	G1/8"	6~8mm	0	24	88.4
MKD21-P0610-S18	2	G1/8"	6~8mm	6	18	88.4
MKD21-S30	2	G1/8"	6~8mm	0	30	105.2
MKD21-S36	2	G1/8"	6~8mm	0	36	125

Note:10A and signal(5A) can be freely combined, please contact customer service for details.

### Specifications

Rotary Union Specifications			Mechanical data	
Parameter	Value		Parameter	Value
Passage	2 in 2 out, G1/8"		Working life	Over 10 Million Revs
Max Pressure	1MPa(high pressure can be customized), Vacuum -80KPa		Rated Rotating Speed	300RPM
Torque	Related to the connection size, please see the product selection table		Working Temperature	-30°C~80°C
Electrical Data				
Parameter	Value		Operating Humidity	0~85% RH
	Power	Signal	Contact Material	Precious Metal
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC	Housing Material	Aluminium Alloy
Insulation Resistance	≥500MΩ/500VDC	≥500MΩ/500VDC	Protection Grade	IP51
Lead Wires	AWG17#Teflon/PVC      AWG22#Teflon/PVC			
Lead Length	Standard 300mm(adjustable on request)			
Dielectric Strength	500VAC@50Hz, 60s			
Electrical Noise	<0.01Ω			

## 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.

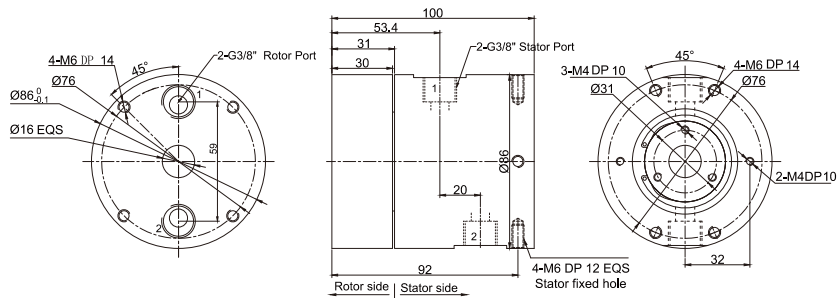
Technical support: [technical@moflon.com](mailto:technical@moflon.com)

# MKD23(2 passages Pneumatic Rotary Union--Can combine electric wires)



MKD23 series is 2 passages Pneumatic Rotary Union(Can combine electric wires), with connection size G3/8", compact size, light weight, low torque, Also optional for transmitting power line, signal line, industrial bus, control line, Electromagnetic valve, induction line, etc.; Standard installation is flange mounting.  
Media Types: compressed Air/Gas, vacuum, etc.

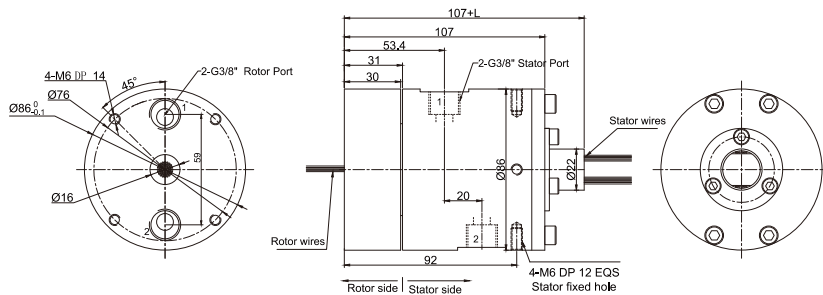
MKD23 (rotary union only for pneumatic) drawing (2 in 2 out, connection size G3/8")



## Part list

Model	Passages	Connection Size	Adaptive tube
MKD23	2	G3/8"	10~12mm

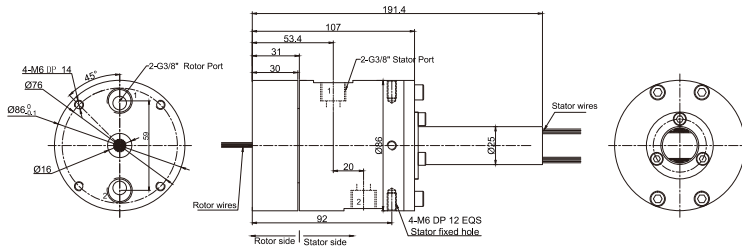
MKD23S-S12 drawing 2 in 2 out, connection size G3/8" + 12~36 wires x signal(2A)



## Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)	L(mm)
MKD23S-S12	2	G3/8"	10~12mm	12	22.5
MKD23S-S18	2	G3/8"	10~12mm	18	29.5
MKD23S-S24	2	G3/8"	10~12mm	24	40.1
MKD23S-S36	2	G3/8"	10~12mm	36	53.8

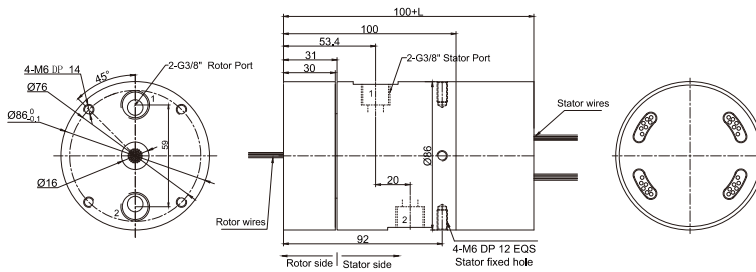
MKD23S-S56 drawing 2 in 2 out, connection size G3/8"



Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)
MKD23S-S56	2	G3/8"	10~12mm	56

MKD23-PXX-SXX drawing 2 in 2 out, connection size G3/8" + signal(5A)/10A



Part list

Model	Passages	Connection Size	Adaptive tube	10A	Signal(5A)	L(mm)
MKD23-P0610	2	G3/8"	10~12mm	6	0	45.2
MKD23-S06	2	G3/8"	10~12mm	0	6	45.2
MKD23-P1210	2	G3/8"	10~12mm	12	0	65.6
MKD23-P0610-S06	2	G3/8"	10~12mm	6	6	65.6
MKD23-S12	2	G3/8"	10~12mm	0	12	65.6
MKD23-P1810	2	G3/8"	10~12mm	18	0	86
MKD23-P0610-S12	2	G3/8"	10~12mm	6	12	86
MKD23-P1210-S06	2	G3/8"	10~12mm	12	6	86
MKD23-S18	2	G3/8"	10~12mm	0	18	86
MKD23-S24	2	G3/8"	10~12mm	0	24	106.4
MKD23-P0610-S18	2	G3/8"	10~12mm	6	18	106.4
MKD23-S30	2	G3/8"	10~12mm	0	30	126.8
MKD23-S36	2	G3/8"	10~12mm	0	36	150.2

Note:10A and signal(5A) can be freely combined, please contact customer service for details.

Specifications

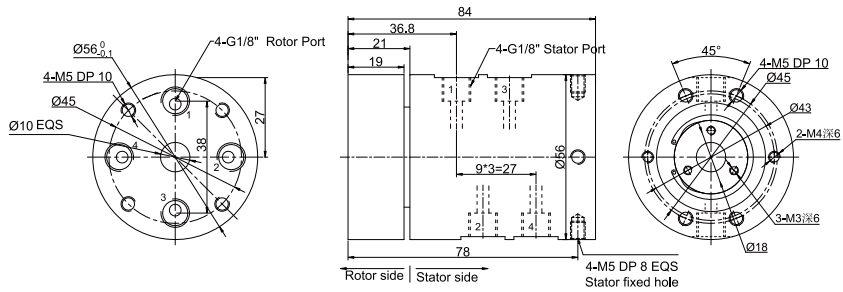
Rotary Union Specifications			Mechanical data	
Parameter	Value		Parameter	Value
Passage	2 in 2 out, G3/8"		Working life	300RPM
Max Pressure	1MPa(high pressure can be customized), Vacuum -80KPa		Rated Rotating Speed	-30°C~80°C
Torque	Related to the connection size, please see the product selection table		Working Temperature	0~85% RH
Electrical Data			Operating Humidity	Precious Metal
Parameter	Value		Contact Material	Aluminium Alloy
	Power	Signal	Housing Material	IP51
Rated Voltage	0~440VAC/VDC	0~440VAC/VDC	Protection Grade	
Insulation Resistance	≥1000MΩ/500VDC	≥1000MΩ/500VDC		
Lead Wires	AWG16#Teflon/PVC	AWG22#Teflon/PVC		
Lead Length	Standard 300mm(adjustable on request)			
Dielectric Strength	500VAC@50Hz, 60s			
Electrical Noise	<0.01Ω			

# MKD41(4 passages Pneumatic Rotary Union--Can combine electric wires)



MKD41 series is 4 passages Pneumatic Rotary Union(Can combine electric wires), with connection size G1/8", compact size, light weight, low torque, Also optional for transmitting power line, signal line, industrial bus, control line, Electromagnetic valve, induction line, etc.; Standard installation is flange mounting.  
Media Types: compressed Air/Gas, vacuum, etc.

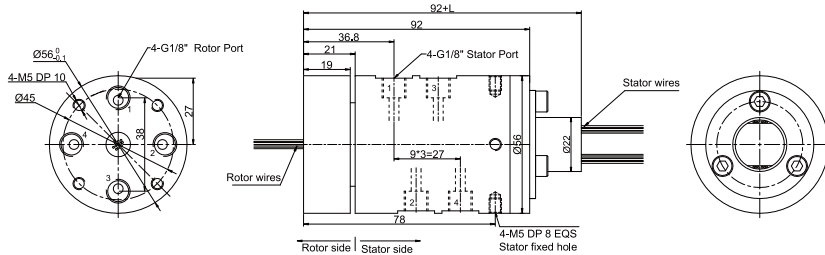
MKD41 (rotary union only for pneumatic) drawing (4 in 4 out, connection size G1/8")



## Part list

Model	Passages	Connection Size	Adaptive tube
MKD41	4	G1/8"	6~8mm

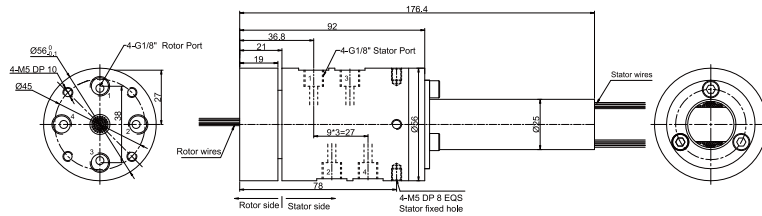
MKD41S-S12 drawing 4 in 4 out, connection size G1/8"+12~36 wires x signal(2A)



## Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)	L(mm)
MKD41S-S12	4	G1/8"	6~8mm	12	22.5
MKD41S-S18	4	G1/8"	6~8mm	18	29.5
MKD41S-S24	4	G1/8"	6~8mm	24	40.1
MKD41S-S36	4	G1/8"	6~8mm	36	53.8

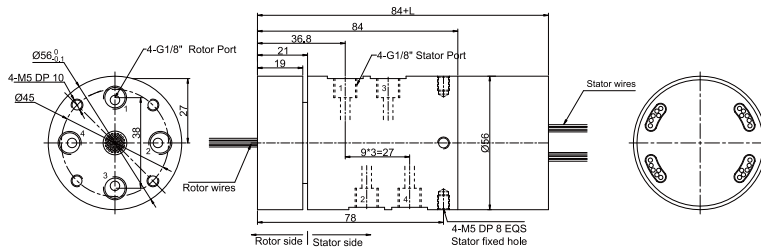
MKD41S-S56 drawing 4 in 4 out, connection size G1/8"



Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)
MKD41S-S56	4	G1/8"	6~8mm	56

MKD41-PXX-SXX drawing 4 in 4 out, connection size G1/8"+signal(5A)/10A



Part list

Model	Passages	Connection Size	Adaptive tube	10A	Signal(5A)	L(mm)
MKD41-P0610	4	G1/8"	6~8mm	6	0	38
MKD41-S06	4	G1/8"	6~8mm	0	6	38
MKD41-P1210	4	G1/8"	6~8mm	12	0	54.8
MKD41-P0610-S06	4	G1/8"	6~8mm	6	6	54.8
MKD41-S12	4	G1/8"	6~8mm	0	12	54.8
MKD41-P1810	4	G1/8"	6~8mm	18	0	71.5
MKD41-P0610-S12	4	G1/8"	6~8mm	6	12	71.5
MKD41-P1210-S06	4	G1/8"	6~8mm	12	6	71.5
MKD41-S18	4	G1/8"	6~8mm	0	18	71.5
MKD41-S24	4	G1/8"	6~8mm	0	24	88.4
MKD41-P0610-S18	4	G1/8"	6~8mm	6	18	88.4
MKD41-S30	4	G1/8"	6~8mm	0	30	105.2
MKD41-S36	4	G1/8"	6~8mm	0	36	125

Note:10A and signal(5A) can be freely combined, please contact customer service for details.

Specifications

Rotary Union Specifications			Mechanical data	
Parameter	Value		Parameter	Value
Passage	4 in 4 out, G1/8"		Working life	Over 10 Million Revs
Max Pressure	1MPa(high pressure can be customized), Vacuum -80KPa		Rated Rotating Speed	300RPM
Torque	Related to the connection size, please see the product selection table		Working Temperature	-30°C~80°C
Electrical Data			Operating Humidity	0~85% RH
Parameter	Value		Contact Material	Precious Metal
	Power	Signal	Housing Material	Aluminium Alloy
Rated Voltage	0~240VAC/VDC	0~240VAC/VDC	Protection Grade	IP51
Insulation Resistance	≥500MΩ/500VDC	≥500MΩ/500VDC		
Lead Wires	AWG17#Teflon/PVC	AWG22#Teflon/PVC		
Lead Length	Standard 300mm(adjustable on request)			
Dielectric Strength	500VAC@50Hz, 60s			
Electrical Noise	<0.01Ω			

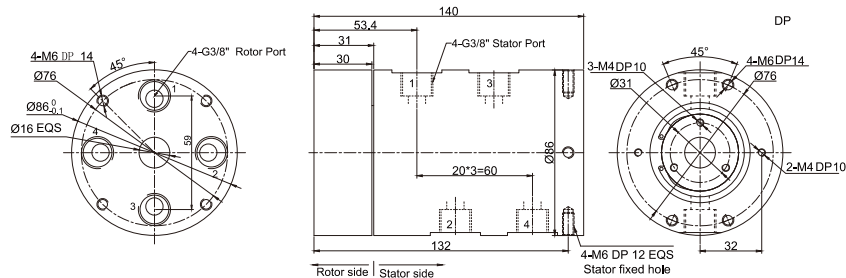


# MKD43(4 passages Pneumatic Rotary Union--Can combine electric wires)



MKD43 series is 4 passages Pneumatic Rotary Union(Can combine electric wires), with connection size G3/8", compact size, light weight, low torque, Also optional for transmitting power line, signal line, industrial bus, control line, Electromagnetic valve, induction line, etc.; Standard installation is flange mounting.  
Media Types: compressed Air/Gas, vacuum, etc.

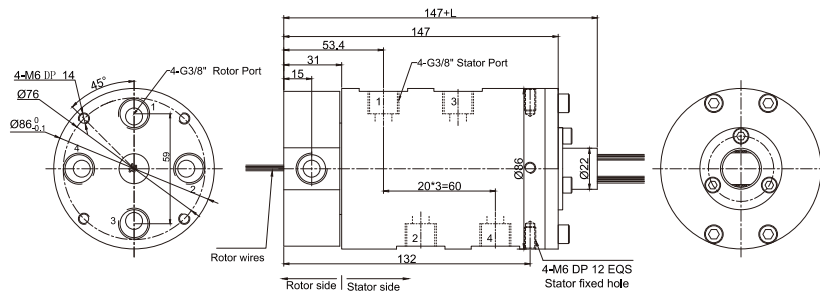
MKD43 (rotary union only for pneumatic) drawing (4 in 4 out, connection size G3/8")



## Part list

Model	Passages	Connection Size	Adaptive tube
MKD43	4	G3/8"	10~12mm

MKD43S-S12 drawing 4 in 4 out, connection size G3/8" + 12~36 wires x signal(2A)



## Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)	L(mm)
MKD43S-S12	4	G3/8"	10~12mm	12	22.5
MKD43S-S18	4	G3/8"	10~12mm	18	29.5
MKD43S-S24	4	G3/8"	10~12mm	24	40.1
MKD43S-S36	4	G3/8"	10~12mm	36	53.8

