

## 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

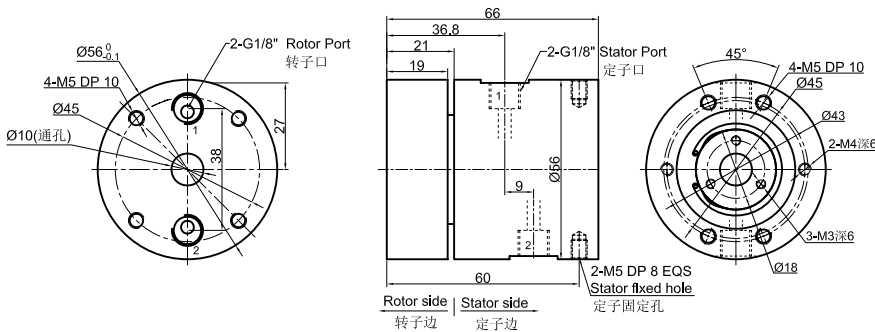
MKD series - G3/8" connection size parts list				
Model	Passages	Connection Size	adaptive tube	Circuit Number(power/signal(2A)
MKD23	2 passages	G3/8"	10~12mm	Note:Pure pneumatic rotary union
MKD23-XXX	2 passages	G3/8"	10~12mm	2~128 circuits electric
MKD43	4 passages	G3/8"	10~12mm	Note:Pure pneumatic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

# MKD21(2 passages Pneumatic Rotary Union Union--Can combine electric wires)



MKD21 series is 2 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.

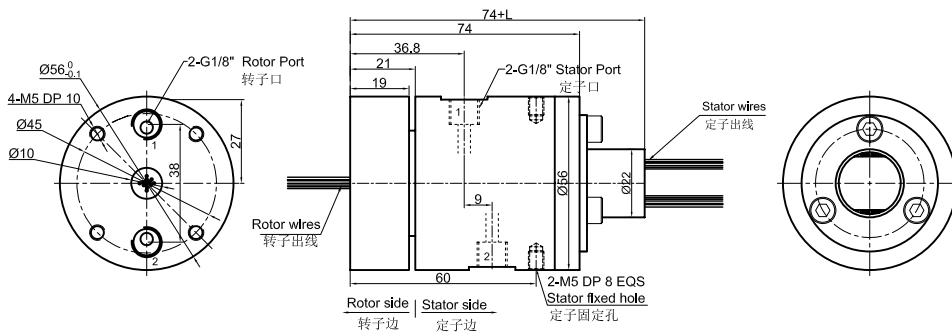
MKD21 (rotary union only for pneumatic) drawing (2 in 2 out, connection size G1/8")



## Part list

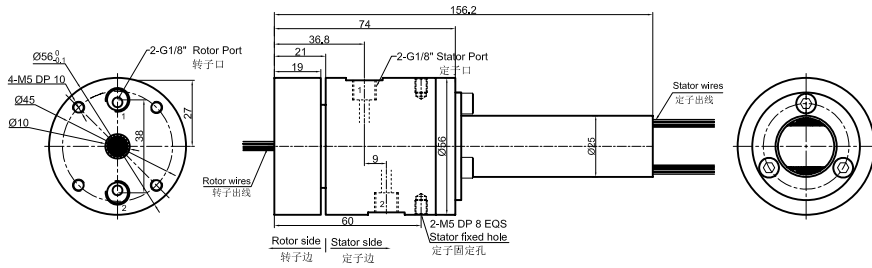
Model	Passages	Connection Size	Pressure range
MKD21	2	G1/8"	Vacuum 0.01torr

MKD21S-S12 drawing 2 in 2 out, connection size G1/8" + 12~36 wires x signal(2A)



## Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)	L(mm)
MKD21S-S12	2	G1/8"	6~8mm	12	22.5
MKD21S-S18	2	G1/8"	6~8mm	18	29.5
MKD21S-S24	2	G1/8"	6~8mm	24	40.1
MKD21S-S36	2	G1/8"	6~8mm	36	53.8



## Part list

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

## 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 0.01torr		Rated Rotating Speed	500RPM
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			

## 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.

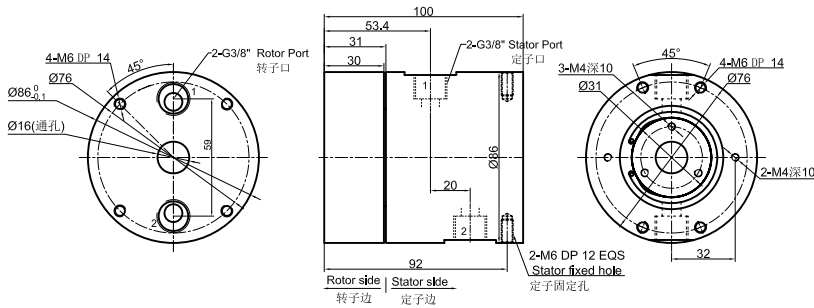
Technical support: [technical@moflon.com](mailto:technical@moflon.com)

# 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.

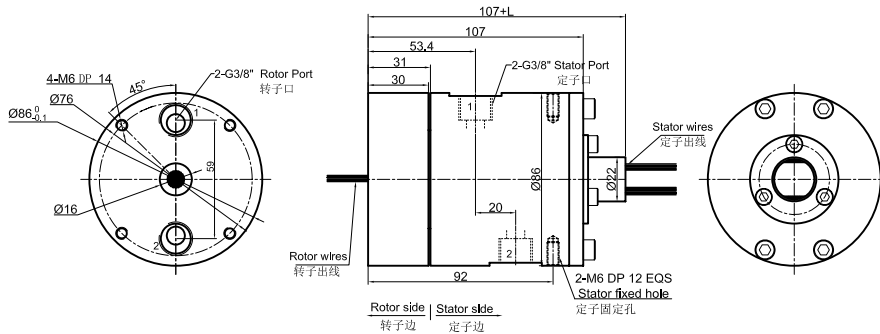
MKD23 (rotary union only for pneumatic) drawing (2 in 2 out, connection size G3/8")



## Part list

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

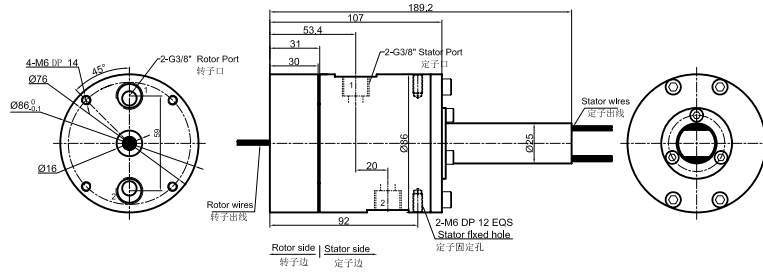
MKD23S-S12 drawing 2 in 2 out, connection size G3/8" + 12~36 wires x signal(2A)



## 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

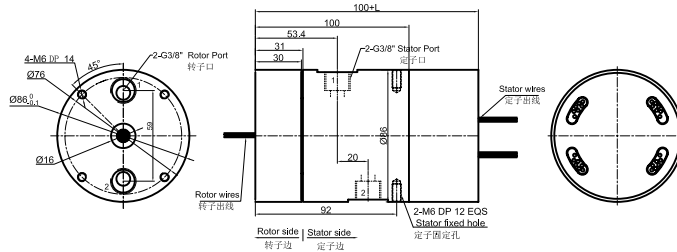
## MKD23S-S56 drawing 2 in 2 out, connection size G3/8"



### 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

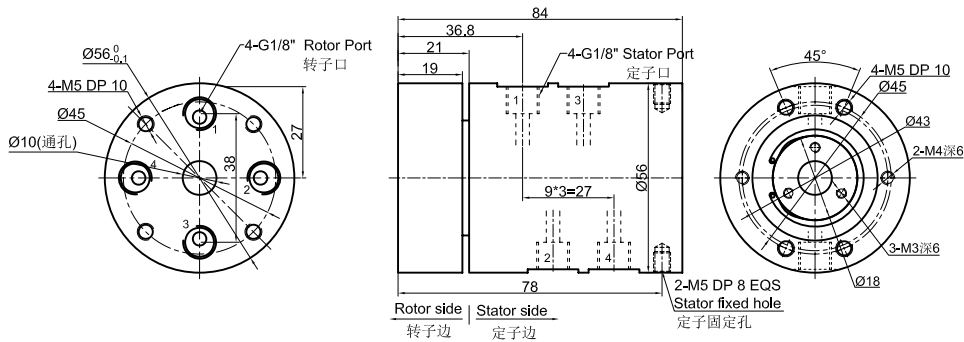
Rotary Union Specifications			Mechanical data	
Parameter	Value		Parameter	Value
Passage	2 in 2 out, G3/8"		Working life	Over 10 Million Revs
Max Pressure	1MPa(high pressure can be customized), Vacuum 0.01torr		Rated Rotating Speed	500RPM
Torque	Related to the connection size, please see the product selection 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	0~440VAC/VDC	0~440VAC/VDC	Protection Grade	IP51
Insulation Resistance	≥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.

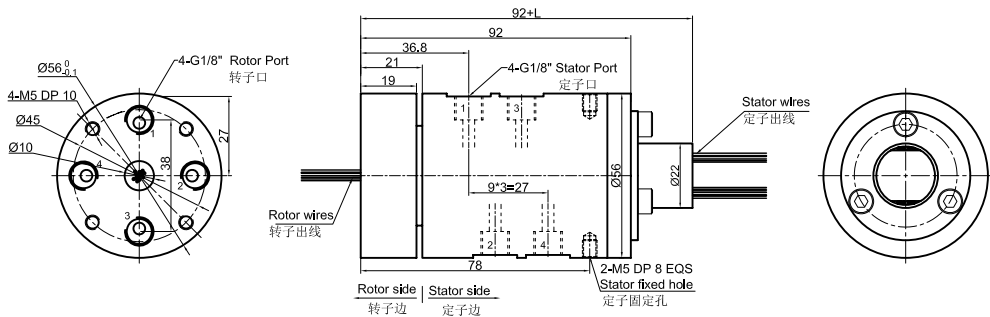
MKD41 (rotary union only for pneumatic) drawing (4 in 4 out, connection size G1/8")



## 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)

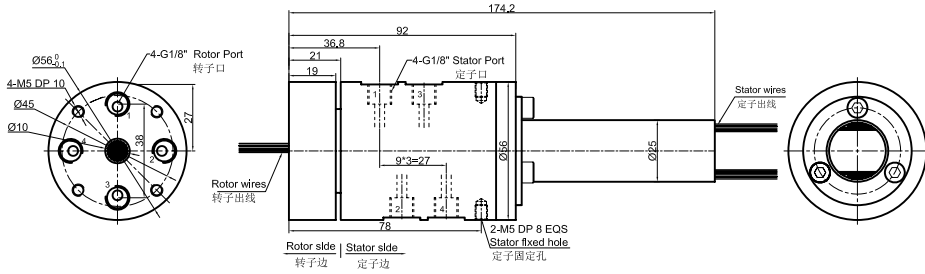


## Part list

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

MKD Series Rotary Unions(can combine with electric wires)

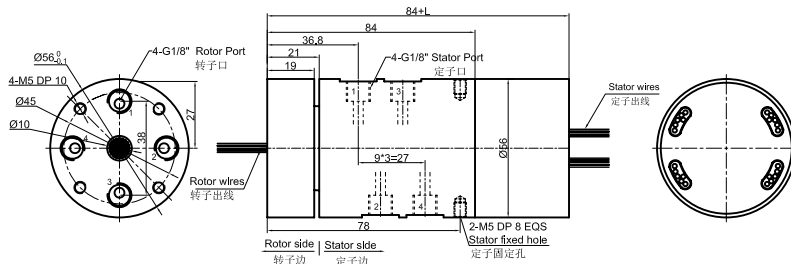
## MKD41S-S56 drawing 4 in 4 out, connection size G1/8"



### 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

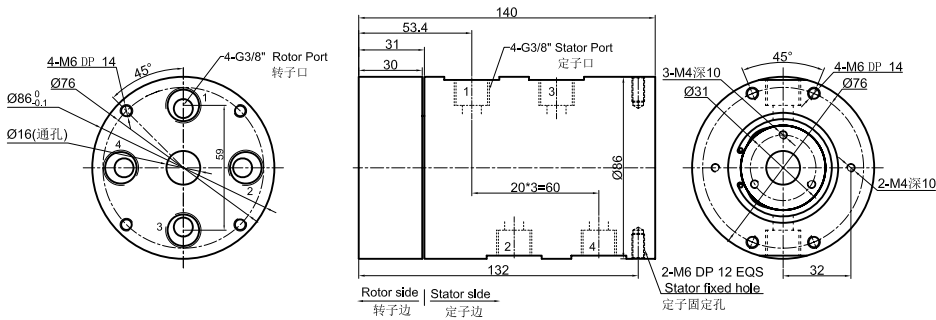
Rotary Union Specifications			Mechanical data	
Parameter	Value		Parameter	Value
Passage	4 in 4 out, G1/8"		Working life	Over 10 Million Revs
Max Pressure	1MPa(high pressure can be customized), Vacuum 0.01torr		Rated Rotating Speed	500RPM
Torque	Related to the connection size, please see the product selection 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.

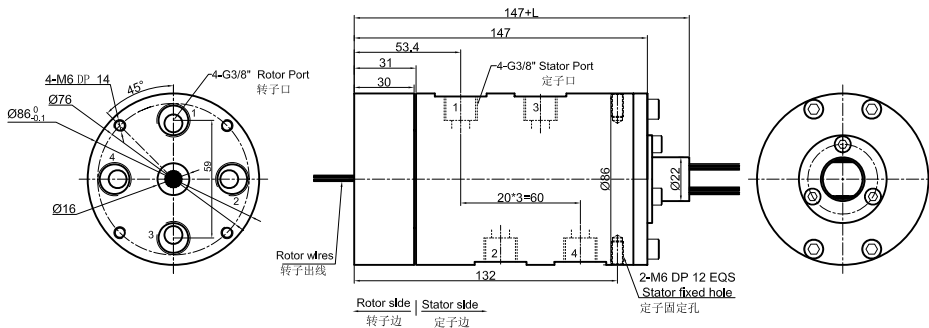
MKD43 (rotary union only for pneumatic) drawing (4 in 4 out, connection size G3/8")



## 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)

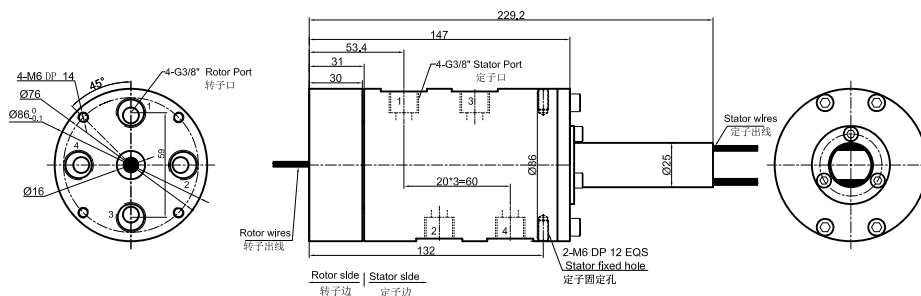


## Part list

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



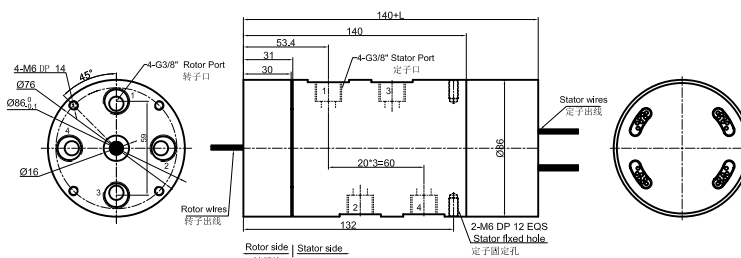
## MKD43S-S56 drawing 4 in 4 out, connection size G3/8"



### Part list

Model	Passages	Connection Size	Adaptive tube	Signal(2A)
MKD43S-S56	4	G3/8"	10~12mm	56

## MKD43-PXX-SXX drawing 4 in 4 out, connection size G3/8" +signal(5A)/10A



### Part list

Model	Passages	Connection Size	Adaptive tube	10A	Signal(5A)	L(mm)
MKD43-P0610	4	G3/8"	10~12mm	6	0	45.2
MKD43-S06	4	G3/8"	10~12mm	0	6	45.2
MKD43-P1210	4	G3/8"	10~12mm	12	0	65.6
MKD43-P0610-S06	4	G3/8"	10~12mm	6	6	65.6
MKD43-S12	4	G3/8"	10~12mm	0	12	65.6
MKD43-P1810	4	G3/8"	10~12mm	18	0	86
MKD43-P0610-S12	4	G3/8"	10~12mm	6	12	86
MKD43-P1210-S06	4	G3/8"	10~12mm	12	6	86
MKD43-S18	4	G3/8"	10~12mm	0	18	86
MKD43-S24	4	G3/8"	10~12mm	0	24	106.4
MKD43-P0610-S18	4	G3/8"	10~12mm	6	18	106.4
MKD43-S30	4	G3/8"	10~12mm	0	30	126.8
MKD43-S36	4	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	4 in 4 out, G3/8"		Working life	Over 10 Million Revs
Max Pressure	1MPa(high pressure can be customized), Vacuum 0.01torr		Rated Rotating Speed	500RPM
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	0~440VAC/VDC	0~440VAC/VDC	Protection Grade	IP51
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			