

# MGP Rotary Joint (Fluid Slip Ring)



## Main features

MGP series rotary joints are available for 2, 3, 4, 6, 8, 10 and 12 channels in 7 sizes, using special sealing technology for multi-channel rotary joints, suitable for vacuum and bidirectional pressure and independent flow passages, which can simultaneously transmit different Types of media, such as compressed air, vacuum, hydraulic oil, water, hot water, coolant, steam and other media.

MGP is the most versatile rotary joint, with many models and specifications, and it is suitable for 90% of applications. A wide range of pressure up to 50Mpa.

## List

MGP Rotary Joint Options			
Model	Passages	Port size	Pressure
MGP2	2 passages	G1/8" G1/4" G3/8" G1/2" G5/8"	0-50MPa
MGP3	3 passages	G1/8" G1/4" G3/8" G1/2" G3/4" G7/8"	0-50MPa
MGP4	4 passages	G1/8" G1/4" G3/8" G1/2" G3/4" G7/8"	0-50MPa
MGP6	6 passages	G1/8" G1/4" G3/8" G1/2" G5/8"	0-50MPa
MGP8	8 passages	G1/8" G1/4" G3/8" G1/2"	0-50MPa

## Technical specifications

Mechanical Specifications		Rotary joint part specification	
Parameters	Value	Parameters	Value
life span	Reference	Number of channels	2, 3, 4, 6, 8 channels
Rated speed	Reference	greatest pressure	50MPa (customizable high pressure), vacuum 30HG
Operating temperature	-30°C~80°C	Media can be	Air, vacuum, hydraulic oil, water, hot water, coolant, steam, etc.
Working humidity	0~85% RH	Torque	Related to the interface size, see selection table
Seals	Reference		
Shell material	Aluminum alloy/steel		
Protection level	IP51		

## Product Grade Selection Table

Product grade code	Max speed	Life	Seals
VC (general level)	100RPM	6 millions	Domestic famous brand seals
VD (industrial grade)	300RPM	20 millions	Imported seals

## Customization options

Note: The following special requirements can be customized, the delivery time will increase by 3 to 15 days, the cost increases by 5% to 50%, most of the company's basic accessories are standardized, modular, non-standard customization can greatly reduce costs And delivery period.

1. Connector size
2. pressure
3. High and low speed
- 4 hollow bore size
5. Corrosive media, all stainless steel, explosion-proof, high temperature
6. can be combined with the electric slip ring

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# MGP2 (2-in, 2-out, multi-function swivel/fluid slip ring)

## Model description

### MGP21-ID12-VC

MCGP: Compact Multi-function Rotary Joint

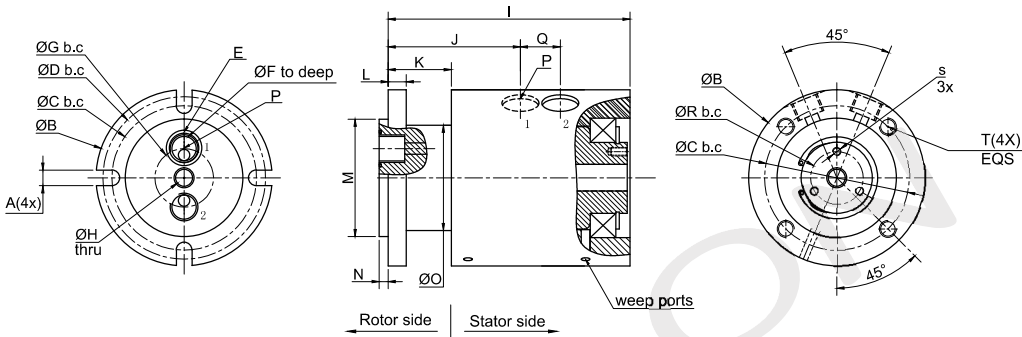
2: 2 in 2 out

1: Port size, 1=G1/8", 2=G1/4", 3=G3/8"  
4=G1/2", 5=G5/8", 6=G3/4", 8=G1", 10=G(1+1/4")

Product grade code  
VC General Grade Product Grade  
VD industrial grade  
Default omitted = VC general product level

ID12: Inner hole 12mm

#### MGP2 Series (Multi-function Swivel) Dimensional Drawing



## List

MGP2 Series List

Model No	Passages	Port size	Inner hole size	Pressure	Model No	Passages	Port size	Inner hole size	Pressure
MGP21	2 in 2 out	G1/8"	N/A	0-50MPa	MGP23-ID19	2 in 2 out	G3/8"	19mm	0-50MPa
MGP21-ID12	2 in 2 out	G1/8"	12mm	0-50MPa	MGP24	2 in 2 out	G1/2"	N/A	0-50MPa
MGP22	2 in 2 out	G1/4"	N/A	0-50MPa	MGP24-ID19	2 in 2 out	G1/2"	19mm	0-50MPa
MGP22-ID19	2 in 2 out	G1/4"	19mm	0-50MPa	MGP25-ID25	2 in 2 out	G5/8"	25mm	0-50MPa
MGP23	2 in 2 out	G3/8"	N/A	0-50MPa					

Size	MGP21	MGP21-ID12	MGP22	MGP22-ID19	MGP23	MGP23-ID19	MGP24	MGP24-ID19	MGP25-ID25
A	5.5mm	7.14mm	7.14mm	9.0mm	7.14mm	9.0mm	9.0mm	9.0mm	13.49mm
B	61.9mm	74.60mm	74.6mm	95.25mm	80.95mm	106.35mm	98.43mm	125.4mm	182.55mm
C	50.8mm	63.50mm	68.25mm	82.55mm	69.85mm	88.9mm	80.98mm	104.78mm	158.75mm
D	57.15mm	69.85mm	17.17mm	87.3mm	74.6mm	98.43mm	88.90mm	117.48mm	171.45mm
E	2-014 O-Ring [12.42mm]	2-015 O-Ring [12.44mm]	2-017 O-Ring [17.17mm]	2-017 O-Ring [17.17mm]	2-019 O-Ring [20.35mm]	2-019 O-Ring [20.35mm]	2-023 O-Ring [26.70mm]	2-023 O-Ring [26.70mm]	2-028 O-Ring [37.77mm]
F	4.0mm	4.0mm	6.4mm	6.4mm	9.5mm	9.5mm	12.7mm	12.7mm	25.40mm
G	20.62mm	33.32mm	25.4mm	44.45mm	30.15mm	47.63mm	36.5mm	57.15mm	76.2mm
H	N/A	12.7mm	N/A	19.05mm	N/A	19.05mm	N/A	19.05mm	25.4mm
I	85mm	92.4mm	111.1mm	121.2mm	119.5mm	134.9mm	137.0mm	156.4mm	218.4mm
J	46.5mm	51.6mm	57.5mm	63.6mm	60.0mm	67.2mm	68.7mm	79.9mm	111.1mm
K	22.2mm	25.4mm	25.4mm	28.5mm	25.4mm	28.5mm	30.1mm	41.3mm	41.3mm
L	6.35mm	6.35mm	6.35mm	7.92mm	6.35mm	7.92mm	7.92mm	9.53mm	15.90mm
M	41.28mm	55.55mm	50.8mm	69.85mm	60.33mm	76.2mm	69.85mm	92.1mm	127.00mm
N	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	4.75mm	4.75mm
O	39.0mm	45.97mm	49.27mm	63.5mm	57.15mm	72.15mm	65.53mm	88.9mm	133.35mm
P	G1/8"	G1/8"	G1/4"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"	G1"
Q	14mm	14mm	21.03mm	21.03mm	24.13mm	26.16mm	28.1mm	30.12mm	45.57mm
R	N/A	18.5	N/A	34.90mm	N/A	34.90mm	N/A	34.90mm	34.90
S	N/A	M3x0.5	N/A	M5x0.8	N/A	M5x0.8	N/A	M5x0.8	M5x0.8
T	M5	M6x1.0	M6x1.0	M8x1.25	M6x1.0	M8x1.25	M8x1.25	M8x1.25	M12x1.75

# MGP3 (3-in, 3-out, multi-function swivel/fluid slip ring)

## Model description

### MGP31-ID12-VC

MCGP: Compact Multi-function Rotary Joint

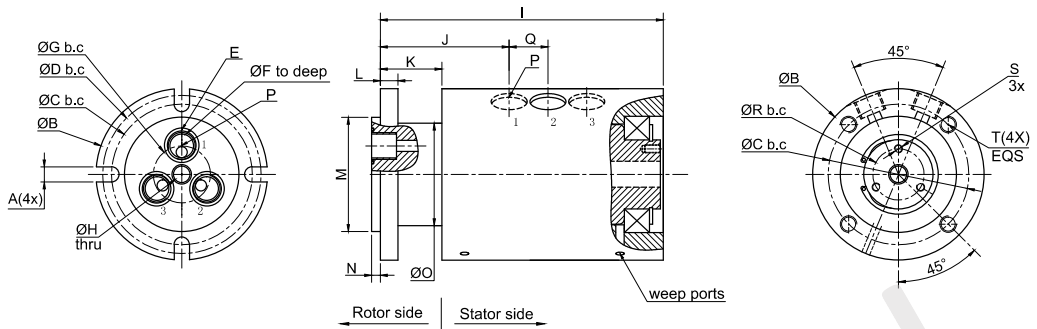
3: 3in 3out

1: Port size, 1=G1/8", 2=G1/4", 3=G3/8"  
4=G1/2", 5=G5/8", 6=G3/4", 8=G1", 10=G(1+1/4")

Product grade code  
VC General Grade Product Grade  
VD industrial grade  
Default omitted = VC general product level

ID12: Inner hole 12mm

#### MGP3 Series (Multi-function Swivel) Dimensional Drawing



## List

#### MGP3 Series List

Model No	Passages	Port size	Inner hole size	Pressure	Model No	Passages	Port size	Inner hole size	Pressure
MGP31	3 in 3 out	G1/8"	N/A	0-50MPa	MGP33-ID19	3 in 3 out	G3/8"	19mm	0-50MPa
MGP31-ID12	3 in 3 out	G1/8"	12mm	0-50MPa	MGP34	3 in 3 out	G1/2"	N/A	0-50MPa
MGP32	3 in 3 out	G1/4"	N/A	0-50MPa	MGP34-ID19	3 in 3 out	G1/2"	19mm	0-50MPa
MGP32-ID19	3 in 3 out	G1/4"	19mm	0-50MPa	MGP36	3 in 3 out	G3/4"	N/A	0-50MPa
MGP33	3 in 3 out	G3/8"	N/A	0-50MPa	MGP37	3 in 3 out	G7/8"	N/A	0-50MPa

Size	MGP31	MGP31-ID12	MGP32	MH32-ID19	MGP33	MGP33-ID19	MGP34	MGP34-ID19	MGP36	MGP37
A	7.14mm	7.14mm	7.14mm	9.0mm	9.0mm	9.0mm	9.0mm	9.0mm	11.00mm	13.49mm
B	68.28mm	74.60mm	80.95mm	95.25mm	98.43mm	106.35mm	107.95mm	125.4mm	131.75mm	176.20mm
C	53.98mm	60.33mm	69.85mm	82.55mm	82.55mm	92.08mm	92.08mm	104.78mm	114.30mm	146.05mm
D	63.50mm	69.85mm	74.60mm	87.3mm	90.47mm	98.43mm	100.00mm	117.48mm	122.22mm	165.10mm
E	2-015 O-Ring [14.00mm]	2-015 O-Ring [14.00mm]	2-017 O-Ring [17.17mm]	2-017 O-Ring [17.17mm]	2-019 O-Ring [20.35mm]	2-019 O-Ring [20.35mm]	2-023 O-Ring [26.70mm]	2-023 O-Ring [26.70mm]	2-026 O-Ring [31.47mm]	2-028 O-Ring [37.77mm]
F	4.0mm	4.0mm	6.4mm	6.4mm	9.5mm	9.5mm	12.7mm	12.7mm	19.05mm	25.40mm
G	25.4mm	33.32mm	31.75mm	44.45mm	44.45mm	47.63mm	44.5mm	57.15mm	53.98mm	53.98mm
H	N/A	12.7mm	N/A	19.05mm	N/A	19.05mm	N/A	19.05mm	N/A	N/A
I	105.3mm	106.3mm	134.4mm	142.3mm	153.2mm	161.1mm	179.3mm	188.1mm	210.2mm	268.4mm
J	50.6mm	51.6mm	58.4mm	63.6mm	66.8mm	67.2mm	75.5mm	81.5mm	86.1mm	115.1mm
K	25.4mm	25.4mm	25.4mm	28.5mm	30.1mm	28.5mm	34.9mm	42.8mm	38.1mm	57.2mm
L	6.35mm	6.35mm	6.35mm	7.92mm	7.92mm	7.92mm	9.53mm	11.10mm	11.10mm	15.88mm
M	47.63mm	55.55mm	60.33mm	69.85mm	66.68mm	76.2mm	79.385mm	92.1mm	95.25mm	117.48mm
N	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	4.75mm	4.75mm	4.75mm	4.75mm
O	44.5mm	46.0mm	57.2mm	63.5mm	65.4mm	65.4mm	74.2mm	88.9mm	87.6mm	127.0mm
P	G1/8"	G1/8"	G1/4"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"	G1"
Q	14mm	14mm	21.03mm	21.03mm	24.13mm	26.16mm	30.12mm	30.12mm	30.12mm	45.57mm
R	N/A	18.5	N/A	34.90mm	N/A	34.90mm	N/A	34.90mm	N/A	N/A
S	N/A	M3x0.5	N/A	M5x0.8	N/A	M5x0.8	N/A	M5x0.8	N/A	N/A
T	M6x1.0	M6x1.0	M6x1.0	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M12x1.75

# MGP4 (4-in, 4-out, multi-function swivel/fluid slip ring)

## Model description

### MGP41-ID12-VC

MCGP: Compact Multi-function Rotary Joint

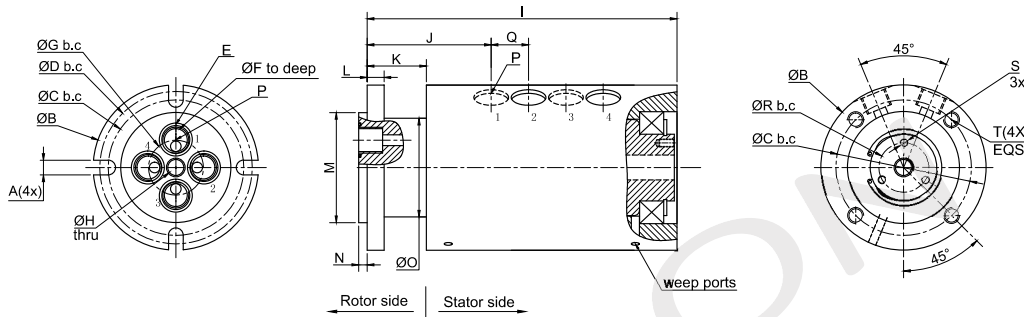
4: 4in 4 out

1: Port size, 1=G1/8", 2=G1/4", 3=G3/8"  
4=G1/2", 5=G5/8", 6=G3/4", 8=G1", 10=G(1+1/4")

Product grade code  
VC General Grade Product Grade  
VD industrial grade  
Default omitted = VC general product level

ID12: Inner hole 12mm

#### MGP4 Series (Multi-function Swivel) Dimensional Drawing



## List

MGP4 Series List

Model No	Passages	Port size	Inner hole size	Pressure	Model No	Passages	Port size	Inner hole size	Pressure
MGP41	4 in 4 out	G1/8"	N/A	0-50MPa	MGP43-ID19	4 in 4 out	G3/8"	19mm	0-50MPa
MGP41-ID12	4 in 4 out	G1/8"	12mm	0-50MPa	MGP44	4 in 4 out	G1/2"	N/A	0-50MPa
MGP42	4 in 4 out	G1/4"	N/A	0-50MPa	MGP44-ID19	4 in 4 out	G1/2"	19mm	0-50MPa
MGP42-ID19	4 in 4 out	G1/4"	19mm	0-50MPa	MGP46	4 in 4 out	G3/4"	N/A	0-50MPa
MGP43	4 in 4 out	G3/8"	N/A	0-50MPa	MGP47	4 in 4 out	G7/8"	N/A	0-50MPa

Size	MGP41	MGP41-ID12	MGP42	MGP42-ID19	MGP43	MGP43-ID19	MGP44	MGP44-ID19	MGP46	MGP47
A	7.14mm	7.14mm	7.14mm	9.0mm	9.0mm	9.0mm	9.0mm	9.0mm	11.00mm	13.49mm
B	68.28mm	74.60mm	80.95mm	95.25mm	98.43mm	106.35mm	107.95mm	125.4mm	131.75mm	182.55mm
C	53.98mm	60.33mm	69.85mm	82.55mm	82.55mm	92.08mm	92.08mm	104.78mm	114.30mm	152.40mm
D	63.50mm	69.85mm	74.60mm	87.3mm	90.47mm	98.43mm	100.00mm	117.48mm	122.22mm	165.10mm
E	2-015 O-Ring [14.00mm]	2-015 O-Ring [14.00mm]	2-017 O-Ring [17.17mm]	2-017 O-Ring [17.17mm]	2-019 O-Ring [20.35mm]	2-019O-Ring [20.35mm]	2-023 O-Ring [26.70mm]	2-023 O-Ring [26.70mm]	2-026 O-Ring [31.47mm]	2-028 O-Ring [37.77mm]
F	4.0mm	4.0mm	6.4mm	6.4mm	9.5mm	9.5mm	12.7mm	12.7mm	19.05mm	25.40mm
G	26.97mm	33.32mm	34.93mm	44.45mm	38.10mm	47.63mm	44.5mm	57.15mm	53.98mm	76.2mm
H	N/A	12.7mm	N/A	19.05mm	N/A	19.05mm	N/A	19.05mm	N/A	25.4
I	119.3mm	120.3mm	155.4mm	160.7mm	177.3mm	187.2mm	209.5mm	218.2mm	247.1mm	268.4mm
J	50.6mm	51.6mm	58.4mm	63.6mm	66.8mm	67.2mm	75.5mm	81.5mm	86.1mm	111.1mm
K	25.4mm	25.4mm	25.4mm	28.5mm	30.1mm	28.5mm	34.9mm	42.8mm	38.1mm	57.2mm
L	6.35mm	6.35mm	6.35mm	7.92mm	7.92mm	7.92mm	9.53mm	11.10mm	11.10mm	15.88mm
M	47.63mm	55.55mm	60.33mm	69.85mm	66.68mm	76.2mm	79.38mm	92.1mm	95.25mm	117.48mm
N	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	3.18mm	4.75mm	4.75mm	4.75mm	4.75mm
O	44.5mm	46.0mm	55.9mm	63.5mm	65.4mm	72.1mm	74.2mm	88.9mm	87.6mm	133.4mm
P	G1/8"	G1/8"	G1/4"	G1/4"	G3/8"	G3/8"	G1/2"	G1/2"	G3/4"	G1"
Q	14mm	14mm	21.03mm	21.03mm	24.13mm	26.16mm	30.12mm	30.12mm	36.93mm	45.57mm
R	N/A	18.5	N/A	34.90mm	N/A	34.90mm	N/A	34.90mm	N/A	34.90mm
S	N/A	M3x0.5	N/A	M5x0.8	N/A	M5x0.8	N/A	M5x0.8	N/A	M5x0.8
T	M6x1.0	M6x1.0	M6x1.0	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M8x1.25	M12x1.75

# MGP6 (6-in, 6-out, multi-function swivel/fluid slip ring)

## Model description

### MGP6 1-ID12-VC

MCGP: Compact Multi-function Rotary Joint

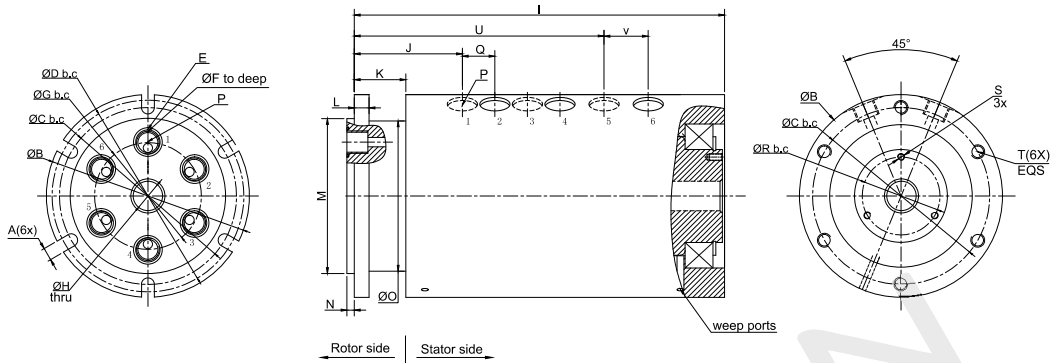
6: 6in 6 out

1: Port size, 1=G1/8", 2=G1/4", 3=G3/8"  
4=G1/2", 5=G5/8", 6=G3/4", 8=G1", 10=G(1+1/4")

Product grade code  
VC General Grade Product Grade  
VD industrial grade  
Default omitted = VC general product level

ID12: Inner hole 12mm

MGP6 Series (Multi-function Swivel) Dimensional Drawing



## List

MGP6 Series List

Model No	Passages	Port size	Inner hole size	Pressure	Model No	Passages	Port size	Inner hole size	Pressure
MGP61-ID12	6 in 6 out	G1/8"	12mm	0-50MPa	MGP64	6 in 6 out	G1/2"	N/A	0-50MPa
MGP62-ID19	6 in 6 out	G1/4"	19mm	0-50MPa	MGP65	6 in 6 out	G5/8"	N/A	0-50MPa
MGP63-ID19	6 in 6 out	G3/8"	19mm	0-50MPa					

Size	MGP61-ID12	MGP62-ID19	MGP63-ID19	MGP64	MGP65
A	7.14mm	9mm	9mm	9.0mm	11.0mm
B	80.95mm	101.60mm	107.95mm	125.4mm	163.50mm
C	66.68mm	85.73mm	92.08mm	104.78mm	142.88mm
D	76.20mm	92.08mm	100.00mm	117.48mm	152.40mm
E	2-015 O-Ring [14.00mm]	2-017 O-Ring [17.17mm]	2-019 O-Ring [20.35mm]	2-023 O-Ring [26.70mm]	2-026 O-Ring [31.47mm]
F	4.0mm	6.4mm	9.53mm	12.7mm	19.05mm
G	39.67mm	33.32mm	53.98mm	61.90mm	79.38mm
H	12.7mm	19.05mm	19.05mm	N/A	19.05
I	164.7mm	207.6mm	227.7mm	261.8mm	336.1mm
J	61.9mm	70.4mm	72.0mm	81.5mm	90.5mm
K	30.1mm	33.3mm	33.3mm	42.8mm	44.5mm
L	7.92mm	7.92mm	7.92mm	11.10mm	12.70mm
M	60.33mm	73.03mm	82.55mm	96.825mm	120.65mm
N	3.18mm	3.18mm	3.18mm	4.75mm	4.75mm
O	55.6mm	69.9mm	72.2mm	94.5mm	114.3mm
P	G1/8"	G1/4"	G3/8"	G1/2"	G3/4"
Q	14mm	17.5mm	20.60mm	24.56mm	37.72mm
R	18.5	34.9	34.9	N/A	34.90mm
S	M3x0.5	M5x0.8	M5x0.8	N/A	M5x0.8
T	M6x1.0	M8x1.25	M8x1.25	M8x1.25	M10x1.25
U	N/A	146.0mm	159.9mm	185.3mm	N/A
V	N/A	23.06mm	23.16mm	30.12mm	N/A

# MGP8 (8-in, 8-out, multi-function swivel/fluid slip ring)

## Model description

### MGP81-ID12-VC

MCGP: Compact Multi-function Rotary Joint

8: 8 in 8 out

1: Port size, 1=G1/8", 2=G1/4", 3=G3/8"  
4=G1/2", 5=G5/8", 6=G3/4", 8=G1", 10=G(1+1/4")

Product grade code

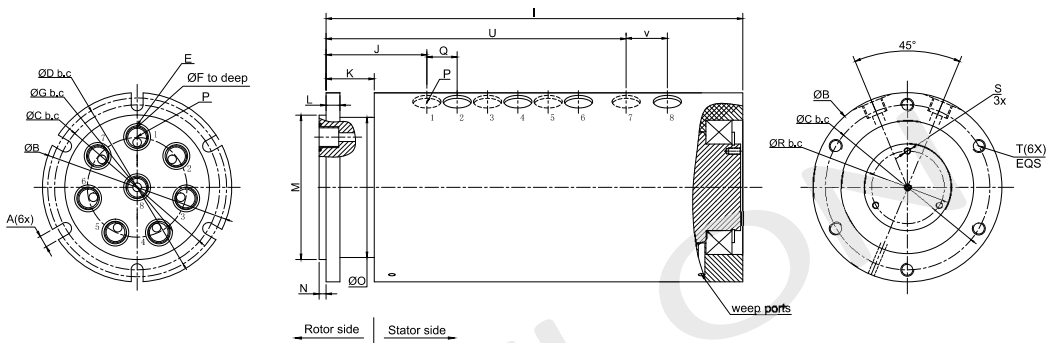
VC General Grade Product Grade

VD industrial grade

Default omitted = VC general product level

ID12: Inner hole 12mm

MGP8 Series (Multi-function Swivel) Dimensional Drawing



## List

MGP8 Series List

Model No	Passages	Port size	Inner hole size	Pressure	Model No	Passages	Port size	Inner hole size	Pressure
MGP81	8 in 8 out	G1/8"	N/A	0-50MPa	MGP83	8 in 8 out	G3/8"	N/A	0-50MPa
MGP82	8 in 8 out	G1/4"	N/A	0-50MPa	MGP84	8 in 8 out	G1/2"	N/A	0-50MPa

Size	MGP81	MGP82	MGP83	MGP84
A	7.14mm	9mm	9mm	9.0mm
B	87.3095mm	107.95mm	125.40mm	142.88mm
C	76.20mm	92.08mm	109.52mm	127.00mm
D	82.55mm	100.008mm	117.4500mm	133.25mm
E	2-015 O-Ring [14.00mm]	2-017 O-Ring [17.17mm]	2-019 O-Ring [20.35mm]	2-023 O-Ring [26.70mm]
F	4.0mm	6.4mm	9.53mm	12.7mm
G	46.02mm	53.98mm	63.50mm	73.03mm
H	N/A	N/A	N/A	N/A
I	190.2mm	244.1mm	227.7mm	316.2mm
J	58.9mm	70.4mm	77.9mm	83.5mm
K	30.1mm	33.3mm	41.3mm	42.8mm
L	7.92mm	7.92mm	9.53mm	11.10mm
M	66.7mm	79.38mm	92.08mm	107.95mm
N	3.18mm	3.18mm	4.75mm	4.75mm
O	64.72mm	74.20mm	91.44mm	101.60mm
P	G1/8"	G1/4"	G3/8"	G1/2"
Q	14mm	17.5mm	20.60mm	24.56mm
R	34.9	34.9	34.9	N/A
S	M5x0.8	M5x0.8	M5x0.8	N/A
T	M6x1.0	M8x1.25	M8x1.25	M8x1.25
U	N/A	118.0mm	207.1mm	236.4mm
V	N/A	23.06mm	23.16mm	30.12mm