

# MSQ Series Rotary Table:



## 1. Ordering Code :

MSQ	B	-	20	A	-	M9N
↑	↑		↑	↑		↑
<b>Model</b>	<b>B:Basic type</b>		<b>Size code</b>	A:with adjustable		<b>Magnet switch type</b>
Rotary table	A:High precision		10~200	angle screw		M9N
with magnet inside				B:with shock absorber		M9B
						M9P

## 2.Characteristics:

- 1) Magnetic ring inside, can be used for magnetic switch.
- 2) Better design for free installation.
- 3) Range for adjustable angle can be 0~190°
- 4) Ball rolling bearing guarantee high precision.
- 5) Different thread type can be offered according to customers' requirements, e.g.:BSP , NPT etc.
- 6) Needn't lubricate on piston rod by oil

## 3.Specification:

Bore(mm)		10	20	30	50	70	100	200
Fluid		Air(non-lube)						
Max.pressure	With adjustment bole	1Mpa(10.2kgf/cm <sup>2</sup> )						
	R:With Shock Absorber	0.6 MPa (6.1kgf/cm <sup>2</sup> )注/Note						
Min.pressure	Basic type	0.1 Mpa(1.0kgf/cm <sup>2</sup> )						
	High precision type	0.2 Mpa		0.1 Mpa				
Ambient and fluid temperature		0~60℃(No freezing)						
Cushion	With adjustment bole	Rubber bumper						
	R:With Shock Absorber	Shock absorber						
Angle adjustment range		0~190℃						
Maximum rotation		190℃						
Piston bore		φ 15	φ 18	φ 21	φ 25	φ 28	φ 32	φ 40
Port size	End ports	M5×0.8			RC1/8"			
	Side ports	M5×0.8						

■ Note:The maximum operating pressure of the actuator is restricted by the maximum allowable thrust of the shock absorber.

## Allowable Kinetic Energy and Rotation Time Adjustment Range:

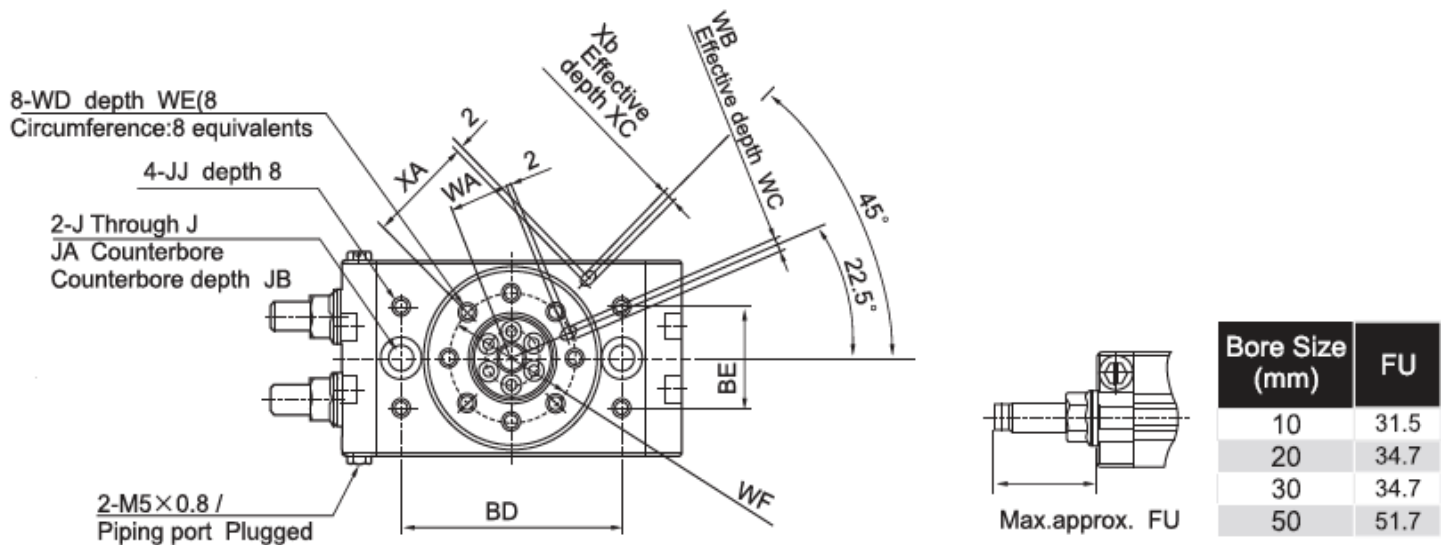
Size	Allowable kinetic energy(mJ)		Rotation time adjustment range for stable operation (s/90°)	
	With adjustment bolt	With internal shock absorber	With adjustment bolt	With internal shock absorber <sup>(Note)</sup>
10mm	7	39	0.2 to 1.0	0.2 to 0.7
20mm	25	116		
30mm	48	116		
50mm	81	294	0.2 to 1.5	0.2 to 1.0
70mm	240	1100		
100mm	320	1600	0.2 to 2.0	
200mm	560	2900	0.2 to 2.5	

■ Note:Be careful if a type with internal absorber is used below the minimum speed,the energy absorption ability will decrease drastically.

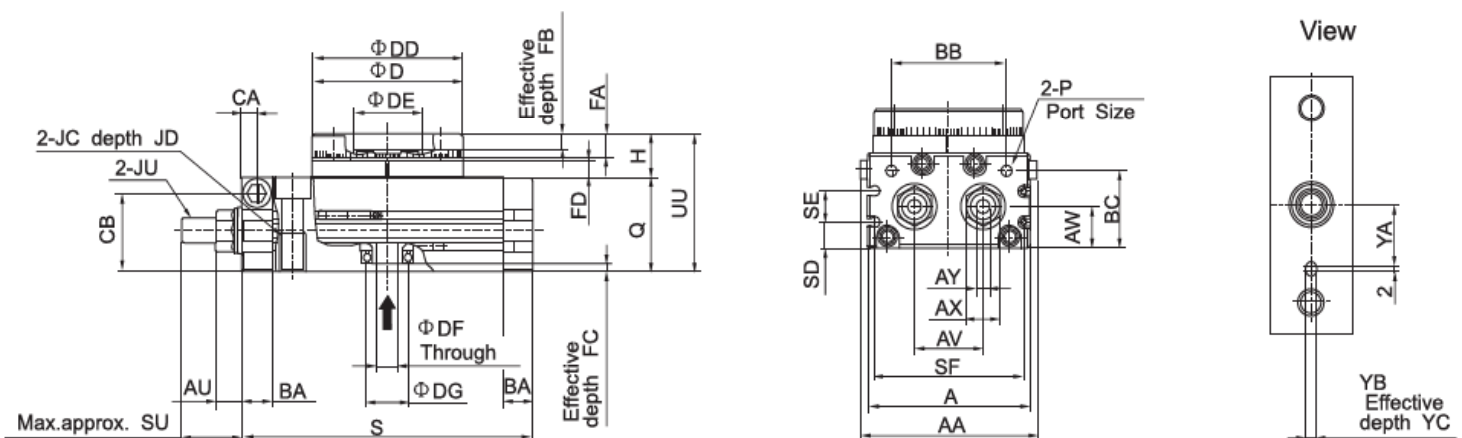
## 4. Overall and Dimension Sheet:

1)  $\Phi 10, \Phi 20, \Phi 30, \Phi 50$

Basic type: MSQB□A



With internal shock absorber type: MSQB□R



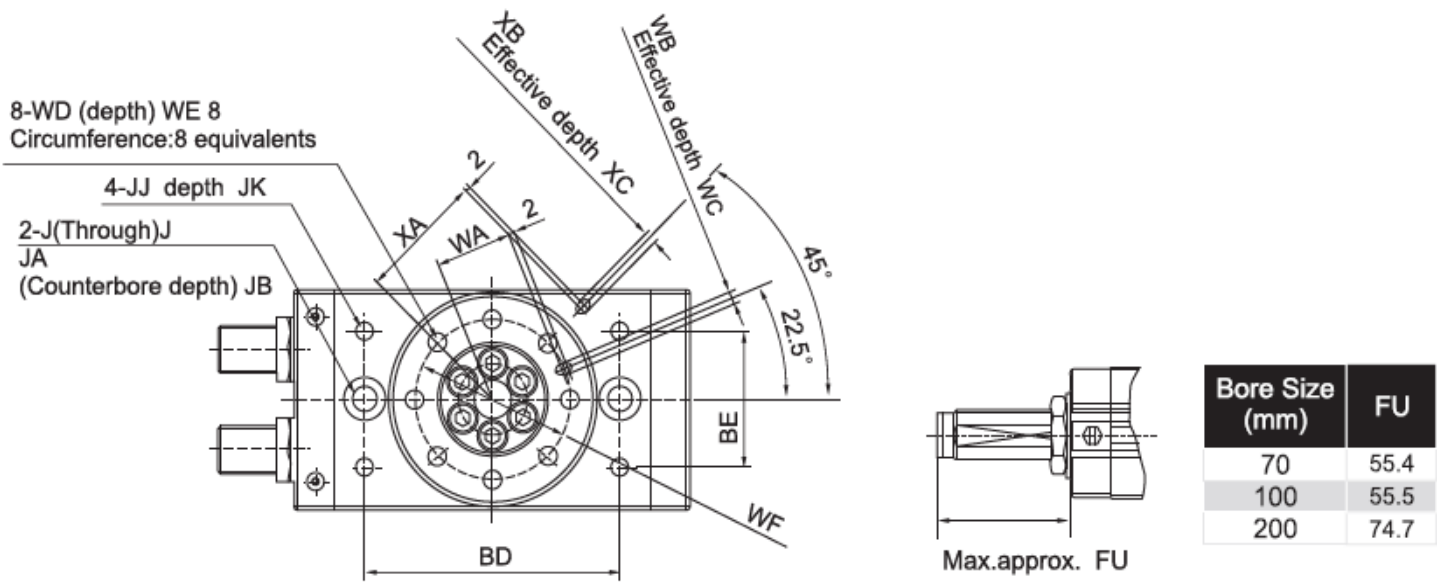
Bore size(mm)	AA	A	AU	AV	AW	AX	AY	BA	BB	BC	BD	BE	CA	CB	D	DD	DE	DF
10	55.4	50	8.6	20	15.5	12	4	9.5	34.5	27.8	60	27	4.5	28.5	46h9	46h9	20H9	5
20	70.8	65	10.6	27.5	16	14	5	12	46	30	67	34	6	30.5	60h9	61h9	28H9	9
30	75.4	70	10.6	29	18.5	14	5	12	50	32	84	37	6.5	33.5	65h9	67h9	32H9	9
50	85.4	80	14	38	22	19	6	15.5	63	37.5	100	50	10	37.5	75h9	77h9	35H9	10

Bore size(mm)	DG	FA	FB	FC	FD	H	J	JA	JB	JC	JD	JJ	JU	P
10	15H9	8	4	3	4.5	13	6.8	11	6.6	M8×1.25	12	M5×0.8	M8×1	M5×0.8
20	17H9	10	6	2.5	6.5	17	8.6	14	8.5	M10×1.5	15	M6×1	M10×1	M5×0.8
30	22H9	10	4.5	3	6.5	17	8.6	14	8.5	M10×1.5	15	M6×1	M10×1	Rc 1/8
50	26H9	12	5	3	7.5	20	10.5	18	10.5	M12×1.75	18	M8×1.25	M14×1.5	Rc 1/8

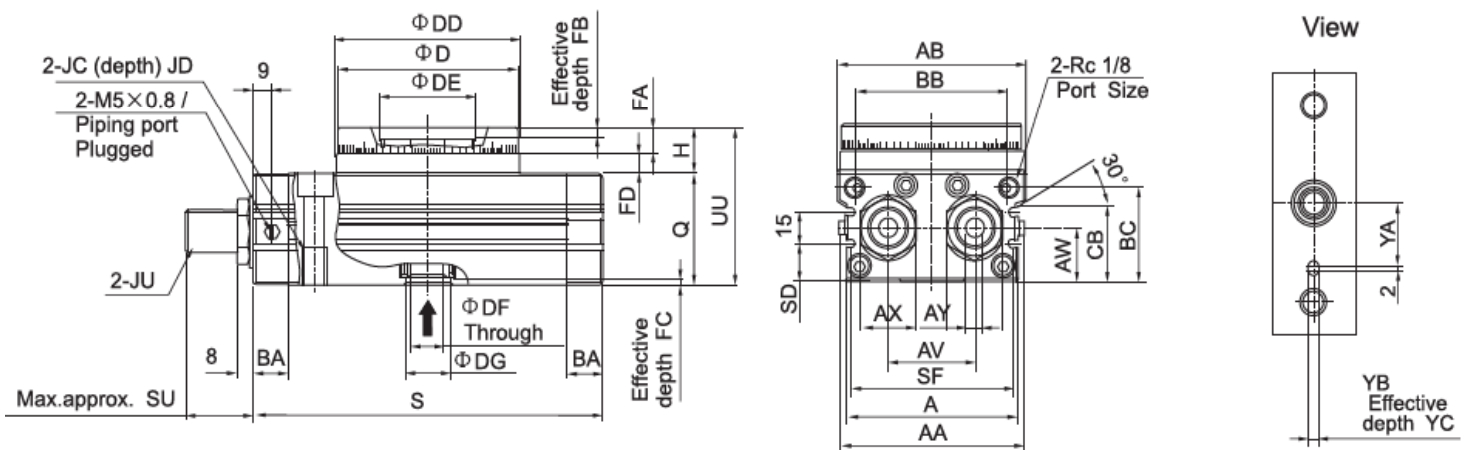
Bore size(mm)	Q	S	SD	SE	SF	SU	UU	WA	WB	WC	WD	WE	WF	XA	XB	XC	YA	YB	YC
10	34	92	9	13	45	17.7	47	15	3H9	3.5	M5×0.8	8	32	27	3H9	3.5	19	3H9	3.5
20	37	117	10	12	60	25	54	20.5	4H9	4.5	M6×1	10	43	36	4H9	4.5	24	4H9	4.5
30	40	127	11.5	14	65	25	57	23	4H9	4.5	M6×1	10	48	39	4H9	4.5	28	4H9	4.5
50	46	152	14.5	15	75	31.4	66	26.5	5H9	5.5	M8×1.25	12	55	45	5H9	5.5	33	5H9	5.5

2)  $\Phi 70, \Phi 100, \Phi 200$

## Basic type: MSQB□A



## With internal shock absorber type: MSQB□R



Bore size(mm)	AA	AB	A	AV	AW	AX	AY	BA	BB	BC	BD	BE	CB	D	DD	DE
70	90	92	84	42	25.5	27	8	17	75	44.5	110	57	36	88h9	90h9	46H9
100	101	102	95	50	29.5	27	8	17	85	50.5	130	66	42	98h9	100h9	56H9
200	119	120	113	60	36.5	36	10	24	103	65.5	150	80	57	116h9	118h9	64H9

Bore size(mm)	DF	DG	FA	FB	FC	FD	H	J	JA	JB	JC	JD	JJ	JK	JU
70	16	22H9	12.5	5	3.5	6	22	10.4	17.5	10.5	M12×1.75	18	M8×1.25	10	M20×1.5
100	19	24H9	14.5	6	3.5	12	27	10.4	17.5	10.5	M12×1.75	18	M8×1.25	10	M20×1.5
200	24	32H9	16.5	9	5.5	15	32	14.2	20	12.5	M16×2	25	M12×1.75	13	M27×1.5

Bore size(mm)	Q	S	SD	SF	SU	UU	WA	WB	WC	WD	WE	WF	XA	XB	XC	YA	YB	YC
70	53	170	18	79	34.2	75	32.5	5H9	5.5	M8×1.25	12.5	67	54	5H9	3.5	39	5H9	3.5
100	59	189	22	90	34.3	86	37.5	6H9	6.5	M10×1.55	14.5	77	59	6H9	4.5	49	6H9	4.5
200	74	240	29	108	40.2	106	44	8H9	8.5	M12×1.75	16.5	90	69	8H9	4.5	54	8H9	6.5