

Made to Order Common Specifications: -XC69: MGP Series with Shock Absorber



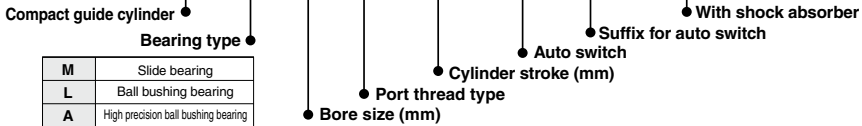
Symbol
-XC69

51 MGP Series with Shock Absorber

Applicable Series

Series	Description	Model	Action	Note	Vol. no. (for std model)
MGP	Compact guide cylinder	MGPM	Double acting		②-2 From P. 432
		MGPL	Double acting		
		MGPA	Double acting		

How to Order **MGP M 32** - **50** - **Z73** - **XC69**



M	Slide bearing
L	Ball bushing bearing
A	High precision ball bushing bearing

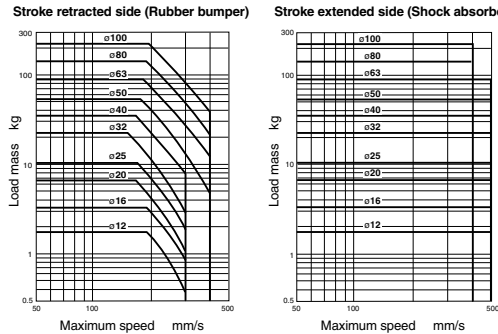
Specifications of Extension Adjusting Mechanism

Bore size (mm)	12, 16	20, 25	32, 40	50, 63	80, 100
Shock absorber model	RB0806	RB1007	RB1412	RB2015	RB2725
Maximum energy absorption (J)	2.94	5.88	19.6	58.8	147
Stroke adjustment range (mm)	0 to -15		0 to -25		0 to -30
Piston speed	Refer to the graph below.				

Soft type RJ series type (-XB22) is also available.
For details, refer to -XB22.

Allowable Kinetic Energy

Load mass and cylinder speed should be observed within the range given in the graph below.



The shock absorber service life is different from that of the MGP cylinder. Refer to the RB series Specific Product Precautions for the replacement period.

Mounting

Do not allow hands or fingers near the cylinder during its operation.

If finger, etc. were to get caught between shock absorber and body, it might damage on the human body and the peripheral equipment. Take protective measures by mounting a protective cover, etc. as necessary.

Basically, avoid bottom-mounting a cylinder.

Mounting space is limited owing to the guide rod and the end plate, etc. Mount a cylinder by the top mounting or side mounting.

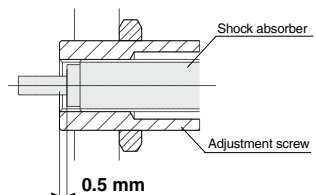
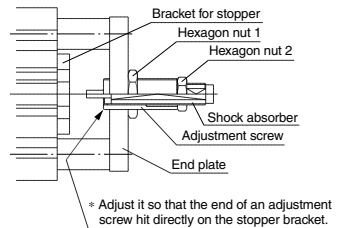
Adjustment

1. How to adjust an adjustment screw (Stroke adjustment)

Loosen only the hexagon nut 1, then turn the adjustment screw to adjust the stroke. After adjusting, lock it with the hexagon nut 1. Fix it at the position ejected from the end plate, so that the end face of an adjustment screw could hit the bracket for stopper directly. (Refer to the figure right above.)

2. How to replace shock absorbers

Loosen hexagon nut 2, and turn a shock absorber counterclockwise for removal. For installing a new shock absorber, fix it at the position that the end face of an adjustment screw sticks out by 0.5 mm from a shock absorber. (Refer to the figure on the right.) After adjusting the position of shock absorber, be sure to secure with hexagon nut 2.



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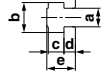


51 MGP Series with Shock Absorber

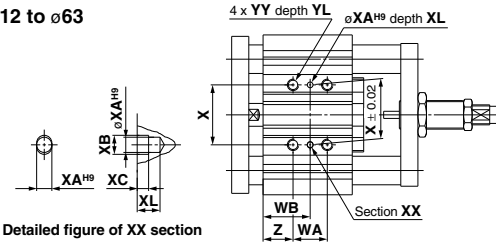
Dimensions

ø12 to ø63

T-slot dimensions



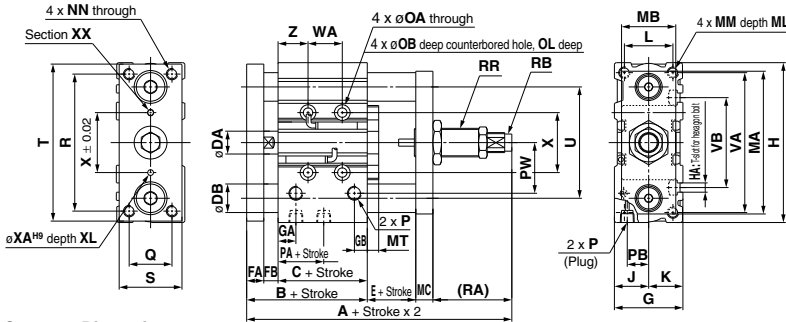
Bore size (mm)	T-slot dimensions					
	a	b	c	d	e	f
12	4.4	7.4	3.7	2	2	6.2
16	4.4	7.4	3.7	2.5	6.7	
20	5.4	8.4	4.5	2.8	7.8	
25	5.4	8.4	4.5	3	8.2	
32	6.5	10.5	5.5	3.5	9.5	
40	6.5	10.5	5.5	4	11	
50	8.5	13.5	7.5	4.5	13.5	
63	11	17.8	10	7	18.5	



Detailed figure of XX section

Bottom view

For ø12, ø16



Common Dimensions

Bore size (mm)	Standard stroke (mm)	DB																							
		A	B	CA	DA	Slide		E	FA	FB	G	GA	GB	H	HA	J	K	L	MA	MB	MC	MT	MM	ML	NN
12	10, 20, 30, 40, 50, 75, 100	90	42	29	6	8	6	7	8	5	26	11	7.5	58	M4	13	13	18	51	19	8	6	M4 x 0.7	10	M4 x 0.7
	125, 150, 175, 200, 250	94	46	33	8	10	8	7	8	5	30	11	8	64	M4	15	15	22	58	19	8	6	M5 x 0.8	12	M5 x 0.8
20	20, 30, 40, 50, 75, 100, 125, 150	109	53	37	10	12	10	9	10	6	36	10.5	8.5	83	M5	18	18	24	68	30	10	8	M5 x 0.8	13	M5 x 0.8
	175, 200, 250, 300, 350, 400	109.5	53.5	37.5	12	16	13	9	10	6	42	11.5	9	93	M5	21	21	30	82	30	10	8	M6 x 1.0	15	M6 x 1.0
25	25, 50, 75, 100	135.5	59.5	37.5	16	20	16	9	12	10	48	12.5	9	112	M6	24	24	34	100	38	12	8	M8 x 1.25	20	M8 x 1.25
	142, 66	142	66	44	16	20	16	9	12	10	54	14	10	120	M6	27	27	40	108	38	12	8	M8 x 1.25	20	M8 x 1.25
40	125, 150, 175, 200	155	72	44	20	25	20	10	16	12	64	14	11	148	M8	32	32	46	139	60	16	9	M10 x 1.5	22	M10 x 1.5
	250, 300, 350, 400	160	77	49	20	25	20	10	16	12	78	16.5	13.5	162	M10	39	39	58	153	60	16	9	M10 x 1.5	22	M10 x 1.5

Bore size (mm)	OA	OB	OL	P																								
				Nil			N	TF	PA	PB	PW	Q	R	RA	RB	RR	S	T	U	VA	VB	X	XA	XB	XC	XL	YY	YL
12	4.3	8	4.5	M5 x 0.8	—	—	—	13	8	18	14	48	33	RB0806	M12 x 1.5	22	56	41	50	37	3	3.5	3	6	M5 x 0.8	10	5	
16	4.3	8	4.5	M5 x 0.8	—	—	—	15	10	19	16	54	33	RB0806	M12 x 1.5	25	62	46	56	38	24	3	3.5	3	6	M5 x 0.8	10	5
20	5.4	9.5	5.5	Rc1/8	NPT1/8	G1/8	12.5	10.5	25	18	70	37	RB1007	M14 x 1.5	30	81	54	72	44	28	3	3.5	3	6	M6 x 1.0	12	17	
25	5.4	9.5	5.5	Rc1/8	NPT1/8	G1/8	12.5	13.5	30	26	78	37	RB1007	M14 x 1.5	38	91	64	82	50	34	4	4.5	3	6	M6 x 1.0	12	17	
32	6.6	11	7.5	Rc1/8	NPT1/8	G1/8	7	15	35.5	30	96	55	RB1412	M20 x 1.5	44	110	78	98	63	42	4	4.5	3	6	M8 x 1.25	16	21	
40	6.6	11	7.5	Rc1/8	NPT1/8	G1/8	13	18	39.5	30	104	55	RB1412	M20 x 1.5	44	118	86	106	72	50	4	4.5	3	6	M8 x 1.25	16	22	
50	8.6	14	9	Rc1/4	NPT1/4	G1/4	9	21.5	47	40	130	57	RB2015	M27 x 1.5	60	146	110	130	92	66	5	6	4	8	M10 x 1.5	20	24	
63	8.6	14	9	Rc1/4	NPT1/4	G1/4	14	28	58	50	130	57	RB2015	M27 x 1.5	70	158	124	142	110	80	5	6	4	8	M10 x 1.5	20	24	

MGP12 to 25 WA, WB Dimensions (mm)

Bore size (mm)	WA					WB				
	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st	30 st or less	Over 30 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st
12	20	40	110	200	—	15	25	60	105	—
16	24	44	110	200	—	17	27	60	105	—
20	24	44	120	200	300	29	39	77	117	167
25	24	44	120	200	300	29	39	77	117	167

MGP32 to 63 WA, WB Dimensions (mm)

Bore size (mm)	WA					WB				
	25 st or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st	25 st or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st
32	24	48	124	200	300	33	45	83	121	171
40	24	48	124	200	300	34	46	84	122	172
50	24	48	124	200	300	36	48	86	124	174
63	28	52	128	200	300	38	50	88	124	174

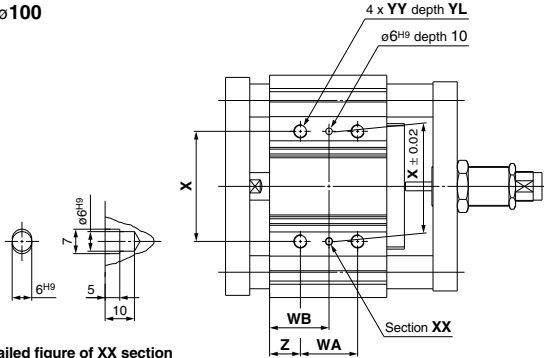
Note) Refer to the Manufacture of Intermediate Strokes in Best Pneumatics No. 2-2 for intermediate strokes excluding the standard strokes.

• Bore size 12 and 16: M5 x 0.8 port only

• Bore size over 20: Rc, NPT or G ports selectable (Refer to Best Pneumatics No. 2-2)

Dimensions

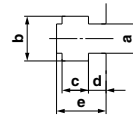
ø80 to ø100



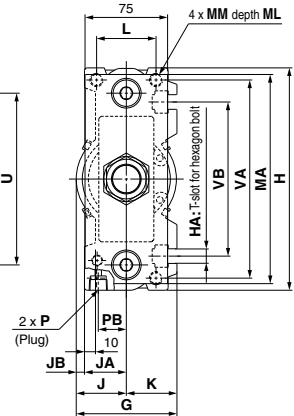
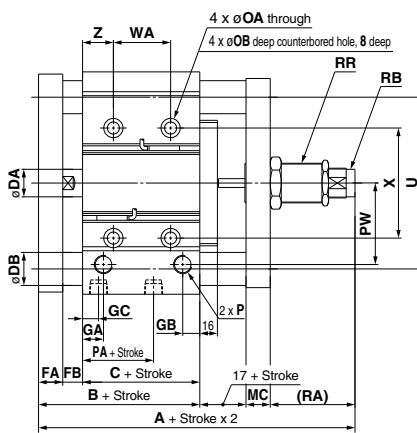
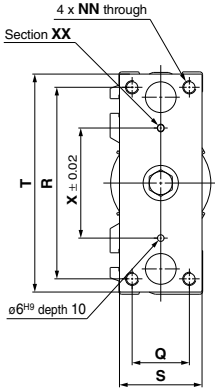
Detailed figure of XX section

Bottom view

T-slot dimensions



Bore size (mm)	T-slot dimensions (mm)				
	a	b	c	d	e
80	13.3	20.3	12	8	22.5
100	15.3	23.3	13.5	10	30



Common Dimensions

Bore size (mm)	Standard stroke (mm)	A	B	C	DA	DB		FA	FB	G	GA	GB	GC	H	HA	J	JA	JB	K	L	MA	MC
						Slide	Ball bushing															
80	25, 50, 75, 100, 125, 150, 175	212.5	96.5	56.5	25	30	25	22	18	91.5	19	15.5	14.5	202	M12	45.5	38	7.5	46	54	190	22
100	200, 250, 300, 350, 400	232	116	66	30	36	30	25	25	111.5	23	19	18	240	M14	55.5	45	10.5	56	62	228	25

Bore size (mm)	MM	ML	NN	OA	OB	P			PA	PB	PW	Q	R	RA	RB	RR	S	T	U	VA	VB
						Nil	N	TF													
80	M12 x 1.75	25	M12 x 1.75	10.6	17.5	Rc3/8	NPT3/8	G3/8	14.5	25.5	74	52	174	77	RB2725	M36 x 1.5	75	198	156	180	140
100	M14 x 2.0	31	M14 x 2.0	12.5	20	Rc3/8	NPT3/8	G3/8	17.5	32.5	89	64	210	74	RB2725	M36 x 1.5	90	236	188	210	166

Bore size (mm)	WA					WB					X	YY	YL	Z
	25 st or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st	25 st or less	Over 25 st to 100 st	Over 100 st to 200 st	Over 200 st to 300 st	Over 300 st				
80	28	52	128	200	300	42	54	92	128	178	100	M12 x 1.75	24	28
100	48	72	148	220	320	35	47	85	121	171	124	M14 x 2.0	28	11

Note) Refer to the Manufacture of Intermediate Strokes in Best Pneumatics No. 2-2 for the intermediate strokes excluding the standard strokes.

• Rc, NPT or G ports selectable (Refer to Best Pneumatics No. 2-2.)

