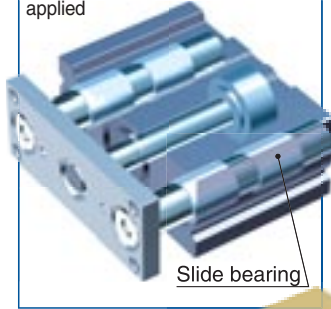


Compact Guide Cylinder (Basic type)

3 types of bearing can be selected.

Slide bearing Series MGPM

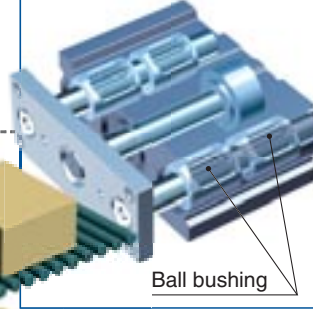
Suitable for lateral load applications such as a stopper where shock is applied



Slide bearing

Ball bushing Series MGPL

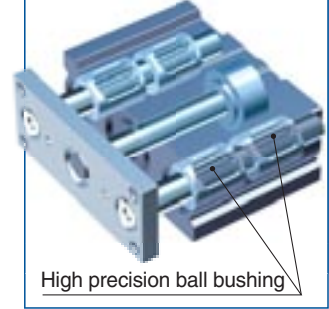
Smooth operation suitable for pusher and lifter



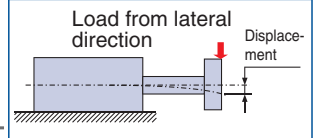
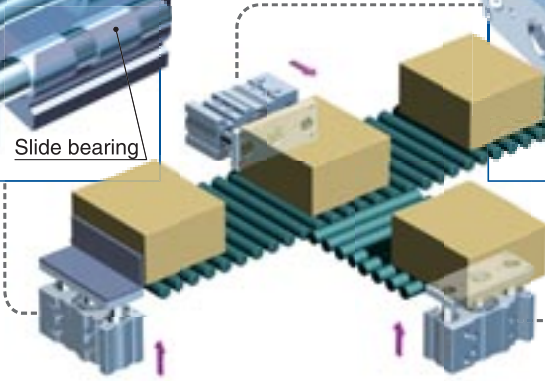
Ball bushing

High precision ball bushing Series MGPA

Suitable for minimizing plate displacement



High precision ball bushing

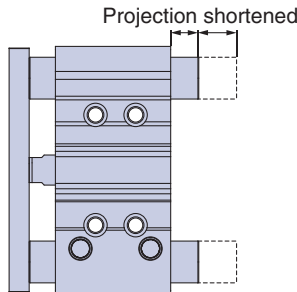


Weight reduced

Bore size	Reduction rate (%)	Weight lbs (kg)
ø12	11	0.55 (0.25)
ø16	3	0.82 (0.37)
ø20	12	1.30 (0.59)
ø25	12	3.61 (0.84)
ø32	17	3.10 (1.41)
ø40	16	3.61 (1.64)
ø50	17	6.15 (2.79)
ø63	17	7.67 (3.48)
ø80	17	11.9 (5.41)
ø100	13	20.1 (9.12)

* Compared with slide bearing type, ø12 to ø25-20 stroke
* Compared with slide bearing type, ø32 to ø100-25 stroke

Guide rod shortened



Bore size	Guide rod (mm)	
	Shortened by	New dimension
ø32	22	15.5
ø40	22	9
ø50	18	16.5
ø63	18	11.5
ø80	10.5	8
ø100	10.5	10.5

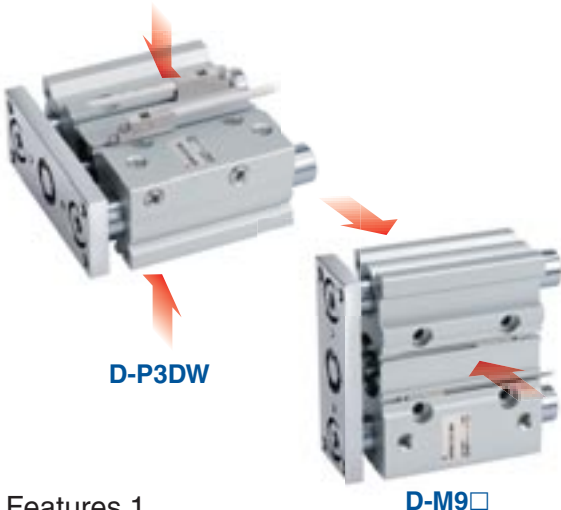
* Compared with slide bearing type, 25 stroke (ø32 to ø100)
(No projection for ø12 to ø25-25 stroke)

Performance, strength (rigidity), and mounting dimensions are equivalent to the conventional MGP series.

Small auto switches or magnetic field resistant auto switches can be mounted on 2 surfaces.

- D-M9□
- D-A9□
- D-P3DW

* The D-Y7 and D-Z7 auto switches are not mountable.



4 types of mounting are possible.

Easy positioning
Knock pin holes provided on each mounting surface

1. Top mounting

2. Side mounting

4. Bottom mounting

3. T-slot side mounting

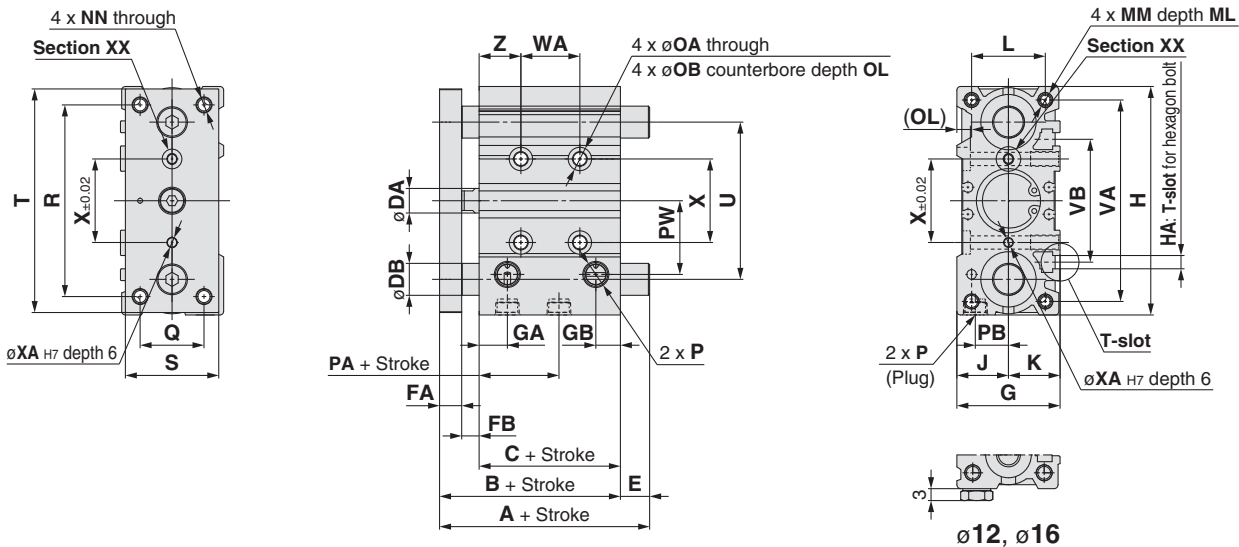
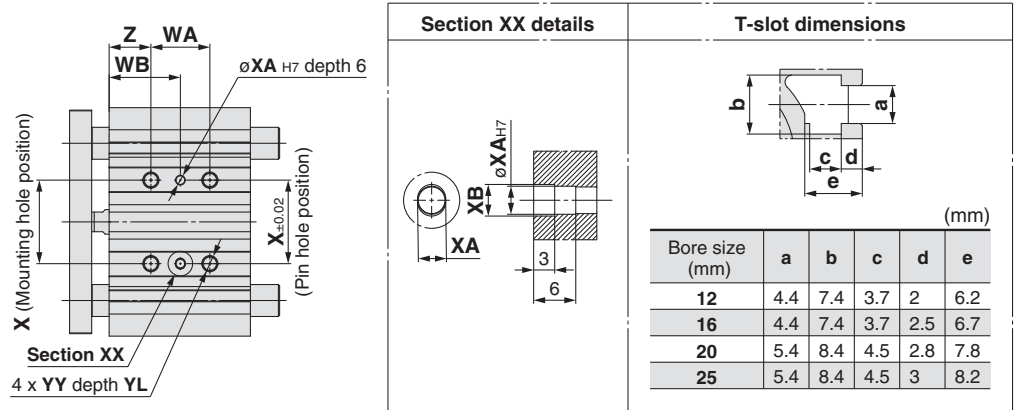
Easy adjustment of workpiece and cylinder mounting

Piping is possible from 2 directions.

1. Top ported

2. Side ported

ø12 to ø25/MGPM, MGPL, MGPA



- * The use of a slot (width XA, length XB, depth 3) allows for a relaxed pin pitch tolerance, with the pin hole (øXA_{H7}, depth 6) as the reference, without affecting mounting accuracy.
- * For intermediate strokes other than standard strokes, refer to "Manufacture of Intermediate Strokes" on page 4.
- * For bore sizes with ø12 and ø16, only M5 x 0.8 is available.
- * Choice of Rc, NPT, G port is available for bore sizes with ø20 or more. (Refer to page 3.)

MGPM, MGPL, MGPA Common Dimensions

Bore size (mm)	Standard stroke (mm)	B	C	DA	FA	FB	G	GA	GB	H	HA	J	K	L	MM	ML	NN	OA	OB	OL	P		
																					Nil	TN	TF
12	10,20,30,40,50,75,100	42	29	6	7	6	26	10	7	58	M4	13	13	18	M4 x 0.7	10	M4 x 0.7	4.3	8	4.5	M5 x 0.8	—	—
16	125,150,175,200,250	46	33	8	7	6	30	10.5	7.5	64	M4	15	15	22	M5 x 0.8	12	M5 x 0.8	4.3	8	4.5	M5 x 0.8	—	—
20	20,30,40,50,75,100,125,150	53	37	10	8	8	36	11.5	9	83	M5	18	18	24	M5 x 0.8	13	M5 x 0.8	5.4	9.5	5.5	Rc1/8	NPT1/8	G1/8
25	175,200,250,300,350,400	53.5	37.5	10	9	7	42	11.5	10	93	M5	21	21	30	M6 x 1.0	15	M6 x 1.0	5.4	9.5	5.5	Rc1/8	NPT1/8	G1/8

Bore size (mm)	PA	PB	PW	Q	R	S	T	U	VA	VB	WA				WB				X	XA	XB	YY	YL	Z		
											30 st or less	Over 30 st 100 st or less	Over 100 st 200 st or less	Over 200 st 300 st or less	30 st or less	Over 30 st 100 st or less	Over 100 st 200 st or less	Over 200 st 300 st or less								
12	13	8	18	14	48	22	56	41	50	37	20	40	110	200	—	15	25	60	105	—	23	3	3.5	M5 x 0.8	10	5
16	14.5	10	19	16	54	25	62	46	56	38	24	44	110	200	—	17	27	60	105	—	24	3	3.5	M5 x 0.8	10	5
20	13.5	10.5	25	18	70	30	81	54	72	44	24	44	120	200	300	29	39	77	117	167	28	3	3.5	M6 x 1.0	12	17
25	12.5	13.5	30	26	78	38	91	64	82	50	24	44	120	200	300	29	39	77	117	167	34	4	4.5	M6 x 1.0	12	17

MGPM (Slide bearing) A, DB, E Dimensions

Bore size (mm)	A				DB	E			
	50 st or less	Over 50 st 100 st or less	Over 100 st 200 st or less	Over 200 st		50 st or less	Over 50 st 100 st or less	Over 100 st 200 st or less	Over 200 st
12	42	60.5	82.5	82.5	8	0	18.5	40.5	40.5
16	46	64.5	92.5	92.5	10	0	18.5	46.5	46.5
20	53	77.5	110	110	12	0	24.5	24.5	57
25	53.5	77.5	109.5	109.5	16	0	24	24	56

MGPL (Ball bushing)

MGPA (High precision ball bushing) A, DB, E Dimensions

Bore size (mm)	A				DB	E			
	30 st or less	Over 30 st 100 st or less	Over 100 st 200 st or less	Over 200 st		30 st or less	Over 30 st 100 st or less	Over 100 st 200 st or less	Over 200 st
12	43	55	84.5	84.5	6	1	13	42.5	42.5
16	49	65	94.5	94.5	8	3	19	48.5	48.5
20	59	76	100	117.5	10	6	23	47	64.5
25	65.5	81.5	100.5	117.5	13	12	28	47	64