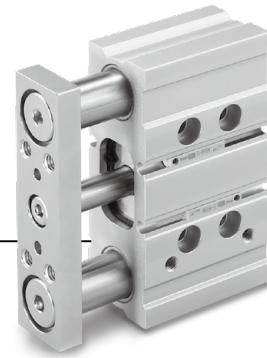


# Compact Guide Cylinder/ Rectangular Piston Type



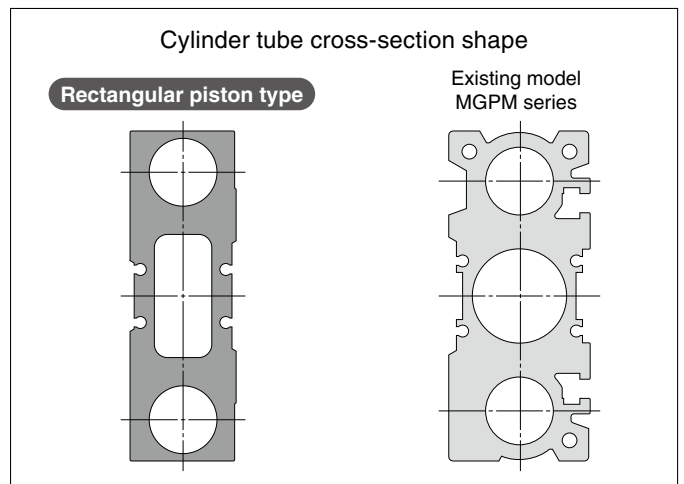
RoHS

Size: 25, 32

Now more lightweight and compact due to the adoption of a rectangular piston

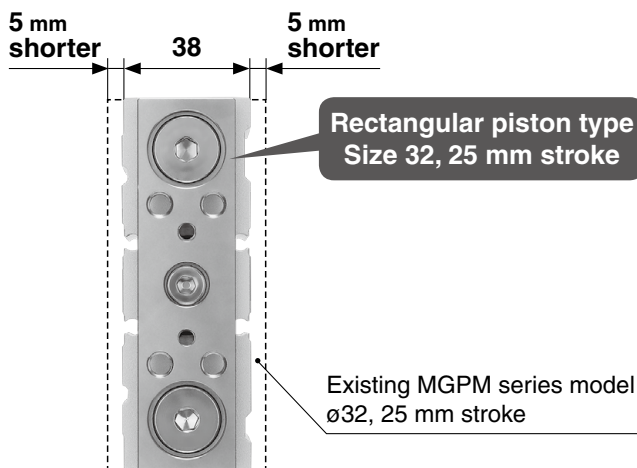
Width	<b>21%<sup>*1</sup> reduction</b> 48 mm → 38 mm
Weight	<b>37%<sup>*2</sup> reduction</b> 3.29 kg → 2.07 kg
Overall length	<b>7%<sup>*1</sup> reduction</b> 100 mm → 93 mm

■ The allowable lateral load and the allowable kinetic energy are the same as those of the existing MGP series model.

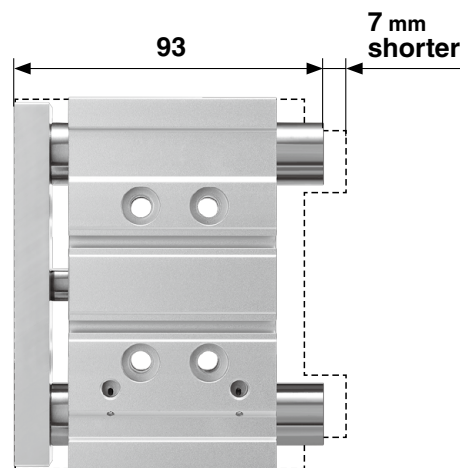


\*1 Compared with the existing MGP series model, ø32, 25 mm stroke  
\*2 Compared with the existing MGP series model, ø32, 150 mm stroke

## Shortened width

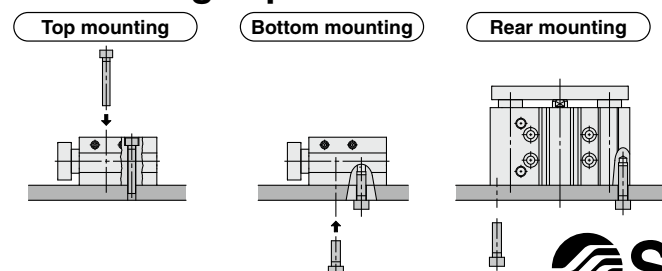


## Shortened overall length



■ The allowable rotational torque of the plate and the non-rotating accuracy are the same as those of the existing MGP series model.

■ Mounting is possible from 3 directions.



# MGPM-X3159



# MGPM-X3159



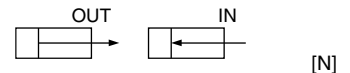
## Specifications

Size	25 (Equiv. $\phi 25$ piston area)	32 (Equiv. $\phi 32$ piston area)
Action	Double acting	
Fluid	Air	
Proof pressure	1.05 MPa	
Max. operating pressure	0.7 MPa	
Min. operating pressure	0.1 MPa	
Ambient and fluid temperatures	5 to 60°C	
Piston speed	50 to 500 mm/s	
Cushion	Rubber bumper on both ends	
Lubrication	Not required (Non-lube)	
Stroke length tolerance	$^{+1.5}_0$ mm	
Allowable kinetic energy	0.18 J	0.29 J
Allowable lateral load (at 50 stroke)	5.0 kg	16.7 kg

## Standard Strokes

Size	Standard stroke [mm]
25	20, 30, 50, 100, 150
32	25, 50, 75, 100, 150

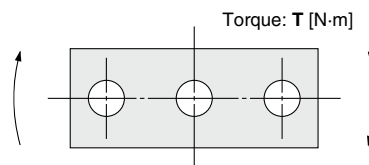
## Theoretical Output



Size	Rod size [mm]	Operating direction	Piston area [mm <sup>2</sup> ]	Operating pressure [MPa]									
				0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
25	10	OUT	491	98	147	196	245	295	344	393	442	491	
		IN	412	82	124	165	206	247	289	330	371	412	
32	14	OUT	804	161	241	322	402	483	563	643	724	804	
		IN	650	130	195	260	325	390	455	520	585	650	

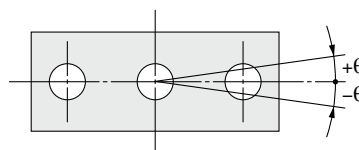
\* Theoretical output [N] = Pressure [MPa] x Piston area [mm<sup>2</sup>]

## Allowable Rotational Torque of Plate



Size	Stroke [mm]						
	20	25	30	50	75	100	150
25	1.76	—	1.55	1.25	—	2.57	2.02
32	—	6.35	—	5.13	5.69	4.97	3.98

## Non-rotating Accuracy of Plate



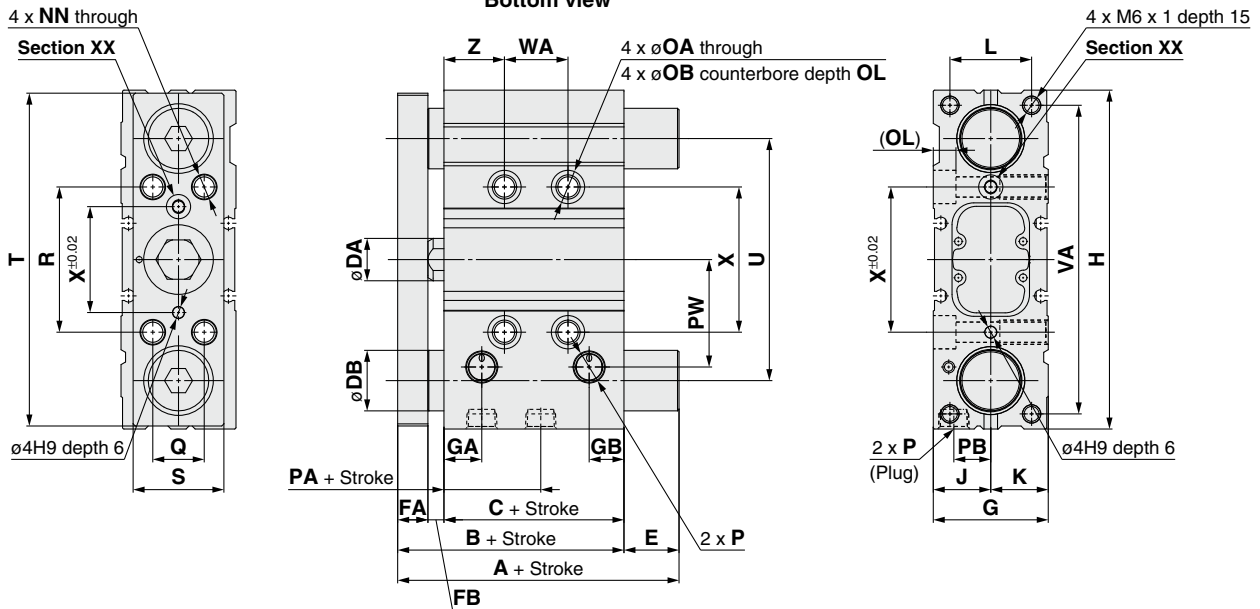
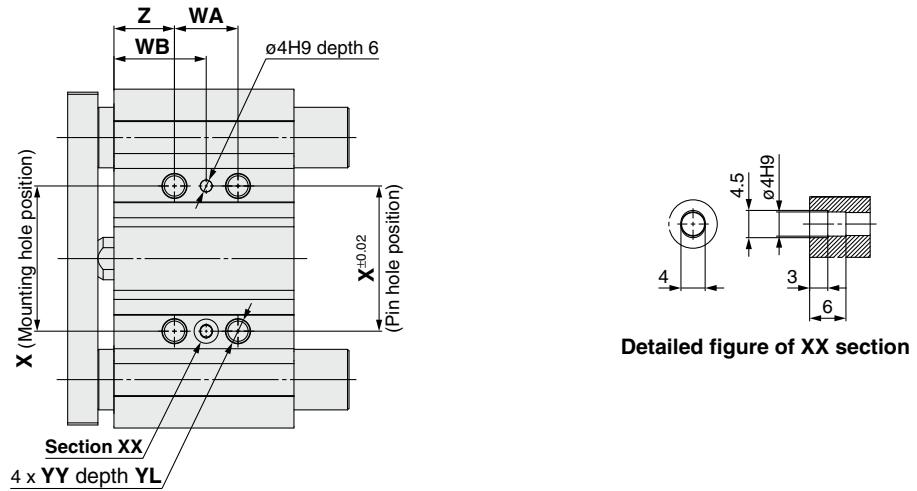
Non-rotating accuracy  $\theta$  when retracted and when no load is applied should be not more than the values shown in the table.

Size	Non-rotating accuracy $\theta$
25	$\pm 0.06^\circ$
32	$\pm 0.05^\circ$

# Compact Guide Cylinder/Rectangular Piston Type **MGPM-X3159**

## Dimensions

MGPM□-□-X3159



[mm]

Size	Standard stroke	A		B	C	DA	DB	E		FA	FB	G	GA	GB	H	J	K
		50 st or less	Over 50 st or less					50 st or less	Over 50 st or less								
25	20, 30, 50, 100, 150	46	75.5	46	31.7	10	16	0	29.5	9	5.3	32	10.5	9.2	93	16	16
32	25, 50, 75, 100, 150	68	86.5	49.8	34.5	14	20	18.2	36.7	10	5.3	38	12.5	11.5	112	19	19

Size	L	NN	OA	OB	OL	P	PA	PB	PW	Q	R	S	T	U	VA	X	YY	YL	Z
25	22	M6 x 1	5.4	9.5	5.5	M5 x 0.8	9	11	26	13	39	25	91	66	84	39	M6 x 1	12	18
32	27	M8 x 1.25	6.7	11	7.5	Rc1/8	7	12	35.5	17	48	30	110	80	102	48	M8 x 1.25	16	20

Size	WA			WB		
	30 st or less	Over 30 st or less	Over 100 st or less	30 st or less	Over 30 st or less	Over 100 st or less
25	17	37	113	26.5	36.5	74.5

Size	WA				WB			
	25 st or less	Over 25 st or less	Over 50 st or less	Over 100 st or less	25 st or less	Over 25 st or less	Over 50 st or less	Over 100 st or less
32	21	45	49	125	30.5	42	44	82

**⚠ Safety Instructions** Be sure to read the "Handling Precautions for SMC Products" (M-E03-3) and the "MGP Series Specific Product Precautions" before use.

## SMC Corporation

Akihabara UDX 15F,  
4-14-1, Sotokanda, Chiyoda-ku, Tokyo 101-0021, JAPAN  
Phone: 03-5207-8249 Fax: 03-5298-5362  
<https://www.smcworld.com>  
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