

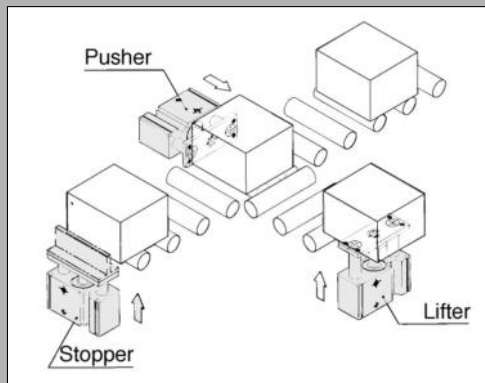
Compact Guide Cylinder Series **MGQ**

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

An integrated guide style air cylinder that achieves lateral load resistance and high non-rotating accuracy.

Space saving cylinder.

Suitable for conveyor line stoppers and lifters.



2 kinds of bearings

Slide bearing

Strength against side load is more than 2 times as compared conventional stopper cylinder.

Ball bushing bearing

Smooth operation is suitable for pushing, lifter and applications where high precision is required.

Detectable operating position

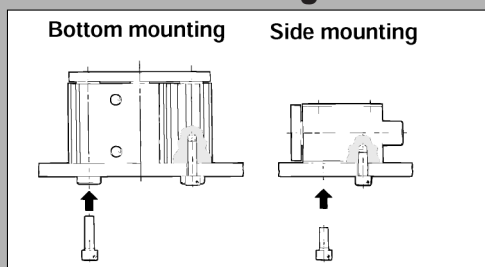
All models have built-in magnets for auto switches.



High non-rotating accuracy

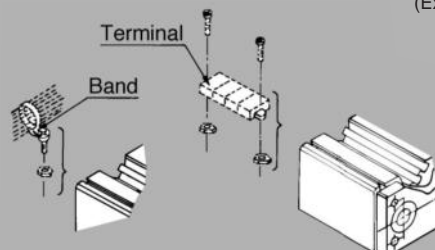
Bore size	Non-rotating accuracy (θ)	
	MGQM	MGQL
12		
16	±0.08°	±0.10°
20		
25	±0.07°	±0.09°
32		
40	±0.06°	±0.08°
50		
63	±0.05°	±0.06°
80		
100	±0.04°	±0.05°

Mounting: Bottom mounting and side mounting



Auto switches, lead wires and terminals can be fixed in the groove of cylinder body.

(Except for ø12, ø16, ø20, ø25)

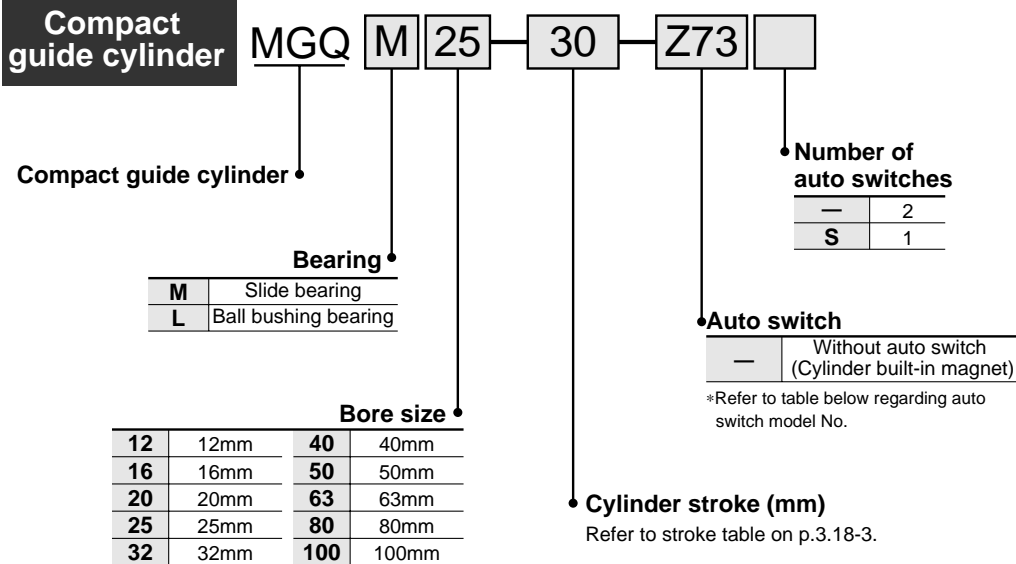


- CL
- MLGC
- CNA
- CB
- CV/MVG
- CXW
- CXS
- CXT
- MX
- MXU
- MXS
- MXQ
- MXF
- MXW
- MPX
- MG
- MGP
- MGQ**
- MGG
- MGC
- MGF
- CY1
- MY1

Compact Guide Cylinder Series **MGQ**

ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100

How to Order



Applicable Auto Switches/Refer to p.5.3-2 for further information on auto switch.

Style	Special function	Electrical entry	Indicator	Wiring (Output)	Load voltage		Auto switch model		Lead wire*(mm)			Applicable load		
					DC	AC	Electrical entry		0.5 (-)	3 (L)	5 (Z)			
							Perpendicular	In-line						
Reed switch	—	Grommet	No	3 wire	—	5V	—	Z76	●	●	—	IC circuit	—	
				2 wire	24V	—	100V	—	Z73	●	●	●	—	Relay
					5V, 12V	≤100V	—	Z80	●	●	—	IC circuit	PLC	
Solid state switch	Diagnostic indicator (2 color indicator)	Grommet	Yes	3 wire (NPN)	24V	5V, 12V	—	Y69A	Y59A	●	●	○	IC circuit	Relay PLC
				3 wire (PNP)				Y7PV	Y7P	●	●	○	—	
				2 wire				Y69B	Y59B	●	●	○	—	
				3 wire (NPN)				Y7NWV	Y7NW	●	●	○	IC circuit	
				3 wire (PNP)				Y7PWV	Y7PW	●	●	○	—	
				2 wire				Y7BWV	Y7BW	●	●	○	—	

*Lead wire
0.5m..... (Example) Y69B
3m.....L (Example) Y69BL
5m.....Z (Example) Y69BZ

*Solid state switches marked with "○" is manufactured upon receipt of order.

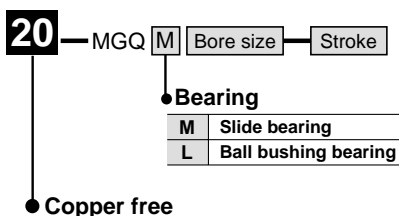
Copper Free

To eliminate influences of copper ions or halogen ions during CRT manufacturing processes, copper and fluorine materials are not used as component parts.

Specifications

Applicable series	MGQM	MGQL
Bearing	Slide	Ball bushing
Bore size (mm)	12, 16, 20, 25, 32 40, 50, 63, 80, 100	

How to Order



Compact Guide Cylinder *Series MGQ*

An integrated guide style air cylinder that achieves lateral load resistance and high non-rotating accuracy. Space saving cylinder. Suitable for conveyor line stoppers and lifters. 2 kinds of bearing

Slide bearing/Ball bushing bearing



Order Made Made to Order

Refer to p.5.4-1 regarding made to order specifications for series MGQ.

Specifications

Bearing	Slide bearing		Ball bushing bearing
Model	MGQM		MGQL
Bore size (mm)	ø12, ø16, ø20, ø25, ø32, ø40, ø50, ø63, ø80, ø100		
Operation	Double acting		
Fluid	Air		
Proof pressure	1.5MPa		
Max. operating pressure	1.0MPa		
Min. operating pressure	ø12, ø16	0.12MPa	
	ø20 to ø100	0.1MPa	
Ambient and fluid temperature	-10 to +60°C		
Piston speed	ø12 to ø63	50 to 500mm/s	
	ø80, ø100	50 to 400mm/s	
Cushion	Rubber bumper at both ends		
Lubrication	Not required		
Stroke tolerance	+1 ₀ ⁵ mm		
Applicable auto switch	Reed switch/D-Z7, Z8		
	Solid state switch/D-Y5, Y6, Y7		

Standard Stroke

Model	Standard stroke (mm)	Intermediate stroke (mm)
MGQ ^M _L 12, 16	10, 20, 30, 40, 50, 75, 100	For intermediate strokes other than the standard, the cylinder is manufactured with a spacer installed. ø12 to ø25.....1mm stroke increments ø32 to ø100...5mm stroke increments Examples: ① For MGQM20-21st, MGQM20-30st is provided with a 5mm+4mm≤9mm width spacer. ② For MGQM50-40st, MGQM50-50st is provided with a 10mm width spacer.
MGQ ^M _L 20, 25	20, 30, 40, 50, 75, 100, 125, 150, 175, 200	
MGQ ^M _L 32, 40, 50, 63, 80, 100	25, 50, 75, 100, 125, 150, 175, 200	

Theoretical Force

Bore (mm)	Rod dia. (mm)	Operating direction	Piston area (mm ²)	Operating pressure (MPa)									
				0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	
12	6	OUT	113	23	34	45	57	68	79	90	102	113	
		IN	85	17	26	34	43	51	60	68	77	85	
16	8	OUT	201	40	60	80	101	121	141	161	181	201	
		IN	151	30	45	60	76	91	106	121	136	151	
20	10	OUT	314	63	94	126	157	188	220	251	283	314	
		IN	236	47	71	94	118	142	165	189	212	236	
25	12	OUT	491	98	147	196	246	295	344	393	442	491	
		IN	378	76	113	151	189	227	265	302	340	378	
32	16	OUT	804	161	241	322	402	482	563	643	724	804	
		IN	603	121	181	241	302	362	422	482	543	603	
40	16	OUT	1257	251	377	503	629	754	880	1006	1131	1257	
		IN	1056	211	317	422	528	634	739	845	950	1056	
50	20	OUT	1963	393	589	785	982	1178	1374	1570	1767	1963	
		IN	1649	330	495	660	825	990	1154	1319	1484	1649	
63	20	OUT	3117	623	935	1247	1559	1870	2182	2494	2805	3117	
		IN	2803	561	841	1121	1402	1682	1962	2242	2523	2803	
80	25	OUT	5027	1005	1508	2011	2514	3016	3519	4022	4524	5027	
		IN	4536	907	1361	1814	2268	2722	3175	3629	4082	4536	
100	30	OUT	7854	1571	2356	3142	3927	4712	5498	6283	7069	7854	
		IN	7147	1429	2144	2859	3574	4288	5003	5718	6432	7147	

Note) Theoretical force(N)=Pressure(MPa) X Piston area (mm²)

CL
MLGC
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CXW
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CY1
MY1

Series MGQ

Weight/Slide Bearing: MGQM12 to 100

(kg)

Bore size (mm)	Model	Standard stroke (mm)											
		10	20	25	30	40	50	75	100	125	150	175	200
ø12	MGQM12	0.23	0.27	—	0.31	0.34	0.38	0.48	0.58	—	—	—	—
ø16	MGQM16	0.34	0.39	—	0.45	0.50	0.55	0.68	0.80	—	—	—	—
ø20	MGQM20	—	0.54	—	0.61	0.69	0.76	0.94	1.09	1.24	1.39	1.54	1.69
ø25	MGQM25	—	0.83	—	0.93	1.04	1.13	1.44	1.68	1.92	2.16	2.40	2.64
ø32	MGQM32	—	—	1.51	—	—	1.91	2.29	2.69	3.09	3.49	3.89	4.29
ø40	MGQM40	—	—	1.65	—	—	2.24	2.46	2.87	3.28	3.69	4.10	4.51
ø50	MGQM50	—	—	2.54	—	—	3.09	3.65	4.21	4.77	5.33	5.89	6.45
ø63	MGQM63	—	—	3.01	—	—	3.63	4.23	4.85	5.47	6.09	6.71	7.33
ø80	MGQM80	—	—	5.66	—	—	6.59	7.49	8.41	9.33	10.25	11.17	12.09
ø100	MGQM100	—	—	8.96	—	—	10.27	11.57	12.90	14.23	15.56	16.89	18.22

Weight/Ball Bushing Bearing: MGQL12 to 100

(kg)

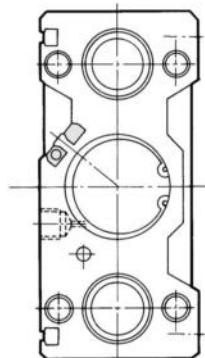
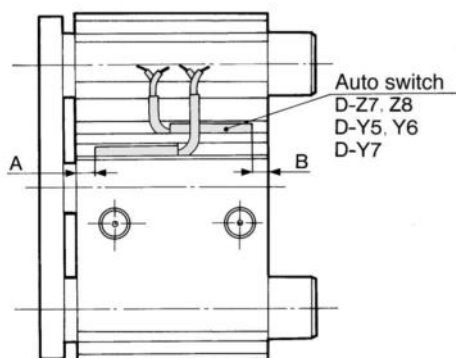
Bore size (mm)	Model	Standard stroke (mm)											
		10	20	25	30	40	50	75	100	125	150	175	200
ø12	MGQL12	0.23	0.26	—	0.29	0.35	0.38	0.46	0.53	—	—	—	—
ø16	MGQL16	0.35	0.39	—	0.44	0.52	0.57	0.70	0.82	—	—	—	—
ø20	MGQL20	—	0.54	—	0.60	0.70	0.75	0.90	1.04	1.18	1.32	1.46	1.60
ø25	MGQL25	—	0.84	—	0.93	1.08	1.17	1.37	1.58	1.79	2.00	2.21	2.42
ø32	MGQL32	—	—	1.32	—	—	1.67	2.09	2.45	2.81	3.17	3.53	3.89
ø40	MGQL40	—	—	1.46	—	—	1.82	2.27	2.63	2.99	3.35	3.71	4.07
ø50	MGQL50	—	—	2.11	—	—	2.59	3.19	3.68	4.17	4.66	5.15	5.64
ø63	MGQL63	—	—	2.65	—	—	3.19	3.85	4.39	4.93	5.47	6.01	6.55
ø80	MGQL80	—	—	5.49	—	—	6.38	7.95	8.79	9.63	10.47	11.31	12.15
ø100	MGQL100	—	—	8.34	—	—	9.53	11.78	12.96	14.14	15.32	16.50	17.68

Weight/Auto switch

(g)

Auto switch model		D-Y5, Y6, Y7	D-Z73 D-Z80	D-Z76
Length of lead wire	0.5m	10	9	10
	3m	53	49	55

Suitable Mounting Position of Auto Switch



Bore size	ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
A	1.5	4.5	4.5	4.5	5.5	9.5	7.5	10	13	17.5
B	2.5	3.5	7.5	8	7	9.5	11.5	14	18.5	23.5

*Refer to p.3.7-10 regarding how to fix an auto switch.

⚠ Precautions

Be sure to read before handling. Refer to p.0-39 to 46 for Safety Instructions and common precautions.

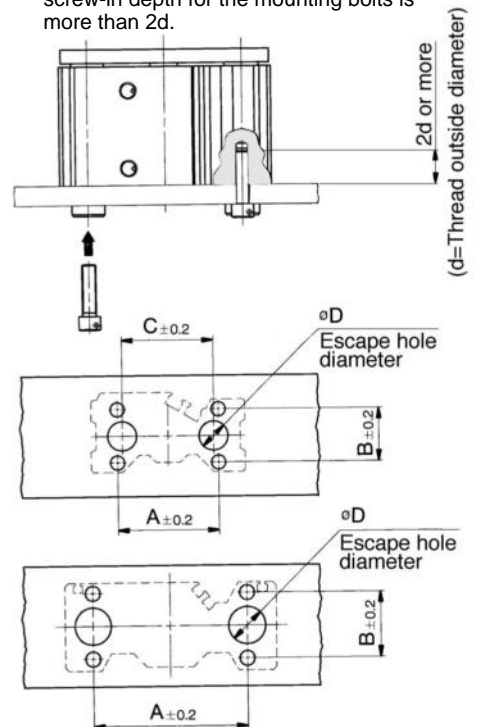
Mounting

⚠ Warning

- Never place your hands or fingers between the plate and the body.
 - Be very careful to prevent your hands or fingers from getting caught in the gap between the cylinder body and the plate when air is applied.

⚠ Caution

- Do not scratch or gouge the sliding portion of the piston rod and the guide rod.
 - This will cause the seals to become damaged, leading to air leaks.
- When mounting on the bottom of the cylinder, the guide rod protrudes from the bottom at the retraction stroke end. Therefore, drill holes for the hexagon socket bolts used for mounting purposes, and relief holes for the guide rods. Also, for an application in which impacts such as those of a stopper are applied, make sure that the screw-in depth for the mounting bolts is more than 2d.
 - (d=Thread outside diameter)

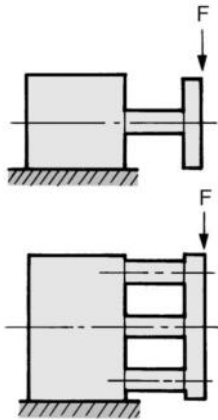


Bore (mm)	A (mm)	B (mm)	C (mm)	øD (mm)		Hex. cap screw for mounting
				MGQM	MGQL	
12	40	18	36	10	8	M4 X 0.7
16	42	22	38	12	10	M5 X 0.8
20	52	26	46	14	12	M5 X 0.8
25	62	32	56	18	15	M6 X 1
32	80	38	—	22	18	M8 X 1.25
40	90	38	—	22	18	M8 X 1.25
50	100	44	—	27	22	M10 X 1.5
63	110	44	—	27	22	M10 X 1.5
80	140	56	—	31	28	M12 X 1.75
100	170	62	—	39	33	M14 X 2

The C dimension for a bore size of 32 to 100 is identical to the A dimension.

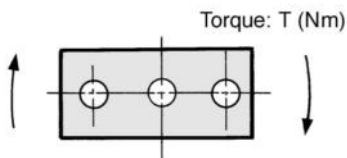
Operating Conditions

Allowable lateral load (Ordinary load)



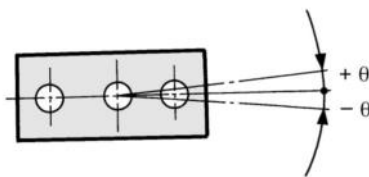
Bore size (mm)	Model	Stroke (mm)												F (N)
		10	20	25	30	40	50	75	100	125	150	175	200	
12	MGQM	21	18	—	15	13	12	9	8	—	—	—	—	
	MGQL	27	22	—	17	21	19	15	13	—	—	—	—	
16	MGQM	34	28	—	25	22	19	15	13	—	—	—	—	
	MGQL	38	30	—	26	37	33	28	23	—	—	—	—	
20	MGQM	—	51	—	44	38	34	57	49	42	37	33	30	
	MGQL	—	55	—	47	78	69	53	44	30	26	23	21	
25	MGQM	—	70	—	60	53	47	77	65	56	49	44	40	
	MGQL	—	71	—	61	77	72	59	51	42	36	32	29	
32	MGQM	—	—	196	—	—	167	137	108	87	77	69	63	
	MGQL	—	—	88	—	—	59	275	216	156	136	121	109	
40	MGQM	—	—	196	—	—	167	137	108	87	77	69	63	
	MGQL	—	—	88	—	—	59	275	216	156	136	121	109	
50	MGQM	—	—	294	—	—	255	215	176	138	123	111	101	
	MGQL	—	—	137	—	—	88	392	313	207	182	162	146	
63	MGQM	—	—	294	—	—	255	215	176	138	123	111	101	
	MGQL	—	—	137	—	—	88	392	313	207	182	162	146	
80	MGQM	—	—	353	—	—	304	255	206	168	151	137	126	
	MGQL	—	—	235	—	—	157	863	686	465	411	368	333	
100	MGQM	—	—	539	—	—	470	412	343	278	252	230	211	
	MGQL	—	—	470	—	—	313	1370	1070	708	627	562	509	

Allowable rotary torque of plate



Bore size (mm)	Model	Stroke (mm)												T (Nm)
		10	20	25	30	40	50	75	100	125	150	175	200	
12	MGQM	0.29	0.24	—	0.21	0.18	0.16	0.13	0.10	—	—	—	—	
	MGQL	0.48	0.39	—	0.31	0.37	0.33	0.27	0.23	—	—	—	—	
16	MGQM	0.51	0.43	—	0.35	0.31	0.27	0.23	0.19	—	—	—	—	
	MGQL	0.73	0.58	—	0.48	0.71	0.64	0.53	0.44	—	—	—	—	
20	MGQM	—	0.91	—	0.78	0.71	0.63	1.04	0.88	0.77	0.68	0.60	0.55	
	MGQL	—	1.26	—	1.06	1.77	1.58	1.22	1.01	0.69	0.60	0.53	0.48	
25	MGQM	—	1.53	—	1.31	1.16	1.03	1.68	1.42	1.24	1.09	0.98	0.88	
	MGQL	—	1.96	—	1.69	2.16	2.00	1.65	1.41	1.18	1.01	0.90	0.81	
32	MGQM	—	—	3.92	—	—	2.94	2.45	3.46	1.72	1.53	1.37	1.24	
	MGQL	—	—	1.96	—	—	0.98	5.88	4.41	3.12	2.72	2.42	2.18	
40	MGQM	—	—	4.41	—	—	3.43	2.94	2.45	1.94	1.72	1.54	1.40	
	MGQL	—	—	2.45	—	—	1.47	6.37	5.39	3.51	3.06	2.72	2.45	
50	MGQM	—	—	7.35	—	—	5.88	4.90	4.41	3.43	3.06	2.77	2.52	
	MGQL	—	—	3.43	—	—	2.20	10.78	8.33	5.18	4.55	4.05	3.65	
63	MGQM	—	—	7.84	—	—	6.37	5.39	4.90	3.77	3.37	3.04	2.77	
	MGQL	—	—	3.92	—	—	2.45	11.76	9.31	5.69	5.01	4.46	4.02	
80	MGQM	—	—	11.76	—	—	9.80	7.84	6.86	5.88	5.28	4.79	4.39	
	MGQL	—	—	9.31	—	—	5.88	31.36	24.50	16.28	14.39	12.88	11.66	
100	MGQM	—	—	22.54	—	—	19.60	16.66	14.70	11.81	10.67	9.74	8.96	
	MGQL	—	—	21.56	—	—	13.72	63.70	49.00	30.09	26.65	23.89	21.63	

Non-rotation accuracy of plate



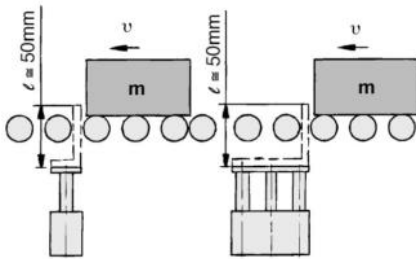
Bore size	Non-rotation accuracy (θ)	
	MGQM	MGQL
12	$\pm 0.08^\circ$	$\pm 0.10^\circ$
16	$\pm 0.08^\circ$	$\pm 0.10^\circ$
20	$\pm 0.07^\circ$	$\pm 0.09^\circ$
25	$\pm 0.07^\circ$	$\pm 0.09^\circ$
32	$\pm 0.06^\circ$	$\pm 0.08^\circ$
40	$\pm 0.06^\circ$	$\pm 0.08^\circ$
50	$\pm 0.05^\circ$	$\pm 0.06^\circ$
63	$\pm 0.05^\circ$	$\pm 0.06^\circ$
80	$\pm 0.04^\circ$	$\pm 0.05^\circ$
100	$\pm 0.04^\circ$	$\pm 0.05^\circ$

- CL
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- CB
- CV/MVG
- CXW
- CXS
- CXT
- MX
- MXU
- MXS
- MXQ
- MXF
- MXW
- MPX
- MG
- MGP
- MGQ
- MGG
- MGC
- MGF
- CY1
- MY1

Series MGQ

Operating Range when Used as Stopper

Bore Size $\phi 12$ to $\phi 25$ /MGQM12 to 25 (Slide Bearing)

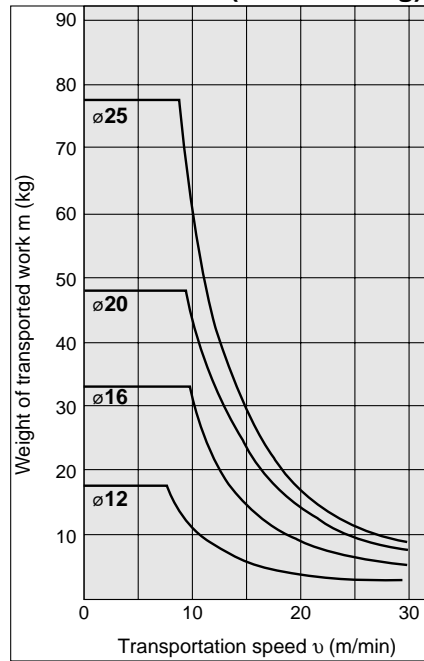


*In the model selection when l dimension becomes longer, select the cylinder having a sufficient I.D. of the tube.

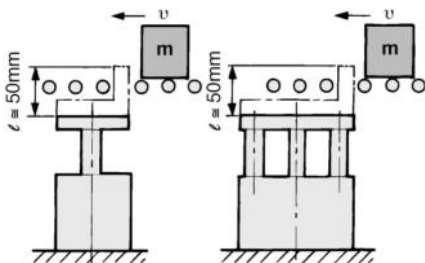
Note 1) When the cylinder is to be used as a stopper, select the cylinder of 30 stroke or less.

Note 2) MGQL (Ball bushing bearing) cannot be used as stopper.

MGQM12 to 25 (Slide bearing)



Bore Size $\phi 32$ to $\phi 100$ /MGQM32 to 100 (Slide Bearing)

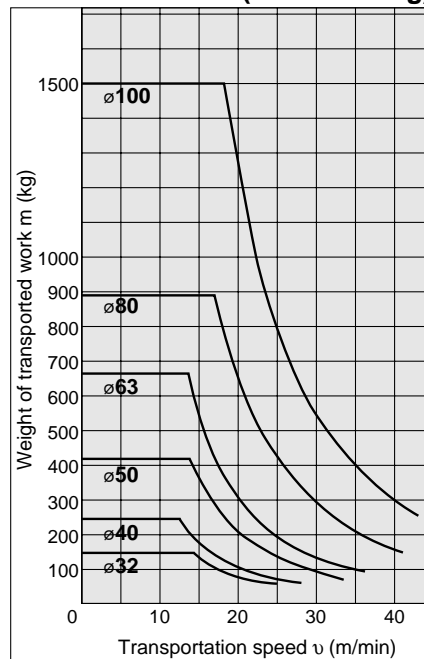


*In the model selection when l dimension becomes longer, select the cylinder having a sufficient I.D. of the tube.

Note 1) When the cylinder is to be used as a stopper, select the cylinder of 50 stroke or less.

Note 2) MGQL (Ball bushing bearing) cannot be used as stopper.

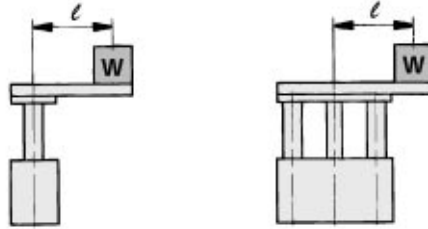
MGQM32 to 100 (Slide bearing)



Operating Range when Used as Lifter

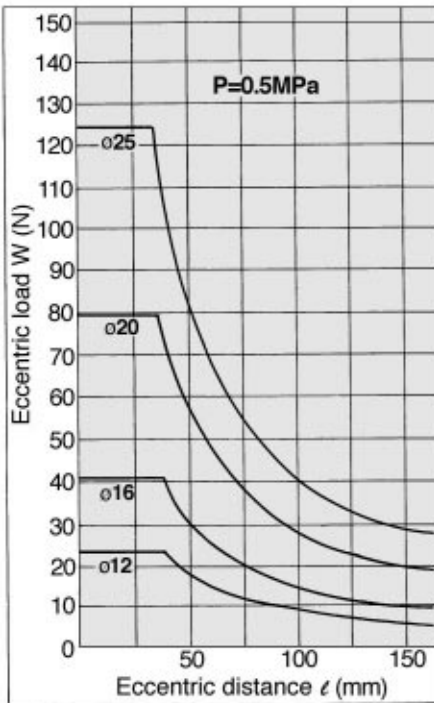
- Select the bore size so that the total load mass is below the theoretical force (See the chart below).

Bore size	Theoretical force
ø12, ø16	40% or below
ø20, ø25	50% or below
ø32 to ø100	60% or below



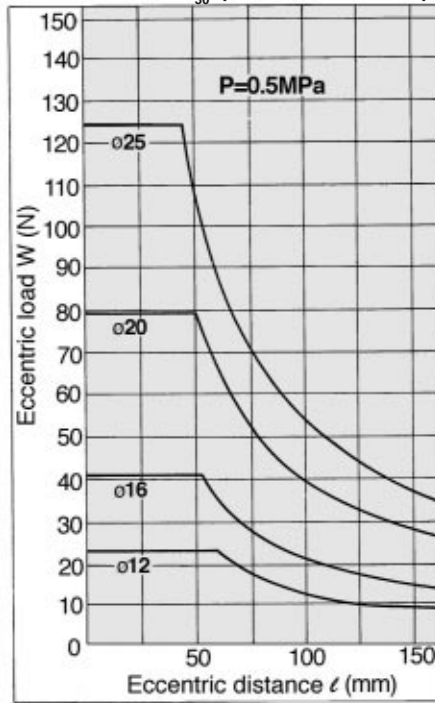
MGQM/Slide bearing

MGQM12 to 25-□

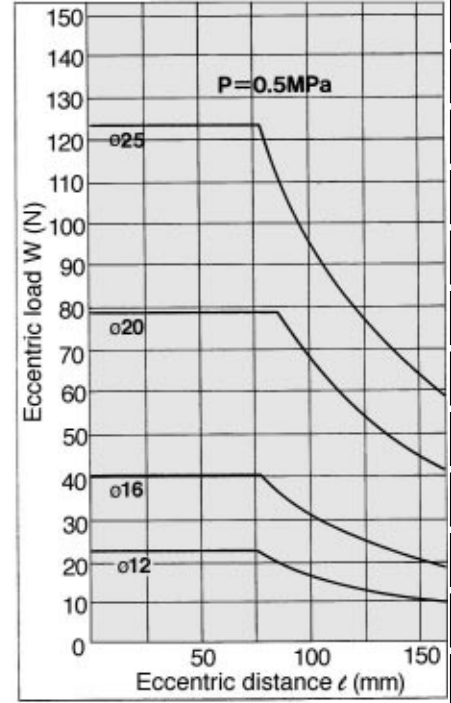


MGQM/Ball bushing bearing

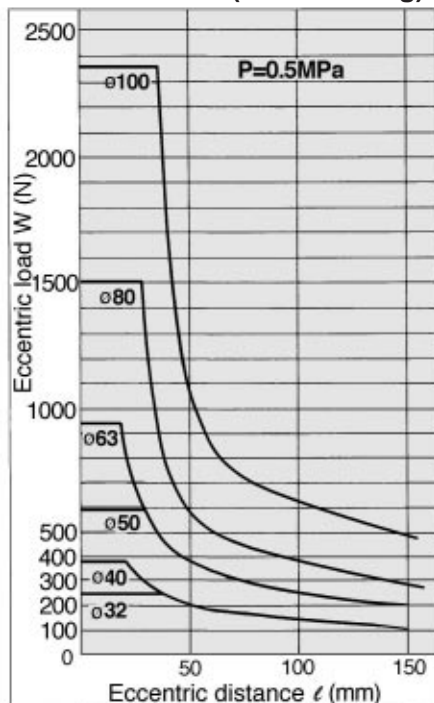
MGQL12 to 25-¹⁰/₂₀-³⁰ (10, 20, 30 stroke)



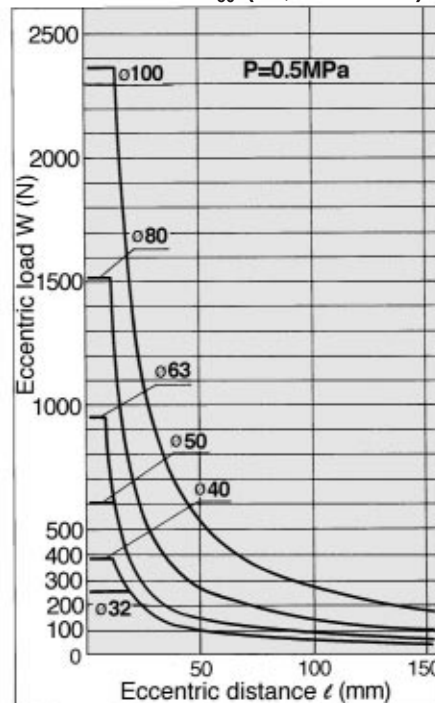
MGQL12 to 25-Over 30 stroke



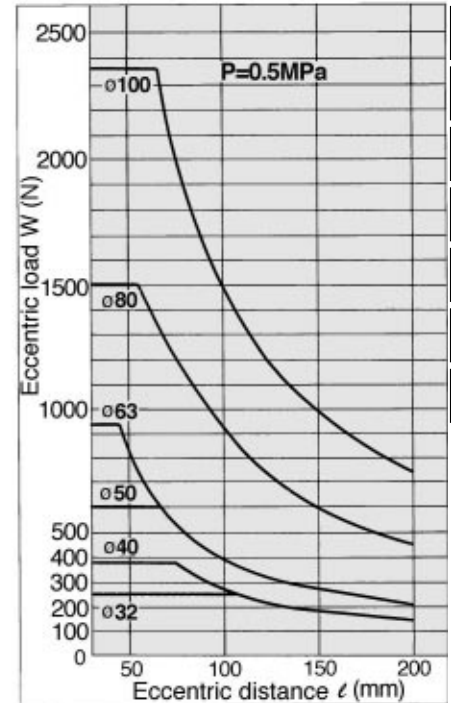
MGQM32 to 100 (Slide bearing)



MGQL32 to 100-²⁵/₅₀ (25, 50 stroke)



MGQL32 to 100-Over 50 stroke



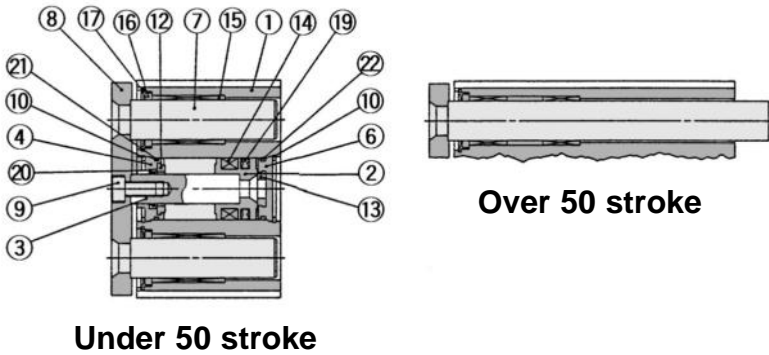
- CL
- MLGC
- CNA
- CB
- CV/MVG
- CXW
- CXS
- CXT
- MX
- MXU
- MXS
- MXQ
- MXF
- MXW
- MXP
- MG
- MGP
- MGQ**
- MGG
- MGC
- MGF
- CY1
- MY1

Series MGQ

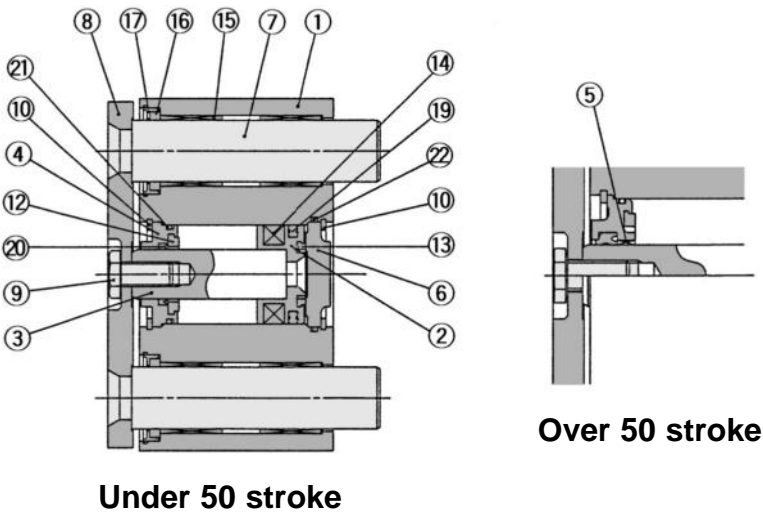
Construction

Series MGQM

ø12 to ø25/MGQM12 to 25

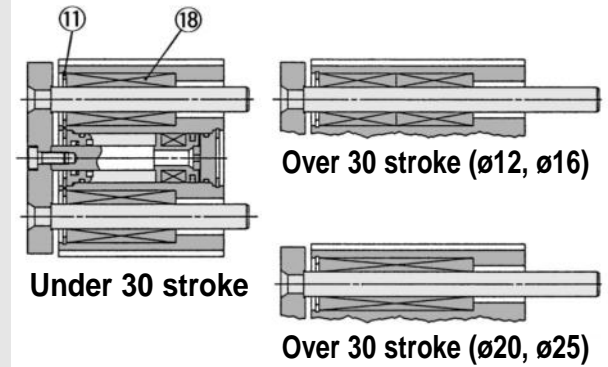


ø32 to ø100/MGQM32 to 100

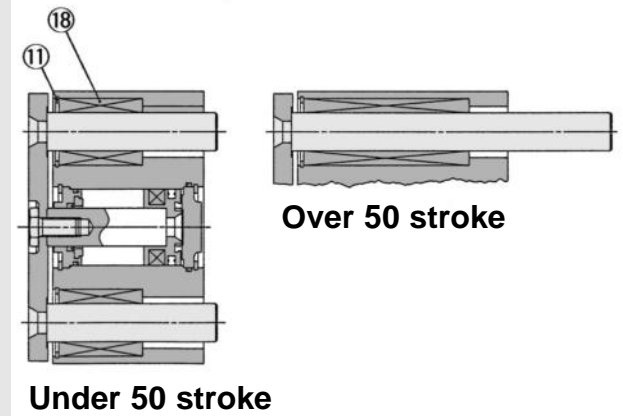


Series MGQL

MGQM12 to 25



MGQL32 to 100



Component Parts

No.	Description	Material	Note
①	Body	Aluminum alloy	Hard anodized
②	Piston	Aluminum alloy	Chromated
③	Piston rod	ø12 to ø25 Stainless steel	—
		ø32 to ø100 Carbon steel	Hard chrome plated
④	Collar	ø12 to ø40 Aluminum bearing alloy	White anodized
		ø50 to ø100 Aluminum alloy	White coated
⑤	Bushing	Lead bronze casting	—
⑥	Head cover	ø12 to ø63 ø80 to ø100 Aluminum alloy	White chromated
			White coated
⑦	Guide rod	MGQM Carbon steel	Hard chrome plated
		MGQL High-carbon chrome steel	High-cycle hardened, Hard chrome plated
⑧	Plate	Carbon steel	White nickel
⑨	Plate mounting bolt	Carbon steel	White nickel

No.	Description	Material	Note
⑩	Retaining ring	Carbon tool steel	Phosphate coated
⑪	Retaining ring	Carbon tool steel	Phosphate coated
⑫	Bumper A	Urethane	—
⑬	Bumper B	Urethane	—
⑭	Magnet	Synthetic rubber	—
⑮	Slide bearing	Lead bronze casting	—
⑯	Felt	Felt	—
⑰	Holder	Resin	—
⑱	Ball bushing bearing	—	—
⑲	Piston seal	NBR	—
⑳	Rod seal	NBR	—
㉑	Gasket A	NBR	—
㉒	Gasket B	NBR	—

Replacement Parts: Seal Kits

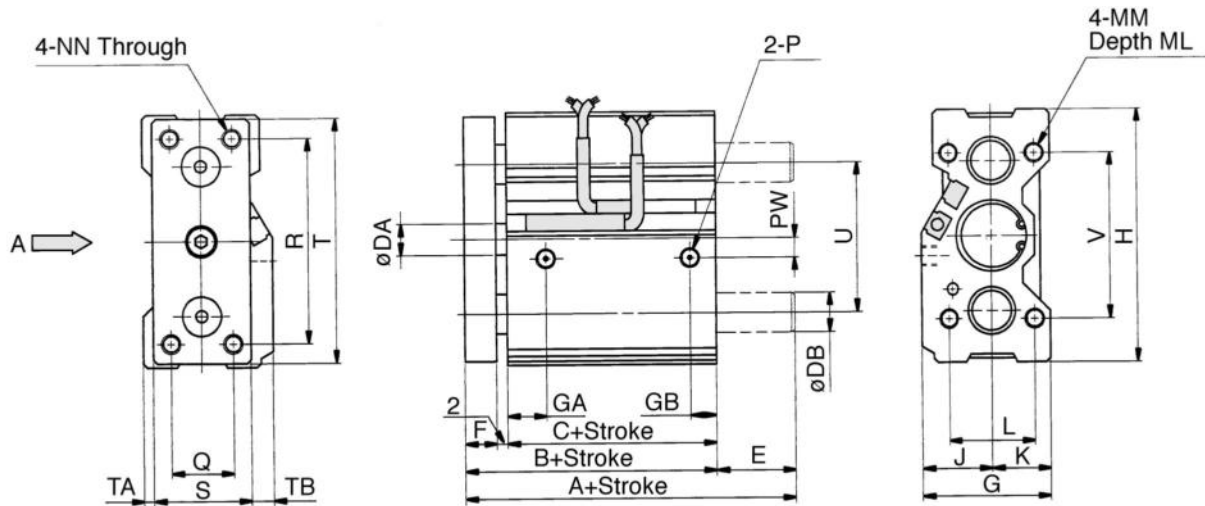
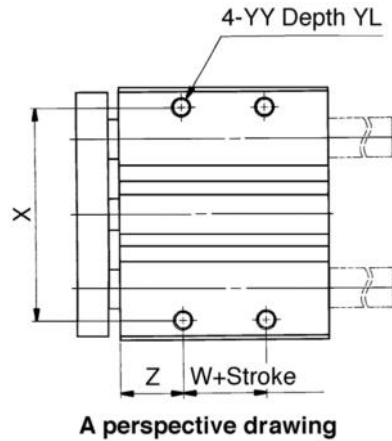
No.	Description	Kit No.									
		ø12	ø16	ø20	ø25	ø32	ø40	ø50	ø63	ø80	ø100
⑲ to ㉒	Seal kits	MGQ12-PS	MGQ16-PS	MGQ20-PS	MGQ25-PS	MGQ32-PS	MGQ40-PS	MGQ50-PS	MGQ63-PS	MGQ80-PS	MGQ100-PS

*Seal kit consists of piston seal ⑲, rod seal ⑳, gasket A ㉑ and gasket B ㉒ contained in one kit, and can be ordered using the seal kit number for each bore size.



Compact Guide Cylinder *Series MGQ*

ø12 to ø25/MGQM/MGQL



MGQM, MFQL Common Dimensions *As to intermediate stroke, spacer will be used. (Refer to p.3.18-3)

Bore size (mm)	Standard stroke (mm)	B	C	DA	F	G	GA	GB	H	J	K	L	MM	ML	NN	P	PW	Q	R	S	T	TA	TB	U	V	W	X	YY	YL	Z
12	10, 20, 30, 40, 50, 75, 100	39	29	6	8	29	11	7.5	58	16	13	18	M4 X 0.7	10	M4 X 0.7	M5 X 0.8	7	14	48	22	56	2	5	36	40	5	50	M4 X 0.7	7	12
16	10, 20, 30, 40, 50, 75, 100	43	33	8	8	33	11	8	64	18	15	22	M5 X 0.8	13	M5 X 0.8	M5 X 0.8	5	16	52	25	62	2.5	5.5	38	42	7	54	M5 X 0.8	8	13
20	20, 30, 40, 50, 75, 100, 125, 150, 175, 200	47	37	10	8	36	10.5	8.5	74	19	17	26	M5 X 0.8	13	M5 X 0.8	Rc 1/8	7	18	60	30	72	2	4	46	52	10	64	M5 X 0.8	8	13
25	20, 30, 40, 50, 75, 100, 125, 150, 175, 200	47.5	37.5	12	8	42	11.5	9	88	21	21	32	M6 X 1.0	15	M6 X 1.0	Rc 1/8	8	26	70	38	86	2	2	56	62	10	76	M6 X 1.0	9	14

MGQM (Slide Bearing)/Dimensions A, DB, E

Bore size (mm)	Symbol		DB	E	
	Stroke	A		50 or less	Over 50
12		39	8	0	
16		43	10	0	
20		47	12	0	14.5
25		47.5	16	0	14.5

MGQL (Ball Bushing Bearing)/Dimensions A, DB, E

Bore size (mm)	Symbol		DB	E	
	Stroke	A		30 or more	40 or more
12		43	6	4	16
16		49	8	6	22
20		57	10	10	27
25		63.5	13	16	32

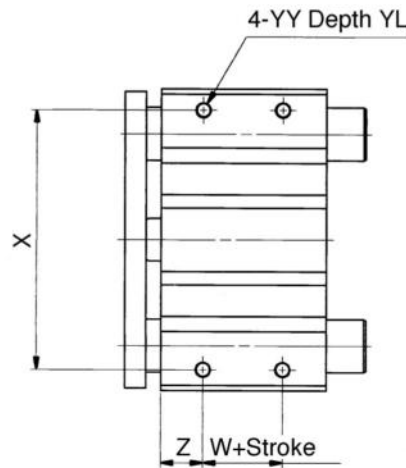
MGQM [Bore size]SMGQ [Bore size], #1(#1+#3)
 MGQL [Bore size]SMGQ [Bore size], #2(#2+#3)

- CL
- MLGC
- CNA
- CB
- CV/MVG
- CXW
- CXS
- CXT
- MX
- MXU
- MXS
- MXQ
- MXF
- MXW
- MXP
- MG
- MGP
- MGQ**
- MGG
- MGC
- MGF
- CY1
- MY1

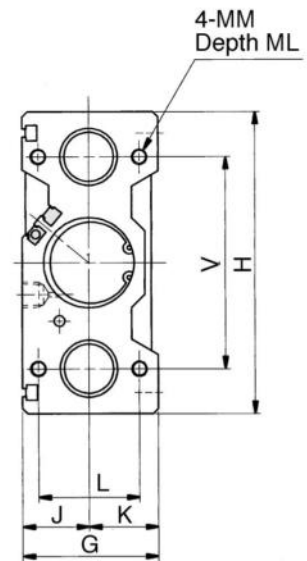
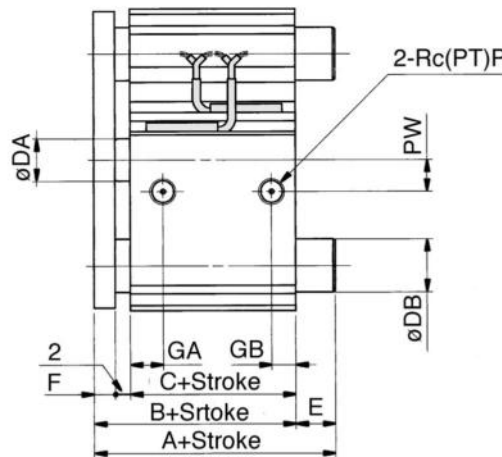
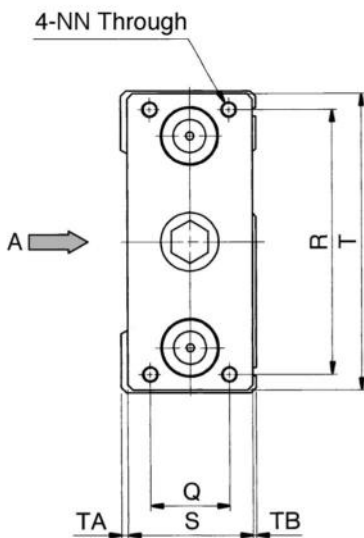
Series MGQ



ø32 to ø100/MGQM/MGQL



A perspective drawing



MGQM, MGQL Common Dimensions

Note 1) As to intermediate stroke, spacer will be used. (Refer to p.3.18-3)

Bore (mm)	Standard stroke (mm)	B	C	DA	F	G	GA	GB	H	J	K	L	MM	ML	NN	P	PW	Q	R	S	T	TA	TB	V	W	X	YY	YL	Z
32	25, 50, 75, 100 125, 150 175, 200	47.5	37.5	16	8	51	12.5	9	114	25	26	38	M8 X 1.25	20	M8 X 1.25	1/8	15	30	96	48	112	2	1	80	5	100	M8 X 1.25	11	16
40		54	44	16	8	51	14	10	124	25	26	38	M8 X 1.25	20	M8 X 1.25	1/8	21	30	106	48	122	2	1	90	10	110	M8 X 1.25	11	17
50		56	44	20	10	59	14	11	140	29	30	44	M10 X 1.5	25	M10 X 1.5	1/4	27	40	120	56	138	2	1	100	10	124	M10 X 1.5	12.5	17
63		61	49	20	10	72	16.5	13.5	150	35.5	36.5	44	M10 X 1.5	25	M10 X 1.5	1/4	33	50	130	69	148	2	1	110	10	132	M10 X 1.5	15	19
80		74.5	56.5	25	16	92	19	15.5	188	45.5	46.5	56	M12 X 1.75	30	M12 X 1.75	3/8	37	60	160	88	185	2.5	1.5	140	15	166	M12 X 1.75	18	21
100	84	66	30	16	112	23	19	224	55.5	56.5	62	M14 X 2	35	M14 X 2	3/8	40	80	190	108	221	2.5	1.5	170	15	200	M14 X 2	21	25	

MGQM (Slide Bearing)/ Dimensions A, DB, E

Bore (mm)	A	DB	E
32	71.5	20	24
40	71.5	20	17.5
50	81	25	25
63	81	25	20
80	93	28	18.5
100	105	36	21

MGQL (Ball Bushing Bearing)/Dimensions A, DB, E

Bore size (mm)	A		DB	E	
	25, 50	Over 50		25, 50	Over 50
32	53	90	16	5.5	42.5
40	54	90	16	0	36
50	60	102	20	4	46
63	61	102	20	0	41
80	84	143	25	9.5	68.5
100	89	153	30	5	69



Slide Bearing

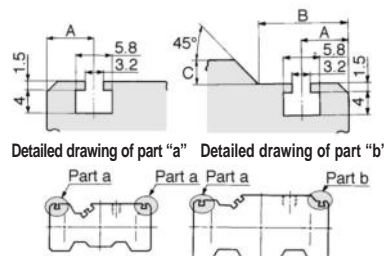
MGQM32.....SMGQ1, #1 MGQL32.....SMGQ1, #2
 MGQM40.....SMGQ2, #1 MGQL40.....SMGQ2, #2
 MGQM50.....SMGQ3, #1 MGQL50.....SMGQ3, #2
 MGQM63.....SMGQ4, #1 MGQL63.....SMGQ4, #2
 MGQM80.....SMGQ5, #1 MGQL80.....SMGQ5, #2
 MGQM100...SMGQ6, #1 MGQL100...SMGQ6, #2

Ball Bushing Bearing

Grooves (Except for ø12, ø16, ø20, ø25)

Use grooves part "a" and part "b" in the figure below of the cylinder body for firmly fixing in the following case.
 (Applicable bolt size is M3.)

These grooves can be used for firmly fixing the tying bands of lead wires of the auto switch, etc., and also terminal boards, etc., to the main body of the cylinder.



MGQ□32 to 50 MGQ□63 to 100

Model	A	B	C
MGQ□32	8	-	-
MGQ□40	8	-	-
MGQ□50	8	-	-
MGQ□63	8	14.5	6.5
MGQ□80	10	25	7
MGQ□100	10	29.5	14.5