Shock Absorbers

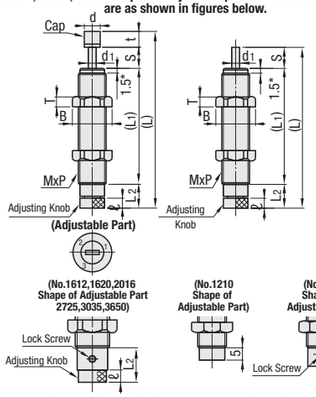
Adjustable

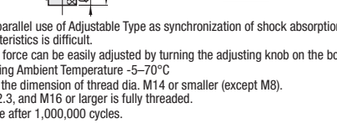
Shock Absorbers – Adjustable

RoHS 10

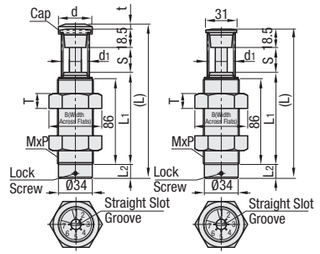
MAC Cap **MAS No Cap**

No.0806*, 1008*, 1210*, 1214, 1410, 1417, 1612*, 1620*, 2016*, 2530*, 2725*, 3035*, 3650* Shapes of adjustable parts of * marked products are as shown in figures below.





No.3625



No.	Material (Main Body)	Surface Treatment
0806	303 Stainless Steel	—
1008, 1210, 1214, 1410, 1417, 1612, 1620, 3625	SUM	Electroless Nickel Plating
2016, 2530, 2725, 3035, 3650	Carbon Steel12C Pipe Steel (JIS)	
Cap	Polyacetal 3035, 3625 and 3650 are Urethane Rubber.	—

- Avoid parallel use of Adjustable Type as synchronization of shock absorption characteristics is difficult.
- Impact force can be easily adjusted by turning the adjusting knob on the bottom.
- Operating Ambient Temperature -5–70°C
- 1.5* is the dimension of thread dia. M14 or smaller (except M8). M8 is 2.3, and M16 or larger is fully threaded.
- Replace after 1,000,000 cycles.

Part Number Type	No.	Speed	Thread Diameter M x P	Stroke S	Max. Absorbed Energy (E') Per Impact (J)	Max. Absorbed Energy (E') Per minute (J)	Max. Equivalent Mass (me') (kg)	Piston Rod Return Force (N)	Max. Drag Value (N)	(L)	(L1)	L2	ℓ	d	d1	t	B (Width Across Flats)	T
MAC Cap / MAS No Cap	0806	M	M8 x 0.75	6	1.4	36.7	15	9 or less	670	58 (53)	41	6	3	6	2.5	5	12.7 (11)	2
	1008	S	M10 x 1.0	8	1.02	58.8	90	5.88 or less	637	65.2 (58.9)	42.2	8.7	3.5	6	2.4	6.3	14.2 (13)	3
		L			1.47		10											
		M			1.76		2.5											
	1210	S	M12 x 1.0	10	2.94	98	100	9.8 or less	1470	84 (76)	61	5	—	8	3.5	8	16.2 (14)	4
		L					30											
		M			4.9		4											
		H					30	12.7 or less	1156	92 (84)	59.5	10.5	5					
	1214	H		14	5.4													
	1410	S	M14 x 1.5	10	3.62	147	120	9.8 or less	1813	88 (80)	59	11	6	10			19.6 (17)	6
		L			3.92		30											
		M			5.88		35											
		H					4.5											
	1417	H		17	14.7	176	50	15.7 or less	2646	115 (105)	77.8	10.2	5		4	10		
	1612	S	M16 x 1.5	12	6.3	235	270	14.7 or less	2646	117 (102)	75.5	14.5	4.5	13.5	5	15	20 (19)	6
		L			9.8		50											
		M					10											
	1620	H		20	17.6		60	19.6 or less		143 (128)	93.5							
	2016	S	M20 x 1.5	16	20	343	600	18.1 or less	3528	127 (110)	76	18	4	18	6	17	27.7 (24)	8
		L			29.4		300											
		M					200											
		H					120											
	2530	S	M25 x 1.5	30	23	490	1100	33.2 or less	3920	173 (155)	110	15	—	22	8	18	37 (32)	10
		L			49		400											
		M					300											
		H					150											
	2725	S	M27 x 1.5	25	32	539	1500	27.3 or less	6370	156 (136)	91	20	5	23		20		
		L			79.3		650											
		M					450											
		H					300											
	3035	S	M30 x 1.5	35	100	1176	2000	44.1 or less	16660	206.5 (188)	128	25		27	10	18.5	41.6 (36)	14
		M			196		1300											
		H					700											
	3625	S	M36 x 1.5	25	125	1500	3500	100 or less	25000	155 (150)	92.5	14	—	34	12	5	53.1 (46)	10
		L			200		2000											
		H					700											
	3650	S		50	235	2352	6700	68.6 or less	23520	254.5 (235)	160	25	5	33	12	19.5		15
		M			392		2700											
		H					1400											

L Dimension values in ( ) are for MAS.

kgfm=Jx0.101972, kgf=Nx0.101972

Collision Velocity Type		Collision Velocity Range	Max. Operating Cycle
Ultra Low Speed	S	0.08–0.5 m/s	60 cycle/min*
Low Speed	L	0.3–1 m/s	
Medium Speed	M	0.3–2 m/s	
High Speed	H	0.7–3 m/s	

Part Number Example Part Number: MAC1008H

*No.0806 is 45 cycle/min, No.3035, 3625 and 3650 are 30 cycle/min.

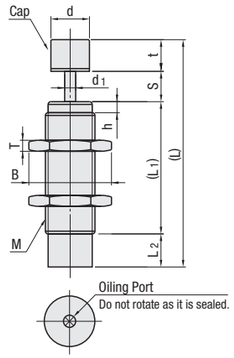
Shock Absorbers

Set

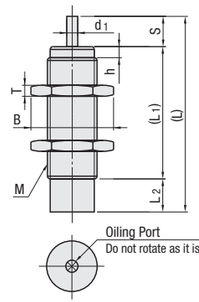
Shock Absorbers – Set

RoHS 10

MAKC Cap



MAKS No Cap



- For parallel use of more than two pieces, be sure to use the same type and install them to receive the shock equally.
- Operating ambient temperature -5–70°C
- Fully threaded if there is no h dimensions in the specification table.
- Replace after 1,000,000 cycles.

No.	Material (Main Body)	Surface Treatment
0404, 0604, 0805	303 Stainless Steel	—
1005, 1008, 1210, 1412, 1612, 2016, 2022, 2530, 2725, 3035	SUM	Electroless Nickel Plating
	C36000 Brass	
	Carbon Steel12C Pipe Steel (JIS)	
Cap	Polyacetal Only 2022 is urethane rubber.	—

Part Number Type	No.	Velocity	Thread Diameter M	Stroke S'	Max. Absorbed Energy (E') per Impact (J)	Max. Absorbed Energy (E') per Minute (J)	Max. Equivalent Mass (me') (kg)	Piston Rod Return Force (N)	Max. Drag Value (N)	(L)	(L1)	L2	d	d1	t	B (Wrench Flats)	T	h
MAKC Cap / MAKS No Cap	0404	A	M4 x 0.5	4	0.1	4.5	1	2.5 or Less	214	32.6 (28.6)	20.1	4.5	3	1.2	4	8.1 (7)	2	0.5
		B			0.3	13.5	3											
	0604	A	M6 x 0.75		0.1	4.5	1	3 or Less	363	33 (29)	20.5		4.6	1.8		9.2 (8)	2	
		B			0.3	13.5	2											
		L			0.5	22.5	3											
	0805	A	M8 x 0.75	5	0.39	17.6	3	4.9 or Less	490	37 (32)	22	5	6	2	5	12.7 (11)	2	1.5
		B			0.68	22.5	5		588									
	1005	A	M10 x 1.0	8		41.1		5.88 or Less	735	39 (32)				3	7	14.2 (13)	3	
		B			0.98		8											
	1008	A				58.8	7	5.88 or Less		53 (46)	33							
		B			1.47		10											
		L			2.94		20											
		M					6	4.9 or Less	1078	55 (48)	34.5	5.5						
		H					2.5											
	1210	A	M12 x 1.0	10	1.96	98	15	9.8 or Less	1470	68 (60)	45	5	8	3.5	8	16.2 (14)	4	1.5
		B			2.45		30											
		L			6.86		50		1960	71 (63)	47.5	5.5						
		M					14											
		H					6											
	1412	L	M14 x 1.5	12	9.8	176	75	8.9 or Less	2156	78 (70)	52.5		10			19.6 (17)	6	
		M					20											
		H					8											
	1612	L	M16 x 1.5	12	14.7	235	110	9.8 or Less	2940	90 (75)	57.5		13.5	5	15	20 (19)		—
		M					30											
		H					13											
	2016	L	M20 x 1.5	16	29.4	343	230	18.1 or Less	3528	110 (93)	63	14	18	6	17	27.7 (24)	8	
		M					60											
		H					25											
	2022	L	M20 x 1.5	22	44.1	392	73	39.2 or Less	3920	126.5 (112)	76				14.5			
		M					30											
		H					15											
	2530	L	M25 x 1.5	30	88.2	490	390	29.4 or Less	6370	158 (140)	95	15	22	8	18	37 (32)	10	
		M					175											
		H					75											
	2725	L	M27 x 1.5	25	79	539	420	27.3 or Less	6370	137.5 (117.5)	77.5		23		20			
		M					105											
		H					47											
	3035	L	M30 x 1.5	35	196	1176	1560	47.1 or Less	14700	190 (171.5)	116.5	20	27	10	18.5	41.6 (36)	14	
		M					390											
		H					173											

L Dimension values in ( ) are for MAKS.

kgfm=Jx0.101972, kgf=Nx0.101972

Collision Velocity Type		Collision Velocity Range	Max. Operating Cycle
Low Speed	A B L	0.3–1 m/s	60 cycle/min*
Medium Speed	M	0.3–2 m/s	
High Speed	H	0.3–3 m/s	

Part Number Example Part Number: MAKC1008L

*No.0404, 0604 and 0805 are 45 cycle/min, No.3035 is 30 cycle/min.