

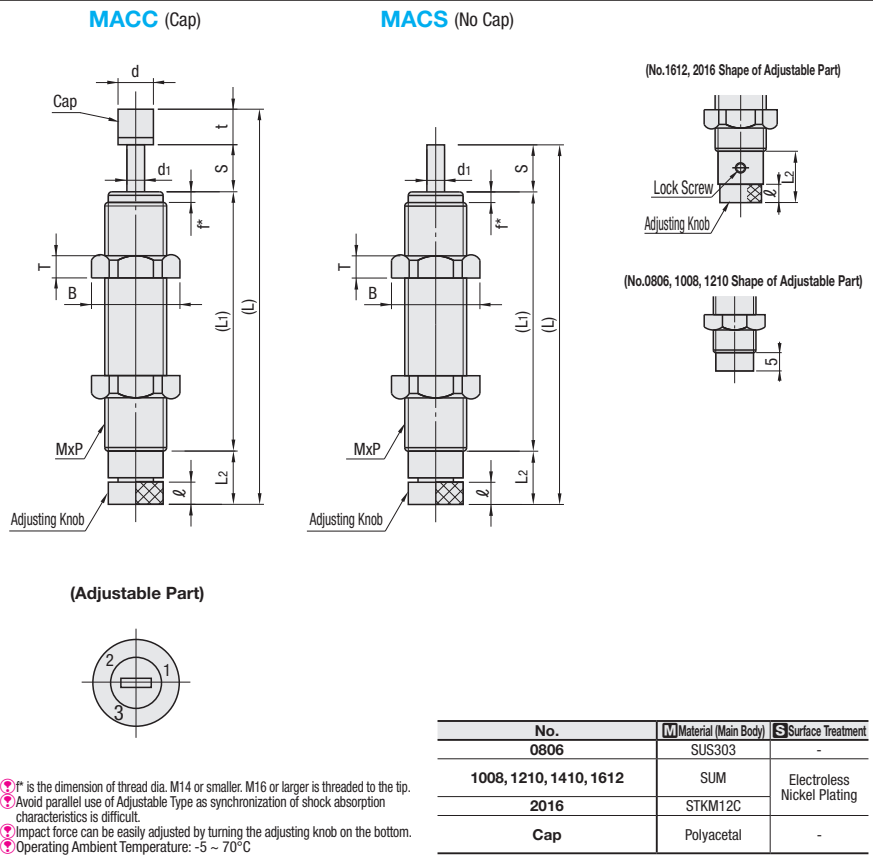
# Shock Absorbers

## Water & Coolant Resistant Type

### Shock Absorbers Water & Coolant Resistant Type



RoHS 10



- Ⓜ: P is the dimension of thread dia. M14 or smaller. M16 or larger is threaded to the tip.
- Ⓜ: 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

Part Number	Thread Dia. MxP	Stroke S	Max. Absorbed Energy [E]		Max. Equivalent Mass (me)(kg)	Piston Rod Return Force (N)	Max. Drag Value (N)	MACC										MACS					
			per Impact (J)	per Minute (J)				(L)	(L1)	L2	l	d	d1	t	f	B (Wrench Flats)	T	Unit Price	Volume Discount Rate	Unit Price	Volume Discount Rate		
MACC (Cap)	0806	M8 x 0.75	6	1.4	36.7	15	9 or Less	670	64 (59)	47	6	3	6	2.5	5	2.3	12.7 (11)	2	1-4 pcs.	5-10 pcs.	1-4 pcs.	5-10 pcs.	
	1008	L	M10 x 1.0	8	1.47	58.8	10	9 or Less	637	79.5 (73.2)	56.7	8.5	3.5	6	2.4	6.3	1.6	14.2 (13)	3				
		M			1.76		2.5																
MACS (No Cap)	1210	L	M12 x 1.0	10	2.94	98	30	13 or Less	1470	90.6 (82.6)	67.6	5	-	8	3.5	8	1.5	16.2 (14)	4				
		M			4.9		4																
	1410	M	M14 x 1.5	10	3.92	147	35	14 or Less	1813	108.2 (98.2)	77.8	10.4	5	10	4	10	1.7	19.6 (17)	6				
2016	L	M16 x 1.5	12	9.8	235	50	20 or Less	2646	122.7 (107.7)	81.2	14.5	4.5	13.5	5	15	-	20 (19)	6					
	M					10																	
	H					300	33 or Less	3528	137 (120)	86	18	4	18	6	17	-	27.7 (24)	8					

Ⓜ: L Dimension values in ( ) are for MACS Type.

kgf · m = Jx0.101972 kgf = Nx0.101972

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

\* For No.0806, max. operating cycle should be 45cycle/min.

Ordering Example  
Part Number  
MACC1008H

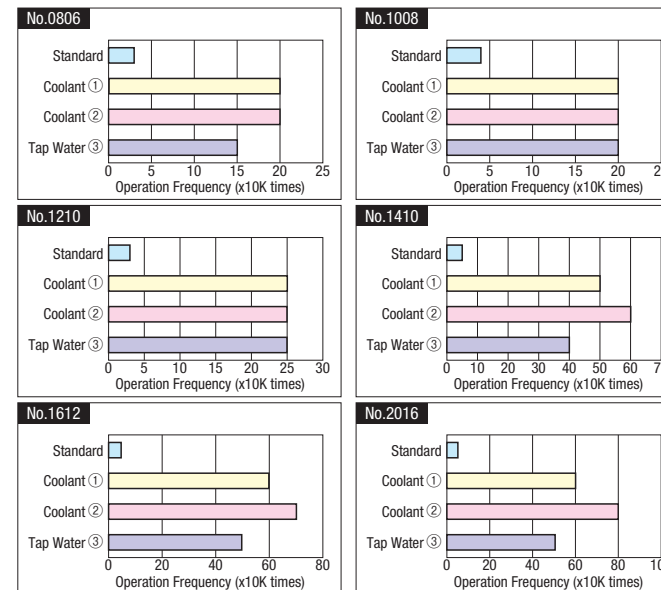
### Features of Water & Coolant Resistant Type

- Having a structure of protection seals for fluid intrusions makes usable in wet conditions, suitable for machine tools and related applications.
- Replacement is possible with Standard Type since mounting O.D. screw size is the same.
- Suitable for water-soluble cutting oil A1 [JIS K2241-2000], but also available for water-insoluble cutting oil or under wet conditions. (In case of using water instead of water-soluble cutting oil, the durability may be inferior.)

### Durability Test Data (Ref.)

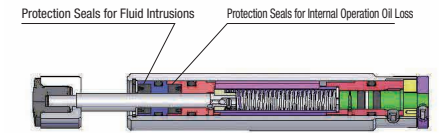
#### Test Condition

- Coolant ①: JIS A1 Emulsion Water-Soluble Cutting Oil (Yushiro Chemical Industry Co., Ltd. Yushiroken FGE330 Dilution 20 times)
- Coolant ②: JIS N1 Water-Insoluble Cutting Oil (Yushiro Chemical Industry Co., Ltd. Yushiro Oil CG8)
- ③: Tap Water
- Load: Ø40 Air Cylinder (Cylinder Propulsion only)
- Collision Cycle: 30/min. • Dripping: 4cc/min.

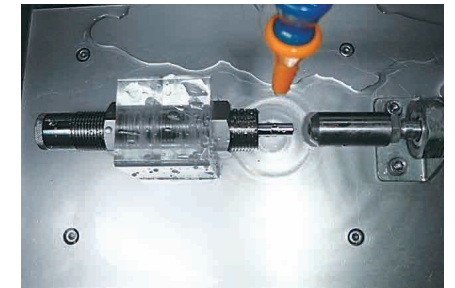


- Durability results may vary depending on each test condition. Testing fluid or volume may affect the results. Prior tests are recommended to obtain appropriate results.
- When used in environments where the piston rods are kept from fluid contacts, the internal oil may be lost by premature leakage.

### Inner Structure



### Test Scene



### App. Example

Rotating Table Stopper [Dedicated Machining Equipment]

