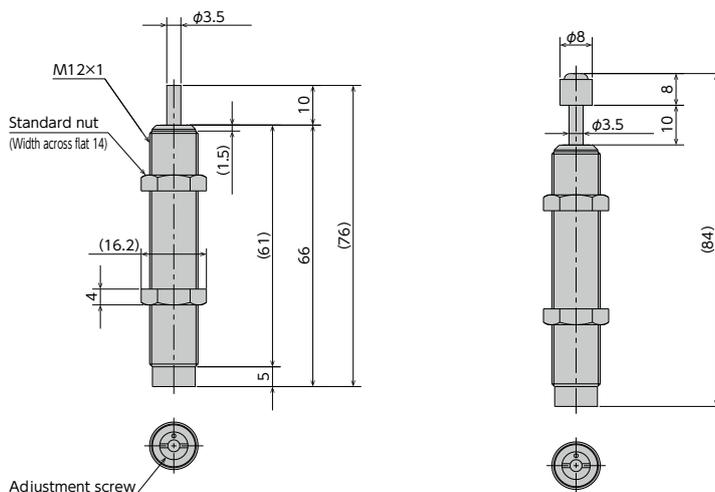


# Soft Absorber

## FA-1210MB/FA-1210MD/FWM-1210MBD Series



## Specifications

Model	Stroke mm	Max. absorption energy J (kgf·m)	Max. equivalent mass kg (kgf)	Range of impact rate m/s	Orifice type			
FA-1210MB-S	10	2.94 (0.3)	30 (30)	0.3~1	Single-orifice type			
FA-1210MB-C								
FA-1210MD-S		4.9 (0.5)	4 (4)	0.7~3	Multiple-orifice type			
FA-1210MD-C								
FWM-1210MBD-S						30 (30)	0.3~2	Multiple-varying orifice type
FWM-1210MBD-C								

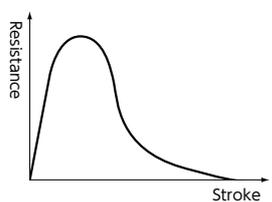
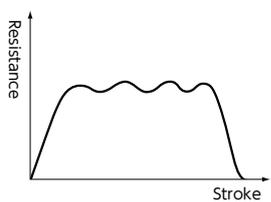
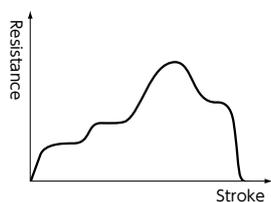
Note) To place an order without a cap, put -S at the end of the model number, and to place an order with a cap, put -C at the end of the model number.

## Common Specifications

Max. drag	N (kgf)	1,470 (150)	Operating temperature	°C	-5~70
Max. cycle rate	cycle/min	60	Mass : S type	g	44
Max. absorption energy per minute	J/min (kgf·m/min)	98 (10)	: C type	g	47
Recovering power of the piston rod	N (kgf)	9.8 (1.0) or lower			

## Selection Guideline

The FA-1210 series has the following three patterns of absorption characteristics depending on the orifice type. Please use the following information as a guideline when making your selection.

Orifice type	Single-orifice type	Multiple-orifice type	Multiple-varying orifice type
Model number	FA-1210MB series	FA-1210MD series	FWM-1210MBD series
Application	For low-speed	For high-speed	For medium speed, in particular with a pneumatic cylinder
Absorption characteristics			

## Precautions for Use

- \* Do not use this product without carefully reading the attached owner's manual.
- \* Ensure that an external stopper (Stopper nut OP-020KB) is also used.
- \* Do not turn the oil inlet screw located at the bottom of the main unit.
- \* Ensure that sufficient mounting strength is secured for this product. (As a guideline, it should be 2 to 3 times the maximum drag listed in the catalogue.)
- \* Do not use this product in a vacuum or a location where it may come in contact with oil.
- \* Ensure that an eccentric load is not applied to the soft absorber (Allowable eccentric angle: within  $\pm 2.5^\circ$ )

## Adjustment Method

- \* To adjust, turn the adjustment knob with a slotted screw driver.
- \* Because the adjustment can be done in an analog manner, a value between two integers on the indicator can be set.
- \* It does not have a lock screw for locking the adjusted setting.

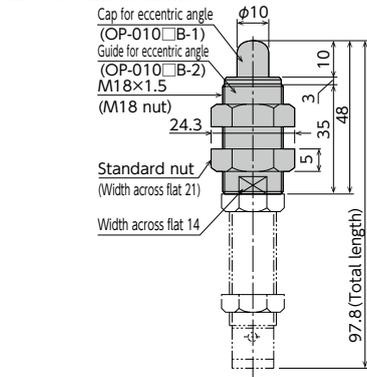
●Products specification might be changed without notice.

## Optional Parts

### Eccentric angle adaptor OP-010PB

Model
OP-010KB

- Screw the eccentric angle adaptor into the main unit until the cap for the eccentric angle and the piston rod form a tight connection. While maintaining this position, fasten the main unit's nut until secured.
- Use the eccentric angle adaptor when the eccentric angle is 2.5° or larger.
- The main unit can also be used as a stopper.
- Use it with a capless soft absorber.
- The maximum operating eccentric angle with an eccentric angle adaptor is ±10°.
- The caps and the guides for inclined use are not unbundled.



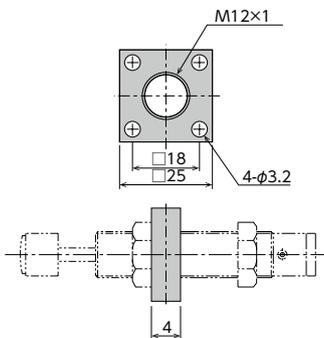
Mass 48g

Note) Material of cap for eccentric angle: POM

### Square flange OP-040KB

Model
OP-040KB

- Once the attachment site is determined, use the main unit's nut to securely fasten in place.

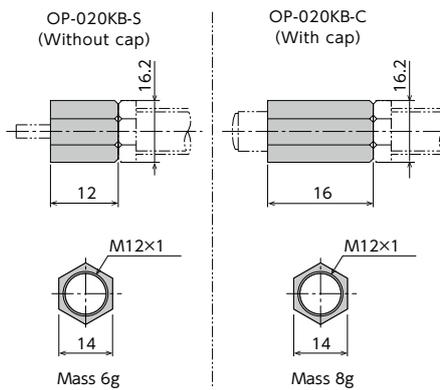


Mass 15g

### Stopper nut OP-020KB-□

Model
OP-020KB-S
OP-020KB-C

- Adjust so that it stops 1mm before the stroke end, and fasten with the main unit's nut until secured.

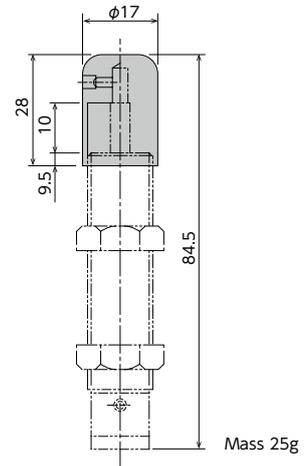


Note) When attaching, make sure that the side without a bearing chamfer is the impact surface.

### Liquid-proof cap F□□-1210M□□-C-060

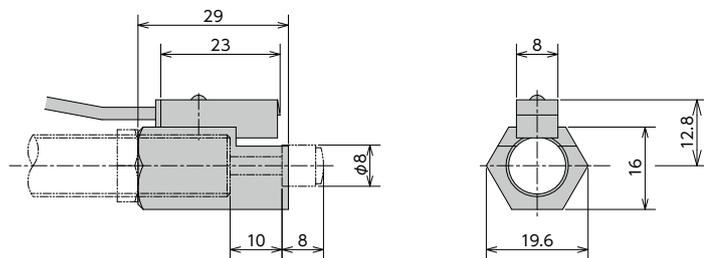
Model
FA-1210MB-C-060
FA-1210MD-C-060
FWM-1210MBD-C-060

- Ideal for use in environments where oil splatter poses a problem.
- Ensure that the cap is facing upward. If the cap is facing sideways or downward, it cannot provide an effective means for liquid proofing.
- F□□-1210M□□-C-060
  - Model indication A or WM is inserted in □ of F□□.
  - Model indication B, D or BD is inserted in □ of M□□.



### Holder with a switch OP-030KB-2 (With a stopper function)

Model
OP-032KB



Mass 38g

- Although a holder with a switch can be ordered on its own, we strongly recommend ordering one with the main unit. Please include the main unit's model number when placing an order.
- For switch specifications and precautions for use, please refer to page 23.

Standard nuts are sold separately as well.

Applicable Models	Model
FA-1210MB	M12 nut
FA-1210MD	
FWM-1210MBD	