



### SPECIFICATIONS

Model	Stroke mm	Max Energy Absorption J(kgf·m)	Max Equiv. Mass kg(kgf)	Range of Impact Rate m/s	Orifice Type
FWM-1612XBD-C	12	9.8(1.0)	50(50)	0.1~3	Multiple-varying orifice type

### COMMON SPECIFICATIONS

Max Drag N(kgf)	Max Cycle Rate cycle/min	Max Energy Absorption per min. J/min(kgf·m/min)	Extension Force N(kgf)	Operating Temp. C°	Mass g
2,646 (270)	60	235(24)	14.7(1.5) or lower	-5~70	117

### PRECAUTIONS FOR USE

- Do not use this product without carefully reading the attached owner's manual.
- Ensure that an external stopper (Stopper nut OP-020HB) 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 located at the bottom of the main unit.
- Because the adjustment can be done in an analog manner, a value between two integers on the indicator can be set.
- Once the adjustment is complete, secure with a lock screw using a hex wrench.

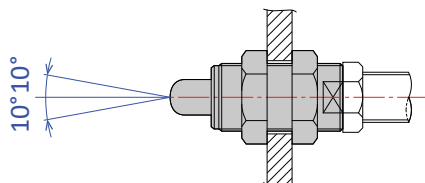
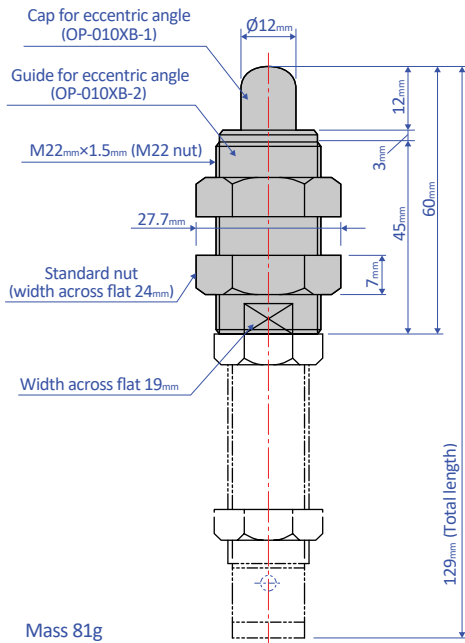
### ABSORPTION CHARACTERISTICS

Orifice type	Multiple-orifice type	<p>Absorption characteristics</p>
Model number	FWM-1612XBD Series	
Application	For medium speed, in particular with a pneumatic cylinder	

## OPTIONAL PARTS

### Eccentric angle adaptor OP-010XB

- 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 it is secured.
- Use the eccentric angle adaptor when the eccentric angle is  $2.5^\circ$  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  $\pm 10^\circ$ .
- The caps and the guides for inclined use are not unbundled.

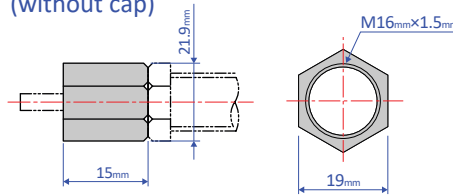


Note: Material of cap for eccentric angle: POM

### Stopper nut OP-020HB

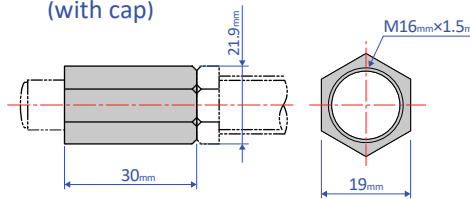
- Adjust so that it stops 1 mm before the stroke end, and fasten with the main unit's nut until secured.

#### OP-020HB-S (without cap)



Mass 15g

#### OP-020HB-C (with cap)



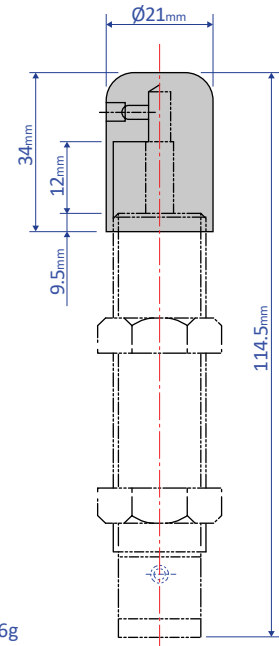
Mass 28g

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

Standard nuts are sold separately as well - M16 Nut

### Liquid-proof cap FWM-1612XBD-C-060

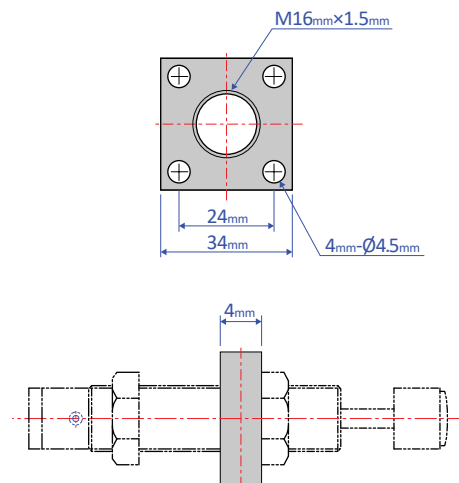
- A drip proof cap is fitted on the unit on delivery.
- Liquid-proof caps are not sold separately.
- Ensure that the cap is facing upward. If the cap is facing sideways or downward, it cannot provide an effective means for liquid proofing.



Mass 46g

### Square flange OP-040XB

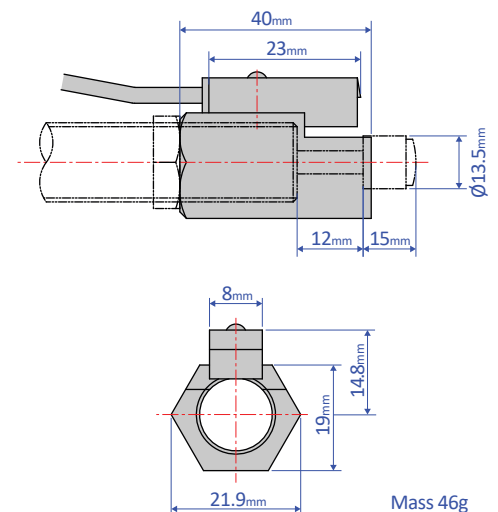
- Once the attachment site is determined, use the main unit's nut to securely fasten in place.



Mass 29g

### Holder with a switch OP-030HB-2

- 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.



Mass 46g