

Soft Absorber

FPD-1012 Series



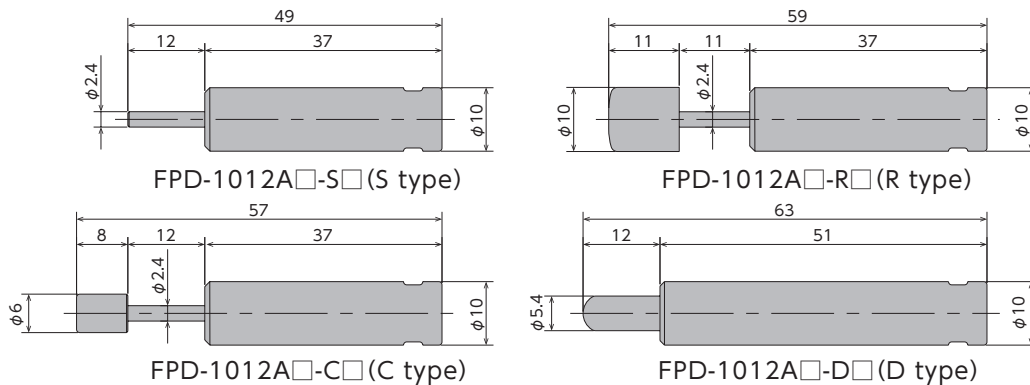
Model Description

FPD - 1012 A1 - SW

① ② ③ ④ ⑤ ⑥

- ① Base model
- ② External diameter
- ③ Stroke
- ④ Symbols indicating characteristics
 - A1 : Low-load specifications
 - A3 : Medium-load specifications
 - A5 : High-load specifications
 - A15 : Ultra high-load specifications
- ⑤ Symbols indicating form
 - S : S type (Standard)
 - C : C type (Cap)
 - R : R type (Elastomer cap)
 - D : D type (Eccentric angle cap)
 - * Please refer to the external dimensions.
- ⑥ Color symbols W : White B : Black

External Dimensions



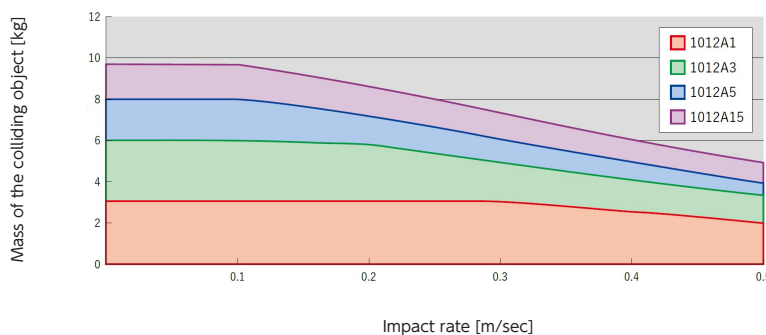
Specifications

MODEL	Max absorption energy	Speed range	Cylinder cap color
	J(kgf · m)	m/s	
FPD-1012A1	0.5(0.05)	0.5 or lower	Black
FPD-1012A3	0.8(0.08)	0.5 or lower	White
FPD-1012A5	1.0(0.10)	0.5 or lower	Blue
FPD-1012A15	1.2(0.12)	0.5 or lower	Brown

Common Specifications * For the motion-time of each load, please see the next page.

Stroke (S/C/D type)	mm	12	Mass	g	S type= 4.5, C type= 5.0, R type=5.7, D type =6.0
Stroke (R type)	mm	11	Main unit material	Resin	
Recovering power of the piston rod	N(kgf)	3 (0.3) or less	Operating temperature	℃ 5~40	

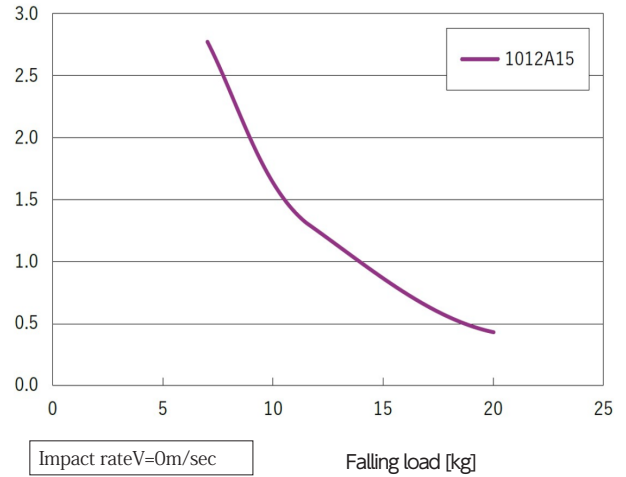
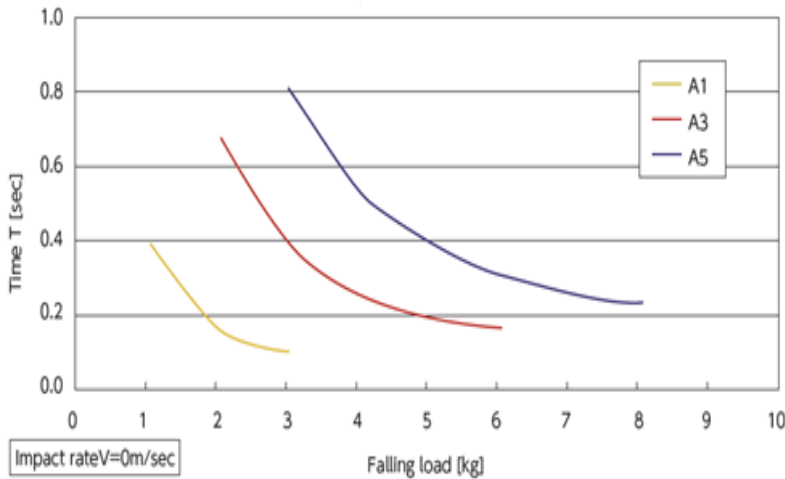
Impact rate and mass of the colliding object in freefall



●Products specification might be changed without notice.

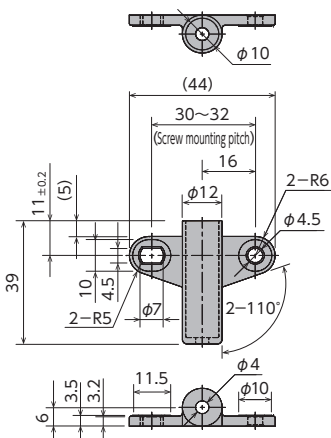
Characteristics Graph

Changes in Operating Time for Each Load



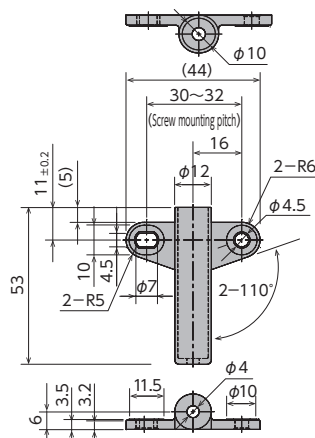
Optional Parts

OP-200-01B/W S/C/R type



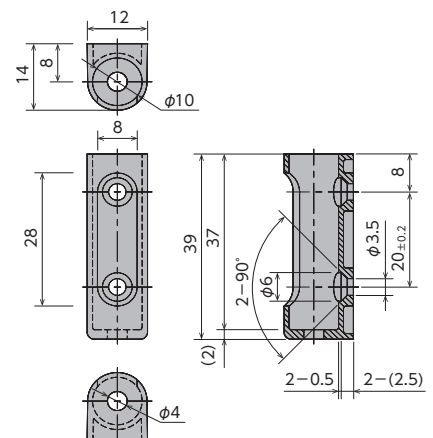
Screw: M4 (Truss screw)
 Recommended tightening torque : 0.5N·m

OP-200-02B/W D type



Screw: M4 (Truss screw)
 Recommended tightening torque : 0.5N·m

OP-200-03B/W S/C/R/D type

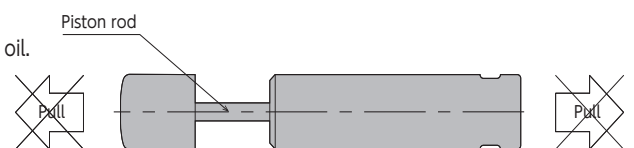


Screw: M3 (Flat head screw)
 Recommended tightening torque : 0.3N·m

- *These adaptors are dedicated for FPD-1012A series
- *They make it easy to install absorbers.
- *There are 2 colors: white and black.
- *Material : Polyacetal (POM)

Precautions for Use

- * Do not use this product without carefully reading the attached owner's manual.
- * Use with an external stopper.
- * Ensure that sufficient mounting strength is secured for this product.
- * 2 or more of this product can be used in parallel.
- * 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.
 - S/C/R type ... Allowable eccentric angle: $\pm 2.5^\circ$ or less
 - D type Allowable eccentric angle: $\pm 6^\circ$ or less
- * Do not pull the piston rod of the soft absorber.



(This will cause air to get inside the soft absorber, causing ineffective stroke, abnormal sounds, and other damage to the soft absorber.)
 * The difference between the speed of stroke and return of piston rod might influence the durability of the damper. So, please confirm sufficient performance on actual machine before use.