

Linear Dampers

FPD-1012 Series



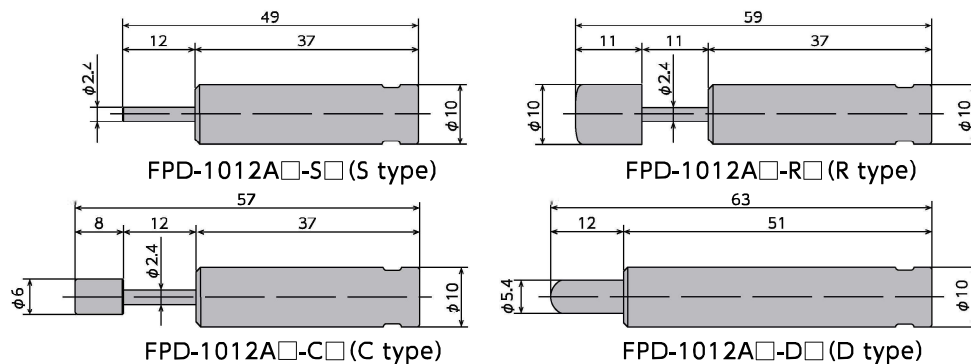
Model Description

F P D - 1 0 1 2 A 1 - S W

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
- ⑤ Symbols indicating form
 - S : S type (Standard)
 - C : C type (Cap)
 - R : R type (Elastomer cap)
 - D : D type (Eccentric angle cap)
- ⑥ Color symbols
 - * Please refer to the external dimensions.
 - W : White B : Black

External Dimensions



Specifications

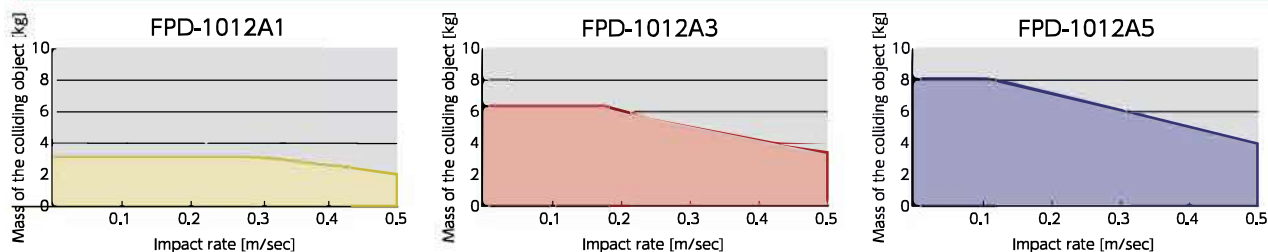
MODEL	load [kg]	Max absorption energy J (kgf·m)	Speed rang m/s	Cylinder cap color
FPD-1012A1	1	0.5 (0.05)	0.5 or lower	Black
FPD-1012A3	3	0.8 (0.08)	0.5 or lower	White
FPD-1012A5	5	1.0 (0.10)	0.5 or lower	Blue

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

Common Specifications

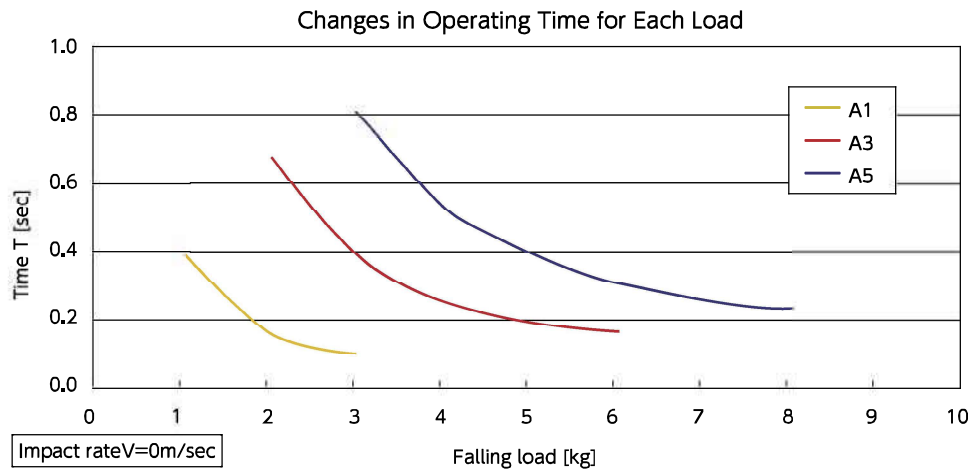
Stroke (S/C/D type)	mm	12	Mass	g	S type= 4.5, C type= 5.0, R type=5.7, D type =6.0
Stroke (R type)	mm	11	Main unit material		Resin
Recovering power of the piston rod	N (kgf)	3 (0.3) or less	Operating temperature	°C	5~40

Impact rate and mass of the colliding object in freefall



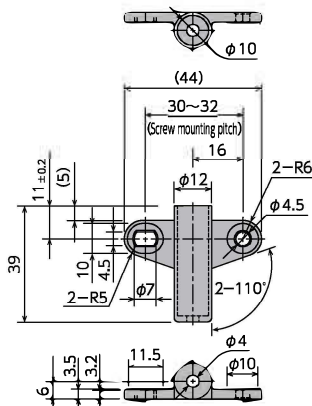
●Products specification might be changed without notice.

Characteristics Graph



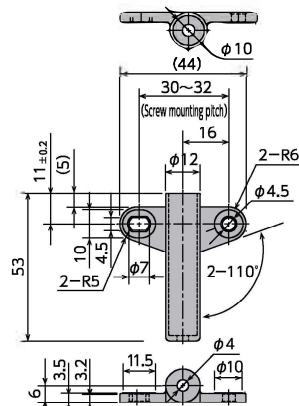
Optional Parts

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



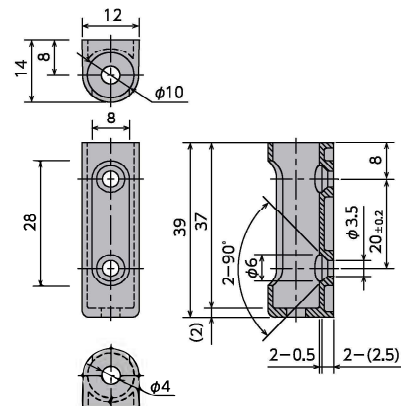
Screw: M4 (Truss screw)
Recommended tightening torque : 0.5N·m

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 linear dampers.
- *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 linear damper.
 - 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 linear damper.
(This will cause air to get inside the linear damper, causing ineffective stroke, abnormal sounds, and other damage to the linear damper.)
- * 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.

