

Linear damper

FPD-0715/0725/0745/0750/0755/0760 Series



Model Description

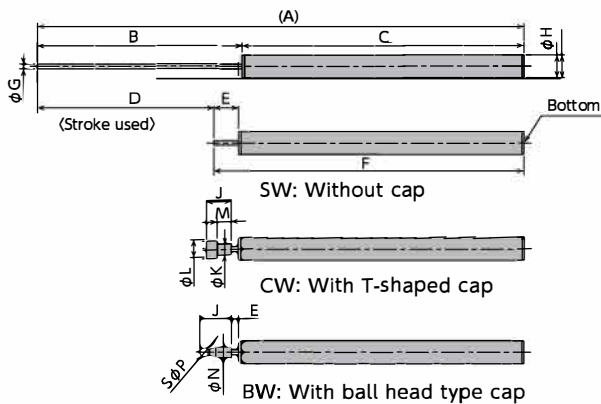
F P D - 0 7 4 5 A 1 - S W

① ② ③ ④ ⑤ ⑥

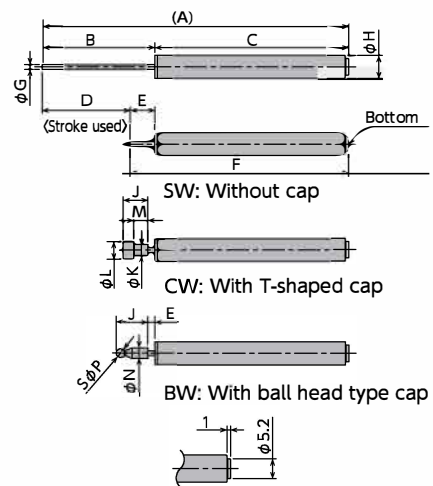
- ① Series name
- ② External diameter stroke
- ③ Stroke
- ④ With/Without self-returning
 - A : With Returning Spring
 - B : Without Returning Spring
- ⑤ Characteristics Number
 - 1 : Low-load (low thrust) specifications
 - 2 : Medium-load (medium thrust) specifications
 - 3 : High-load (high thrust) specifications
- ⑥ Symbols indicating form SW: Without cap
 CW : With T-shaped cap
 BW : With ball head type cap

External Dimensions

FPD-0715/0745/0750/0755/0760 External Dimensions



FPD-0725 External Dimensions



*FPD-0715A Series are provided with Returning Spring Type only
 *The shape of the bottom of FPD-0725 series differs from FPD-07□□ series. (Ref. Fig. 1)

Fig. 1 Bottom Shape of FPD-0725 Series

Dimensions

MODEL	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Mass(g)		
FPD-0715A□-SW	66	22	44	15	7	51	1.5	7.2	-	-	-	-	-	-	2.7		
FPD-0715A□-CW	68	24			2	53			7	62	-	3.5	5.5	4	-	-	-
FPD-0725A□-SW	87	32	55	25	7	62			7	3.5	5.5	4	-	-	-	3.4	
FPD-0725A□-CW	89	34			2	64			7	62	7	3.5	5.5	4	-	-	3.6
FPD-0725B□-SW	87	32			7	62			-	-	-	-	-	-	-	-	3.2
FPD-0725B□-CW	89	34	7	62	7	64			7	3.5	5.5	4	-	-	-	3.4	
FPD-0725B□-BW	91	36	2	66	9	-			-	-	-	3.4	2.8	3.3	-	3.3	
FPD-0745A□-SW	138	57	81	45	12	93			7	3.5	5.5	4	-	-	-	4.9	
FPD-0745A□-CW	140	59			7	95			7	62	7	3.5	5.5	4	-	-	5.1
FPD-0750B□-SW	138	57			7	88			-	-	-	-	-	-	-	-	4.7
FPD-0750B□-CW	140	59	50	90	7	90			7	3.5	5.5	4	-	-	-	4.9	
FPD-0750B□-BW	142	61	2	92	9	-			-	-	-	3.4	2.8	4.8	-	4.8	
FPD-0755A□-SW	159	67	92	55	12	104	7	3.5	5.5	4	-	-	-	5.6			
FPD-0755A□-CW	161	69			7	106	7	62	7	3.5	5.5	4	-	-	5.8		
FPD-0760B□-SW	159	67			7	99	-	-	-	-	-	-	-	-	5.3		
FPD-0760B□-CW	161	69	60	101	7	101	7	3.5	5.5	4	-	-	-	5.5			
FPD-0760B□-BW	163	71	2	103	9	-	-	-	-	3.4	2.8	5.4	-	5.4			

*The characteristics number 1, 2, or 3 is inserted in the □.

●Products specification might be changed without notice.

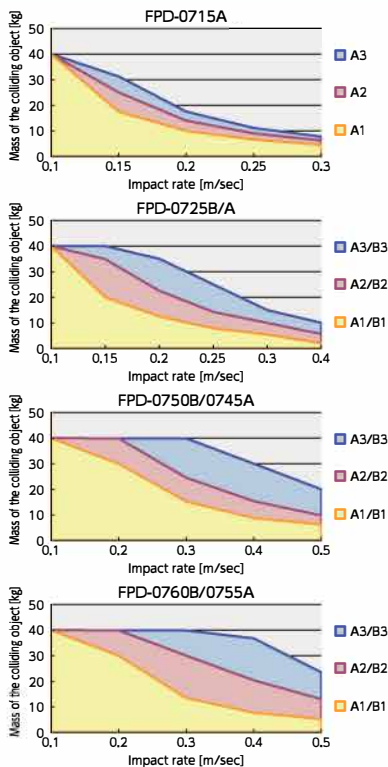
Specifications

MODEL	Max absorption energy J (kgf·m)	Speed range m/s	Cylinder cap color
FPD-0715A1-□	0.2(0.02)	Under 0.3	Black
FPD-0715A2-□	0.28(0.028)	Under 0.3	White
FPD-0715A3-□	0.3(0.03)	Under 0.3	Blue
FPD-0725A1-□	0.25(0.025)	Under 0.4	Black
FPD-0725A2-□	0.45(0.045)	Under 0.4	White
FPD-0725A3-□	0.8(0.08)	Under 0.4	Blue
FPD-0725B1-□	0.25(0.025)	Under 0.4	Black
FPD-0725B2-□	0.45(0.045)	Under 0.4	White
FPD-0725B3-□	0.8(0.08)	Under 0.4	Blue
FPD-0745A1-□	0.7(0.07)	Under 0.5	Black
FPD-0745A2-□	1.25(0.125)	Under 0.5	White
FPD-0745A3-□	2.5(0.25)	Under 0.5	Blue
FPD-0750B1-□	0.7(0.07)	Under 0.5	Black
FPD-0750B2-□	1.25(0.125)	Under 0.5	White
FPD-0750B3-□	2.5(0.25)	Under 0.5	Blue
FPD-0755A1-□	0.75(0.075)	Under 0.5	Black
FPD-0755A2-□	1.6(0.16)	Under 0.5	White
FPD-0755A3-□	2.9(0.29)	Under 0.5	Blue
FPD-0760B1-□	0.75(0.075)	Under 0.5	Black
FPD-0760B2-□	1.6(0.16)	Under 0.5	White
FPD-0760B3-□	2.9(0.29)	Under 0.5	Blue

Common Specifications

Recovering power of piston rod N(kgf)	With returning spring : ≤5 (0.5), Without returning spring : ≤1.5 (0.15)
Main unit material	Resin
Range of operating temperature, degree s C	5~40°C

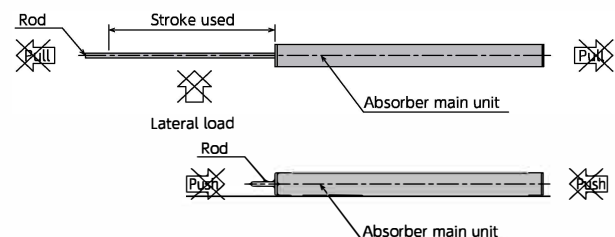
Absorbable energy range under a horizontal inertial collision condition



*The absorbable energy ranges above represent the properties under a condition where no thrusting force exists.

Precautions for Use

- * 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.
- * Do not press the piston rod of linear damper in beyond the stroke used.
(This will cause the incomplete return of the piston rod and other failures.)
- * Do not pull the linear damper beyond the stroke used.
(This will cause the damage or failure of the linear damper.)
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.
- ** A falling impact will cause a deformation, damage, etc. Please handle with special care.



Linear damper

FPD-0805 Series



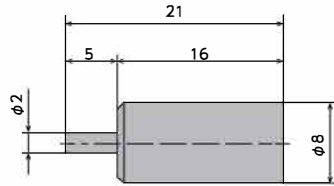
Model Description

F P D - 0 8 0 5 A 5 - S W

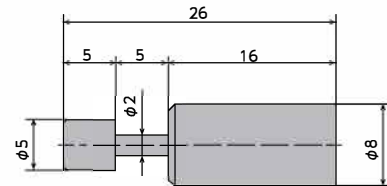
① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ Characteristics number
A1: Low-load specifications
A2: High-load specifications
- ⑤ Symbols indicating form
S : S type (Standard)
C : C type (Cap)
* Please refer to the external dimensions.
- ⑥ Symbols indicating color W : White

External Dimensions



FPD-0805A□-SW (S type)



FPD-0805A□-CW (C type)

Specifications

MODEL	Max absorption energy J (kgf·m)	Impact speed range m/s	Push Speed rang mm/s	Max load thrust N(kgf)	Cylinder cap color
FPD-0805A1	0.2	0.5 or lower	-	-	Black
FPD-0805A2	0.3	0.5 or lower	-	-	White
FPD-0805A5	-	-	50 or lower	80(8)	Blue
FPD-0805A7	-	-	20 or lower	100(10)	Brown

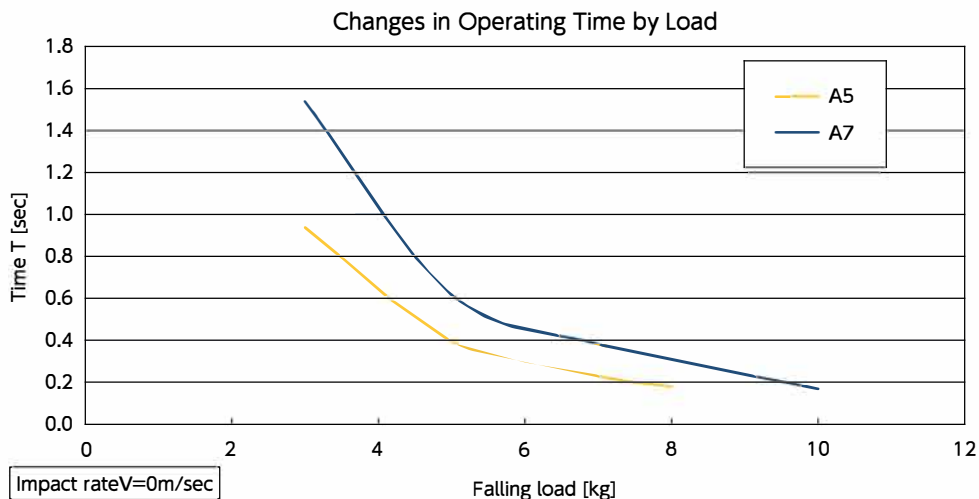
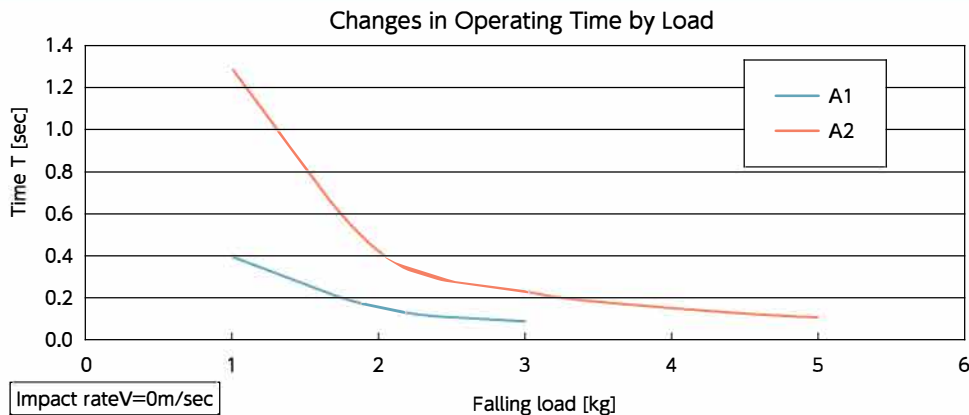
* For the motion-time of each load, please see the next page.

Common Specifications

Stroke (S/C type)	mm	5	Main Unit Material	Resin
Recovering power of piston rod	N (kgf)	6(0.6) or lower	Range of operating temperature, degrees °C	5~40
Mass	g	S type =1.3, C type =1.5		

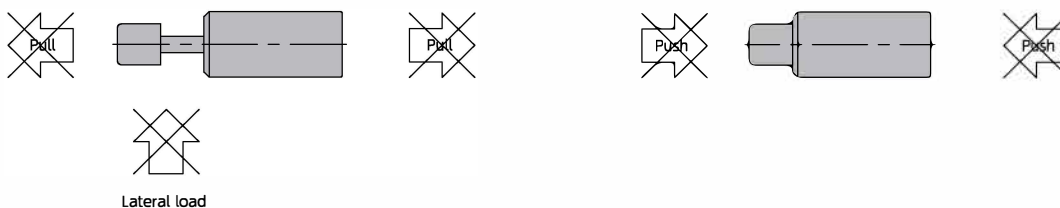
●Products specification might be changed without notice.

Graph of Operating Time by Load



Precautions for Use

- * 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.
Allowable eccentric angle: within $\pm 2.5^\circ$
- * Do not pull the linear damper beyond the stroke used.
(This will cause the damage or failure of the linear damper.)
- * Do not press the piston rod of linear damper in beyond the stroke used.
(This will cause the incomplete return of the piston rod, and other failures.)
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.



Linear damper

FPD-1006/1008 Series



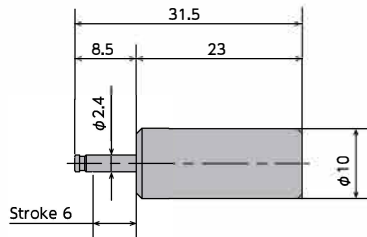
Model Description

F P D - 1 0 0 6 A 8 - S W

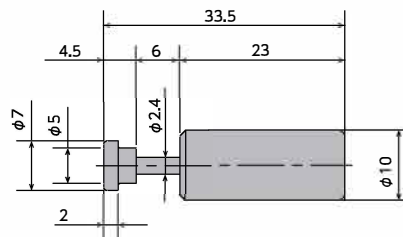
① ② ③ ④⑤ ⑥ ⑦

- ① Series name
- ② External diameter
- ③ Stroke
- ④ With/Without self-returning
A : With returning spring
B : Without returning spring
- ⑤ Characteristics number
3, 5 : High-load specifications
8, 12, 15 : Low-load specifications
- ⑥ Symbols indicating form
S : S type (Standard)
C : C type (Cap)
*Please refer to the external dimensions.
- ⑦ Symbols indicating color W : White

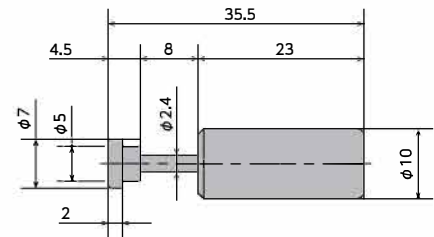
External Dimensions



FPD-1006A□-SW(S type)



FPD-1006A□-CW(C type)



FPD-1008B□-CW(C type)

* FPD-1006 Series are supplied only in types implementing a return spring, and FPD-1008 Series are supplied only in C-Type without a return spring.

Specifications

MODEL	Max absorption energy J(kgf·m)	Impact speed range m/s	Push Speed rang mm/s	Max load thrust N(kgf)	Cylinder cap color
FPD-1006A3	0.3	Under 0.5	-	-	Black
FPD-1006A5	0.4	Under 0.5	-	-	White
FPD-1006A8	-	-	Under 40	120(12)	Blue
FPD-1006A12	-	-	Under 30	160(16)	Brown
FPD-1006A15	-	-	Under 20	200(20)	Gray
FPD-1008B3	0.4	Under 0.5	-	-	Black
FPD-1008B5	0.5	Under 0.5	-	-	White
FPD-1008B8	-	-	Under 40	120(12)	Blue
FPD-1008B12	-	-	Under 30	160(16)	Brown
FPD-1008B15	-	-	Under 20	200(20)	Gray

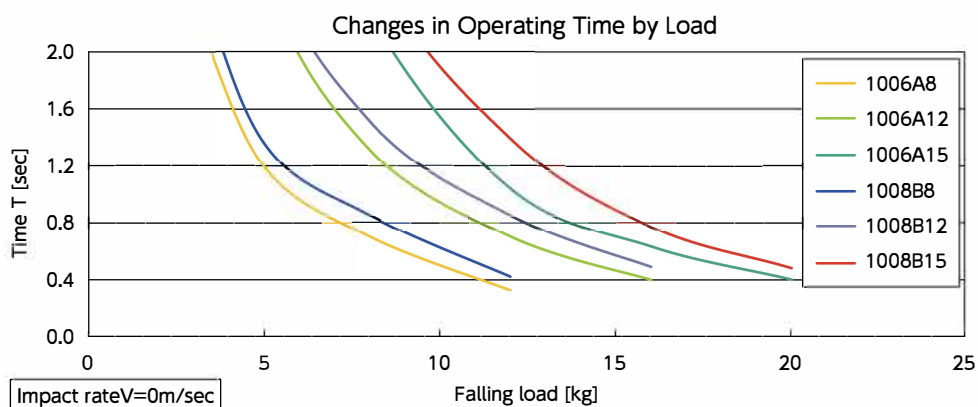
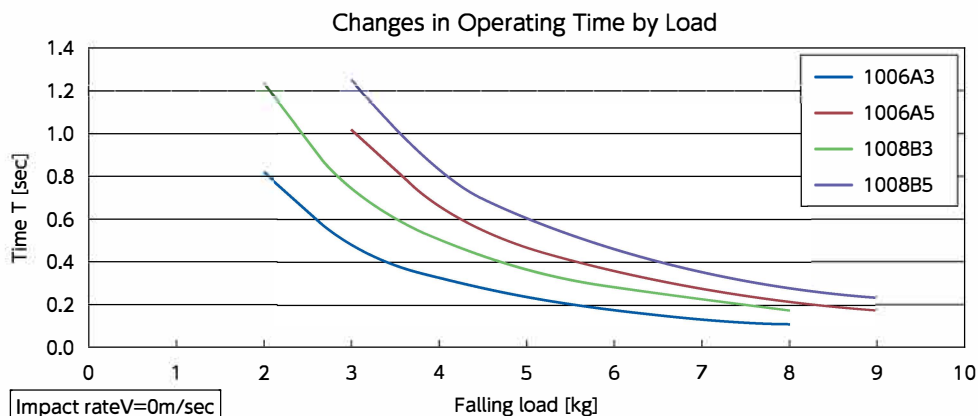
* For the motion-time of each load, please see the next page.

Common Specifications

Stroke	FPD-1006 6mm	Mass	FPD-1006 S type 2.9g
	FPD-1008 8mm		FPD-1006 C type 3.1g
Recovering power of piston rod N(kgf)	FPD-1006 Under 5(0.5)	Main unit material	FPD-1008 C type 3.0g
	FPD-1008 Under 1(0.1)		Resin
Range of operating temperature, degrees °C			5~40

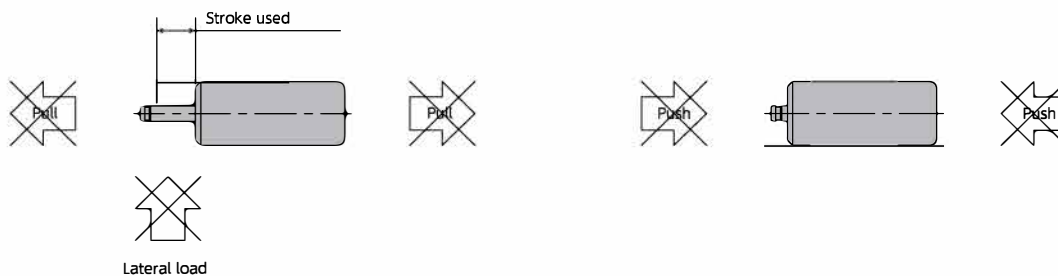
●Products specification might be changed without notice.

Graph of Operating Time by Load



Precautions for Use

- * 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.
 Allowable eccentric angle: within ± 2.5
- * Do not pull the linear damper beyond the stroke used.
 (This will cause the damage or failure of the linear damper.)
- * Do not press the piston rod of linear damper in beyond the stroke used.
 (This will cause the incomplete return of piston rod, and other failures.)
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected.
 Confirm its performance in an actual machine before use.



Linear damper

FPD-1012 Series

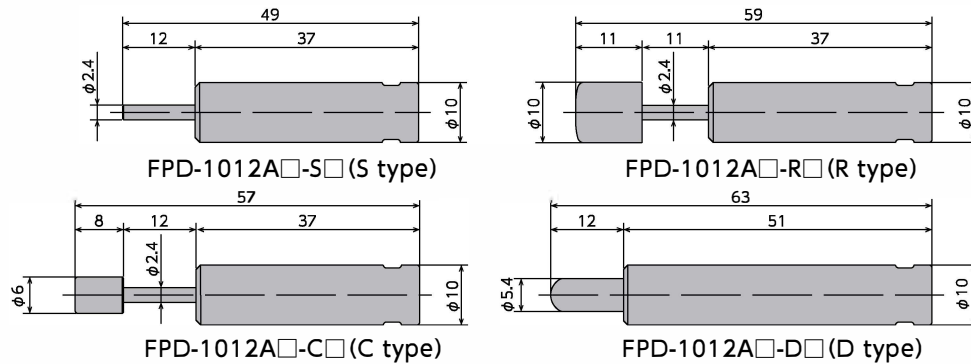


Model Description

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)
 - * Please refer to the external dimensions.
- ⑥ Color symbols W : White B : Black

External Dimensions



Specifications

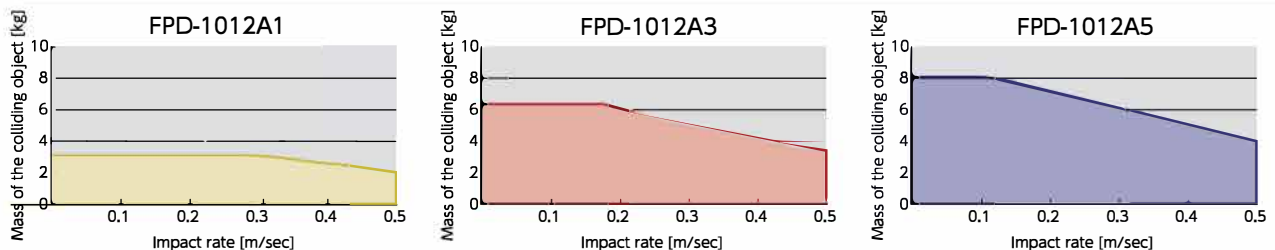
MODEL	load [kg]	Max absorption energy J (kgf·m)	Speed rang m/s	Cylinder cap color
FPD-1012A1	1	0.5(0.05)	0.5 or lower	Black
FPD-1012A3	3	0.8(0.08)	0.5 or lower	White
FPD-1012A5	5	1.0(0.10)	0.5 or lower	Blue

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

Common Specifications

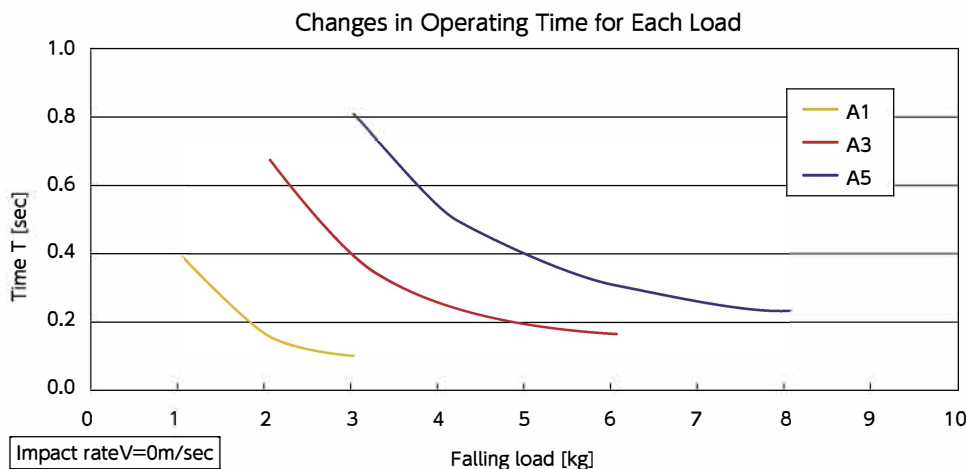
Stroke (S/C/D type)	mm	12	Mass	g	S type= 4.5, C type= 5.0, R type=5.7, D type =6.0
Stroke (R type)	mm	11	Main unit material	Resin	
Recovering power of the piston rod	N (kgf)	3(0.3) or less	Operating temperature	°C 5~40	

Impact rate and mass of the colliding object in freefall



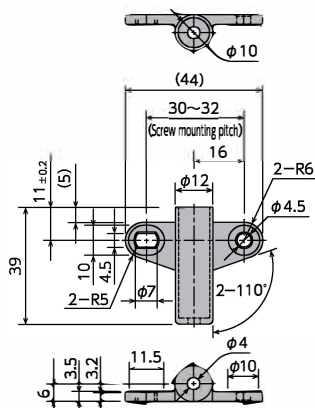
●Products specification might be changed without notice.

Characteristics Graph



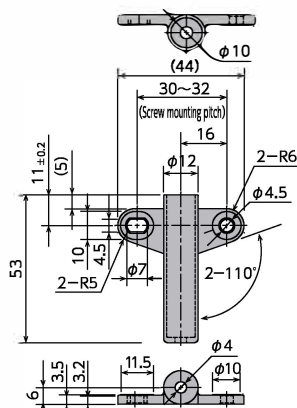
Optional Parts

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



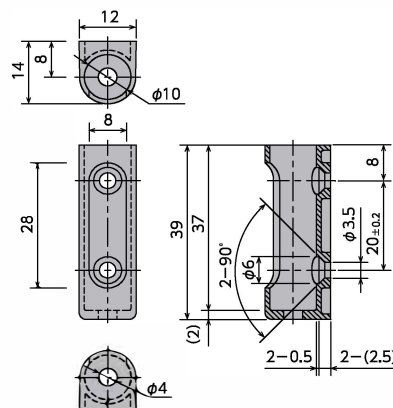
Screw: M4 (Truss screw)
 Recommended tightening torque : 0.5N·m

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

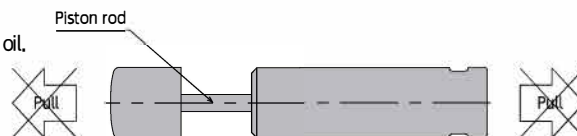


Screw: M3 (Flat head screw)
 Recommended tightening torque : 0.3N·m

- *These adaptors are dedicated for FPD-1012A series
- *They make it easy to install 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 **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.



Linear damper

FPD-1016 Series

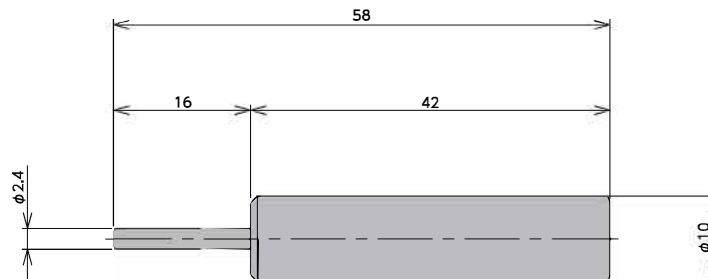


Model Description

F P D - 1 0 1 6 A 3 0 - S W
 ① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ Symbols indicating characteristic
 A30: Low-load specification
 A40: High-load specification
- ⑤ Symbols indicating form
 S: S type (Standard)
 *Please refer to the external dimensions
- ⑥ Symbols indicating color W : White

External Dimensions



FPD-1016A□-SW

Specifications

MODEL	Push speed range mm/s	Max load thrust N (kgf)	Cylinder cap color
FPD-1016A30-SW	15 or lower	300(30)	black
FPD-1016A40-SW		400(40)	white

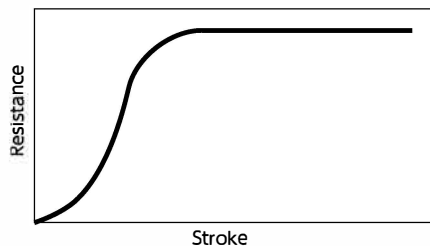
* For the motion-time of each load, please see the next page.

Common Specifications

Stroke	mm	16	Mass	g	5.2
			Main unit material		Resin
Recovering power of piston rod	N(kgf)	10 (1.0) or lower	Range of operating temperature	°C	5~40

Waveform of Resistance

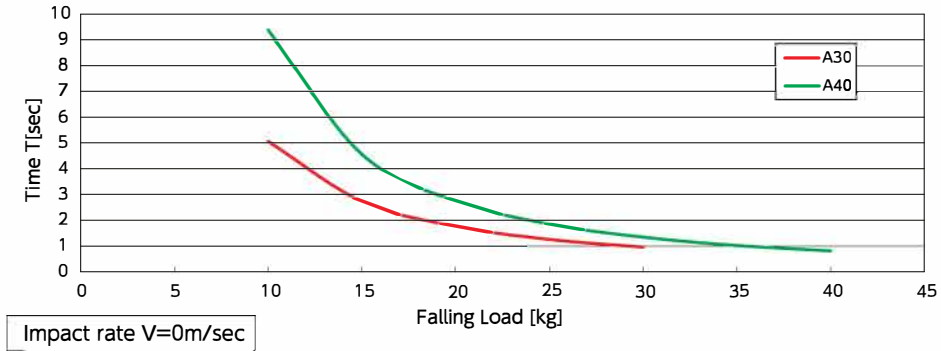
Waveform of Resistance: When pressing constant speed (F.Y.R.)



●Products specification might be changed without notice.

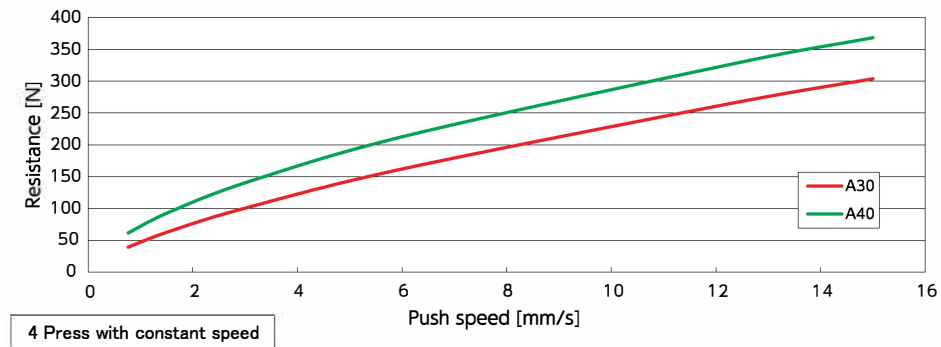
Graph of Operating Time by Load

Changes in Operating Time by load



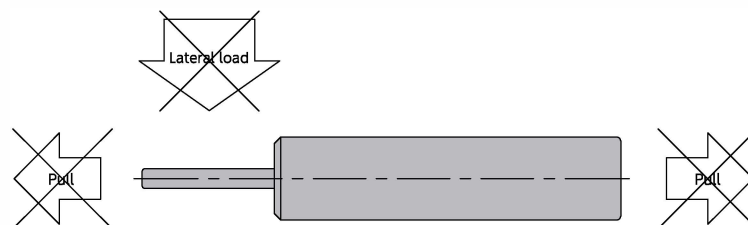
Graph of Resistance by Push Speed

Changes of Resistance by Push Speed



Precautions for Use

- * 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.
- Allowable eccentric angle: within ± 2.5
- * Do not pull the soft absorber beyond the stroke used.
(This will cause the damage or failure of the linear damper.)
 - * Do not press the piston rod of linear damper in beyond the stroke used.
(This will cause the incomplete return of piston rod, and other failures.)
 - * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.



Linear damper

FPD-1018 Series



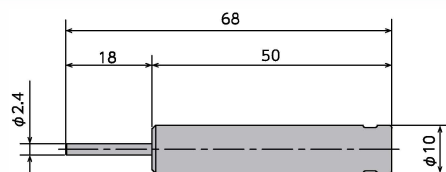
Model Description

FPD - 1018 A15 - SW

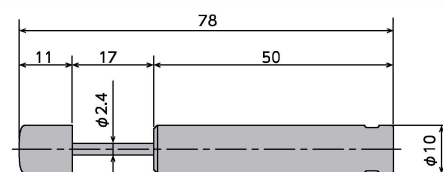
① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ Symbols indicat : ing characteristics
 - A15 : Low-load specifications
 - A20 : High-load specifications
- ⑤ Symbols indicating form
 - S : S type (Standard)
 - C : C type (Cap)
 - R : R type (Elastomer cap)
 - * Please refer to the external dimensions.
- ⑥ Symbols indicating color W : White

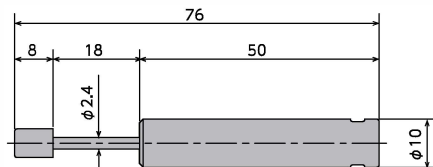
External Dimensions



FPD-1018A□-SW (S type)



FPD-1018A□-RW (R type)



FPD-1018A□-CW (C type)

Specifications

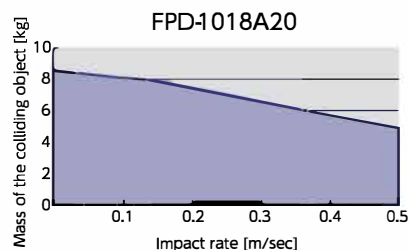
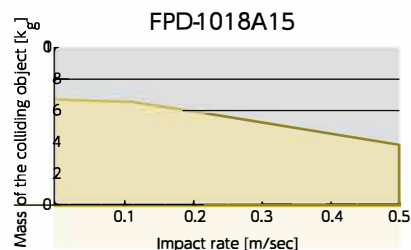
MODEL	Max absorption energy J(kgf·m)	Impact speed range m/s	Cylinder cap color
FPD-1018A15	1.2(0.12)	0.5 or lower	Brown
FPD-1018A20	1.5(0.15)	0.5 or lower	Gray

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

Common Specifications

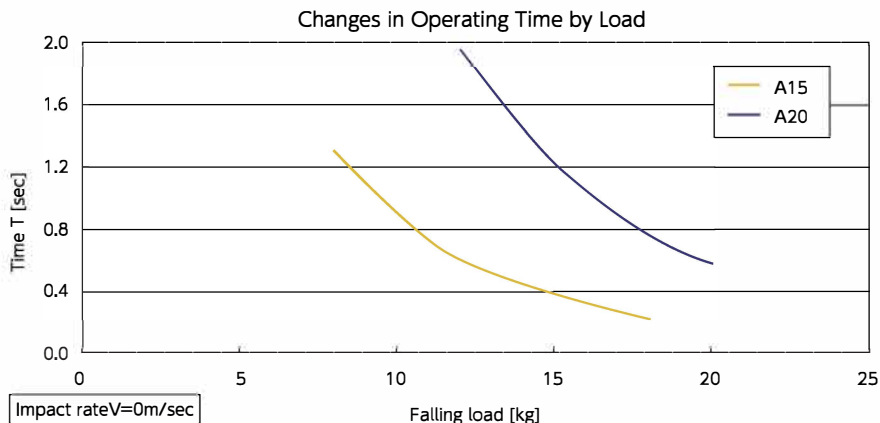
Stroke (S/C type)	mm	18	Mass	g	S type = 6.1, C type = 6.6, R type = 7.3
Stroke (R type)	mm	17	Main unit material		Resin
Recovering power of piston rod	N (kgf)	6(0.6) or lower	Range of operating temperature, degrees °C		5~40

Graph of Impact Rate/Mass of Colliding Object Under the Condition of Free Fall



●Products specification might be changed without notice.

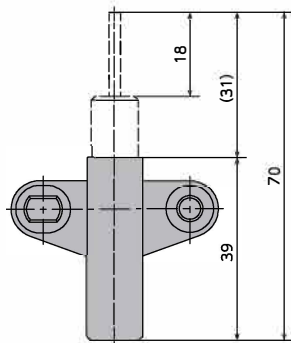
Graph of Operating Time by Load



Optional Parts

OP-200-01B/W

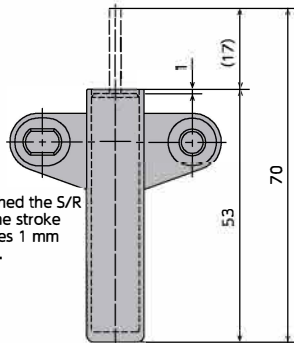
MODEL
OP-200-01B
OP-200-01W



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

OP-200-02B/W

MODEL
OP-200-02B
OP-200-02W

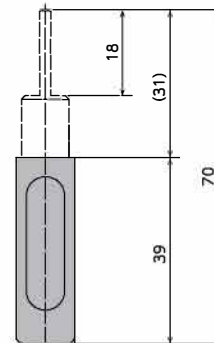


* Attached the S/R type, the stroke becomes 1 mm shorter.

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

OP-200-03B/W

MODEL
OP-200-03B
OP-200-03W

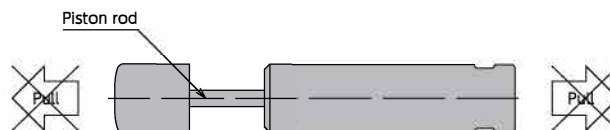


Screw used: M3 (countersunk screw)
 Recommended tightening torque: 0.3 N·m

- The diagram indicates the mounting dimensions of the adaptor for the FPD-1012 series used in combination with the FPD-1018S type.
- For the details of the adaptor specifications, please see the pages of the FPD-1012 series.

Precautions for Use

- ※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
- * 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.)
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.



Linear damper

FPD-1030/1050/1060/1070/10100/10150 Series



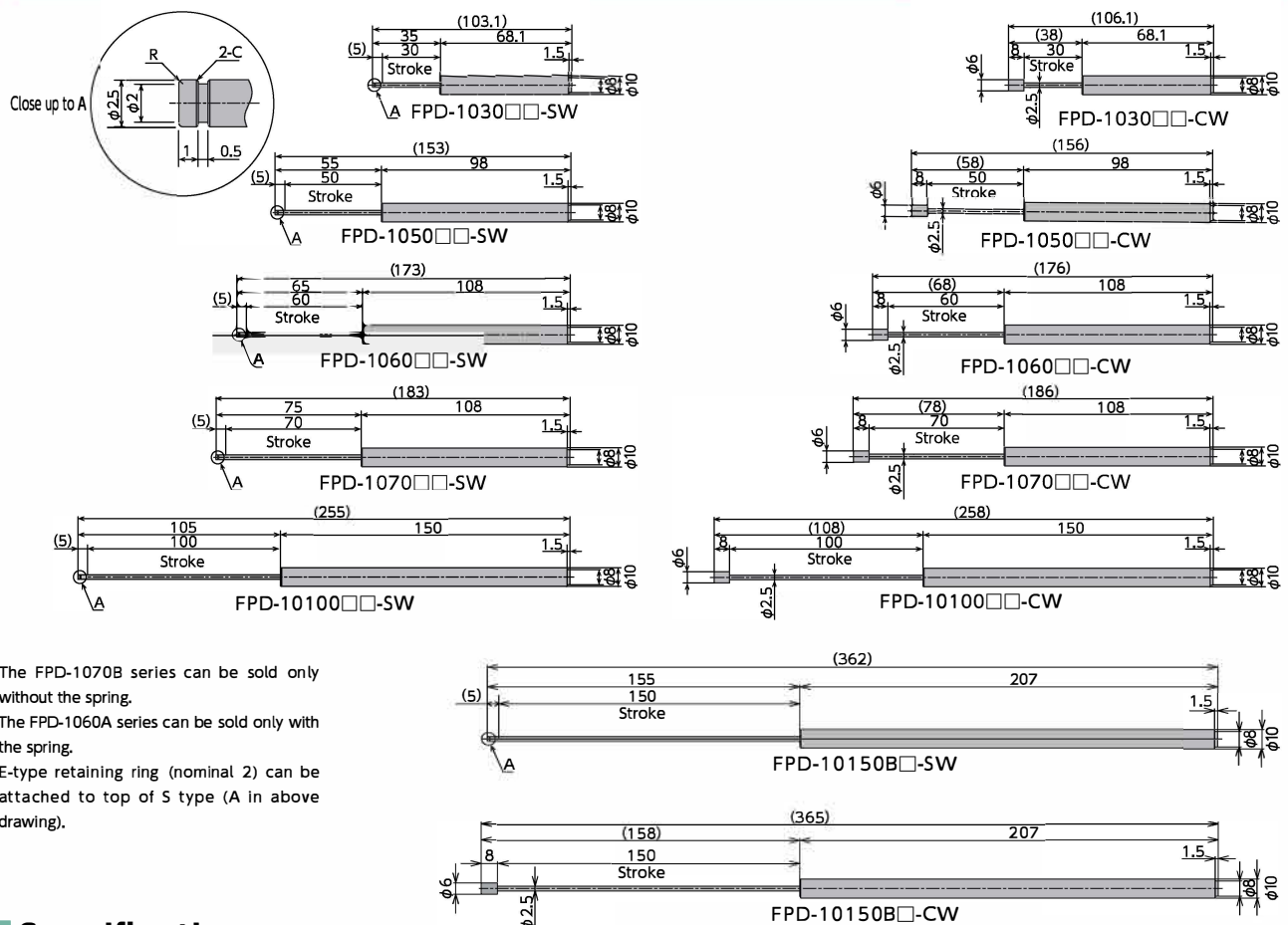
Model Description

F P D - 1 0 3 0 B 1 - S W

① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ Self-return presence A : With returning spring
 B : Without returning spring
- ⑤ Symbols indicating characteristics 1 : Low load (low thrust) specifications
 2 : Medium load (medium thrust) specifications
 3 : High load (high thrust) specifications
- ⑥ Symbols indicating shape SW : Without cap
 CW : With cap

External Dimensions



*The FPD-1070B series can be sold only without the spring.

*The FPD-1060A series can be sold only with the spring.

*E-type retaining ring (nominal 2) can be attached to top of S type (A in above drawing).

Specifications

Stroke[mm]	FPD-1030=30,FPD-1050=50,FPD-1060=60,FPD-1070=70,FPD-10100=100, FPD-10150=150
External diameter[mm]	φ10
Mass[g]	FPD-1030-SW=8,FPD-1030-CW=8.5,FPD-1050-SW=12,FPD-1050-CW=12.5,FPD-1060-SW=13.5,FPD-1060-CW=14,FPD-1070-SW=13.5,FPD-1070-CW=14,FPD-10100-SW=18.5,FPD-10100-CW=19,FPD-10150-SW=26.1,FPD-10150-CW=26.4
Main unit material	Resin
Operating temperature[°C]	5~40

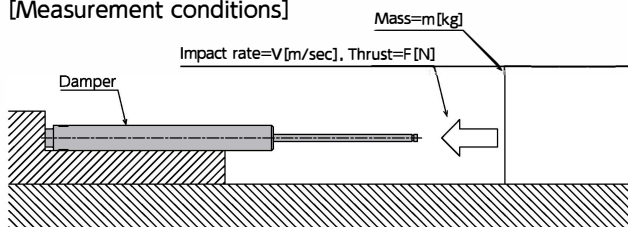
●Products specification might be changed without notice.

Motion performance

Model	Load [kg]	Thrust [N]	Impact rate [m/sec]	Motion time [sec]	Recovering power of the piston rod [N]	※Bottom color
FPD-1030A1-□W	10	6	0.3	0.2~1.5	5 or less	Black
FPD-1030A2-□W	10	8	0.3	0.2~1.5	5 or less	White
FPD-1030A3-□W	10	13	0.3	0.3~1.6	5 or less	Grey
FPD-1030B1-□W	10	5	0.3	0.2~1.2	1.5 or less	Black
FPD-1030B2-□W	10	8	0.3	0.2~1.2	1.5 or less	White
FPD-1030B3-□W	10	13	0.3	0.3~1.3	1.5 or less	Grey
FPD-1050A1-□W	10	8	0.5	0.3~2.0	6 or less	Black
FPD-1050A2-□W	10	10	0.5	0.4~2.2	6 or less	White
FPD-1050A3-□W	10	15	0.5	0.5~2.5	6 or less	Grey
FPD-1050B1-□W	10	5	0.5	0.3~2.0	1.5 or less	Black
FPD-1050B2-□W	15	8	0.5	0.4~2.2	1.5 or less	White
FPD-1050B3-□W	15	13	0.5	0.5~2.5	1.5 or less	Grey
FPD-1060A1-□W	10	8	0.5	0.3~2.0	6 or less	Black
FPD-1060A2-□W	10	10	0.5	0.4~2.2	6 or less	White
FPD-1060A3-□W	10	15	0.5	0.5~2.5	6 or less	Grey
FPD-1070B1-□W	10	5	0.5	0.3~2.0	1.5 or less	Black
FPD-1070B2-□W	15	8	0.5	0.4~2.2	1.5 or less	White
FPD-1070B3-□W	15	13	0.5	0.5~2.5	1.5 or less	Grey
FPD-10100B1-□W	10	5	0.5	0.8~3.0	1.5 or less	Black
FPD-10100B2-□W	15	8	0.5	0.8~3.2	1.5 or less	White
FPD-10100B3-□W	15	15	0.5	1.5~5.5	1.5 or less	Grey
FPD-10150B1-□W	20	15	0.5	0.8~3.5	4.0 or less	Black
FPD-10150B2-□W	20	20	0.5	0.8~3.5	4.0 or less	White
FPD-10150B3-□W	20	25	0.5	0.8~3.5	4.0 or less	Grey

The above performance was measured using Fuji Latex' s instruments. So, please select dampers accordingly, and confirm operation on actual machines before selecting final models.

[Measurement conditions]

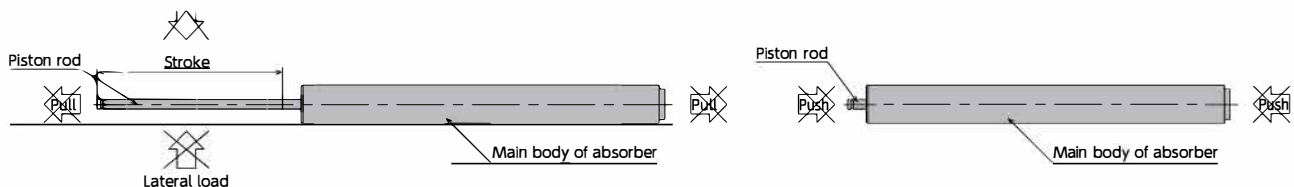


* Bottom color



Precautions in 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 (lateral load) is not applied to the linear damper.
- * Do not pull the piston rod of the linear damper more than stroke.
(This will cause air to get inside the linear damper, causing ineffective stroke, abnormal sounds, and other damage to the linear damper.)
- * Do not push the piston rod of the linear damper more than stroke.
(This will cause recovery failure and other damage to the linear damper.)
- * Although the main body of the FPD-10150B series may be slightly warped, there is no problem in terms of quality. However, it should be used after sufficiently confirming that there is no problem with respect to installation.



Linear damper

FPR-1040 Series



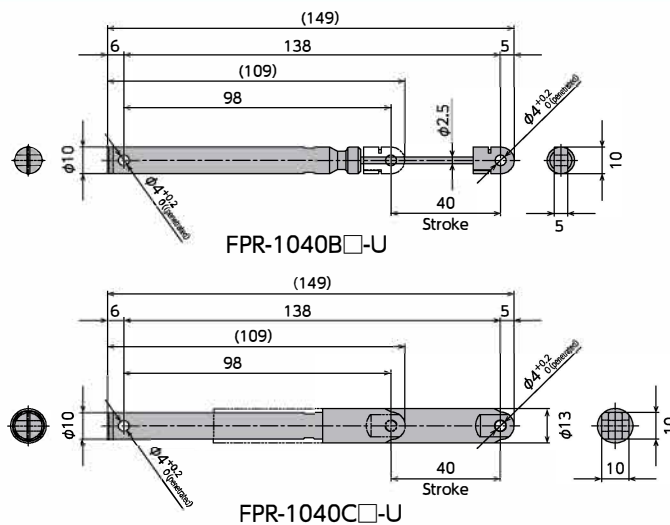
Model Description

F P R - 1 0 4 0 B 1 - U

① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ With/Without cover B : Without cover
 C : With cover
- ⑤ Symbols indicating characteristics
 - 1 : Low-load (low thrust) specifications
 - 2 : Medium-load (medium thrust) specifications
 - 3 : High-load (high thrust) specifications
- ⑥ Symbols indicating form U : With crevice

External Dimensions



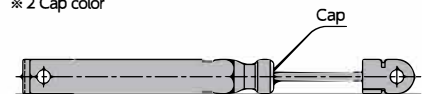
Specification

Model	Measuring speed [m/sec]	Resistance [N] ^{※1}	CAP COLOR ^{※2}
FPR-1040□1-U	0.04	30	Black
FPR-1040□2-U	0.04	45	White
FPR-1040□3-U	0.04	60	Gray

※ 1 The resistance generated is a reference value according to our measurement conditions.

● □ will be filled in with either B or C

※ 2 Cap color

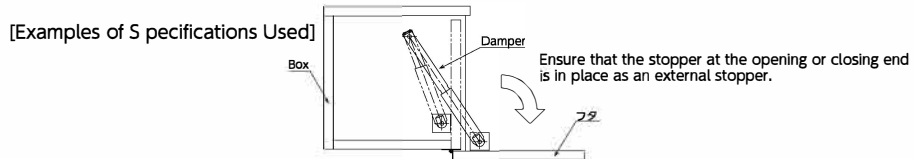
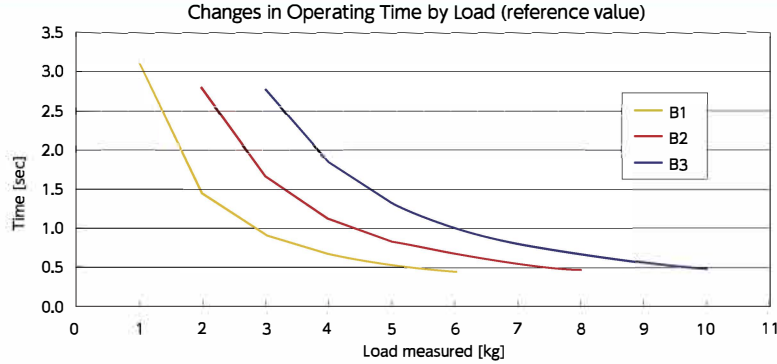


Common Specification

Stroke[mm]	40
External diameter[mm]	φ10
Mass[g](reference value)	FPR-1040B-U=11.6, FPR-1040C-U=14.2
Main unit material	Resin
Operating temperature[°C]	5~40

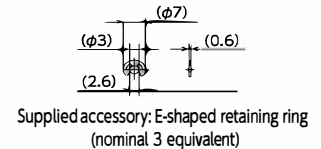
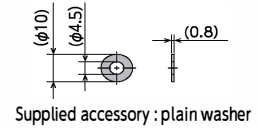
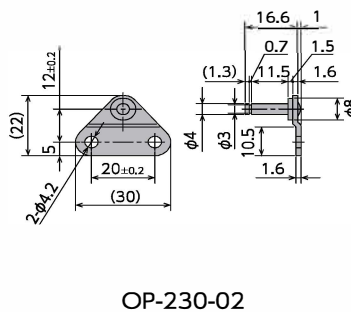
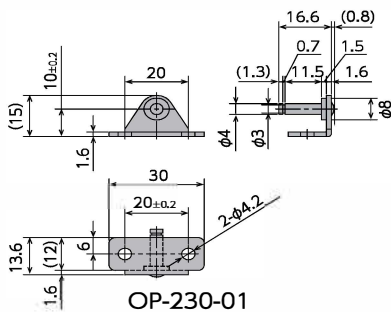
●Products specification might be changed without notice.

Graph of Operating Time by Load



Optional Parts

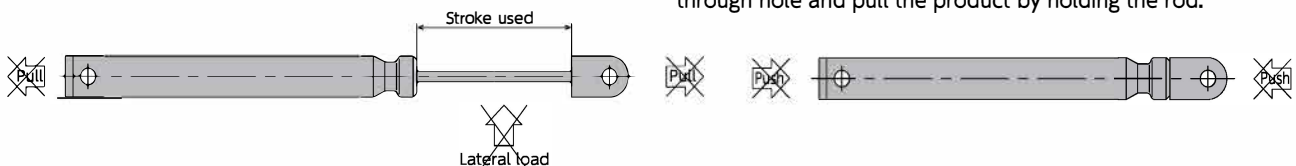
Model
OP-230-01
Model
OP-230-02



- Exclusive mounting fixture for FPR
- Facilitates the absorber mounting.
- A plain washer and E-shaped retaining ring are supplied to OP-230-01 and OP-230-02 each.
- Material: Metal

Precautions for Use

- * The linear damper generates the drag in the drawing direction.
- * Unusable to generate the resistance in the pushing direction.
- * 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.
- * Do not pull the linear damper beyond the stroke used. (This will cause the damage or failure of the linear damper)
- * Do not press the linear damper in beyond the stroke used. (This will cause the damage or failure of the linear damper.)
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.
- * For the products with cover, do not pull the cover part. When you need to pull the product, insert a rod into the φ 4 through hole and pull the product by holding the rod.



Linear damper

U Packing Seal

Fixed Type

Adjustable type

Self-adjusting

FPA-1475 Series

RoHS Compliant

●Products specification might be changed without notice.



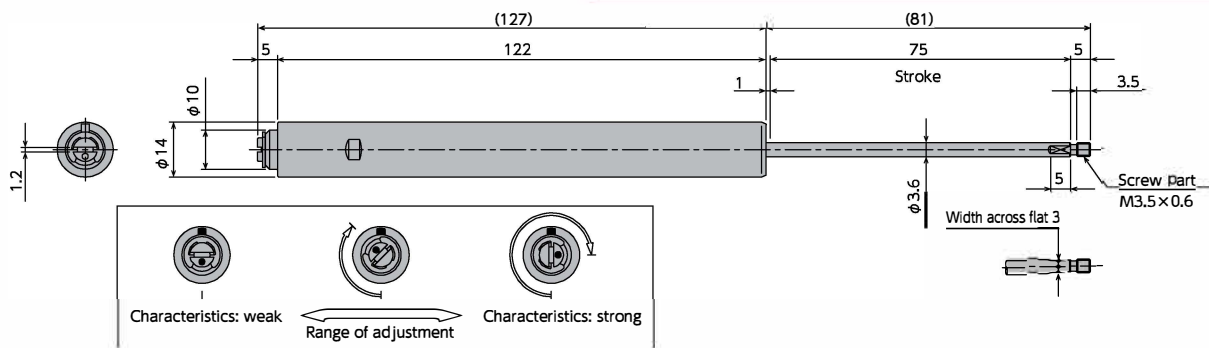
Model Description

F P A - 1 4 7 5 B 1 - S W

① ② ③ ④ ⑤ ⑥

- ① Series name
- ② External diameter
- ③ Stroke
- ④ For self-returning B : Without self-returning
With/Without spring
- ⑤ Symbols indicating characteristics
- ⑥ Symbols indicating form SW : Without cap

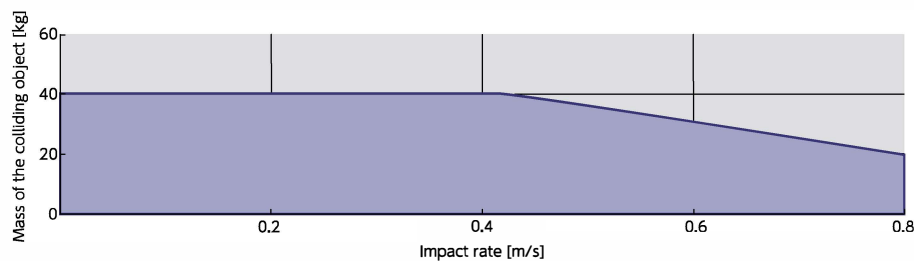
外形図



Specifications

Model	Stroke [mm]	Mass [g]	Main unit material	Range of impact rate [m/s]	range of operating temperature [°C]	Range of storage temperature [°C]
FPA-1475B1-SW	75	38	Resin	0.8 or lower	5~40	-10~50

Graph of Impact Rate/Mass of Colliding Object with the Condition of Horizontal Impact and No Thrust



Precautions for Use

- * The series do not have the self-returning function. The piston rod needs to be pulled out by external forces.
- * Use the product with the external stopper within the stroke range.
- * Ensure that sufficient mounting strength is secured for this product.
- * Do not use this product in a vacuum or a location where it may come in contact with oil.
- * Ensure that an eccentric load (lateral load) is not applied to the soft absorber.
- * When the gap between the pressing time and the returning time of the piston rod is large, the durability may be affected. Confirm its performance in an actual machine before use.