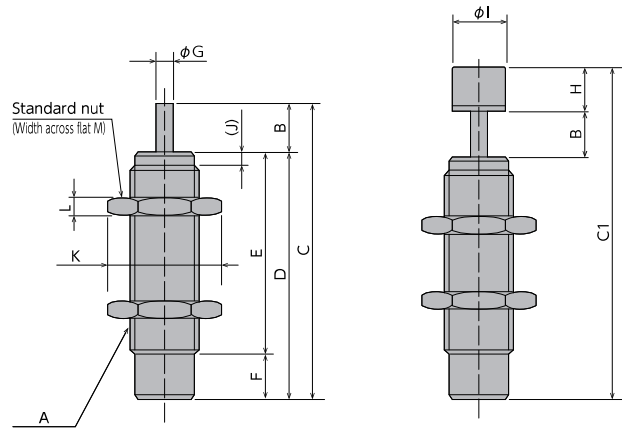


Soft Absorber

FA-0805/FA-1005/FA-1008/FA-1210 Series



Dimensions

Model	A	B	C	C1	D	E	F	φG	H	φI	J	K	L	M
FA-0805SB*-S/C	M8×0.75 (M8×1)	5	32	37	27	22	5	2	5	6	1.5	12.7	2	11
FA-1005PMB*-S/C	M10×1	5	32	39	27	22	5	3	7	6	1.5	15	3	13
FA-1008PB*-S/C	M10×1	8	46	53	38	33	5	3	7	6	1.5	15	3	13
FA-1210KB*-S/C	M12×1	10	60	68	50	45	5	3.5	8	8	1.5	16.2	4	14

Specifications

Model	Stroke mm	Max. absorption energy J (kgf·m)	Max. equivalent mass kg (kgf)	Max. drag N (kgf)	Absorption energy per minute J/min (kgf·m/min)	Recovering power of the piston rod N (kgf)	Mass g
FA-0805SB1-S ▲	5	0.39 (0.04)	3 (3)	490 (50)	17.6 (1.8)	4.9 or lower (0.5)	8.6
FA-0805SB1-C ▲							8.8
FA-0805SB2-S ▲		0.68 (0.07)	5 (5)	588 (60)	22.5 (2.3)		8.6
FA-0805SB2-C ▲							8.8
FA-1005PMB1-S	5	0.68 (0.07)	5 (5)	735 (75)	41.1 (4.2)	5.88 or lower (0.6)	13.2
FA-1005PMB1-C							14.2
FA-1005PMB2-S		0.98 (0.1)	8 (8)				13.2
FA-1005PMB2-C							14.2
FA-1008PB1-S	8	0.98 (0.1)	7 (7)	735 (75)	58.8 (6.0)	5.88 or lower (0.6)	17.2
FA-1008PB1-C							18.2
FA-1008PB2-S		1.47 (0.15)	10 (10)				17.2
FA-1008PB2-C							18.2
FA-1210KB1-S	10	1.96 (0.2)	15 (15)	1470 (150)	98 (10)	9.8 or lower (1.0)	30.6
FA-1210KB1-C							32.6
FA-1210KB2-S		2.45 (0.25)	30 (30)				30.6
FA-1210KB2-C							32.6

▲ The thread pitch P1.0 is supplied as well.

Common Specifications

Range of impact rate	m/s	0.3~1.0
Max. cycle rate	cycle/min	60 (45 for the FA-0805 series)
Operating temperature	°C	-5~70

Note) MB X 1.0 is also available as the main body's screw pitch specifications for the FA-0805 series. Please order using the model number FA-0805SB □-S-P1.0 or FA-0805SB □-C-P1.0. However, please note that there are no optional parts for it.
 Note) To place an order without a cap, put -S, and to place an order with a cap, put -C.
 Note) Cap colour: **1 is white and **2 is black.

Precautions for Use

- * Do not use this product without carefully reading the attached owner's manual.
- * Ensure that an external stopper (Stopper nut OP-020**) 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 ±2.5°)

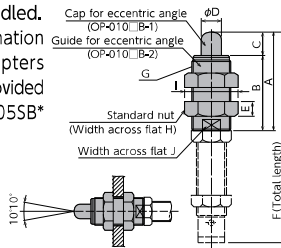
●Products specification might be changed without notice.

Optional Parts

Eccentric angle adaptor OP-010SB, PMB, PB, KB

Model
OP-010SB
OP-010PMB
OP-010PB
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.
- The inclination angle adapters are not provided for FA-0805SB* -SP1.0.



Note) Material of cap for eccentric angle: POM

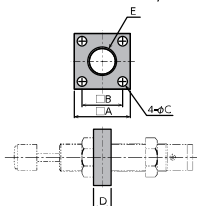
Model	A	B	C	φD	E	F
OP-010SB	28	23	5	6	4	44.5
OP-010PMB	28	23	5	8	6	44.5
OP-010PB	38	30	8	8	6	62.8
OP-010KB	48	38	10	10	5	81.8

Model	G	H	I	J	Mass g
OP-010SB	M12×1	14	16.2	10	13
OP-010PMB	M16×1.5	19	21.9	13	29
OP-010PB	M16×1.5	19	21.9	13	35
OP-010KB	M18×1.5	21	24.3	14	48

Square flange OP-040SB, PB, KB

Model
OP-040SB
OP-040PB
OP-040KB

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

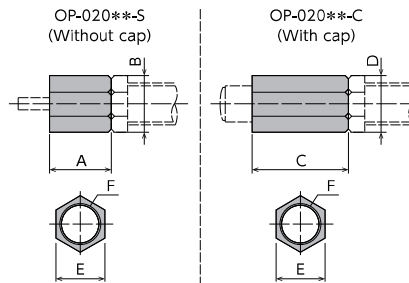


Model	A	B	C	D	E	Mass g
OP-040SB					M8×0.75	17
OP-040PB	25	18	3.2	4	M10×1	16
OP-040KB					M12×1	15

Stopper nut OP-020SB, PB, KB

Model
OP-020SB-S
OP-020SB-C
OP-020PB-S
OP-020PB-C
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.



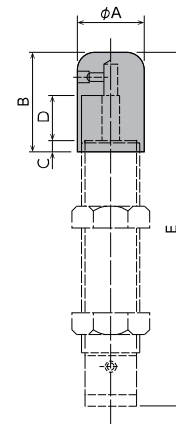
Note) When attaching, make sure that the side without a bearing chamfer is the impact surface.

Model	A	B	C	D	E	F	Mass g
OP-020SB-*	10	12.7	15	12.7	11	M8×0.75	S 5 C 7
OP-020PB-*	10	15	16	15	13	M10×1	S 6 C 9
OP-020KB-*	12	16.2	16	16.2	14	M12×1	S 6 C 8

Liquid-proof cap -060

Model
FA-1005PMB□-C-060
FA-1008PB□-C-060
FA-1210KB□-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.

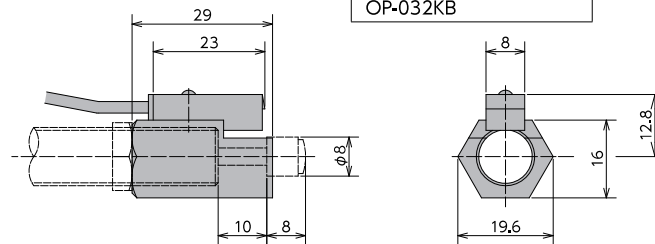


Model	φA	B	C	D	E	Mass g
FA-1005PMB□-C-060	13	15	3	5	39	9
FA-1008PB□-C-060	13	18	3	8	53	10
FA-1210KB□-C-060	17	28	9.5	10	68.5	25

- /Model indication 1 or 2 is inserted in □.

Holder with switch OP-030KB-2

Model
OP-032KB



Mass 38g

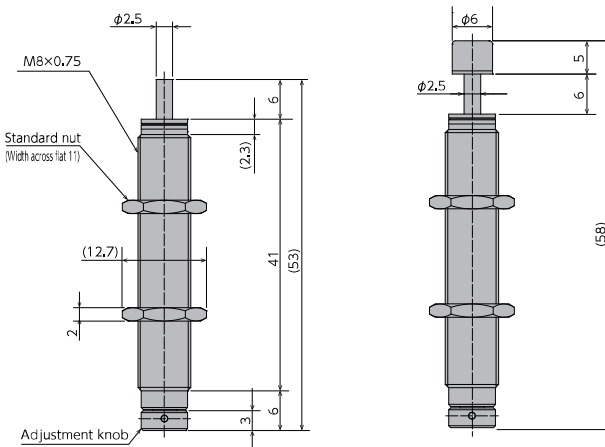
- Although a holder with a switch can be ordered on its own, we strongly recommend ordering one with the main unit. Please include the main unit's model number when placing an order.
- For switch specifications and precautions for use, please refer to page 23.

Standard nuts are sold separately as well.

Applicable Models	Model
FA-0805SB	M08 nut
FA-0805SB P1.0	M08-P1 nut
FA-1005PMB	M10 nut
FA-1008PB	M10 nut
FA-1210KB	M12 nut

Soft Absorber

FA-0806 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-0806-S	6	1.4 (0.14)	15 (15)	0.3~2	Single-orifice type
FA-0806-C					
FA-0806-S-P1.0					
FA-0806-C-P1.0					

Note: There are no optional parts for M8 x 1.0.

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)	670 (68.3)	Operating temperature	°C	-5~70
Max. cycle rate	cycle/min	45	Mass :S type	g	13.8
Max. absorption energy per minute	J/min (kgf·m/min)	36.7 (3.74)	:C type	g	14.1
Recovering power of the piston rod	N(kgf)	9 or lower (0.92)			

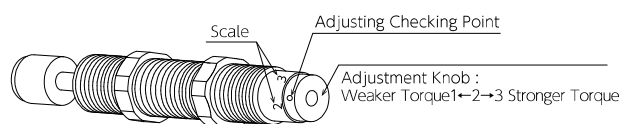
Absorption characteristics

Orifice type	Single-orifice type
Model number	FA-0806 Series
Application	For low to medium speed
Absorption characteristics	

Precautions for Use

- * Do not use this product without carefully reading the attached owner's manual.
- * We recommend that you use it with an external stopper (Stopper nut OP-020SB).
- * 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.
- * 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.

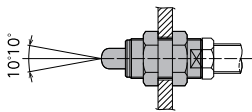
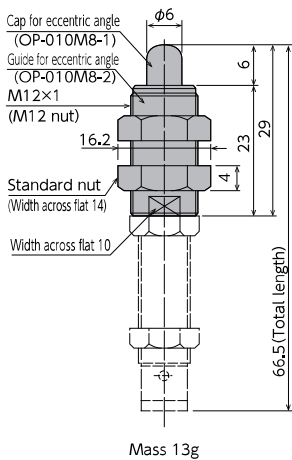
●Products specification might be changed without notice.

Optional Parts

Eccentric angle adaptor OP-010M8

Model
OP-010MB

- 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 FA-0806-S.
- The maximum operating eccentric angle with an eccentric angle adaptor is $\pm 10^\circ$.
- The maximum inclination angle using an inclination angle adapter is $\pm 10^\circ$.
- The caps and the guides for inclined use are not unbundled.

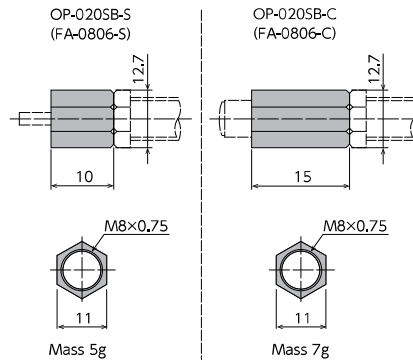


Note) Material of cap for eccentric angle: POM

Stopper nut OP-020SB

Model
OP-020SB-S
OP-020SB-C

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

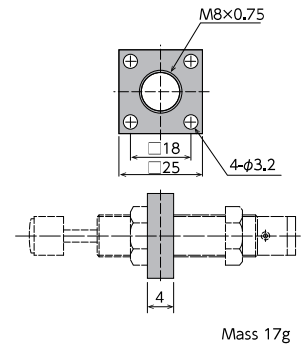


Note) When attaching, make sure that the side without a bearing chamfer is the impact surface.

Square flange OP-040SB

Model
OP-040SB

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

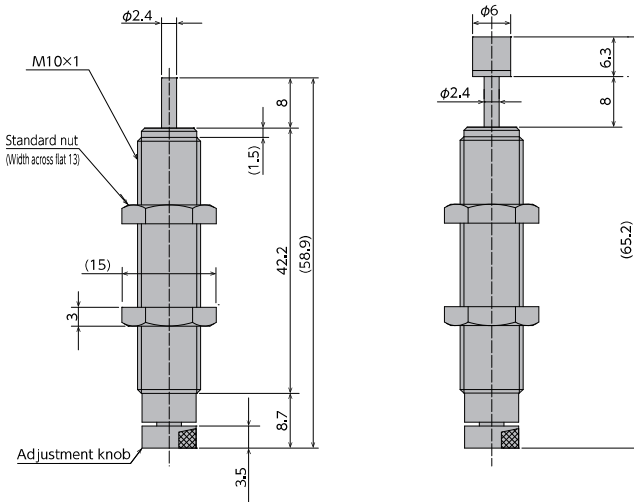


Standard nuts are sold separately as well.

Applicable Models	Model
FA-0806-S/C	M08 nut
FA-0806-S/C-P1.0	M08-P1.0 nut

Soft Absorber

FA-1008VB/FA-1008VD/FWM-1008VBD 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-1008VB-S	8	1.47 (0.15)	10 (10)	0.3~1	Single-orifice type
FA-1008VB-C					
FA-1008VD-S		1.76 (0.18)	2.5 (2.5)	0.7~3	Multiple-orifice type
FA-1008VD-C					
FWM-1008VBD-S			10 (10)	0.3~2	Multiple-varying orifice type
FWM-1008VBD-C					

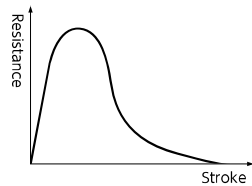
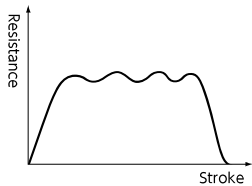
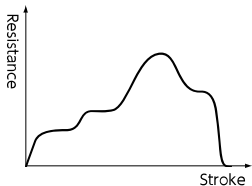
Note) To place an order without a cap, put -S at the end of the model number, and to place an order with a cap, put -C at the end of the model number.

Common Specifications

Max. drag	N (kgf)	637 (65)	Operating temperature	°C	-5~70
Max. cycle rate	cycle/min	60	Mass : S type	g	26.5
Max. absorption energy per minute	J/min (kgf·m/min)	58.8 (6)	: C type	g	27
Recovering power of the piston rod	N (kgf)	5.88 (0.6) or lower			

Selection Guideline

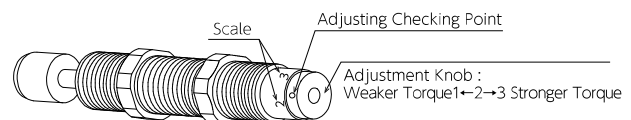
The FA-1008 series has the following three patterns of absorption characteristics depending on the orifice type. Please use the following information as a guideline when making your selection.

Orifice type	Single-orifice type	Multiple-orifice type	Multiple-varying orifice type
Model number	FA-1008VB series	FA-1008VD series	FWM-1008VBD 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-020PB) 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.
- * 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.

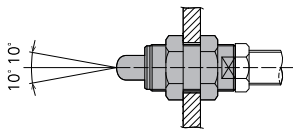
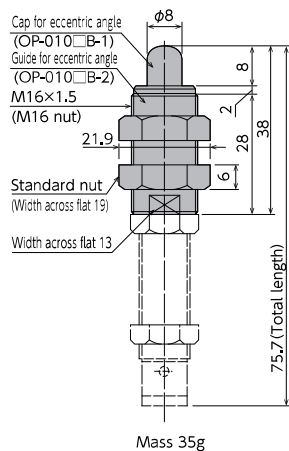
●Products specification might be changed without notice.

Optional Parts

Eccentric angle adaptor OP-010PB

Model
OP-010PB

- 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 $\pm 10^\circ$.
- The caps and the guides for inclined use are not unbundled.

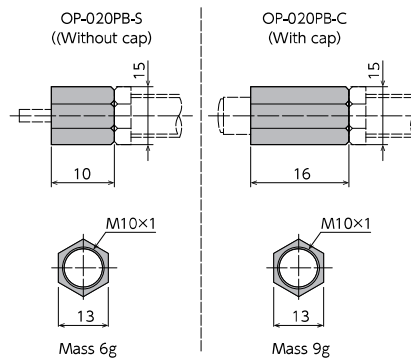


Note) Material of cap for eccentric angle: POM

Stopper nut OP-020PB-□

Model
OP-020PB-S
OP-020PB-C

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

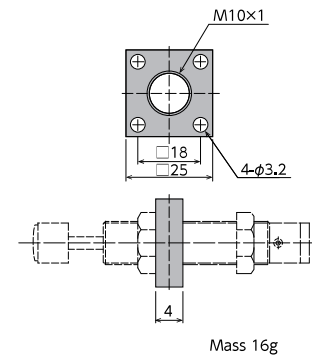


Note) When attaching, make sure that the side without a bearing chamfer is the impact surface.

Square flange OP-040PB

Model
OP-040PB

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

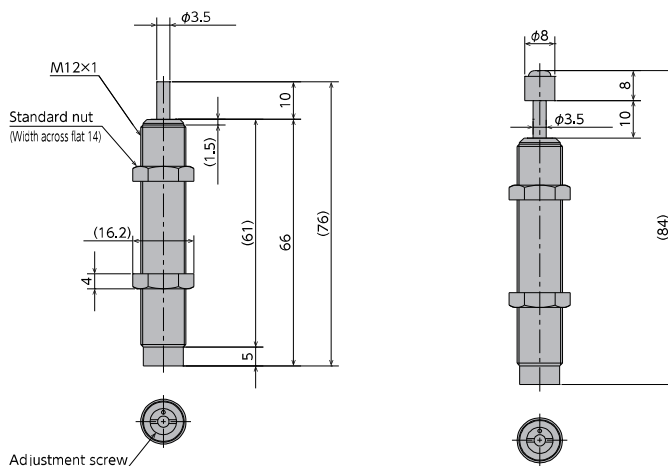


Standard nuts are sold separately as well.

Applicable Models	Model
FA-1008VB	M10 nut
FA-1008VD	
FWM-1008VBD	

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					

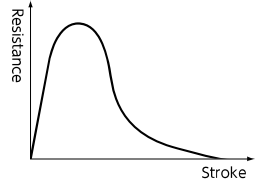
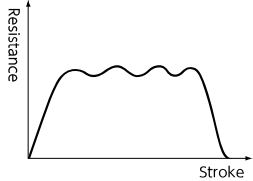
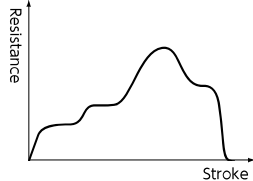
Note) To place an order without a cap, put -S at the end of the model number, and to place an order with a cap, put -C at the end of the model number.

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

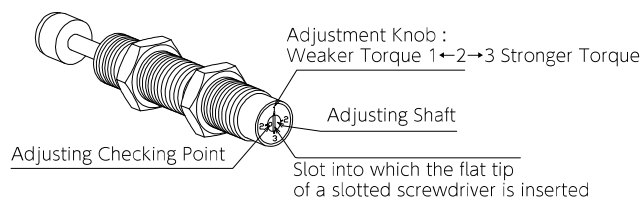
The FA-1210 series has the following three patterns of absorption characteristics depending on the orifice type. Please use the following information as a guideline when making your selection.

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.

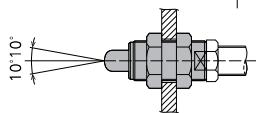
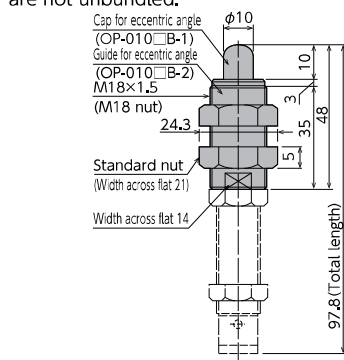
●Products specification might be changed without notice.

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 $\pm 10^\circ$.
- The caps and the guides for inclined use are not unbundled.



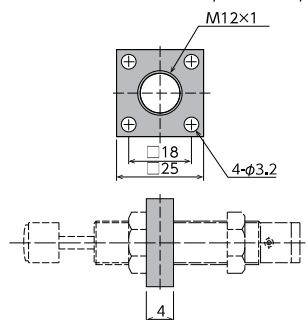
Mass 48g

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.

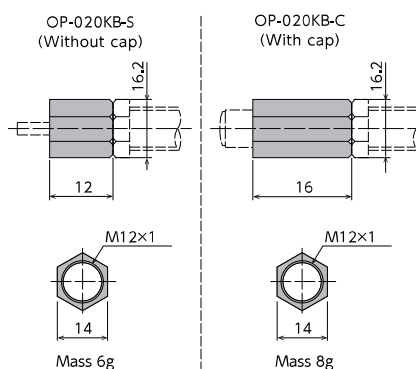


Mass 15g

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.

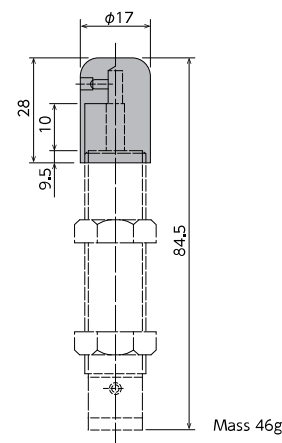


Note) When attaching, make sure that the side without a bearing chamfer is the impact surface.

Liquid-proof cap F□□-1210M□□-C-060

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

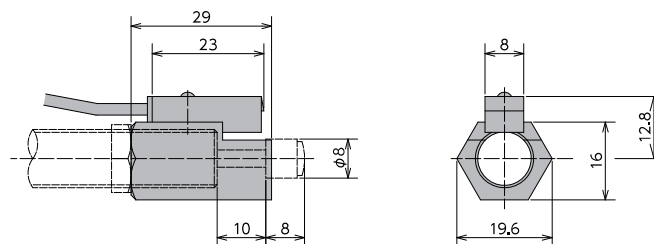
- Ideal for use in environments where oil splatter poses a problem.
- Ensure that the cap is facing upward. If the cap is facing sideways or downward, it cannot provide an effective means for liquid proofing.
- F□□-1210M□□-C-060
 - Model indication A or WM is inserted in □ of F□□.
 - Model indication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



Mass 46g

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	