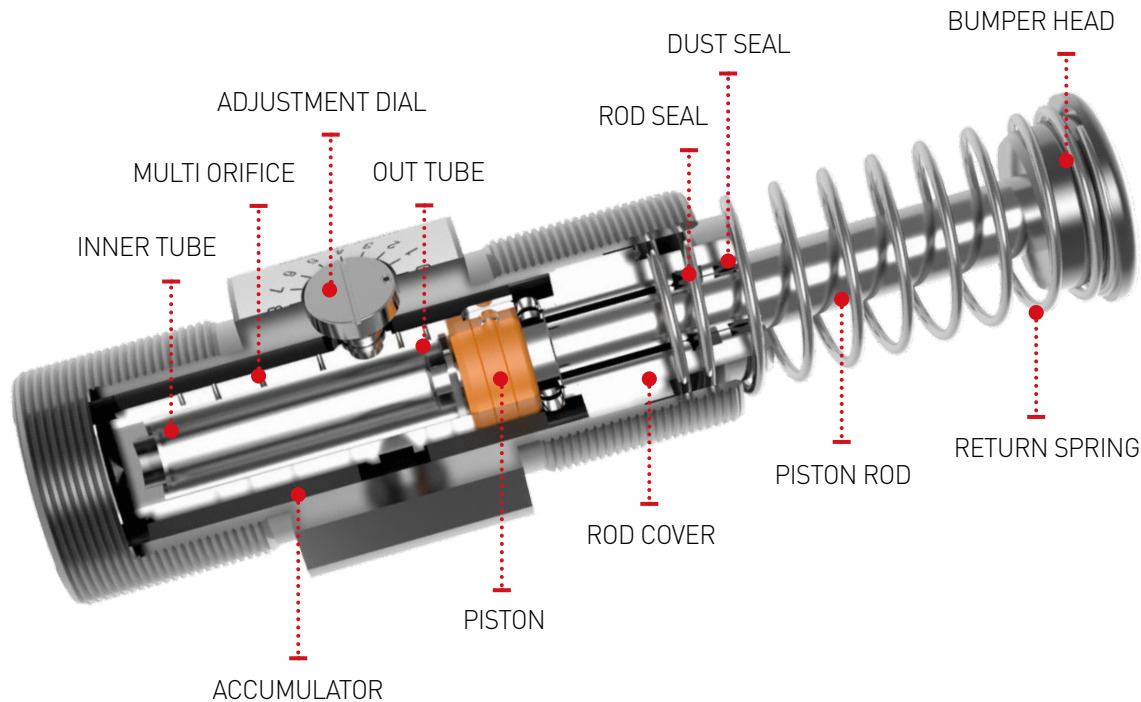


KHA Series Adjustable Type

When the object collides, the piston rod is pushed into the body, and oil is stored as an accumulator as much as the volume of the piston rod that came into the body through the inner tube and the outer tube's orifice. During this process, kinetic energy is transformed into heat energy and dissipates into the atmosphere, resulting in damping force. When the load is removed, the piston rod is returned to its original position by the force of the compressed return spring.



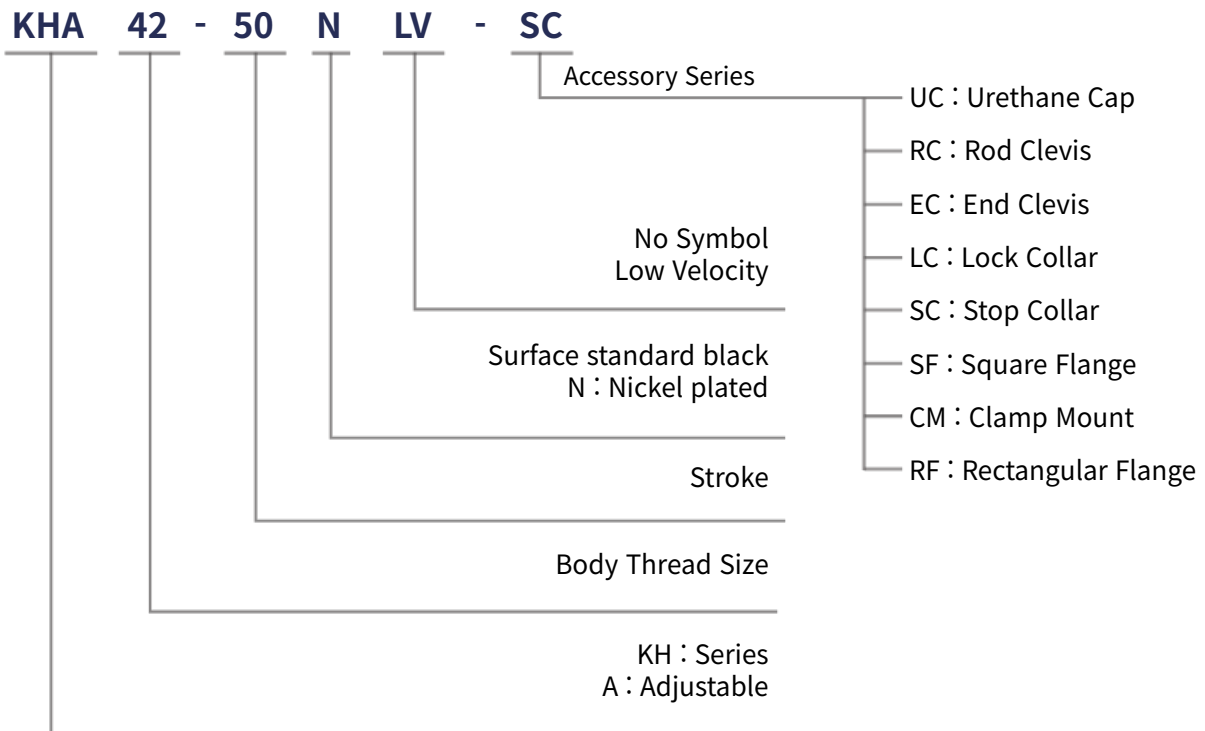
Feature

- The Adjustment Dial is rotated from 0 to 180 degrees from left to right to freely adjust the buffering range according to the impact speed.
- The body is threaded to increase the surface area, and it dissipates thermal energy which was transformed by impact energy faster, and it can adjust the position when mounting, which makes it easy to fix the position accurately.
- Piston Rod is made of anticorrosion material and Rod Cover is made of long lasting material with function of seal protection and that enable to guarantee long life.
- Shock Absorber Bumper Head Urethane Cap for low impact noise.
- Body surface is Electroless Ni plated or Alloy plated, so that strong to corrosion.
- Velocity ranges : 0.3~3.5m/s, Low Velocity(LV) 0.08~1.3m/s
- Temperature ranges : -10~80°C
- Special specification custom made : Can be made to order according to characteristics such as thread, stainless, low temperature and high temperature.
: Option -40~120°C(Special oil and seal)

Application

✓ Pick N place Robot, Packing Machine, Machine Tool, Automobile Assembly Line, Tire Manufacturing Line, Casting Plant, Crane, Safety devices and all other areas of multi purposes.

KHA Series Ordering Information



Shock Absorber

Accessory Series Charts

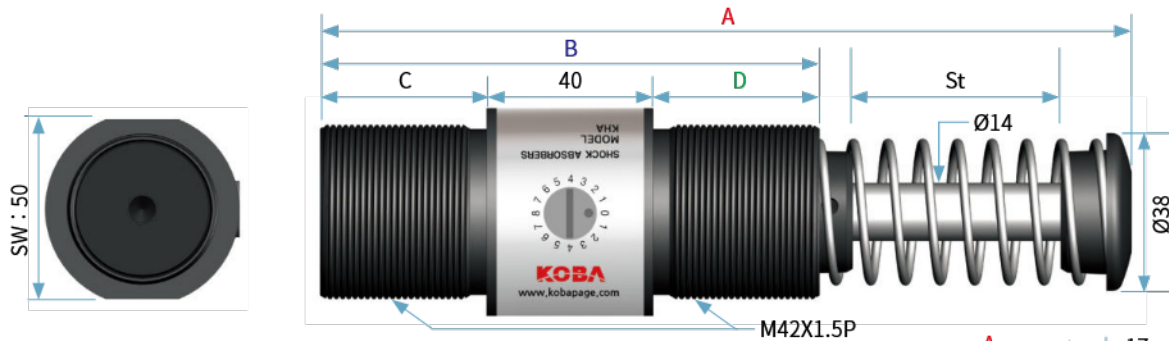
Accessories	Urethane Cap	Rod Clevis	End Clevis	Lock Collar	Stop Collar	Square Flange	Clamp Mount	Rectangular Flange
Model	UC	RC	EC	LC	SC	SF	CM	RF
KHA 42-25								
-50	●	●	●	●	●	●	●	●
-75								
KHA 64-50								
-100	●	●	●	●	●	●	●	●
-150								
KHA 85-50								
-90	●	●	●	●	●	●	●	
-125								
-165								
KHA 115-50								
-100								
-150	●	●	●	●	●	●	●	
-200								
-250								

KHA Series Adjustable Type

KHA42 Series

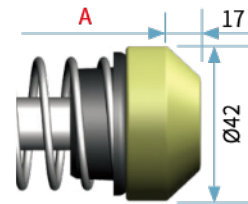
Engineering Data

Model	Stroke (mm) St	Max.Energy /Cycle (Nm) E _r	Max.Energy /Hour (Nm/h) E _r C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KHA42-25	25	250	125,000	36 - 3,600	28	56	1.25
-25LV				295 - 52,000			
-50	50	500	166,000	45 - 6,150	38	86	1.4
-50LV				591 - 104,000			
-75	75	750	200,000	54 - 9,500	32	88	1.6
-75LV				887 - 156,000			



Dimensions (unit : mm)

Model	St	A	B	C	D
KHA42-25	25	145	95	28	27
-50	50	195	120	40	40
-75	75	245	145	52	53



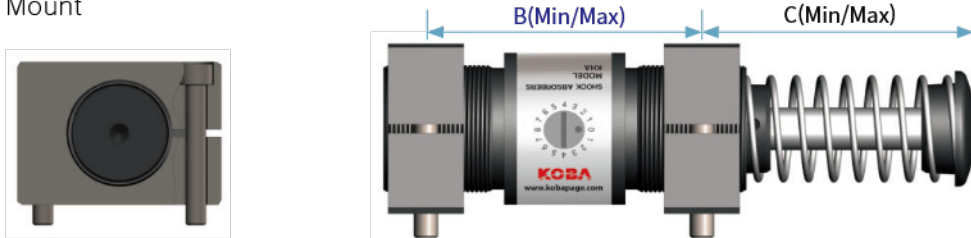
Urethane Cap

Accessory (unit : mm)

Clevis Mount



Clamp Mount



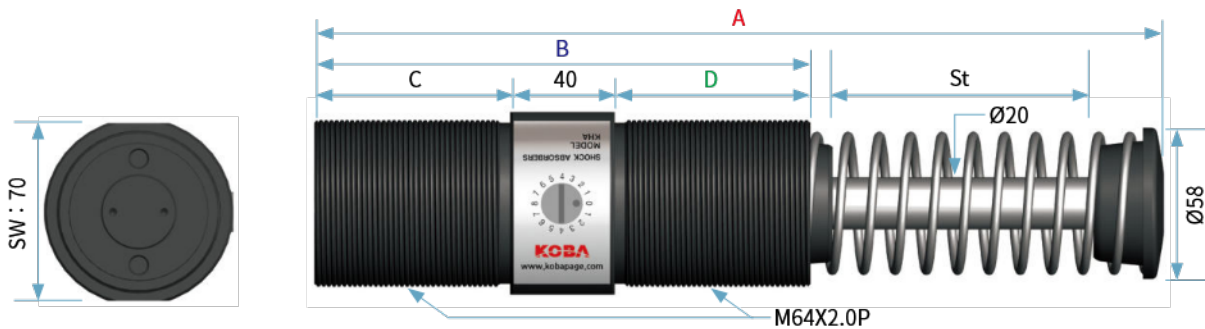
Dimensions (unit : mm)

Model	KHA42-25	KHA42-50	KHA42-75
A	200	250	300
B(Min/Max)	65/70	65/95	65/120
C(Min/Max)	62.5/64.5	87.5/102.5	117.6/145.5

KHA64 Series

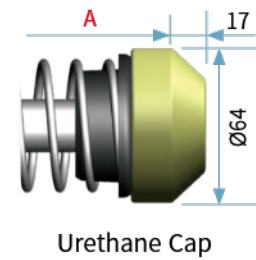
Engineering Data

Model	Stroke (mm) St	Max.Energy /Cycle (Nm) E _r	Max.Energy /Hour (Nm/h) E _r C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KHA64-50	50	1,300	270,000	82 - 12,600	65	148	3.7
-50LV							
KHA64-100	100	2,600	360,000	115 - 17,000	45	157	4.5
-100LV							
KHA64-150	150	3,900	420,000	140 - 22,000	47	199	5.3
-150LV							



Dimensions (unit : mm)

Model	St	A	B	C	D
KHA64-50	50	225	140	50	50
-100	100	327	190	75	75
-150	150	455	240	100	100

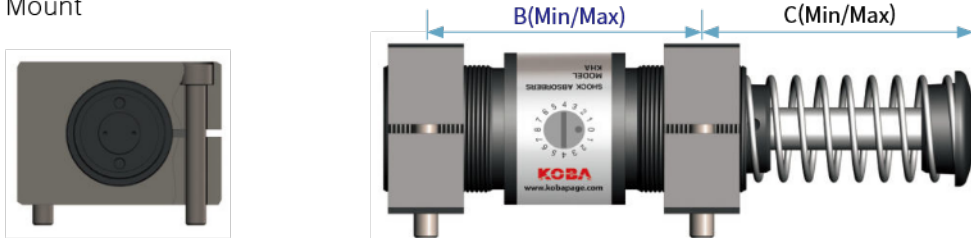


Accessory (unit : mm)

Clevis Mount



Clamp Mount



Dimensions (unit : mm)

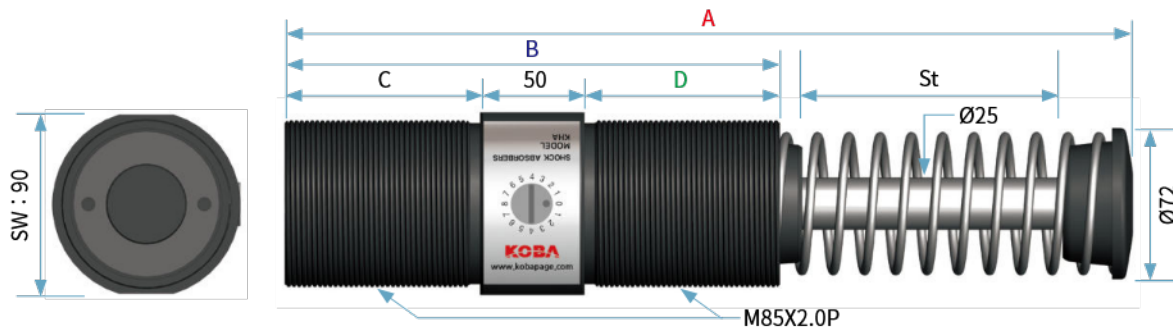
Model	KHA64-50	KHA64-100	KHA64-150
A	305	409	534
B(Min/Max)	65/115	65/165	65/215
C(Min/Max)	97.5/122.5	147.5/197.5	197.5/272.5

KHA Series Adjustable Type

KHA85 Series

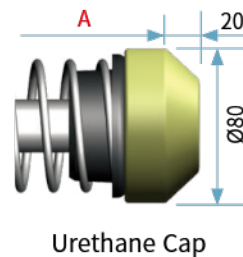
Engineering Data

Model	Stroke (mm) St	Max. Energy /Cycle (Nm) E _r	Max. Energy /Hour (Nm/h) E _r C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KHA85-50	50	2,300	370,000	200 - 37,000	148	315	6.4
-90	90	4,000	650,000	230 - 40,000	121	365	7.6
-125	125	5,700	930,000	300 - 43,000	114	365	8.6
-165	165	7,300	1,210,000	360 - 45,000	98	429	9.8



Dimensions (unit : mm)

Model	St	A	B	C	D
KHA85-50	50	245	140	42	48
-90	90	325	180	60	70
-125	125	400	216	82	84
-165	165	494	256	106	100

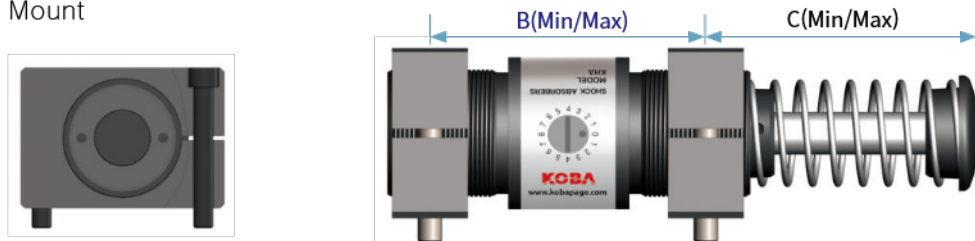


Accessory (unit : mm)

Clevis Mount



Clamp Mount



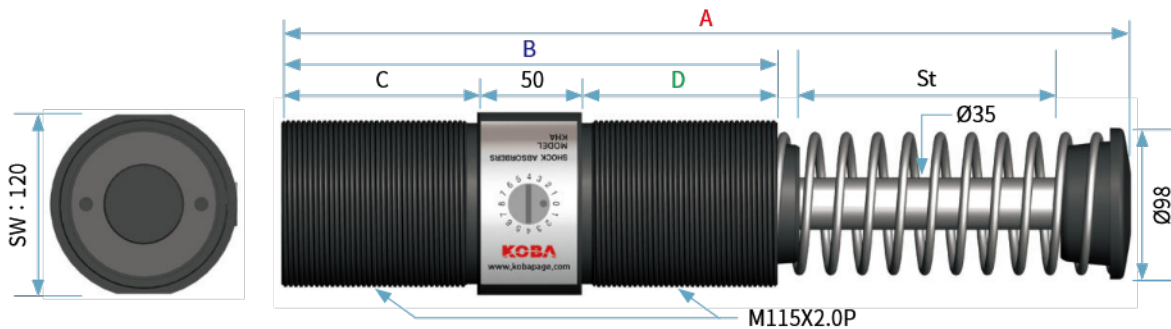
Dimensions (unit : mm)

Model	KHA85-50	KHA85-90	KHA85-125	KHA85-165
A	325	405	480	575
B(Min/Max)	80/110	80/150	80/186	80/226
C(Min/Max)	120/138	160/200	195/249	220/290

KHA115 Series

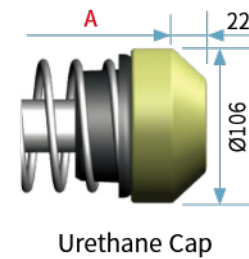
Engineering Data

Model	Stroke (mm) St	Max. Energy /Cycle (Nm) E _r	Max. Energy /Hour (Nm/h) E _r C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KHA115-50	50	3,700	1,501,000	370 - 44,000	187	427	16
-100	100	7,400	1,805,000	370 - 57,000	178	482	19
-150	150	11,100	2,100,000	370 - 89,000	185	538	21
-200	200	14,800	2,405,000	390 - 118,000	185	665	31
-250	250	18,500	2,710,000	440 - 145,000	184	649	34



Dimensions (unit : mm)

Model	St	A	B	C	D
KHA115-50	50	314	200	75	75
-100	100	414	250	100	100
-150	150	514	300	125	125
-200	200	644	350	150	150
-250	250	744	400	180	170

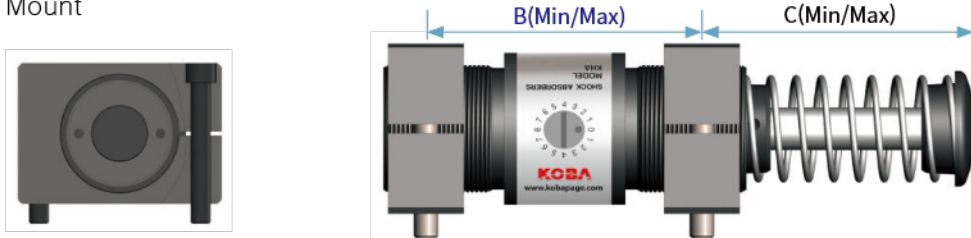


Accessory (unit : mm)

Clevis Mount



Clamp Mount

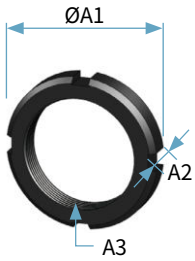


Dimensions (unit : mm)

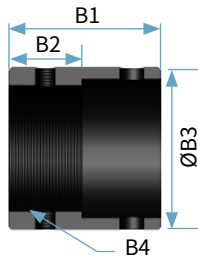
Model	KHA115-50	KHA115-100	KHA115-150	KHA115-200	KHA115-250
A	430	535	635	760	865
B(Min/Max)	80/170	80/220	80/270	80/320	80/370
C(Min/Max)	129/174	179/249	229/324	279/399	329/479

KHA Series Adjustable Type

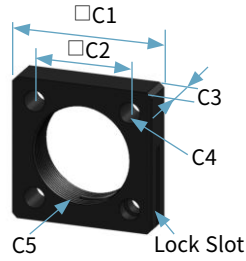
KHA Accessories



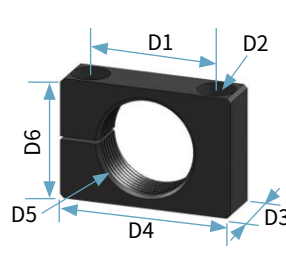
Lock Collar



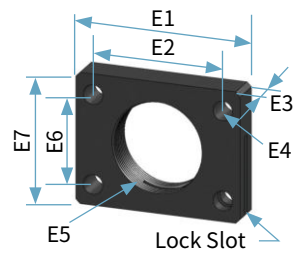
Stop Collar



Square Flange



Clamp Mount



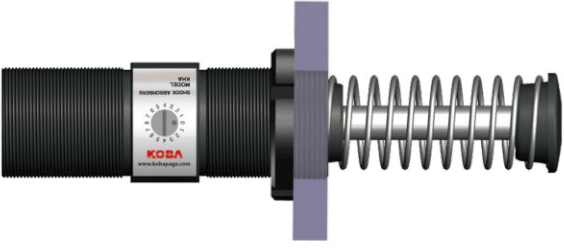


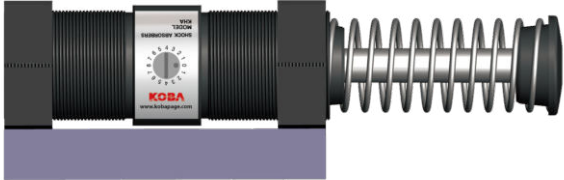

Rectangular Flange

(unit : mm)

Accessory Model	Lock Collar			Stop Collar				Square Flange				
	ØA1	A2	A3	B1	B2	ØB3	B4	□C1	□C2	C3	C4	C5
KHA 42-25												
-50	58	9	M42X1.5P	52	25	56	M42X1.5P	60	41	16	4-Ø9	M42X1.5P
-75												
KHA 64-50												
-100	80	11	M64X2.0P	85	45	75	M64X2.0P	90	70	16	4-Ø11	M64X2.0P
-150												
KHA 85-50												
-90	110	16	M85X2.0P	95	45	98	M85X2.0P	104	76	19	4-Ø13	M85X2.0P
-125												
-165												
KHA 115-50												
-100												
-150	150	19	M115X2.0P	130	70	138	M115X2.0P	140	111	25	4-Ø18	M115X2.0P
-200												
-250												

Accessory Model	Clamp Mount						Rectangular Flange						
	D1	D2	D3	D4	D5	D6	E1	E2	E3	E4	E5	E6	E7
KHA 42-25													
-50	60	Bolt : M8X65L	25	80	M42X1.5P	56	76	60	14	4-Ø9	M42X1.5P	41	60
-75													
KHA 64-50													
-100	78	Bolt : M10X85L	25	100	M64X2.0P	80	115	87.6	16	4-Ø11	M64X2.0P	70	90
-150													
KHA 85-50													
-90	115	Bolt : M14X110L	30	145	M85X2.0P	100	-	-	-	-	-	-	-
-125													
-165													
KHA 115-50													
-100													
-150	150	Bolt : M16X150L	35	185	M115X2.0P	135	-	-	-	-	-	-	-
-200													
-250													

KHA Accessories Installation

NAME	Installation	Remark
Lock Collar		<p>Installation is simply done by fastening Lock Collar. This is basic installation.</p>
Stop Collar + Lock Collar		<p>Stop Collar guarantees accurate stopping and positioning and protects piston shooting problem (so called "Bottom-out" problem) of Piston.</p>
Flange Mount		<p>Use to Square Flange or Rectangular Flange to conveniently fix Shock Absorber.</p>
Clamp Mount		<p>Clamp mount is used in horizontal installation usually specially if the shock absorber is long.</p>
Clevis Mount		<p>Clevis mount is used in rotation movement to absorb the collision force indirectly and protect from unbalanced shock absorption.</p>

Shock Absorber