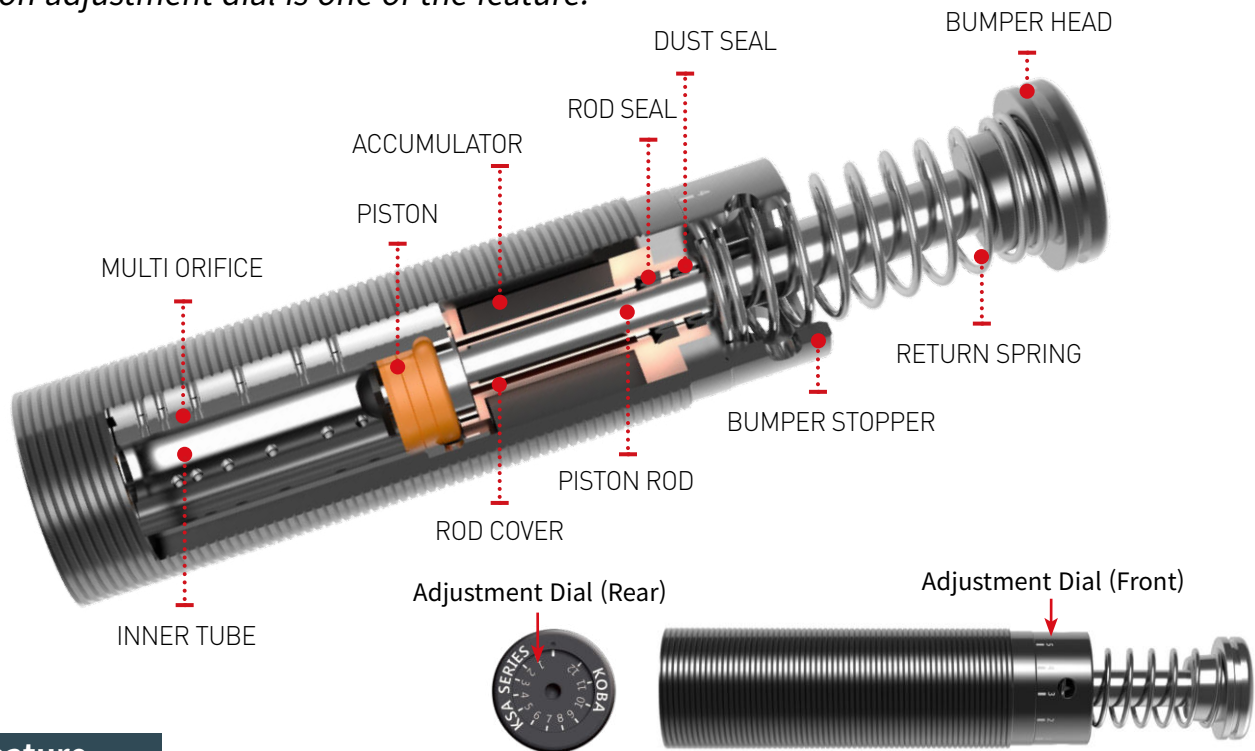


KSA Series Adjustable Type

When the object collides, the shock absorber piston rod is pushed into the body, and the oil moves to the oil chamber through the groove formed along the outskirts of the inner tube. 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 returns to its original position by the compressed power of return spring. Middle piston adjustment dial is one of the features.



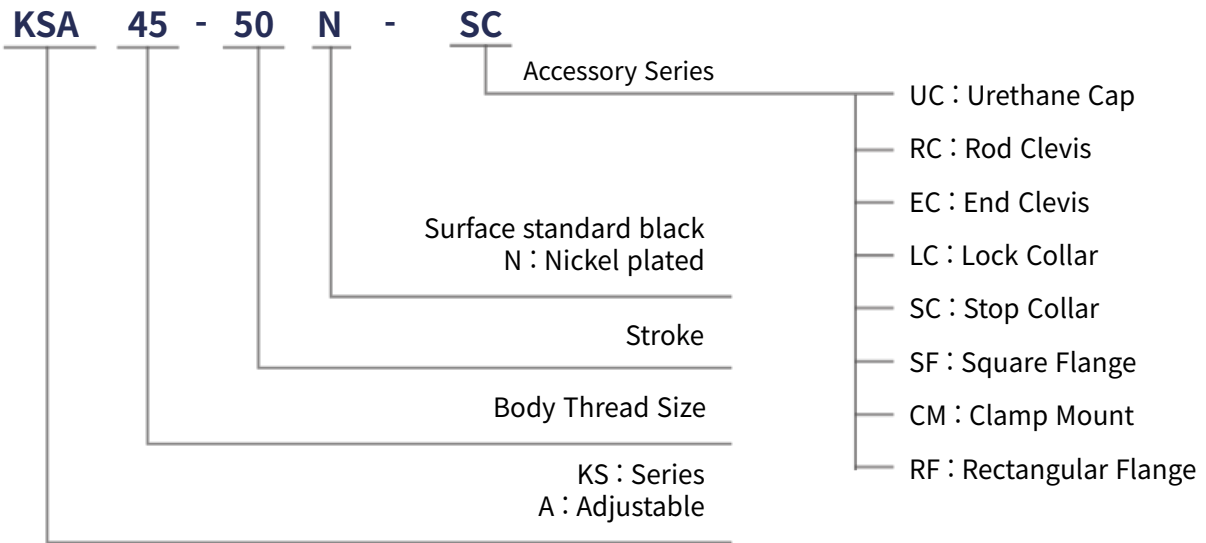
Feature

- Depending on the collision speed, you can fit the buffer dial from 0 to 300 degrees in 12 steps.
- Adjustment is easy in various installation environment by adopting front and rear adjustment dial.
- Shock Absorber Body is built as one body, not only robust but also fundamentally solves the trouble so called bottom out problem.
- Because of full threaded body KMS Series is easy to be installed and precise location fixing is possible. And surface area is increased to dissipate thermal energy fast to atmosphere.
- 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.
- Body surface is electroless Ni plated or alloy plated, so that strong to corrosion.
- By using Urethane Cap, noise can be reduced.
- Velocity ranges : 0.3~5.0m/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.

KSA Series Ordering Information



Shock Absorber

Accessory Series Charts

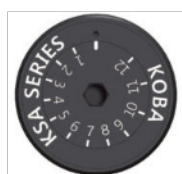
Accessories	Urethane Cap	Rod Clevis	End Clevis	Lock Collar	Stop Collar	Square Flange	Clamp Mount	Rectangular Flange
Model \ Symbols	UC	RC	EC	LC	SC	SF	CM	RF
KSA 45-25								
-50	•	•	•	•	•	•	•	•
-75								
KSA 64-25								
-50								
-75	•	•	•	•	•	•	•	•
-100								
-125								
-150								
KSA 85-25								
-50								
-75	•	•	•	•	•	•	•	
-100								
-125								
-150								

KSA Series Adjustable Type

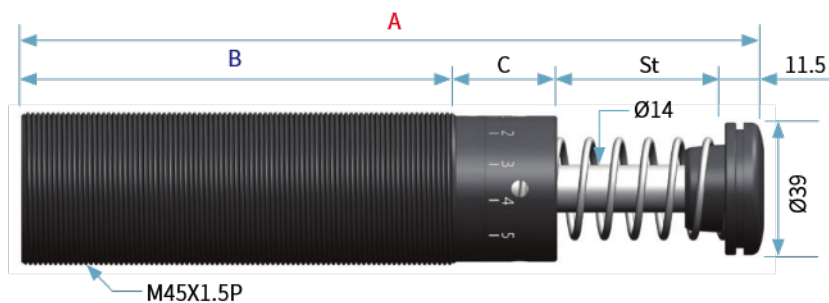
KSA45 Series

Engineering Data

Model	Stroke (mm) St	Max. Energy /Cycle (Nm) E _T	Max. Energy /Hour (Nm/h) E _{rC}	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KSA45-25	25	650	195,000	50 - 13,354	49.7	82.8	1.13
-50	50	1,300	260,000	99 - 26,700	45.6	84	1.3
-75	75	2,000	300,000	148 - 39,060	44.3	86.3	1.52

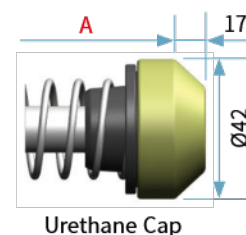


※ Lwrench 6mm



Dimensions (unit : mm)

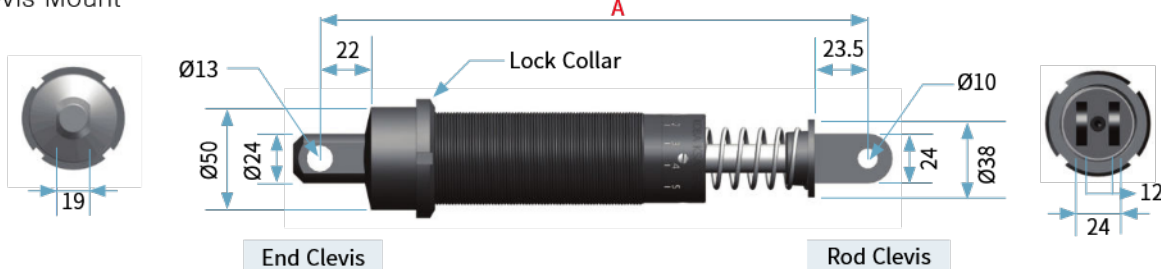
Model	St	A	B	C
KSA45-25	25	159.5	93	30
-50	50	220.5	129	30
-75	75	292.5	168.5	37.5



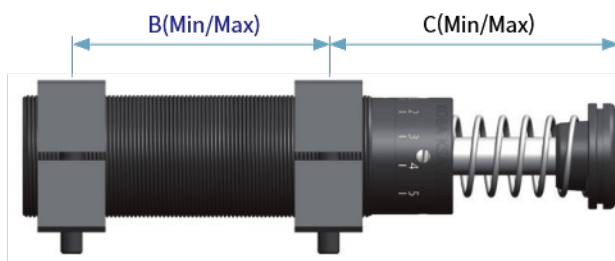
Urethane Cap

Accessory (unit : mm)

Clevis Mount



Clamp Mount



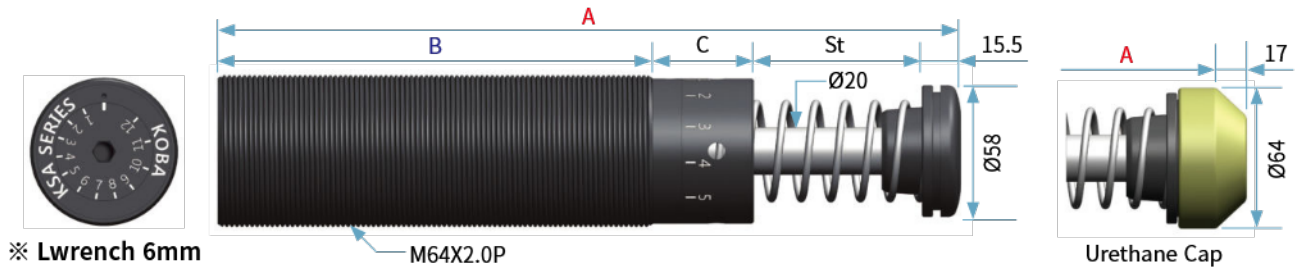
Dimensions (unit : mm)

Model	KSA45-25	KSA45-50	KSA45-75
A	210	271	343
B(Min/Max)	25/68	25/104	25/143.5
C(Min/Max)	79.5/100.5	104/143.5	129/170.7

KSA64 Series

Engineering Data

Model	Stroke (mm) St	Max. Energy /Cycle (Nm) E _T	Max. Energy /Hour (Nm/h) E _T C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KSA64-25	25	1,250	152,000	92 - 24,400	61.8	110	2.9
-50	50	2,500	248,000	185 - 48,800	60.8	133.2	3.3
-75	75	3,750	265,000	277 - 73,240	61.4	148.3	3.8
-100	100	5,000	360,000	370 - 97,650	59.4	160.1	4
-125	125	6,250	413,000	462 - 122,000	57.1	160.4	7.7
-150	150	7,500	450,000	555 - 146,480	51	166.8	8.9



Dimensions (unit : mm)

Model	St	A	B	C
KSA64-25	25	176	97.5	38
-50	50	239	135.5	38
-75	75	309	173.5	45

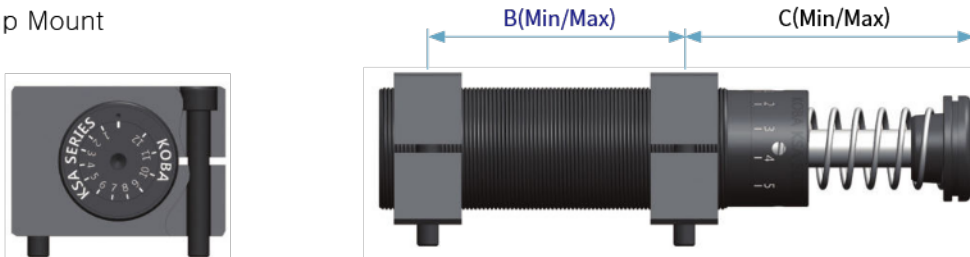
Model	St	A	B	C
KSA64-100	100	375	214.5	45
-125	125	452	256.5	55
-150	150	518.5	294.5	58.5

Accessory (unit : mm)

Clevis Mount



Clamp Mount



Dimensions (unit : mm)

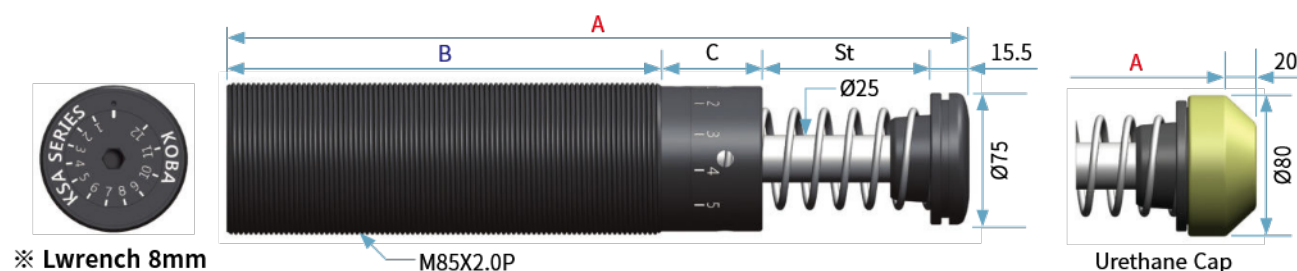
Model	KSA64-25	KSA64-50	KSA64-75	KSA64-100	KSA64-125	KSA64-150
A	244	307	377	442	520	-
B(Min/Max)	25/72.5	25/110.5	25/148.5	25/189.5	25/231.5	25/269.5
C(Min/Max)	92.5/116.25	117.5/160.25	149.5/211.25	174.5/256.75	209.5/312.75	238/360.25

KSA Series Adjustable Type

KSA85 Series

Engineering Data

Model	Stroke (mm) St	Max. Energy /Cycle (Nm) E _T	Max. Energy /Hour (Nm/h) E _{rC}	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext.	Comp.	
KSA85-25	25	2,000	330,000	148 - 39,600	132	245.8	12.2
-50	50	4,000	462,000	296 - 78,100	131.6	271.7	14.4
-75	75	6,000	680,000	444 - 117,200	130	325.1	17
-100	100	8,000	825,000	591 - 156,300	125.4	327.7	20
-125	125	10,000	859,000	740 - 195,300	126.6	343.3	23.6
-150	150	12,000	901,000	930 - 220,300	126.6	386.7	28



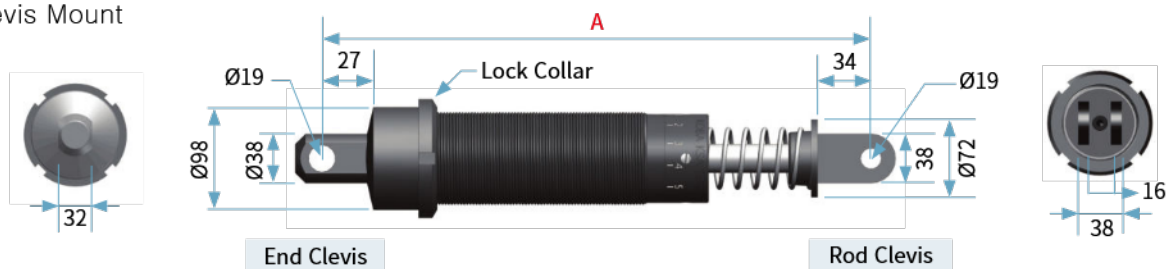
Dimensions (unit : mm)

Model	St	A	B	C
KSA85-25	25	189.5	109	40
-50	50	251	145.5	40
-75	75	314.5	180	44

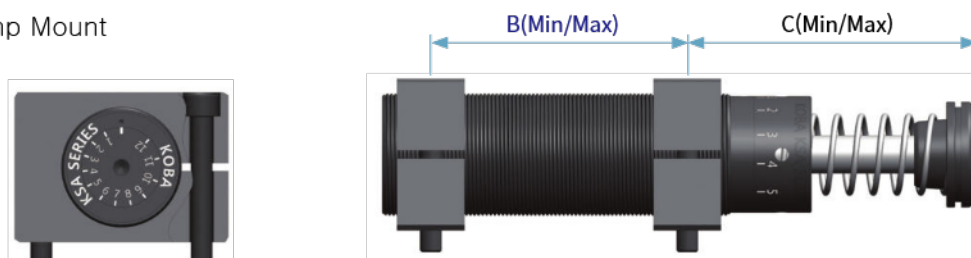
Model	St	A	B	C
KSA85-100	100	384.5	217	52
-125	125	452.5	256	56
-150	150	513.5	292	56

Accessory (unit : mm)

Clevis Mount



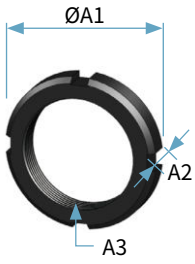
Clamp Mount



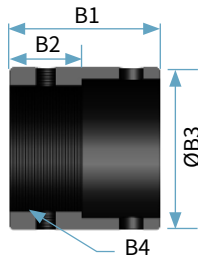
Dimensions (unit : mm)

Model	KSA85-25	KSA85-50	KSA85-75	KSA85-100	KSA85-125	KSA85-150
A	256	316	381	451	519	-
B(Min/Max)	25/79	25/114	25/150	25/187	25/226	25/262
C(Min/Max)	95.5/120	120.5/162.5	149/209.5	182.5/261	211.5/309.5	236.5/352.5

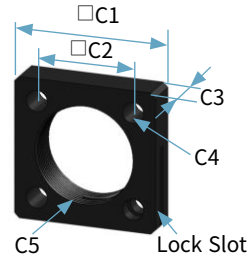
KSA Accessories



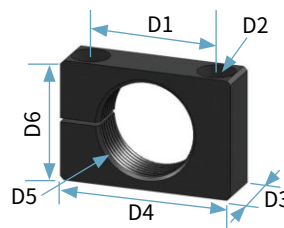
Lock Collar



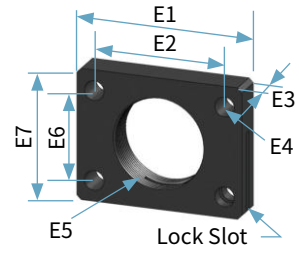
Stop Collar



Square Flange



Clamp Mount



Rectangular Flange

(unit : mm)







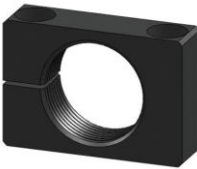

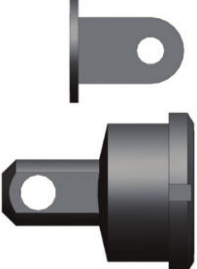

Accessory Model	Lock Collar			Stop Collar				Square Flange				
	ØA1	A2	A3	B1	B2	ØB3	B4	□C1	□C2	C3	C4	C5
KSA 45-25												
-50	58	9	M45X1.5P	52	25	56	M45X1.5P	60	41	14	4-Ø9	M45X1.5P
-75												
KSA 64-25												
-50												
-75	80	11	M64X2.0P	85	45	75	M64X2.0P	90	70	16	4-Ø11	M64X2.0P
-100												
-125												
-150												
KSA 85-25												
-50												
-75	110	16	M85X2.0P	95	45	98	M85X2.0P	104	86	19	4-Ø13	M85X2.0P
-100												
-125												
-150												

Accessory Model	Clamp Mount						Rectangular Flange						
	D1	D2	D3	D4	D5	D6	E1	E2	E3	E4	E5	E6	E7
KSA 45-25													
-50	60	Bolt : M8X65L	25	80	M45X1.5P	56	76	60	14	4-Ø9	M45X1.5P	41	60
-75													
KSA 64-25													
-50													
-75	78	Bolt : M10X85L	25	100	M64X2.0P	80	115	87.6	16	4-Ø11	M64X2.0P	70	90
-100													
-125													
-150													
KSA 85-25													
-50													
-75	115	Bolt : M14X110L	30	145	M85X2.0P	100	-	-	-	-	-	-	-
-100													
-125													
-150													

Shock Absorber

KSA Series Adjustable Type

KSA Accessories Installation

NAME	Accessories	Installation	Remark
Lock Collar			As a basic mounting way, by using Lock nut, shock absorber can be installed easily.
Stop Collar + Lock Collar			Stop Collar makes it easy to stop precisely and easy to select location to set and it prevents troubles so called bottom-out (piston shooting) problem in the position.
Flange Mount			By using Flange or Rectangular Flange, Shock Absorber can be fixed conveniently.
Clamp Mount			It can help to use on long shock absorber body settlement.
Clevis Mount			Main application is for cycle movement and it can help to decelerate indirectly and it can prevent damage from side load.