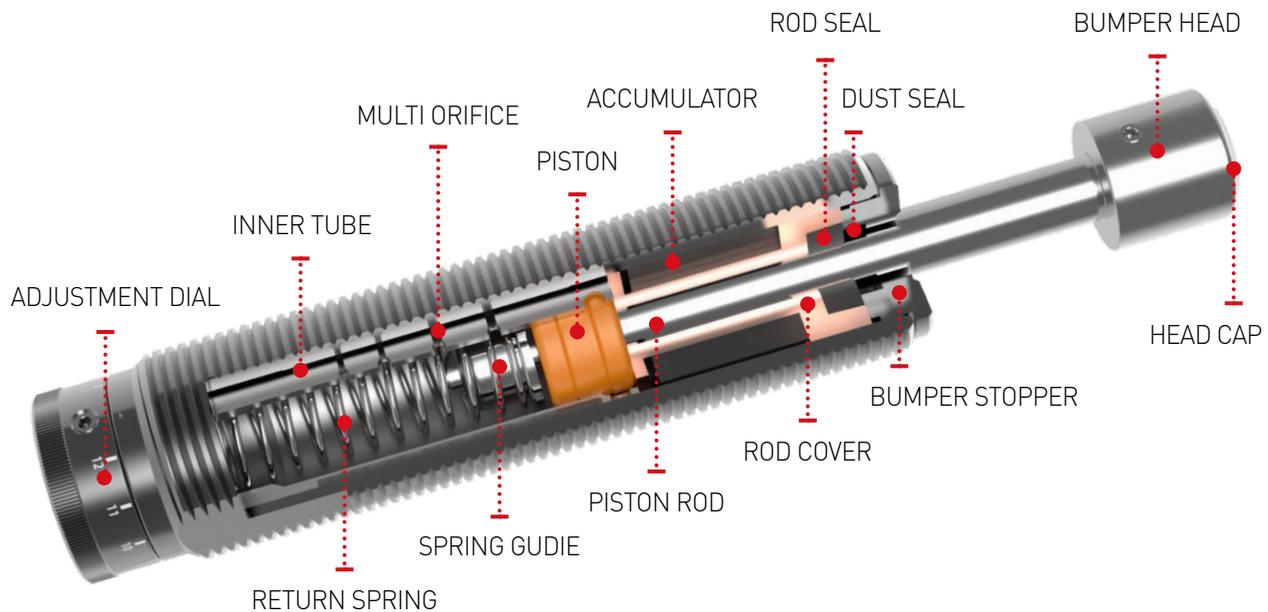


KMA Series Adjustable Type

When the object collides, the Piston Rod is pushed into the Body, and Oil is stored in the Accumulator through Groove formed along the outer space of Inner Tube. During the process, kinetic energy is converted into heat energy and the heat is dissipated into atmosphere and then damping force occur. The Piston Rod is returned to the original position by the power of Return Spring.



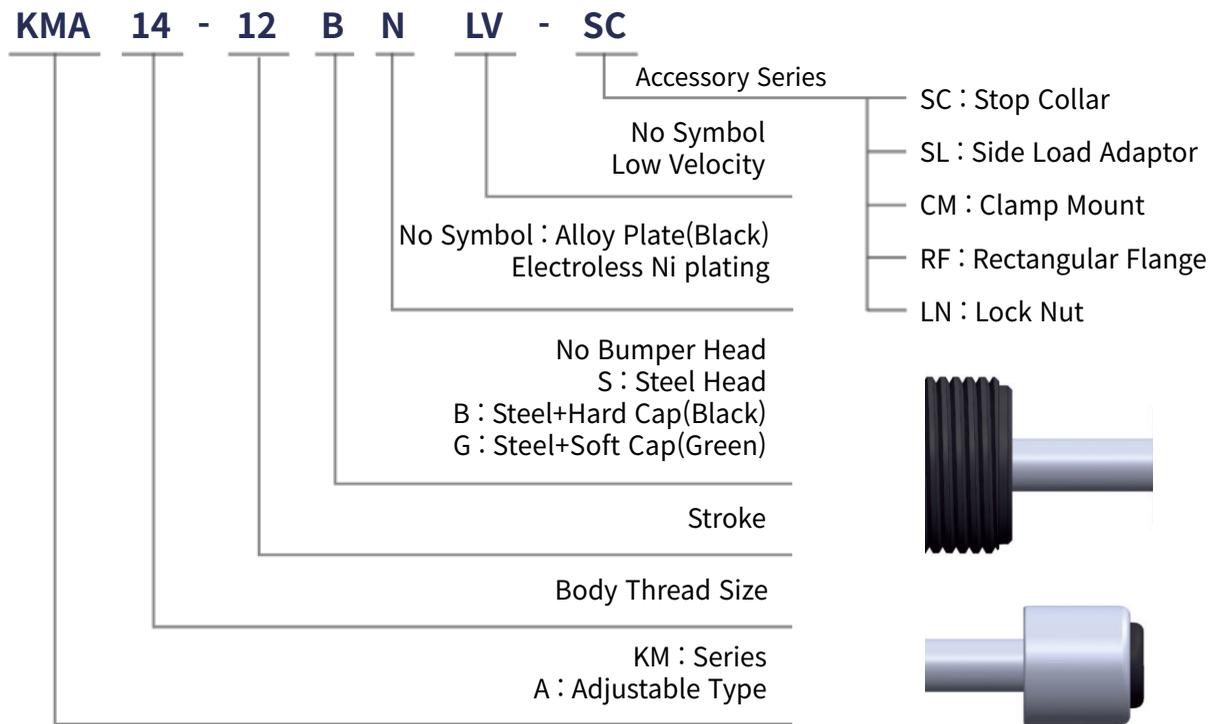
Feature

- Adjustable to control damping force according to impact velocity by 12 steps from 0° to 300°.
- KMS Series is made as one Body type, that makes it solid and solves piston shooting trouble.
- Fully threaded Body for highest mounting flexibility and improved thermal energy dissipation to the atmosphere.
- Thanks to 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.
- Several options of Bumper Head material - steel, black standard PU, green soft PU
- Velocity ranges : 0.3~5.0m/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.

KMA Series Ordering Information



Shock Absorber

Accessory Series Charts

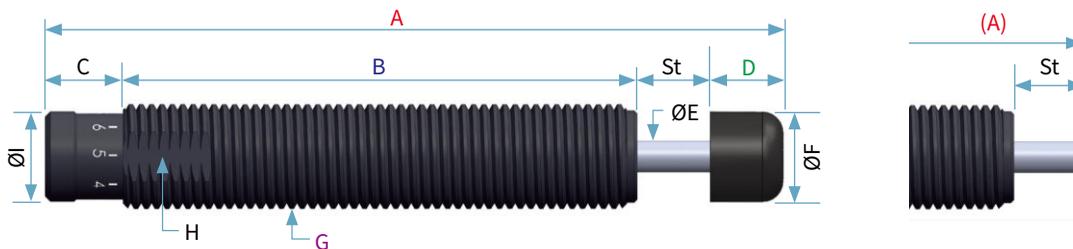
Accessories	Stop Collar	Side Load Adapter	Clamp Mount	Rectangular Flange
Model	SC	SL	CM	RF
KMA08-06	●		●	
KMA10-07	●	●	●	
KMA12-14	●	●	●	
KMA14-12	●	●	●	
KMA16-12	●	●	●	
KMA20-16	●	●	●	
KMA25-25	●	●	●	
KMA27-25	●	●	●	
-40	●		●	
KMA30-35	●	●	●	
KMA33-25	●	●	●	●
-50	●		●	●
KMA36-25	●	●	●	●
-50	●		●	●

KMA Series Adjustable Type

KMA10 - 07(B)

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	
KMA08-06(B)	6	3	4,800	0.55-65	2.4	5.4	15
KMA10-07(B)	7	5.5	15,000	1-123	3	7	21



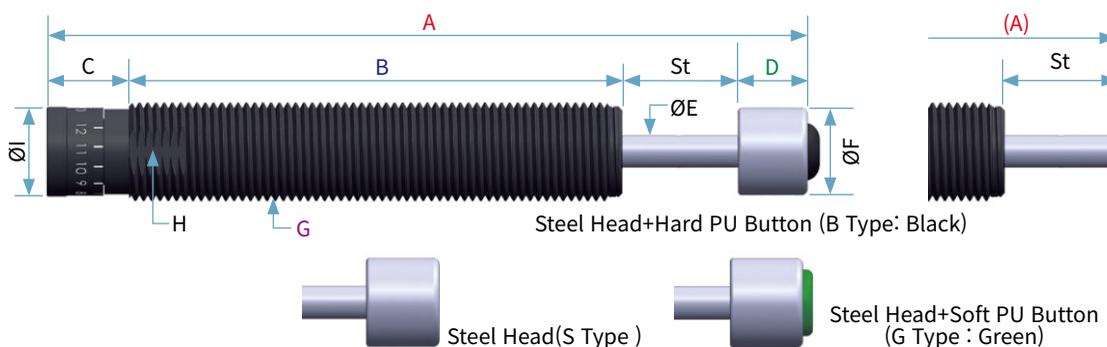
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G	H	ØI
KMA08-06(B)	6	59(52)	40.5	5.5	7	2	6.8	M8X1.0P	SW:6.8	6.8
KMA10-07(B)	7	71(64)	49.5	7.5	7	3	8.6	M10X1.0P	SW:8.8	8.6

KMA12 - 14(B) / KMA14 - 12(B)

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	
KMA12-14(B)	14	21.5	35,000	4-477	3.7	9.6	33
KMA14-12(B)	12	21.5	45,000	1.5-494	3.6	9.8	55
-12(B)LV	12			25.4-1,650			



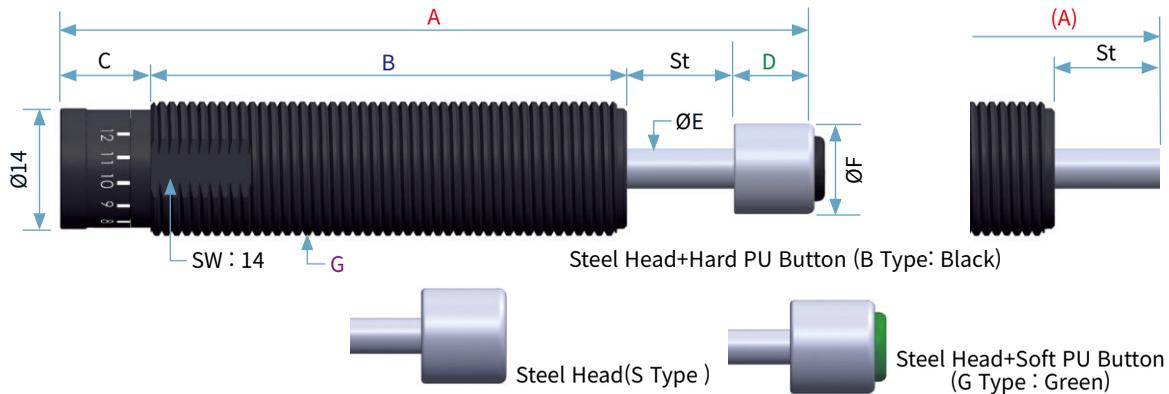
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G	H	ØI
KMA12-14(B)	14	94(84)	61	9	10	4	10.5	M12X1.0P	SW:10.5	10.7
KMA14-12(B)	12	97.5(87.5)	63.5	12	10	4	10.5	M14X1.5P	SW:12	12
-12(B)LV	12	97.5(87.5)	63.5	12	10	4	10.5	M14X1.5P	SW:12	12

KMA16 - 12(B)

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	
KMA16-12(B)	12	27	51,000	2-527	4.9	11.4	80
-12(B)LV				31.9-3,375			



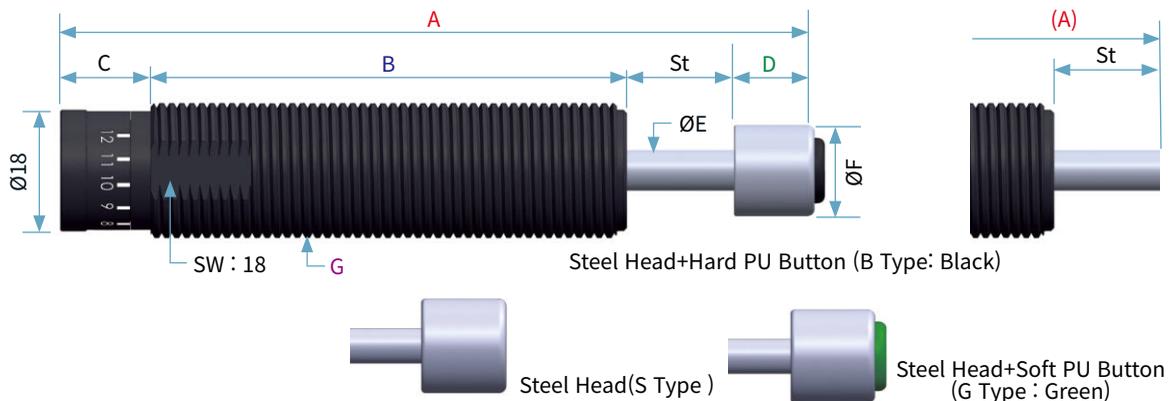
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA16-12(B) / 12(B)LV	12	98(88)	63.5	12.5	10	4	10.5	M16X1.5P

KMA20 - 16(B)

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	
KMA20-16(B)	16	61	63,000	4.5-1,230	8	19.6	145
-16(B)LV				72.1-5,600			



Dimensions (unit : mm)

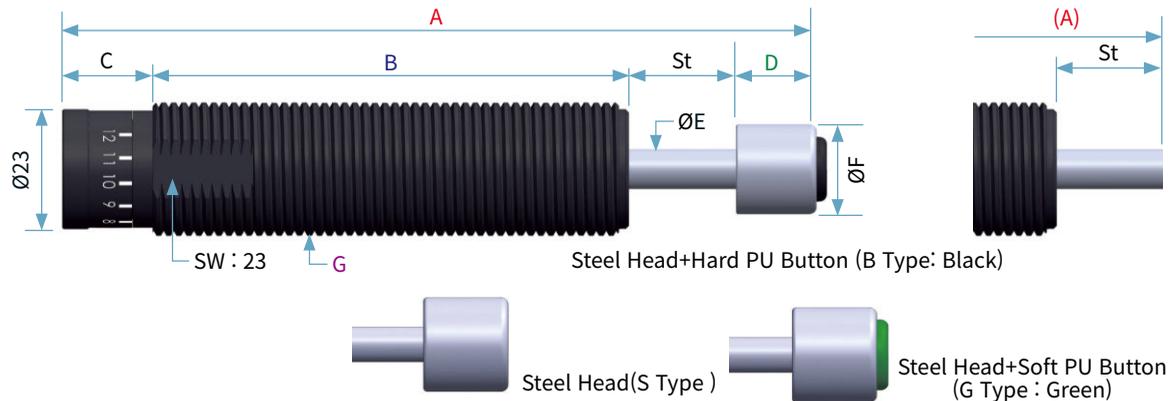
Model	St	A(A)	B	C	D	ØE	ØF	G
KMA20-16(B) / 16(B)LV	16	114(100.5)	71	13.5	13.5	6	13.5	M20X1.5P

KMA Series Adjustable Type

KMA25 - 25(B)

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	
KMA25-25(B)	25	177	113,000	8.3-2,150	10.2	29.5	285
-25(B)LV				209.4-15,750			



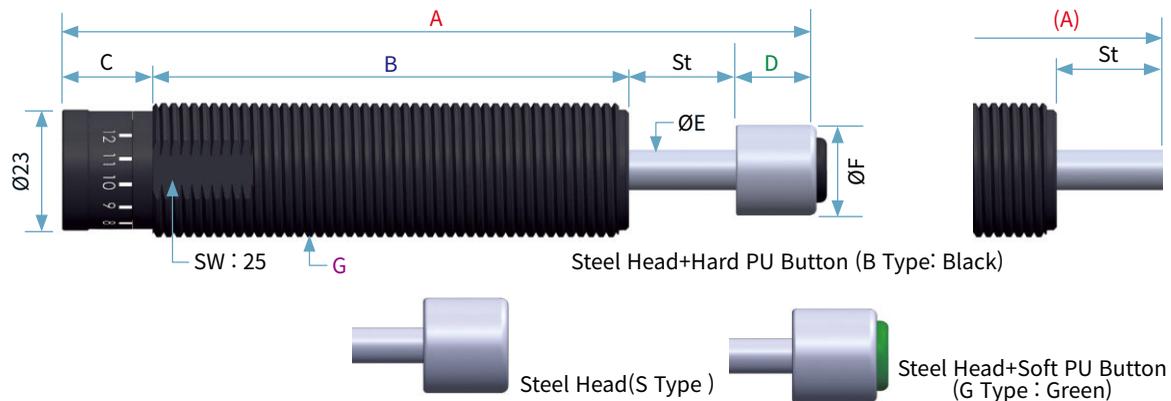
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA25-25(B) / -25(B)LV	25	143.5(127)	90	12	16.5	8	16	M25x1.5P

KMA27 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	
KMA27-25(B)	25	177	113,000	8.3-2,150	10.2	29.5	305
-25F(B)				209.4-15,750			
-25(F)(B)LV				209.4-15,750			



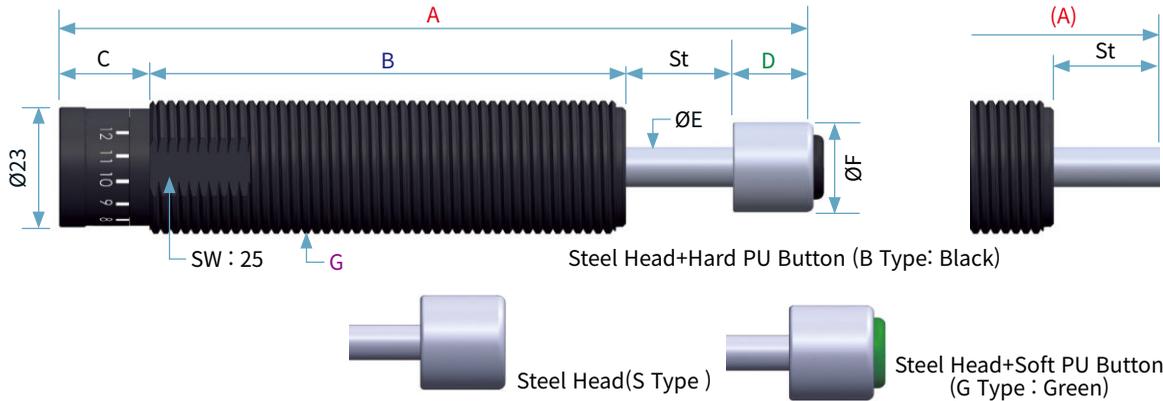
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA27-25(B) -25F(B)	25	143.5(127)	90	12	16.5	8	16	M27x3.0P
-25(F)(B)LV								M27x1.5P

KMA27 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	
KMA27-40(B)	40	283	149,000	20-5,120	10	31	429
-40(B)LV							



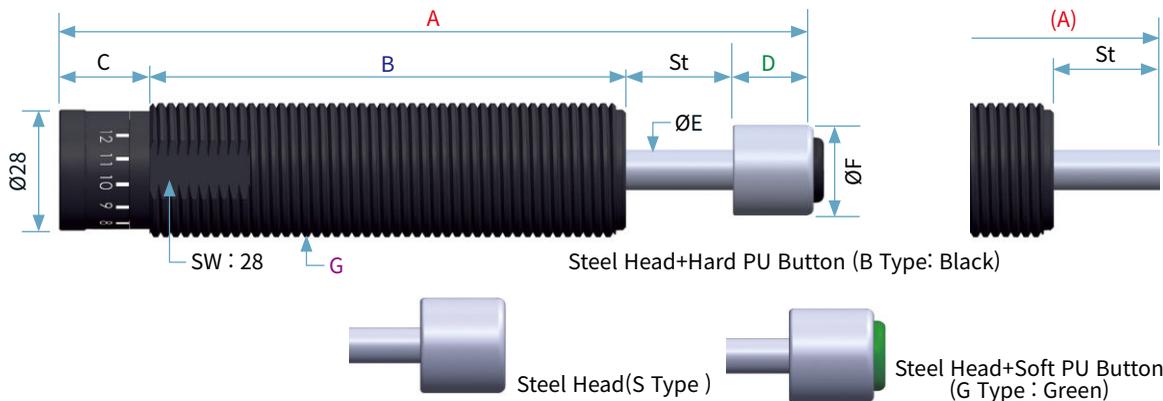
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA27-40(B)	40	194.5(178)	126	12	16.5	8	16	M27x2.0P

KMA30 - 35(B)

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	
KMA30-35(B)	35	356	137,000	25-6,950	17.8	50.3	610



Dimensions (unit : mm)

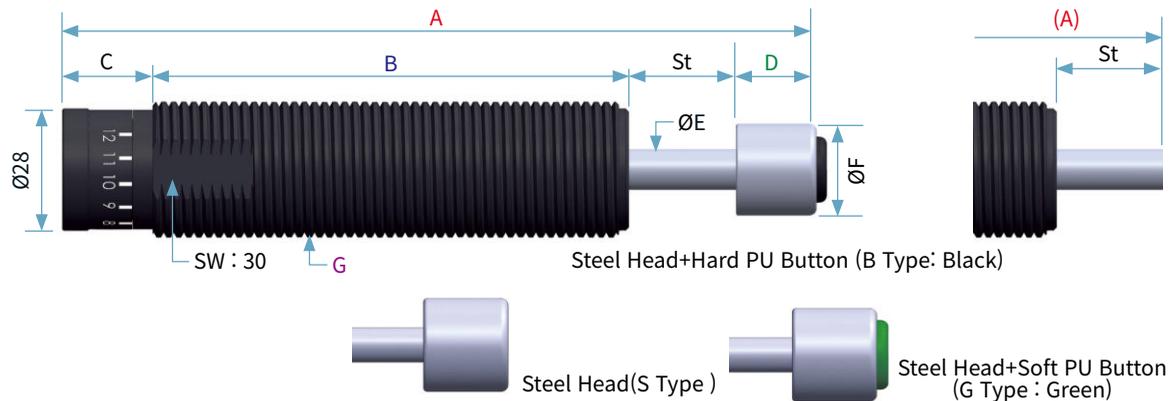
Model	St	A(A)	B	C	D	ØE	ØF	G
KMA30-35(B)	35	203.5(179.5)	128.5	16	24	10	28	M30x1.5P

KMA Series Adjustable Type

KMA33 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	
KMA33-25(B)	25	314	120,000	25-6,980	17.5	48.8	454
-25(B)LV							
KMA33-50(B)	50	628	150,000	50-14,000	13.6	65.3	580
-50(B)LV							



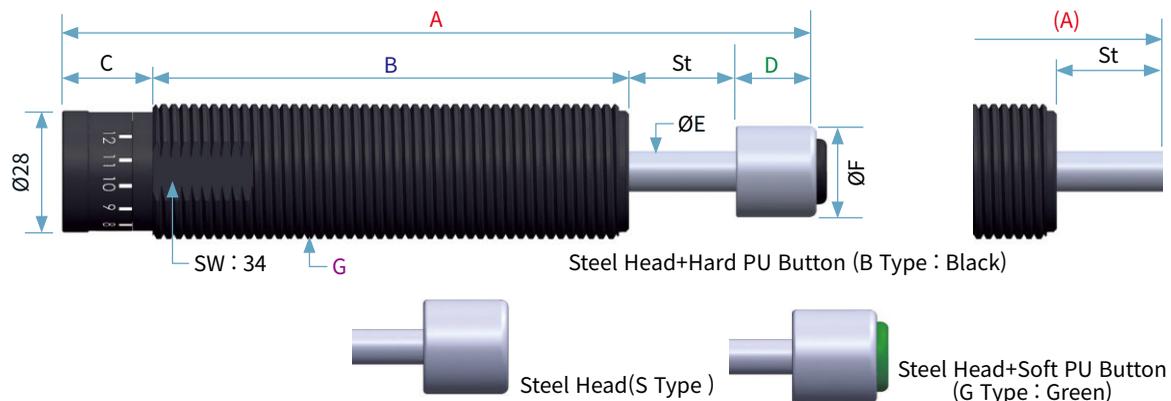
Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA33-25(B) / -25(B)LV	25	170(146)	105	16	24	10	28	M33x1.5P
KMA33-50(B) / -50(B)LV	50	229(205)	139	16	24	10	28	M33x1.5P

KMA36 Series

Engineering Data

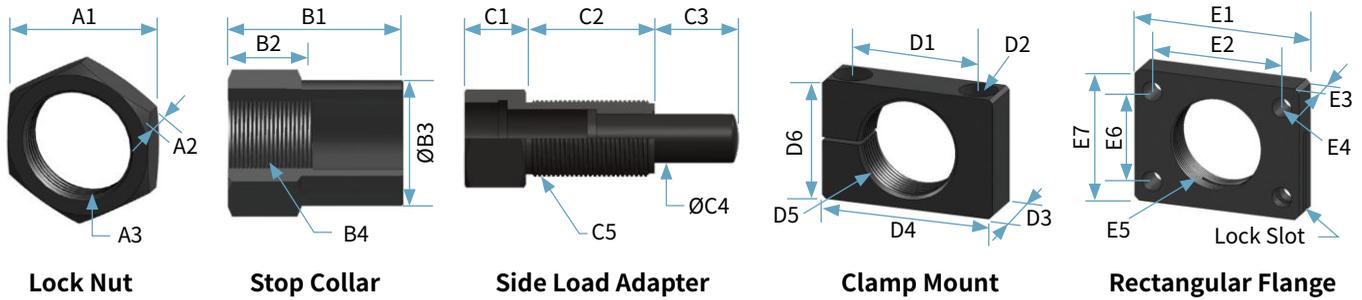
Model	Stroke (mm) St	Max.Energy /Cycle(Nm) E _T	Max.Energy /Hour(Nm/h) E _T C	Effective Weight (kg) m _e	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA36-25(B)	25	346	125,000	25-6,980	25	56.2	725
-25(B)LV							
KMA36-50(B)	50	692	160,000	50-14,000	22.5	60	885
-50(B)LV							



Dimensions (unit : mm)

Model	St	A(A)	B	C	D	ØE	ØF	G
KMA36-25(B) / -25(B)LV	25	170(146)	105	16	24	10	28	M36x1.5P
KMA36-50(B) / -50(B)LV	50	229(205)	139	16	24	10	28	M36x1.5P

KMA Accessories



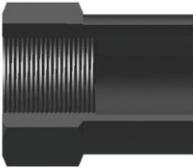
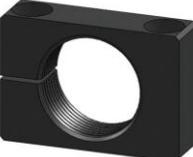
(unit : mm)

Accessory Model	Lock Nut			Stop Collar				Side Load Adapter				
	A1	A2	A3	B1	B2	ØB3	B4	C1	C2	C3	ØC4	C5
KMA08-06	12	3	M8X1.0P	20	8	11.5	M8X1.0P	-	-	-	-	-
KMA10-07	13	4	M10X1.0P	20	8	12.8	M10X1.0P	12	12.5	7	4	M10X1.0P
KMA12-14	14	4	M12X1.0P	20	8	13.8	M12X1.0P	13	22.5	14	5	M12X1.0P
KMA14-12	19	5	M14X1.5P	27	12	18	M14X1.5P	14	19.5	12	6	M14X1.5P
KMA16-12	19	6	M16X1.5P	27	12	19	M16X1.5P	19	22.8	12	8	M16X1.5P
KMA20-16	24	6	M20X1.5P	36	15	24	M20X1.5P	20	34	16	12	M20X1.5P
KMA25-25	32	8	M25X1.5P	42	18	31.5	M25X1.5P	20	42	25	16	M25X1.5P
KMA27-25	32	8	Thread	42	18	31.5	Thread	20	42	25	16	Thread
-40	32	8	Thread	42	18	31.5	Thread	-	-	-	-	-
KMA30-35	36	8	M30X1.5P	52	20	35	M30X1.5P	25	57	35	20	M30X1.5P
KMA33-25	46	8	M33X1.5P	62	26	45	M33X1.5P	22	47	25	20	M33X1.5P
-50	46	8	M33X1.5P	62	26	45	M33X1.5P	-	-	-	-	-
KMA36-25	46	10	M36X1.5P	62	26	45	M36X1.5P	22	47	25	20	M36X1.5P
-50	46	10	M36X1.5P	62	26	45	M36X1.5P	-	-	-	-	-

Accessory Model	Clamp Mount						Rectangular Flange						
	D1	D2	D3	D4	D5	D6	E1	E2	E3	E4	E5	E6	E7
KMA08-06	16	Bolt : M4	10	25	M8X1.0P	14	-	-	-	-	-	-	-
KMA10-07	16	Bolt : M4	10	25	M10X1.0P	14	-	-	-	-	-	-	-
KMA12-14	20	Bolt : M5	12	32	M12X1.0P	16	-	-	-	-	-	-	-
KMA14-12	20	Bolt : M5	12	32	M14X1.5P	20	-	-	-	-	-	-	-
KMA16-12	24	Bolt : M6	16	36	M16X1.5P	22	-	-	-	-	-	-	-
KMA20-16	28	Bolt : M6	20	40	M20X1.5P	25	-	-	-	-	-	-	-
KMA25-25	32	Bolt : M6	25	46	M25X1.5P	32	-	-	-	-	-	-	-
KMA27-25	35	Bolt : M6	25	48	Thread	32	-	-	-	-	-	-	-
-40	35	Bolt : M6	25	48	Thread	32	-	-	-	-	-	-	-
KMA30-35	39	Bolt : M6	25	53	M30X1.5P	37	-	-	-	-	-	-	-
KMA33-25	42	Bolt : M6	25	56	M33X1.5P	40	51	41	10	4-Ø7	M33X1.5P	29	45
-50	42	Bolt : M6	25	56	M33X1.5P	40	51	41	10	4-Ø7	M33X1.5P	29	45
KMA36-25	45	Bolt : M6	25	61	M36X1.5P	42	51	41	10	4-Ø7	M36X1.5P	29	45
-50	45	Bolt : M6	25	61	M36X1.5P	42	51	41	10	4-Ø7	M36X1.5P	29	45

Shock Absorber

KMA Accessories Installation

NAME	Accessories	Installation	Remark
Lock Nut			As a basic mounting way, by using Lock nut shock absorber can be installed nut, easily.
Stop Collar + Lock Nut			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.
Side Load Adapter + Lock Nut			Main application is rotational motion control, and when the center distance of the shock absorber is inevitably short, it can help to prevent one-sided wear trouble of Shock Absorber Piston Rod.
Flange Mount			By using Flange or Rectangular Flange, Shock Absorber can be fixed conveniently.
Clamp Mount			By Clamp Mount location adjustment and installation are easy. It is possible to mount it on single side or both sides of shock absorber.