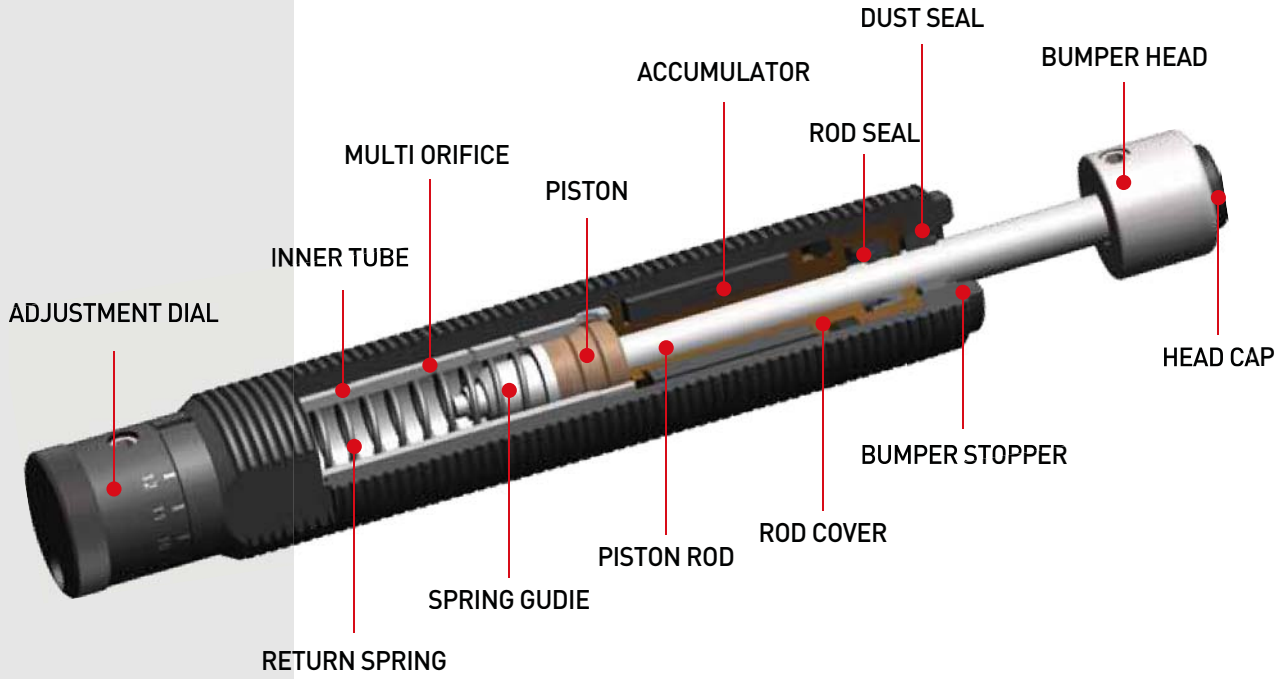
KMA Series
조정형 타입

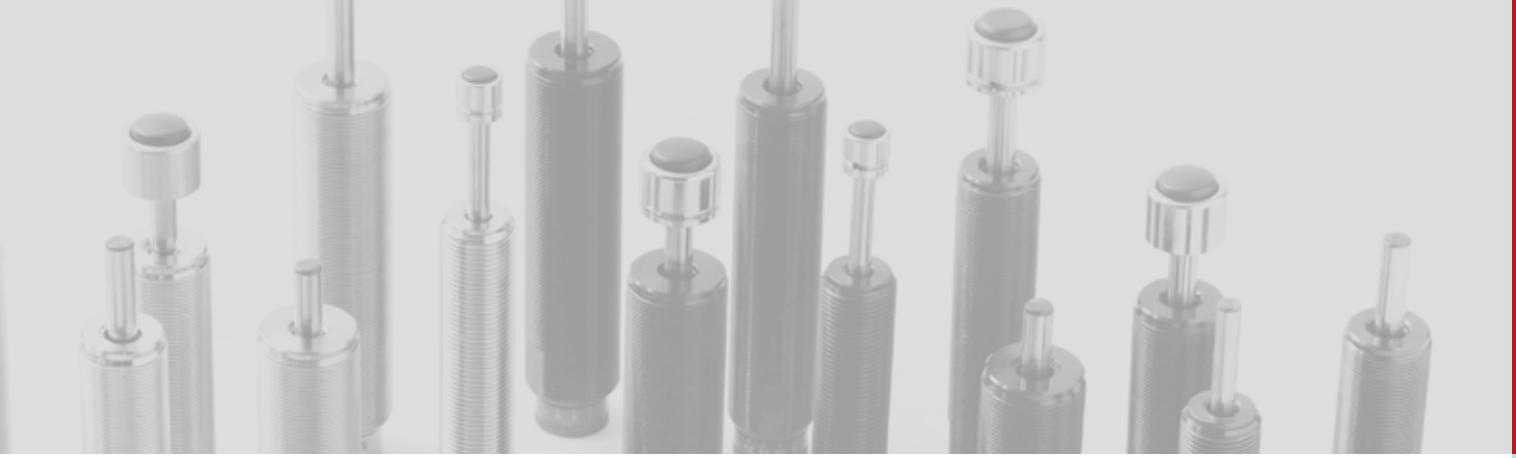
KOBA
Best Energy Absorption

물체가 충돌 시 Piston Rod가 Body내로 밀려 들어가고, 오일은 Inner Tube의 외측면을 따라 형성된 Groove를 통해 Accumulator로 저장되며, 이 과정 중에 운동에너지는 열에너지로 변환되어 대기 중으로 소산되는 과정을 거치면서 감쇠력이 발생됩니다. 부하가 제거되면, 압축되었던 Return Spring의 힘으로 Piston Rod는 원래의 위치로 되돌아 옵니다.



특징

- 조정형 Shock Absorber는 충돌속도에 따라 0에서 300도까지 12단계 범위로 완충력의 미세 조정이 가능합니다.
- Piston 단면적 증가로 기존 제품보다 에너지 흡수 용량이 증가하였으며, Effective Weight의 범위가 더 넓어졌습니다.
- Shock Absorber의 Body를 일체형으로 제작함으로써 견고할 뿐만 아니라 Bottom Out 문제를 근본적으로 해결하였습니다.
- 전체가 Threaded Body로 취부가 용이할 뿐만 아니라 정확한 위치고정이 가능합니다. 또한 표면적이 증가하여 충격흡수에 따른 열에너지를 외부로 보다 빨리 방출시킬 수 있습니다.
- Piston Rod는 부식에 강한 소재를 적용하였으며, Rod Cover는 장시간 사용해도 견디는 특수재질로서 Seal을 보호하며 긴 수명을 보장합니다.
- Body 표면처리는 니켈 도금 또는 합금도금(흑색)으로 부식에 강합니다.
- Bumper Head는 스틸, 스틸+경질 Cap(흑색), 스틸+연질 Cap(녹색)등으로 구성되어 있으며, 충돌 조건이나 사용 환경에 맞게 선택하여 사용할 수 있습니다.
- 속도범위
  - 일반 : 0.3~5.0 m/s
  - 저속용 : 0.08~1.3 m/s
- 온도범위 -10~80 ℃
- Option -40~120 ℃(특수 오일 및 Seal)
- 사용처 : Robot, 포장기, 직조기, 공작기계, 자동차 제조설비, 타이어 제조설비, 주조설비, 크레인 , 안전장치 등 산업전반에 걸쳐 다용도로 사용되고 있습니다.



KMA Series Ordering Information

KMA 14 - 12 B N LV - SC

- KMA: KM: Series / A:조정형
- 14: Body Thread Size
- 12: Stroke
- B: 무기호 : Bumper Head 없음 / S : 스틸 헤드 / B : 스틸+경질Cap(흑색) / G : 스틸+연질Cap(녹색) / 단, KMA10인 경우 무기호: Bumper Head없음 B: 흑색수지캡
- N: 무기호 : 합금도금(흑색) / N : 무전해Ni 도금
- LV: 무기호 : 표준형 / LV : 저속형
- SC: 〈 Accessory Series 〉 SC : Stop Collar / RF : Rectangular Flange / SL : Side Load Adaptor / CM : Clamp Mount

Accessory Series Charts

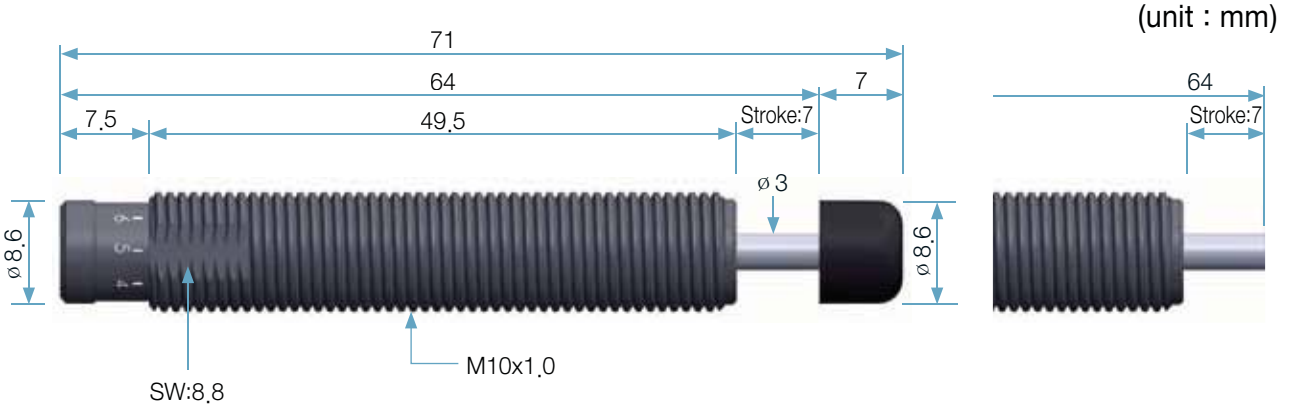
Accessories	Side Load Adapter	Stop Collar	Rectangular Flange	Clamp Mount
Model \ Symbols	SL	SC	RF	CM
KMA 10-07	●	●		●
KMA 12-14	●	●		●
KMA 14-12	●	●		●
KMA 16-12	●	●		●
KMA 20-16	●	●		●
KMA 25-25	●	●		●
KMA 27-25	●	●		●
-40		●		●
KMA 30-35	●	●		●
KMA33-25	●	●	●	●
-50		●	●	●
KMA 36-25	●	●	●	●
-50		●	●	●

KMA 10 - 07(B)

Engineering Data

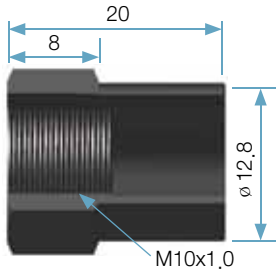
Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA10-07(B)	7	5.5	15,000	1-123	2.4	5.4	21

(unit : mm)



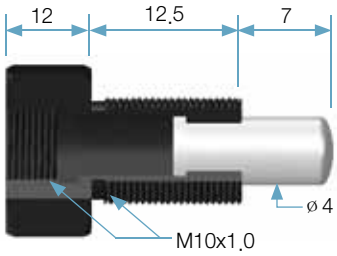
Accessory (unit : mm)

Stop Collar



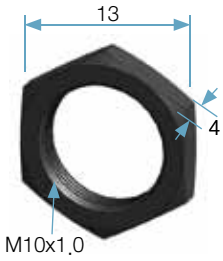
SC10

Side Load Adapter



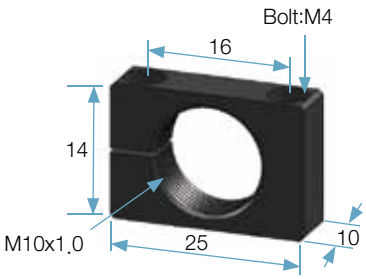
SL1007

Lock Nut



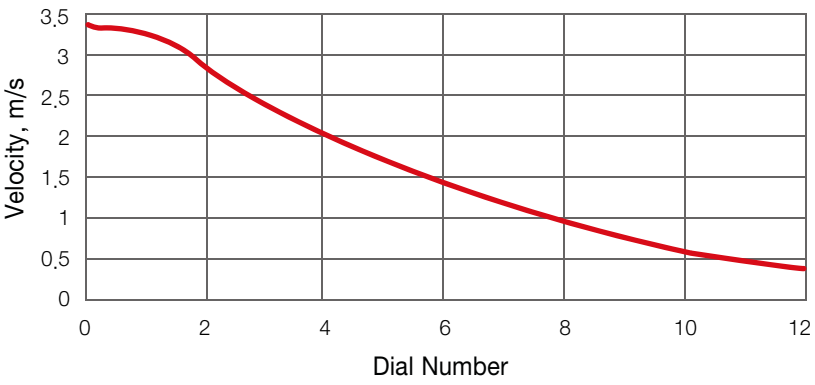
LN10

Clamp Mount



CM10

속도에 따른 다이얼 번호

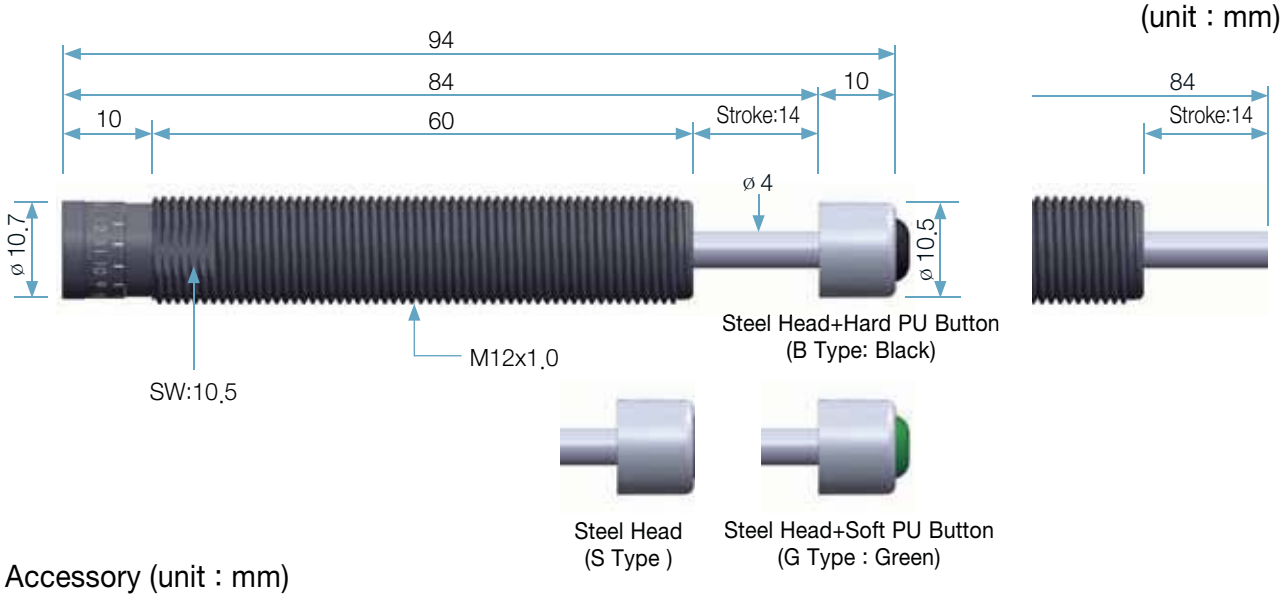


KMA 12 - 14(B)

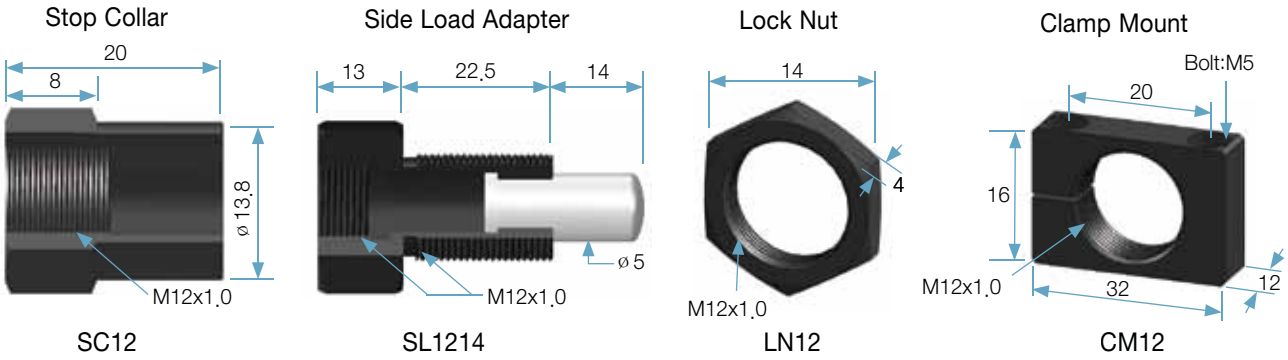
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA12-14(B)	14	21.5	35,000	4-477	3.7	9.6	33

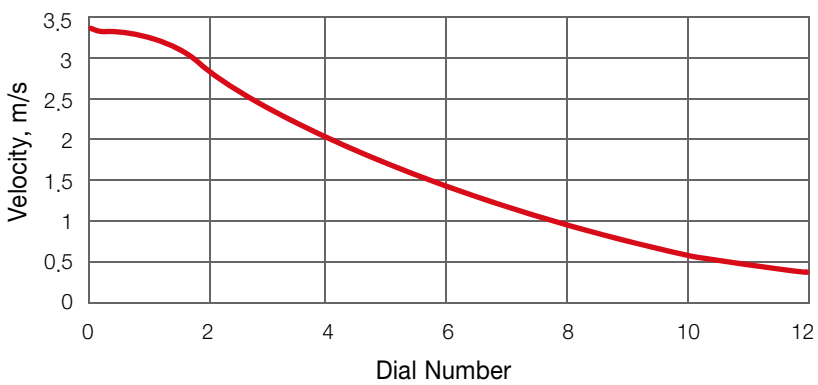
(unit : mm)



Accessory (unit : mm)



속도에 따른 다이얼 번호

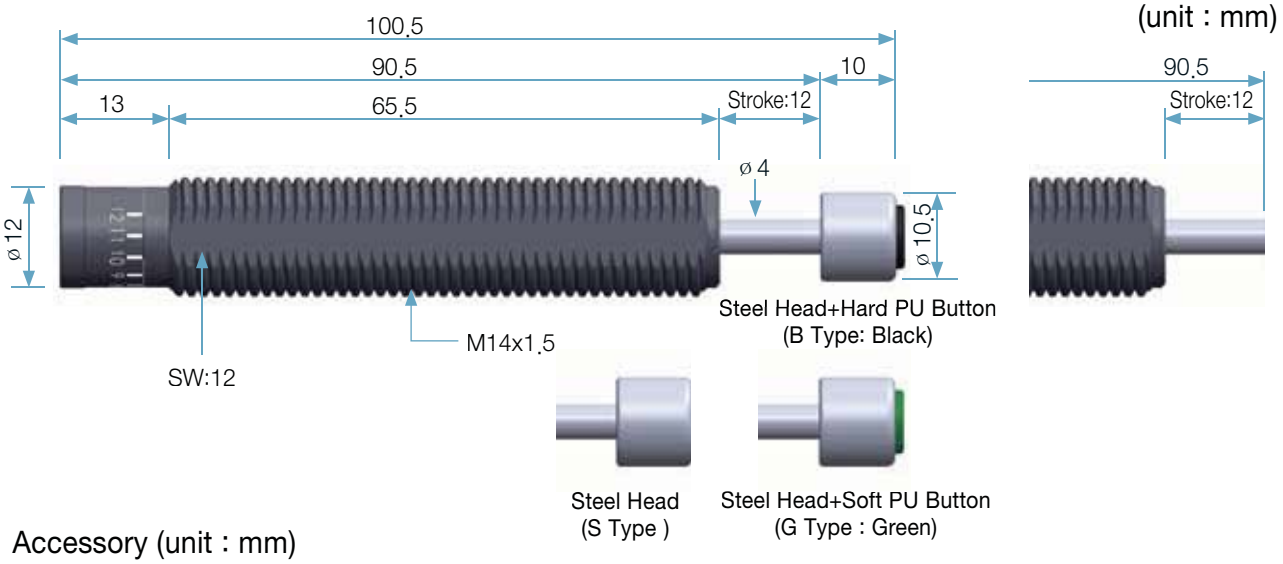


KMA 14 - 12(B)

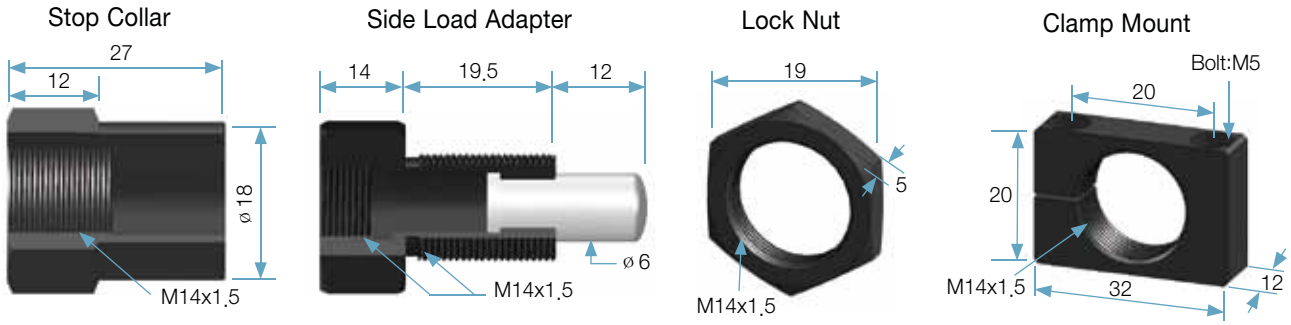
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA14-12(B)	12	21.5	45,000	1.5-494	3.6	9.8	55
-12(B)LV				25.4-1,650			

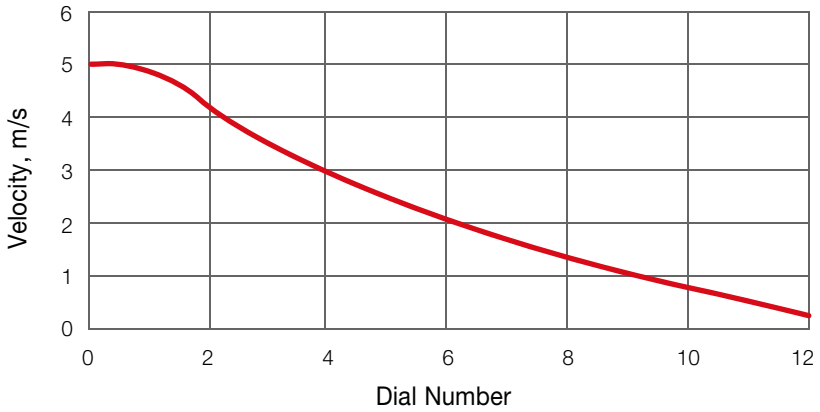
(unit : mm)



Accessory (unit : mm)



속도에 따른 다이얼 번호

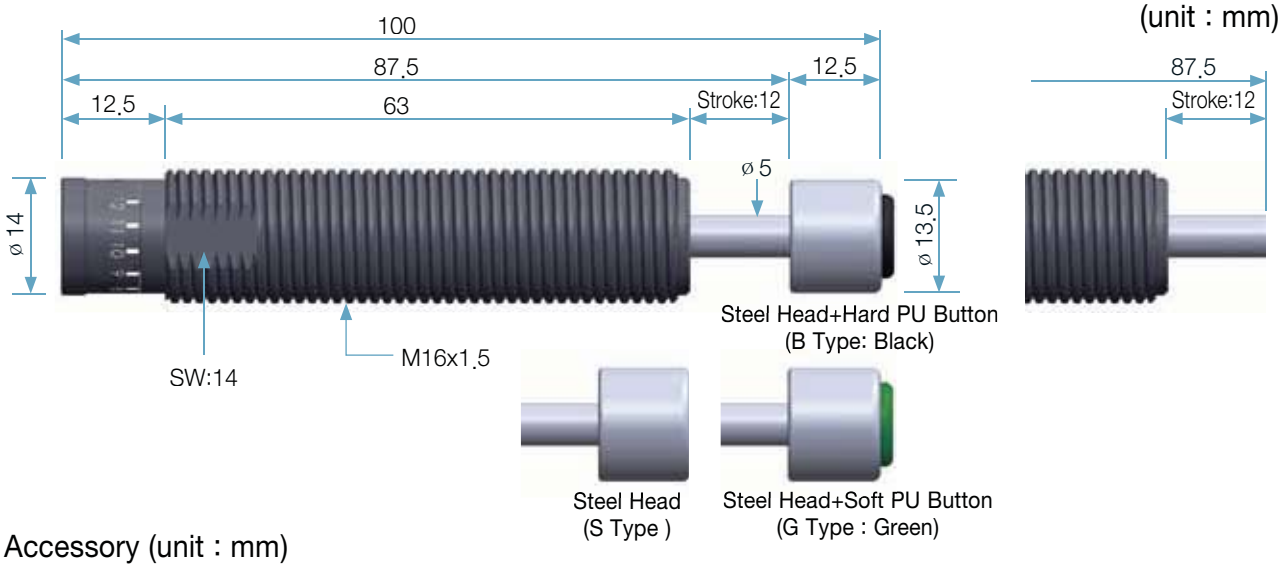


KMA 16 - 12(B)

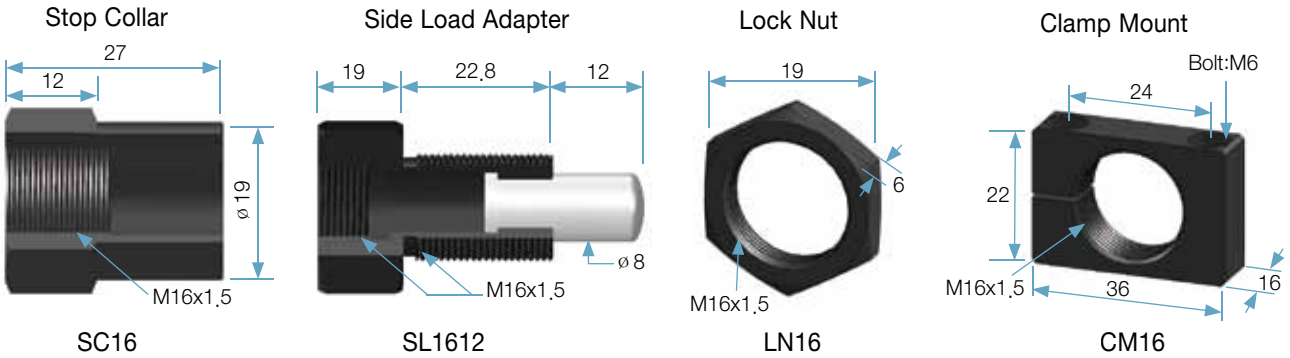
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	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			

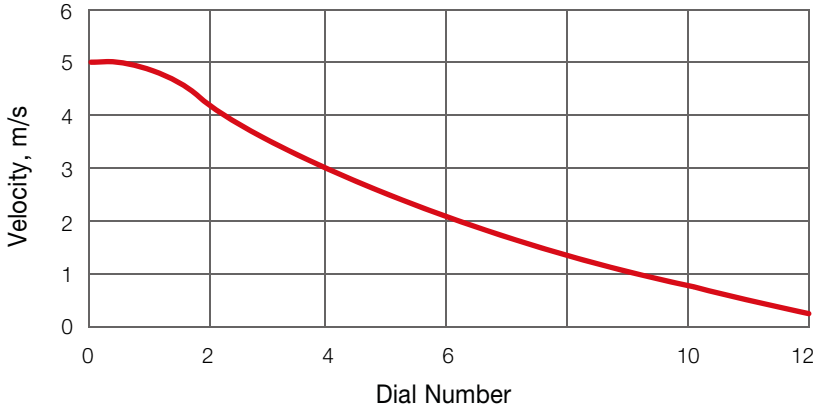
(unit : mm)



Accessory (unit : mm)



속도에 따른 다이얼 번호

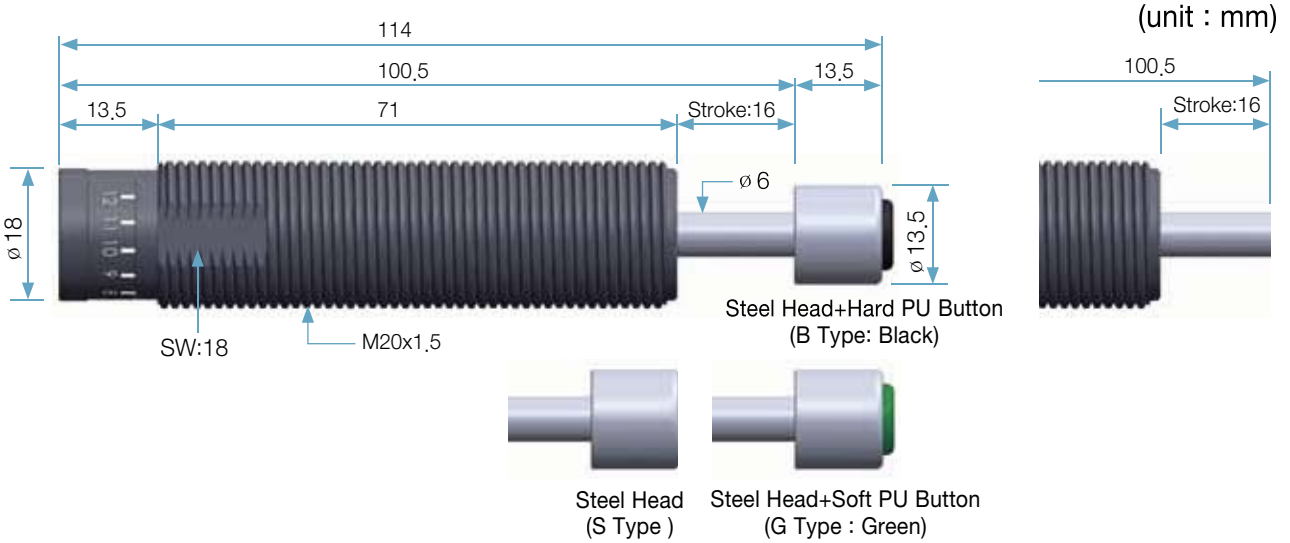


KMA 20 - 16(B)

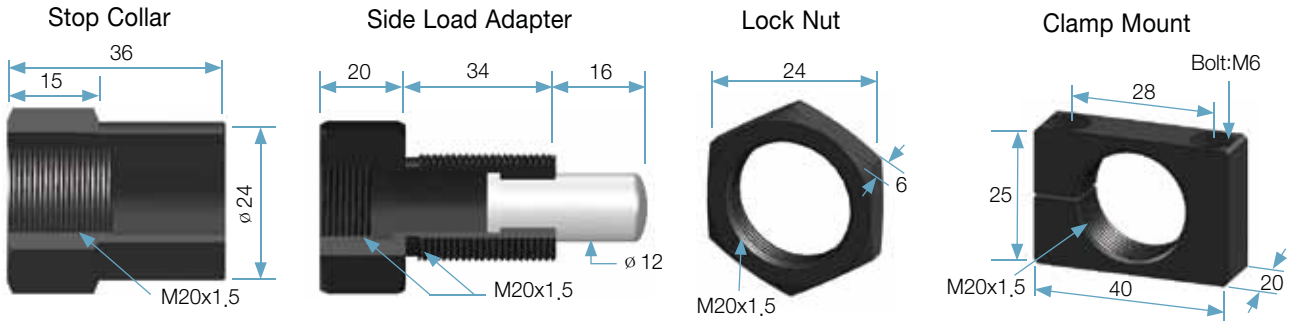
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (Kg) We	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			

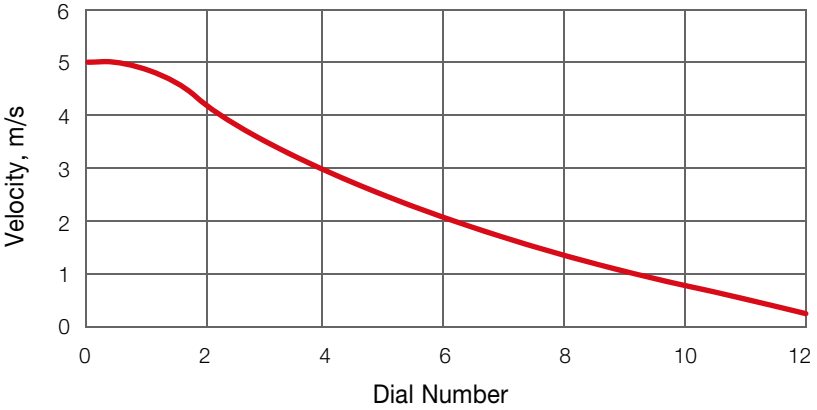
(unit : mm)



Accessory (unit : mm)



속도에 따른 다이얼 번호

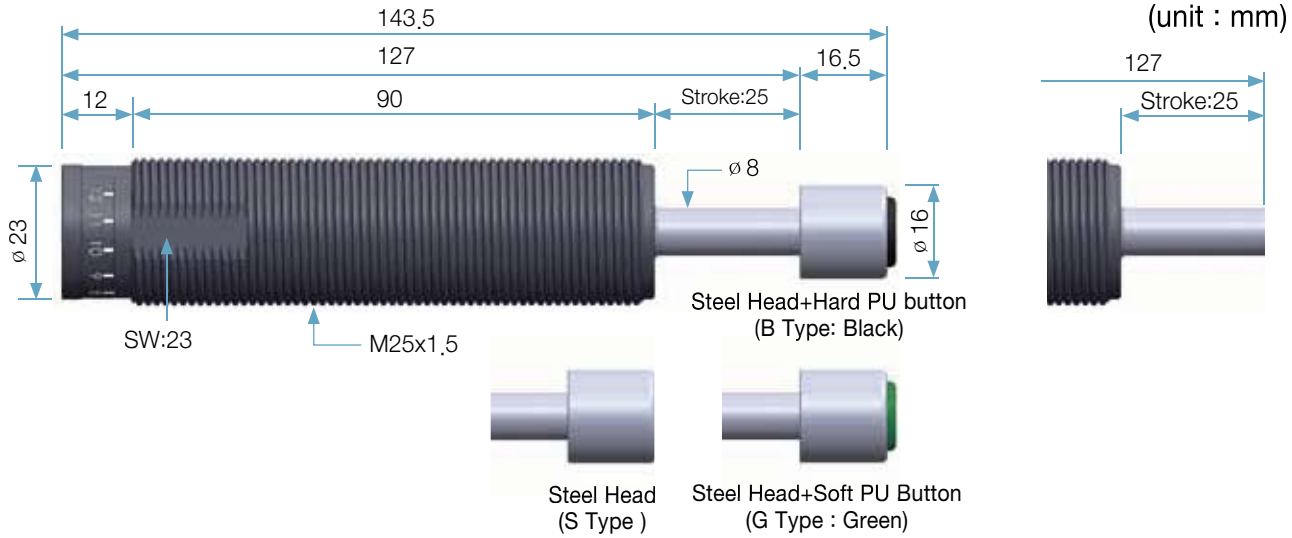


KMA 25 - 25(B)

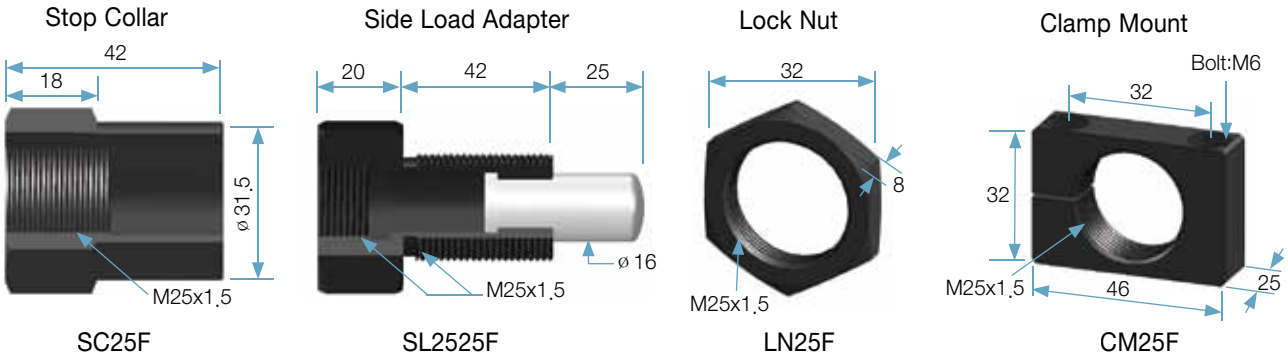
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	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			

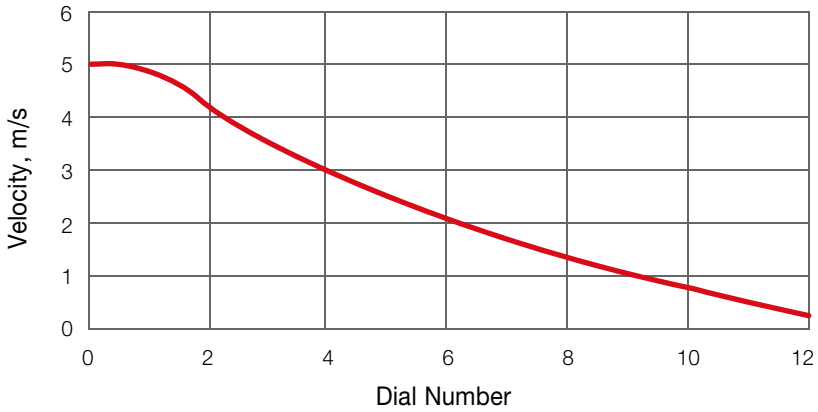
(unit : mm)



Accessory (unit : mm)



속도에 따른 다이얼 번호

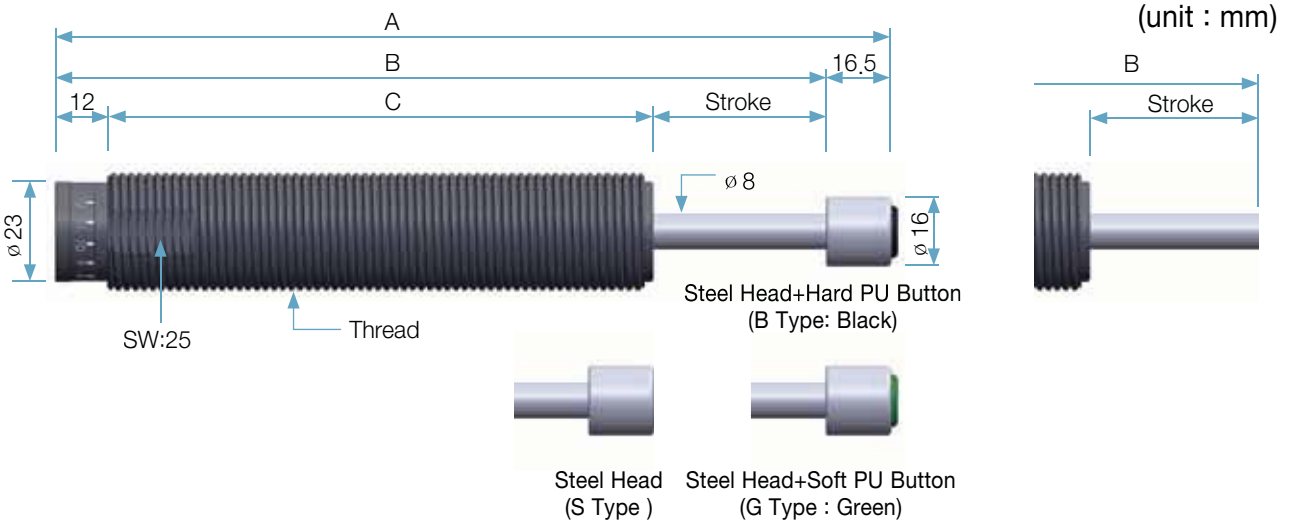


KMA 27 Series

Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA27-25(B) -25F(B) -25(F)(B)LV	25	177	113,000	8.3-2,150 209.4-15,750	10.2	29.5	305
-40(B) -40(B)LV	40	283	149,000	20-5,120 334.9-25,200	10	31	429

(unit : mm)



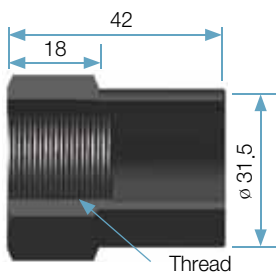
Dimensions (unit : mm)

Model	St	THREAD	A	B	C
KMA27-25(B) 25(B)LV -25F(B) -25F(B)LV	25	M27x3.0 M27x1.5	143.5	127	90
-40(B) -40(B)LV	40	M27x2.0	194.5	178	126

속도에 따른 다이얼 번호

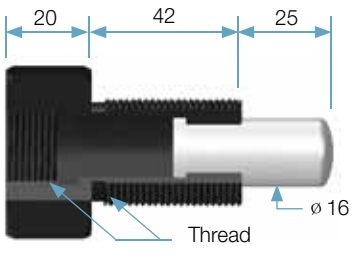
Accessory (unit : mm)

Stop Collar



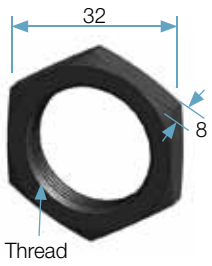
SC27/SC27F

Side Load Adapter



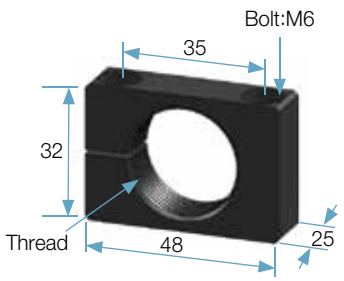
SL2725/SL2725F

Lock Nut



LN27/LN27F

Clamp Mount



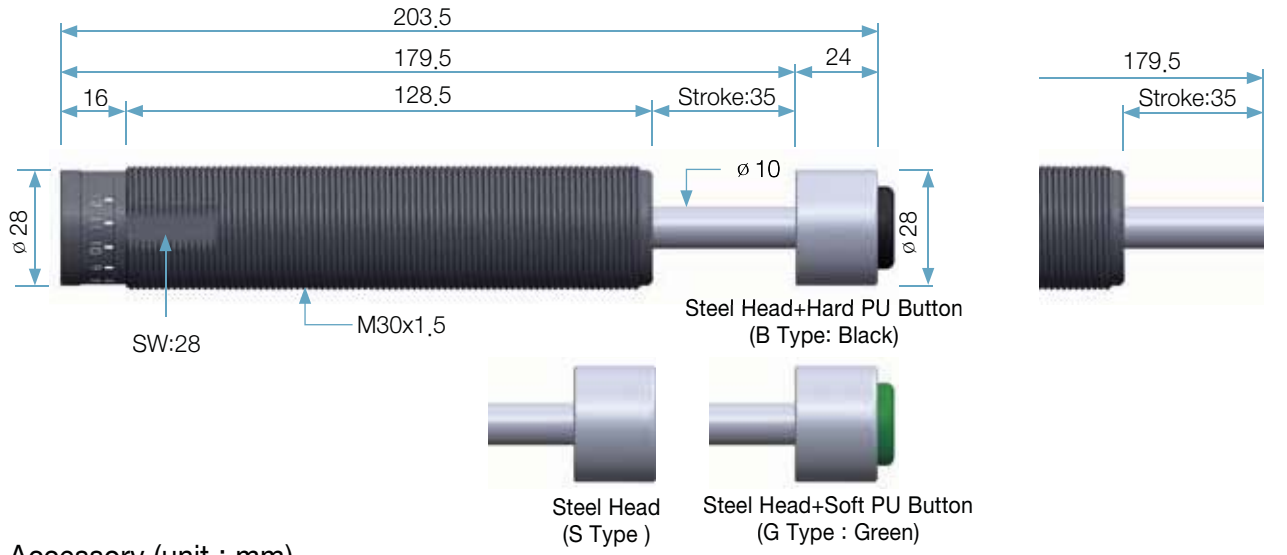
CM27/CM27F

KMA 30 - 35(B)

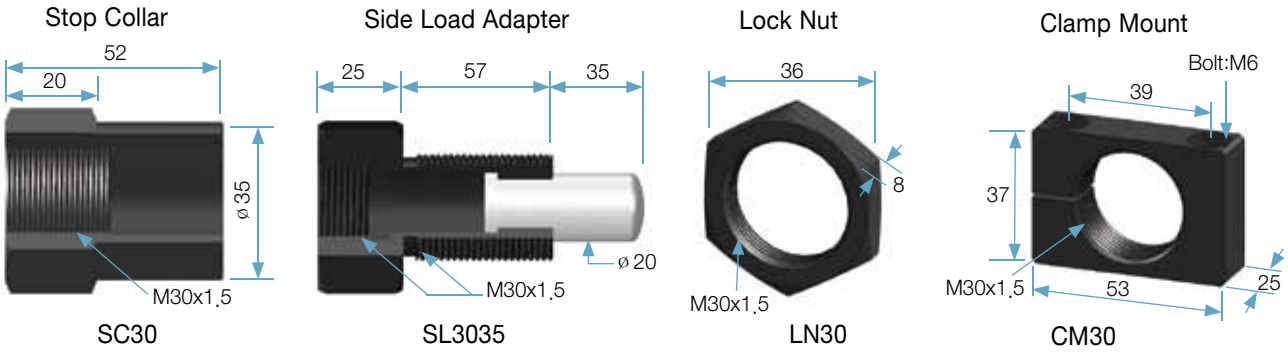
Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA30-35(B)	35	356	137,000	25-6,950	17.8	50.3	610

(unit : mm)



Accessory (unit : mm)



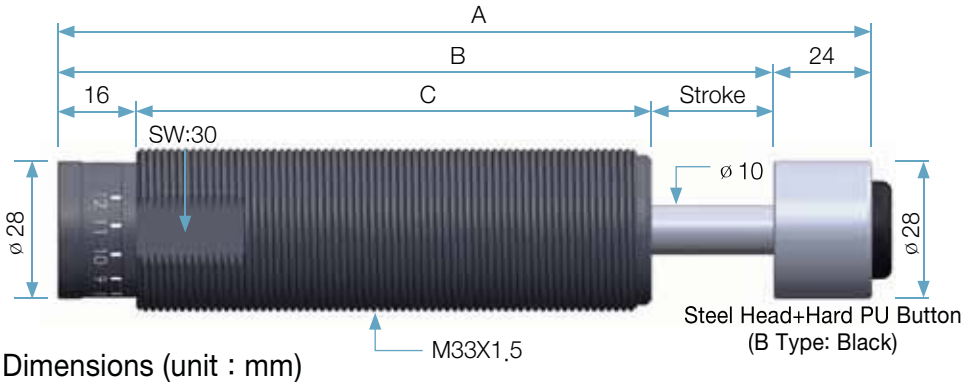
속도에 따른 다이얼 번호

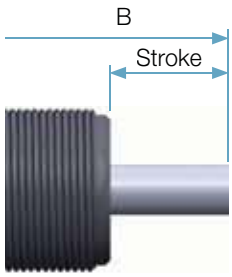
KMA 33 Series

Engineering Data

Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	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				97-60,930			
-50(B)	50	628	150,000	50-14,000	13.6	65.3	580
-50(B)LV				192-120,312			

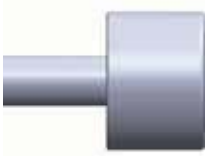
(unit : mm)



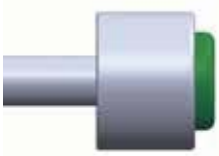


Dimensions (unit : mm)

Model	St	A	B	C
KMA33-25(B)	25	170	146	105
-25LV(B)				
-50(B)	50	229	205	139
-50LV(B)				



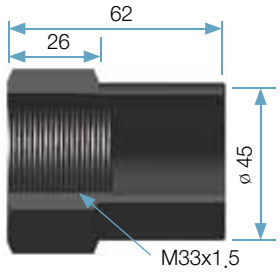
Steel Head
(S Type)



Steel Head+Soft PU Button
(G Type : Green)

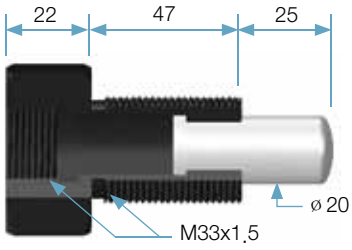
Accessory (unit : mm)

Stop Collar



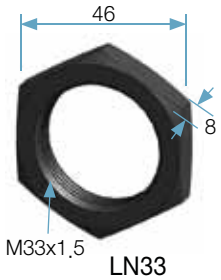
SC33

Side Load Adapter



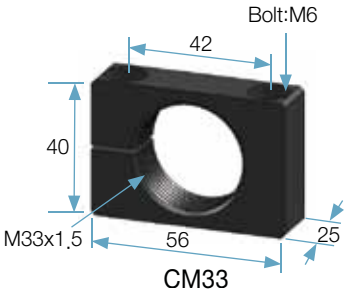
SL3325

Lock Nut



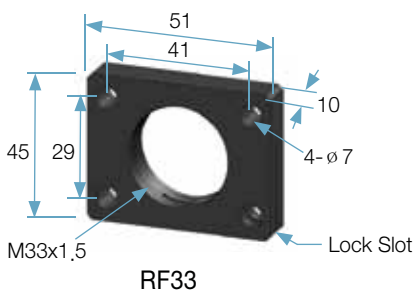
LN33

Clamp Mount



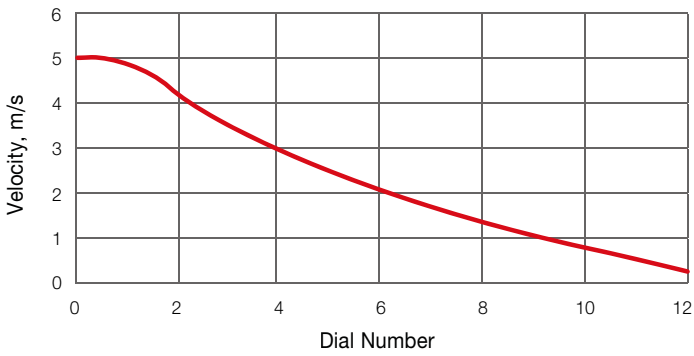
CM33

Rectangular Flange



RF33

속도에 따른 다이얼 번호

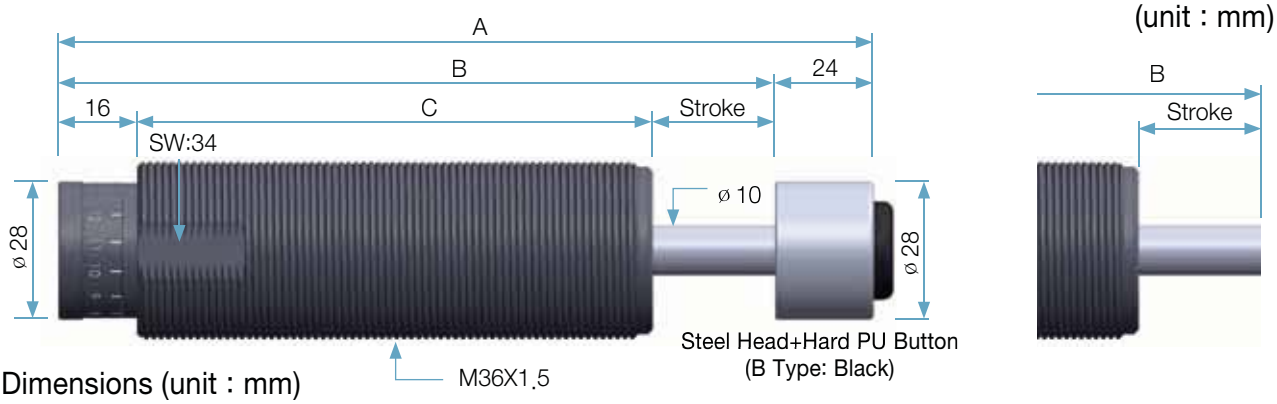


KMA 36 Series

Engineering Data

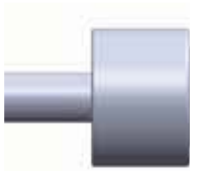
Model	Stroke (mm) S	Max.Energy / Cycle (Nm) E_T	Max.Energy /Hour (Nm/h) E_TC	Effective Weight (kg) We	Recoil Force (N)		Weight (g)
					Ext	Comp	
KMA36-25(B)	25	346	125,000	25-6,980	25	56.2	725
-25(B)LV				97-60,930			
-50(B)	50	692	160,000	50-14,000	22.5	60	885
-50(B)LV				192-120,312			

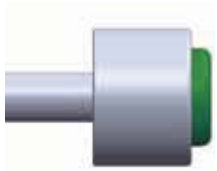
(unit : mm)



Dimensions (unit : mm)

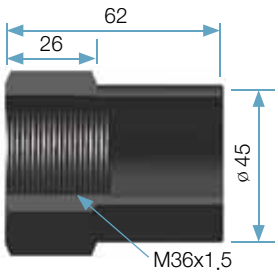
Model	St	A	B	C
KMA36-25(B)	25	170	146	105
-25LV(B)				
-50(B)	50	229	205	139
-50LV(B)				


Steel Head
(S Type)


Steel Head+Soft PU Button
(G Type : Green)

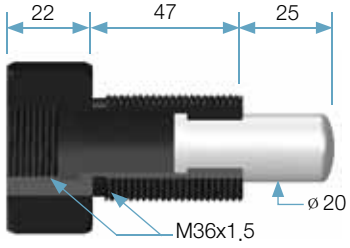
Accessory (unit : mm)

Stop Collar



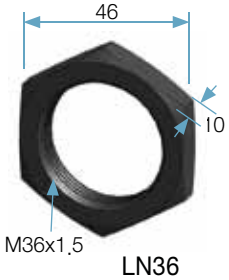
SC36

Side Load Adapter



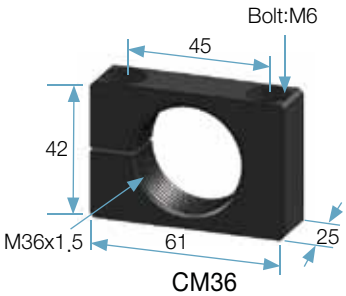
SL3625

Lock Nut



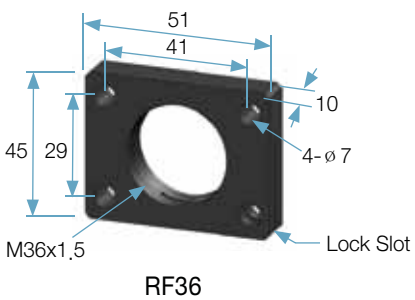
LN36

Clamp Mount



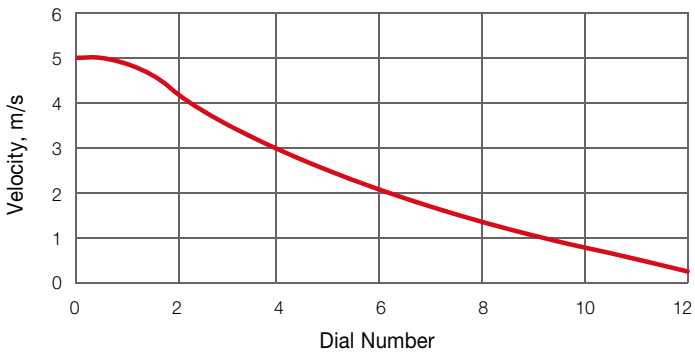
CM36

Rectangular Flange



RF36

속도에 따른 다이얼 번호



KMA/KMS Accessories 취부방법

NAME	취부도	비고
Lock Nut		기본적인 취부 방법으로 Lock Nut를 이용하여 간단하게 취부 할 수 있습니다.
Stop Collar + Lock Nut		Stop Collar를 사용함으로써 정확한 정지 및 위치 선정이 용이하고 Piston에 발생되는 Bottom Out 현상을 방지시켜 줍니다.
Side Load Adapter + Lock Nut		회전운동에 사용함으로써 Shock Absorber의 중심거리를 부득이 짧게 사용할 경우 Shock Absorber Piston Rod 의 편마모현상을 방지시켜 줍니다.
Flange Mount		Rectangular Flange를 이용하면 편리하게 Shock Absorber를 고정 할 수 있습니다.
Clamp Mount		Clamp Mount는 주로 수평면에 사용되며 Shock Absorber 길이가 길 때 사용하면 유리합니다.