

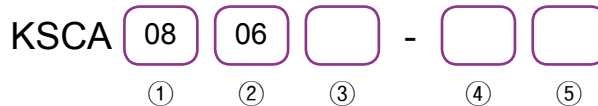
KSCA series



Features

- Shock absorber made to stop smooth and quiet using a unique design for multiple orifice structure. When injection mold inject as well as collide against robot with high speed.
- Non-adjustable shock absorber makes impact energy exhale to heat energy in a short time.
- Shock Absorber allows higher productivity by increasing accelerated velocity.
- Saves production costs by extending the equipment life.
- Improves working efficiency by decreasing noise in factory.
- Maintains better quality to prevent damage of goods.

How to Order



① Outer diameter

08	M8XP1.0	06	06 mm
10	M10XP1.0	06	06 mm
12	M12XP1.0	10	10 mm
14	M14XP1.0 (M14XP1.5*)	15	15 mm
		20	20 mm
20	M20XP1.5	20	20 mm
		30	30 mm
		50	50 mm
25	M25XP2.0	25	25 mm
		30	30 mm
		50	50 mm
		80	80 mm
36	M36XP1.5	80	80 mm

② Stroke

③ Cap

Nil	With out cap (Only M08, M10, M12, M14, M20)
B	With cap (KSCA2030~KSCA3680 : Standard have urethane cap basically)

④ Damping constant

1	Soft
2	Standard
3	Hard

⑤ Finishing

Nil	Black oxide coating
N	Nickel plating

* Order made : outer diameter M14XP1.5

* M08~M12 : Basic nickel plating

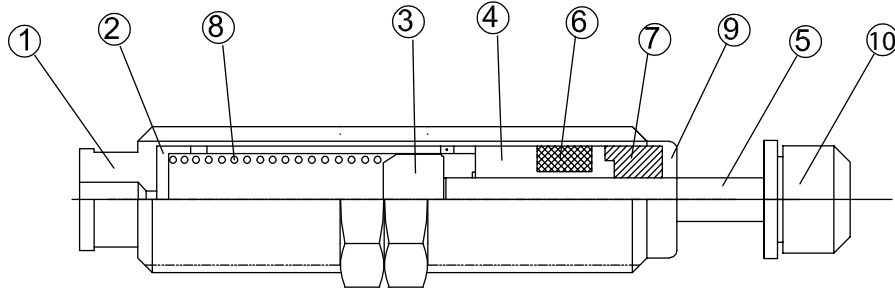
Specifications

Model	Total energy [Max] (Nm)	Total energy per hour [Max] (Nm/h)	Effective weight [Max~Min] (kg)	Shock force [Max] (N)	Return force [Min~Max] (N)	Weight (g)	Model	Total energy [Max] (Nm)	Total energy per hour [Max] (Nm/h)	Effective weight [Max~Min] (kg)	Shock force [Max] (N)	Return force [Min~Max] (N)	Weight (g)
KSCA0806-1	2.8	6,000	≤8	250	1~4	15	KSCA2050B-1	75	40,000	≤10	1,900	10~30	300
KSCA0806-2			≤10				KSCA2050B-2			≤16			
KSCA1006-1	4	10,000	≤5	630	4~6	25	KSCA2050B-3	80	72,000	≤32	4,000	20~40	270
KSCA1006-2			≤8				KSCA2525B-1			≤20			
KSCA1006-3			≤13				KSCA2525B-2			≤30			
KSCA1210-1	8	14,000	≤8	1,050	5~10	40	KSCA2525B-3	100	75,000	≤110	4,000	10~35	300
KSCA1210-2			≤16				KSCA2530B-1			≤30			
KSCA1415-1	15	27,000	≤7	1,300	7~11	65	KSCA2530B-2	130	76,000	≤50	4,000	20~50	410
KSCA1415-2			≤17				KSCA2530B-3			≤110			
KSCA1415-3			≤32				KSCA2550B-1			≤30			
KSCA1420-1	19	29,000	≤7	1,300	7~12	80	KSCA2550B-2	210	86,500	≤50	4,000	20~45	530
KSCA1420-2			≤17				KSCA2580B-1			≤30			
KSCA1420-3			≤32				KSCA2580B-2			≤50			
KSCA2020-1	30	35,000	≤10	1,900	10~30	130	KSCA2580B-3	320	128,000	≤110	5,000	25~50	800
KSCA2020-2			≤16				KSCA3680B-1			≤1,000			
KSCA2020-3			≤32				KSCA3680B-2			≤1,000			
KSCA2030B-1	45	37,000	≤10	1,900	10~30	230	KSCA3680B-3	320	128,000	≤1,000	5,000	25~50	800
KSCA2030B-2			≤16										
KSCA2030B-3			≤32										

Max. impact velocity ≤ 4 m/sec
Ambient temperature -10~60 °C

* Includes lock nut(2pcs).

Structure

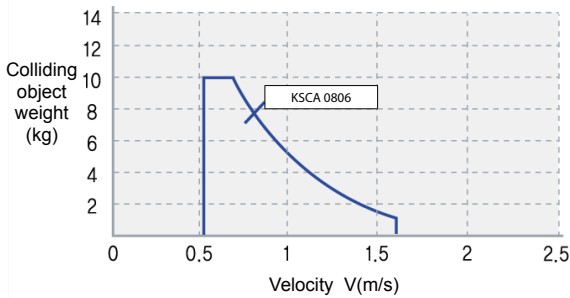


Part no.	Parts	Material	Part no.	Parts	Material
1	Outer tube	Free-cutting steel, SHN24L	6	Accumulator	ECO
2	Inner tube	Brass extruding tube, C2700BE	7	U-packing	Nitrile rubber, NBR
3	Piston	Brass extruding tube, C2700BE	8	Spring	HSWR72A
4	Head	Brass extruding tube, C2700BE	9	Dust cap	AL2104
5	Piston rod	Carbon steel tube, SM54C	10	Urethane cap	Urethane, TPU

Shock Absorber & Gas Spring Shock Absorber Reference data
KPA KUPA
KSCA
KSCC
Gas Spring Reference data
KBG-W
KBG-B

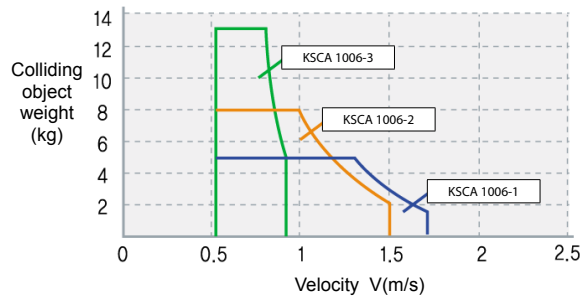
Impact Velocity

KSCA 0806



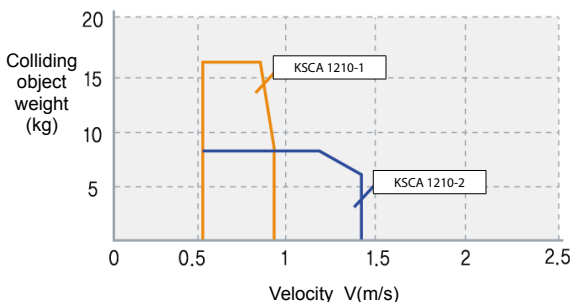
※ Impact velocity range: ≤1.6m/sec

KSCA 1006-1, 1006-2, 1006-3



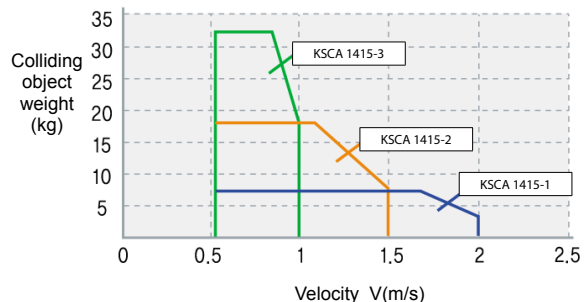
※ Impact velocity range: ≤1.7m/sec

KSCA 1210-1, 1210-2



※ Impact velocity range: ≤1.4m/sec

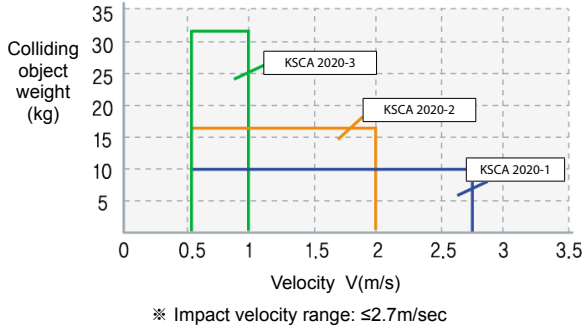
KSCA 1415-1, 1415-2, 1415-3



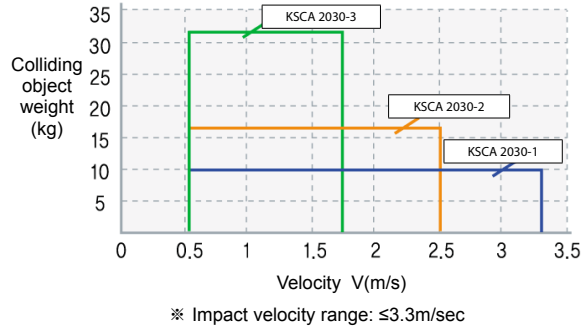
※ Impact velocity range: ≤2m/sec

Impact Velocity

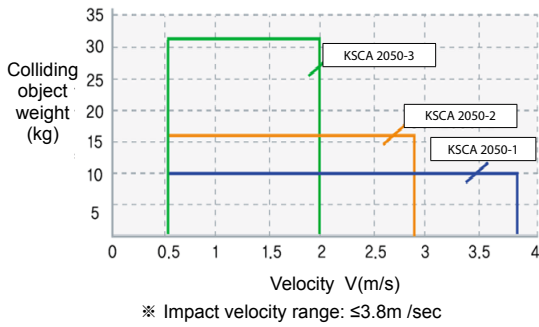
KSCA 2020-1, 2020-2, 2020-3



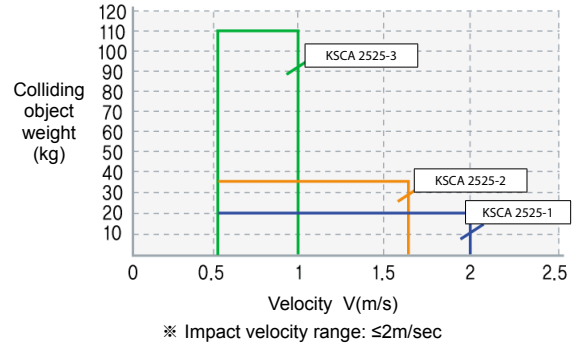
KSCA 2030-1, 2030-2, 2030-3



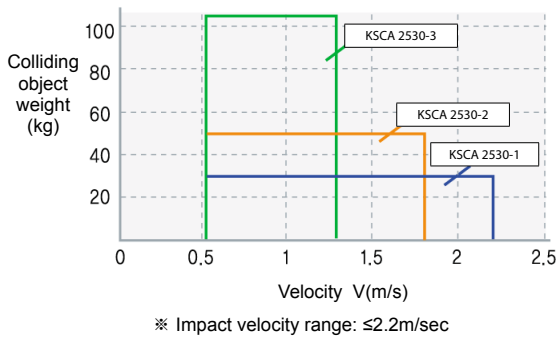
KSCA 2050-1, 2050-2, 2050-3



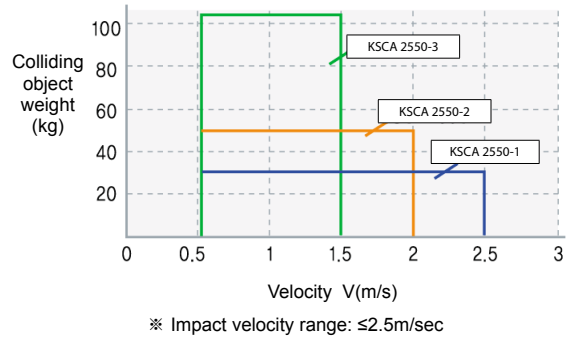
KSCA 2525-1, 2525-2, 2525-3



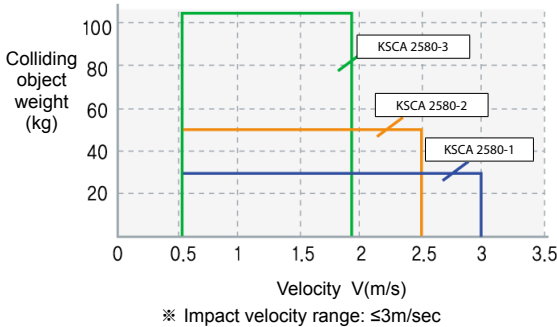
KSCA 2530-1, 2530-2, 2530-3



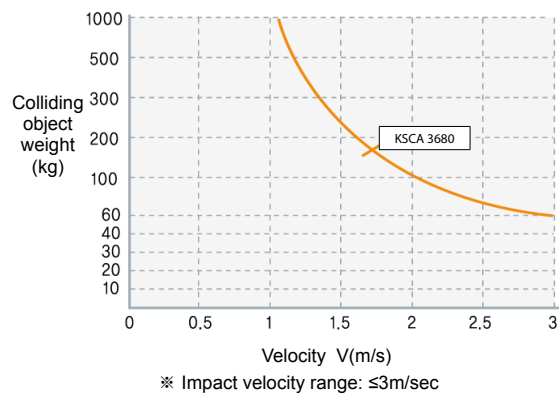
KSCA 2550-1, 2550-2, 2550-3



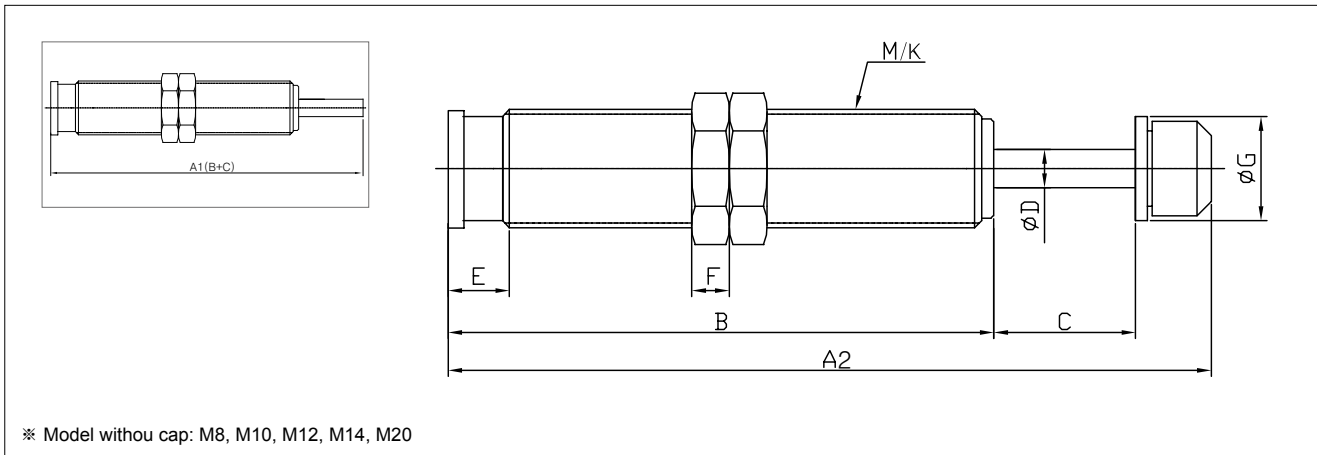
KSCA 2580-1, 2580-2, 2580-3



KSCA 3680



Dimensions-Non-adjustable (Small)

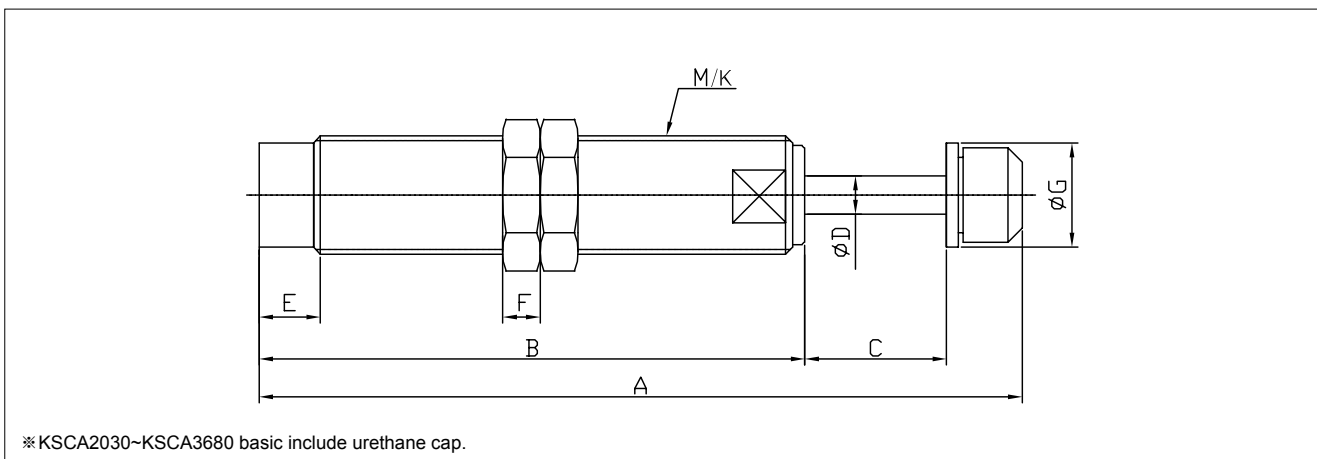


※ Model without cap: M8, M10, M12, M14, M20

Unit:mm											Unit:mm										
Model	Stroke	A1	A2	B	C	øD	E	F	øG	M/K	Model	Stroke	A1	A2	B	C	øD	E	F	øG	M/K
KSCA0806	6	47	-	41	6	3	5	3	-	M8XP1.0	KSCA1415	15	88.5	-	73.5	15	4	11	4	-	M14XP1.0 M14XP1.5
KSCA0806-B	6	-	55	41	6	3	5	3	7	M8XP1.0	KSCA1415-B	15	-	101.5	73.5	15	4	11	4	11	M14XP1.0 M14XP1.5
KSCA1006	6	47	-	41	6	3	5	3	-	M10XP1.0	KSCA1420	20	93.5	-	73.5	20	4	11	4	-	M14XP1.0
KSCA1006-B	6	-	57	41	6	3	5	3	9	M10XP1.0	KSCA1420-B	20	-	106.5	73.5	20	4	11	4	11	M14XP1.0
KSCA1210	10	63	-	53	10	4	5	3	-	M12XP1.0	KSCA2020	20	108.5	-	88.5	20	6	13	6	-	M20XP1.5
KSCA1210-B	10	-	73	53	10	4	5	3	9	M12XP1.0	KSCA2020-B	20	-	124	88.5	20	6	13	6	18	M20XP1.5

Shock Absorber & Gas Spring
Shock Absorber Reference data
KPA
KUPA
KSCA
KCSC
Gas Spring Reference data
KBG-W
KBG-B

Dimensions-Non-adjustable (Medium, Long Stroke)



※ KSCA2030~KSCA3680 basic include urethane cap.

Unit:mm										
Model	Stroke	A	B	C	øD	E	F	øG	M/K	
KSCA2030B	30	149	103.5	30	6	13	6	18	M20XP1.5	
KSCA2525B	25	132.5	91.5	25	8	13	8	22	M25XP2.0	
KSCA2530B	30	161.5	115.5	30	8	13	8	22	M25XP2.0	
KSCA2550B	50	236.5	170.5	50	8	61	8	22	M25XP2.0	
KSCA2580B	80	331.5	235.5	80	8	126	8	22	M25XP2.0	
KSCA3680B	80	343	241	80	10	131	10	34	M36XP1.5	