

Industrial Shock Absorber (Adjustable Type)

How to Order



Adjustable(Standard)



Adjustable(Medium)



Adjustable(Large)

- User can adjust impact absorbed range with dampening adjustable dial(360°) according to impact velocity.
- Rapid returning piston rod by specially designed spring for next cycle.
- Surface of outer tube and piston rod plate with chrome that prohibits corrosion and scratches for a longer life.
- Available attachment to any position.
- Shock Absorber allows higher productivity for 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

① Cap

KPA	Without cap (Only M12, M14, M16, M20, M25, M27)
KUPA	With cap (M12, M14, M16, M20, M25, M27 Standard have urethane cap.) (M36, M42, M64, M85 Standard have a steel cap. Urethane cap is option part.)

② Outer dia. & Stroke

1210	M12XP1.0	10mm
1410	M14XP1.5	10mm
1612	M16XP1.5	12mm
2015	M20XP1.5	15mm
2525	M25XP1.5	25mm
2725	M27XP30	25mm
	M27XP1.5	
3035	M30XP1.5	35mm
3625	M36XP1.5	25mm
3650		50mm
4225	M42XP1.5	25mm
4250		50mm
4275	M42XP1.5	75mm
64050		50mm
64100	M64XP2.0	100mm
64150		150mm
85050	M85XP2.0	50mm
85090		90mm
85125		125mm
85165		165mm

③ Finishing

Nil : Black oxide coating
N : Nickel plating

④ Option

Nil	Lock nut M08~M36 (Basic : include 2ea) Lock nut M42~M85 (Basic : include 1ea)
S	Stop collar (Only M14~M85)
F	Square flange (Only M36, M42, M64, M85)
R	Rectangular flange (Only M36, M42, M64)
U	Urethane cap (Only M36, M42, M64, M85)

Specifications

Model	Total energy [MAX] (Nm)	Total energy per hour [MAX] (Nm/h)	Effective weight [MIN~MAX] (kg)	Shock force [MAX] (N)	Return force [MIN~MAX] (N)	Weight (g)
KPA1210	13	19,000	0.3~70	600	4~10	45
KUPA1210	13	19,000	0.3~70	600	4~10	50
KPA1410	15	24,500	0.3~90	680	5~11	55
KUPA1410	15	24,500	0.3~90	680	5~11	65
KPA1612	20	30,000	1.3~200	1,000	7~14	110
KUPA1612	20	30,000	1.3~200	1,000	7~14	125
KPA2015	25	35,000	1.3~220	1,160	8~15	135
KUPA2015	25	35,000	1.3~220	1,160	8~15	150
KPA2525	70	70,000	9.8~1,300	3,800	15~45	340
KUPA2525	70	70,000	9.8~1,300	3,800	15~45	390
KPA2725	70	70,000	9.8~1,300	3,800	15~45	340
KUPA2725	70	70,000	9.8~1,300	3,800	15~45	390
KUPA3035	170	80,000	15~1,950	5,000	30~60	600
KUPA3625	180	90,000	17~2,450	6,000	40~75	680
KUPA3650	350	110,000	34~4,900	6,000	25~60	780
KUPA4225	250	130,000	25~7,000	2,400	50~85	1,000
KUPA4250	500	157,500	45~10,000	2,400	35~75	1,300
KUPA4275	750	195,000	55~10,500	2,400	35~100	1,600
KUPA64050	1,250	245,000	70~16,000	3,300	80~165	3,500
KUPA64100	2,550	335,000	115~19,000	3,300	75~210	4,700
KUPA64150	3,750	370,000	130~26,500	3,300	95~360	6,100
KUPA85050	2,400	384,000	180~34,000	66,000	140~200	6,300
KUPA85090	4,100	656,000	210~40,000	66,000	100~210	7,300
KUPA85125	5,800	945,000	220~45,000	66,000	90~210	8,900
KUPA85165	7,100	1,150,000	290~50,000	66,000	90~400	10,900
Max. impact velocity	≤ 3.5 m/sec					
Ambient temperature	-10~60 °C					

※ Lock nut include 2ea

Industrial Shock Absorber (Non-Adjustable Type)

How to Order

KSCA 08 06 -

① ② ③ ④ ⑤



① Outer Dia.		② Stroke	
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

* Order made : outer dia. M14XP1.5

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

* Deliver the standard type if there is no choice

⑤ Finishing

Nil	Black oxide coating
N	Nickel plating

* M08~M12 : Basic nickel plating

Specifications

Model	Total energy [MAX] (Nm)	Total energy per hour [MAX] (Nm/h)	Effective weight [MIN~MAX] (kg)	Shock force [MAX] (N)	Return force [MIN~MAX] (N)	Weight (g)
KSCA0806-1	2.8	6,000	≤ 8	250	1~4	15
KSCA0806-2			≤ 10			
KSCA1006-1	4	10,000	≤ 5	630	4~6	25
KSCA1006-2			≤ 8			
KSCA1006-3			≤ 13			
KSCA1210-1	8	14,000	≤ 8	1,050	5~10	40
KSCA1210-2			≤ 16			
KSCA1415-1	15	27,000	≤ 7	1,300	7~11	65
KSCA1415-2			≤ 17			
KSCA1415-3			≤ 32			
KSCA1420-1	19	29,000	≤ 7	1,300	7~12	80
KSCA1420-2			≤ 17			
KSCA1420-3			≤ 32			
KSCA2020-1	30	35,000	≤ 10	1,900	10~30	130
KSCA2020-2			≤ 16			
KSCA2020-3			≤ 32			
KSCA2030B-1	45	37,000	≤ 10	1,900	10~30	230
KSCA2030B-2			≤ 16			
KSCA2030B-3			≤ 32			
KSCA2050B-1	75	40,000	≤ 10	1,900	10~30	300
KSCA2050B-2			≤ 16			
KSCA2050B-3			≤ 32			
KSCA2525B-1	80	72,000	≤ 20	4,000	20~40	270
KSCA2525B-2			≤ 30			
KSCA2525B-3			≤ 110			
KSCA2530B-1	100	75,000	≤ 30	4,000	10~35	300
KSCA2530B-2			≤ 50			
KSCA2530B-3			≤ 110			
KSCA2550B-1	130	76,000	≤ 30	4,000	20~50	410
KSCA2550B-2			≤ 50			
KSCA2550B-3			≤ 110			
KSCA2580B-1	210	86,500	≤ 30	4,000	20~45	530
KSCA2580B-2			≤ 50			
KSCA2580B-3			≤ 110			
KSCA3680B-1	320	128,000	≤ 1,000	5,000	25~50	800
KSCA3680B-2						
KSCA3680B-3						
Max. impact velocity	≤ 4 m/sec					
Ambient temperature	-10~60 °C					

* Lock nut include 2ea

- Shock absorber made to stop smooth and quiet using a uniquely designed 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 for 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.

Costant Speed Controller



• KCC have 3 kinds of KCSC model which control the speed of both light and heavy loads with smooth and consistent capacities. They are available in stroke lengths of 15mm, 30mm, 50mm with capacities from 2.5Kg to 255Kg force. KCC KCSC models are hermetically sealed and can be operated in any position for a long time operation without any leakage and can control the moving devices with easy and diverse by using adjustable dial.

How to Order

KCSC **15**

①

②

① Model

KCSC : Constant speed controller

② Stroke

15 : 15mm

30 : 30mm

50 : 50mm

Specifications

Model		KCSC15	KCSC30	KCSC50
Stroke		15	30	50
Propelling force (N)	Min.	30	30	35
	Max.	3,500	3,500	3,500
Return force (N)	Min.	20	20	20
	Max.	30	30	35
Return force (Sec)		0.8	1.2	1.8
Max. acceptance angle (°)		1.5	1.5	1.0
Material	Body	Steel(Nickel plating)		
	Piston rod	Special steel(Chromium plating)		
Range of Impact Velocity		0.01m/s~0.65m/s		
Ambient Temperature		-10~60°C		
Adjustment		Adjustment knob located at rear."0" is soft and "30" is hard.		

KBG series

Gas Spring



How to Order

KBG - **W10** **15** **□** - **□**

①

②

③

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① End fitting type

W10 : Straight (ø6 X 3T)

W20 : Straight (ø8 X 3T)

W30 : Straight (ø6 X 5T)

W40 : □ Type (ø10)

W50 : L Type (ø8 X 10T)

B20 : Metal ball socket

B21 : Penetration hinge (ø8X10T)

B22 : Plastic ball socket

② Cylinder outer dia.

15 : ø15

18 : ø18

22 : ø22

27.4 : ø27.4

③ Max. length

Refer to Specifications

④ Force

Refer to Specifications

Specifications

End fitting type	Cylinder outer Dia.	Piston rod outer dia.	Max. Length	Stroke	Force	Calculation method
W10	ø15	ø6	160~500	52~222	3~30	Max. length after specifying stroke = (Stroke+28) X2~500 Max. stroke after specifying max. length = 52~Max. length/2-28
	ø18	ø8	160~800	46~366	5~30	Max. length after specifying stroke = (Stroke+34) X2~800 Max. stroke after specifying max. length = 46~Max. length/2-34
W20	ø15	ø6	180~510	57~222	3~30	Max. length after specifying stroke = (Stroke+33) X2~510 Max. stroke after specifying max. length = 57~Max. length/2-33
	ø18	ø8	180~800	51~361	5~30	Max. length after specifying stroke = (Stroke+39) X2~800 Max. stroke after specifying max. length = 51~Max. length/2-39
W30	ø18	ø8	180~800	51~361	5~50	Max. length after specifying stroke = (Stroke+39) X2~800 Max. stroke after specifying max. length = 51~Max. length/2-39
	ø22	ø10			10~80	
	ø27.4	ø12.5			10~100	
W40	ø22	ø10	180~800	52~362	10~100	Max. length after specifying stroke = (Stroke+38) X2~800 Max. stroke after specifying max. length = 52~Max. length/2-38
	ø27.4	ø12.5			10~120	
	ø18	ø8			5~50	
W50	ø22	ø10	200~800	54~354	10~100	Max. length after specifying stroke = (Stroke+46) X2~800 Max. stroke after specifying max. length = 54~Max. length/2-46
	ø27.4	ø12.5			10~120	
	ø18	ø8			5~50	
B20	ø18	ø8	180~800	48~358	5~50	Max. length after specifying stroke = (Stroke+42) X2~800 Max. stroke after specifying max. length = 48~Max. length/2-42
	ø22	ø10			10~100	
	ø27.4	ø12.5			10~120	
B21	ø18	ø8	180~800	46~356	5~50	Max. length after specifying stroke = (Stroke+44) X2~800 Max. stroke after specifying max. length = 46~Max. length/2-44
	ø22	ø10			10~100	
	ø27.4	ø12.5			10~120	
B22	ø18	ø8	180~800	50~360	5~50	Max. length after specifying stroke = (Stroke+40) X2~800 Max. stroke after specifying max. length = 50~Max. length/2-40
	ø22	ø10			10~80	
	ø27.4	ø12.5			10~80	