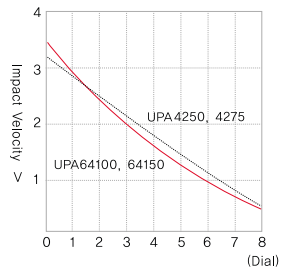
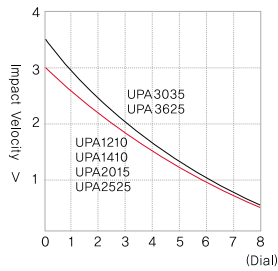




**How to Use**

- Tighten the dial for dampening adjustment with wrench after optimal value is selected.
- Confirm whether the effective weight is in optimal range.
- Can decrease the noise 3~7dB by inserting Urethane cap to rod end button.
- Total energy per hour made out based on atmosphere temperature of 20 °C

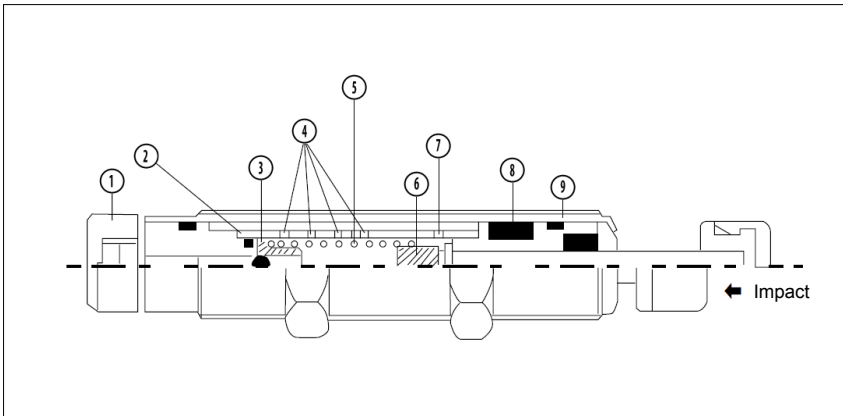
**Adjustment Dial of Shock Absorber**



- To achieve the optimal shock absorber range

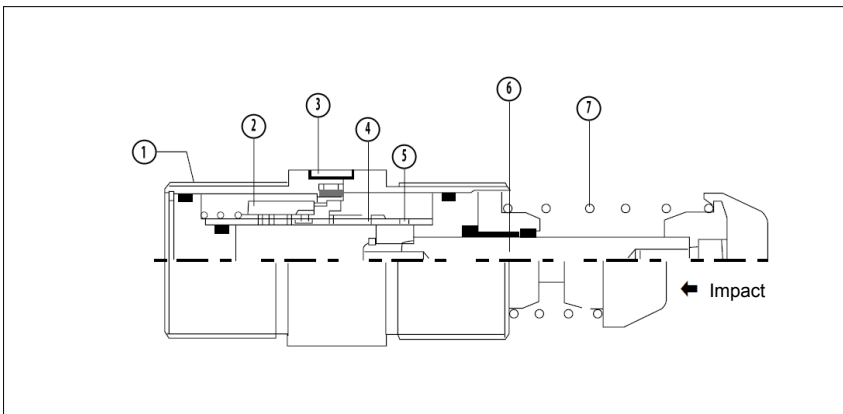
1. Mount the Shock Absorber.
2. Set adjustment to "0". If this is too soft, adjust to the next number in sequence until the desired shock absorber range is obtained.
3. Tighten the dial with provided wrench.

**Structure (Small)**



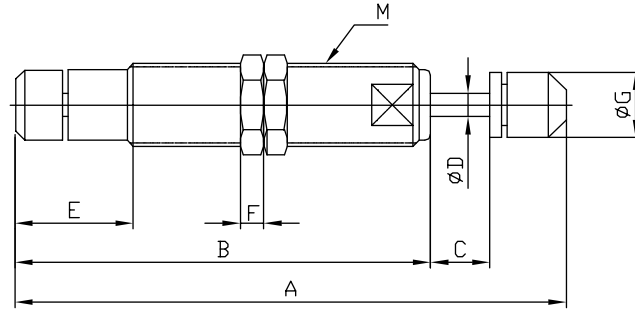
Part no.	Parts	Material
1	Adjustment dial	Carbon steel tube, SM45C
2	Inner tube	Carbon steel tube, STKM13C
3	Check valve	-
4	Orifice hole	-
5	Return spring	HSWR72A
6	Piston	Brass extruding tube, C2700BE
7	Oil return hole	-
8	Accumulator	-
9	Outer tube	Carbon steel tube, STKM13C

**Structure (Large)**



Part no.	Parts	Material
1	Outer tube	Carbon steel tube, STKM13C
2	Accumulator	-
3	Adjustment dial	Carbon steel tube, SM45C
4	Inner tube	Carbon steel tube, STKM13C
5	Oil return hole	-
6	Piston	Brass extruding tube, C2700BE
7	Return spring	HSWR72A

**Dimensions-Adjustable Type(Standard)**



Unit:mm

Model	Stroke	A	B	C	ØD	E	F	ØG	M
KPA1210	10	82.5	72.5	10	4	18.5	4	-	M12XP1.0
KUPA1210	10	95.5	72.5	10	4	18.5	4	11	M12XP1.0
KPA1410	10	80.5	70.5	10	4	20	4	-	M14XP1.5
KUPA1410	10	93.5	70.5	10	4	20	4	11	M14XP1.5
KPA1612	12	103	91	12	4	22	6	-	M16XP1.5
KUPA1612	12	116	91	12	4	22	6	14	M16XP1.5
KPA2015	15	116	98	15	6	22	6	-	M20XP1.5
KUPA2015	15	128.5	98	15	6	22	6	18	M20XP1.5
KPA2525	25	152	127	25	8	24	8	-	M25XP1.5
KUPA2525	25	168	127	25	8	24	8	22	M25XP1.5
KPA2725	25	152	127	25	8	24	8	-	M27XP3.0
KUPA2725	25	168	127	25	8	24	8	22	M27XP3.0

Shock Absorber & Gas Spring Shock Absorber Reference data

KPA KUPA

KSCA

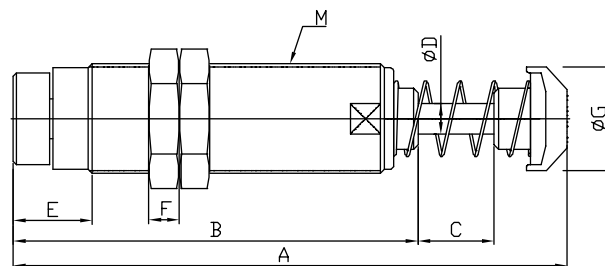
KCSC

Gas Spring Reference data

KBG-W

KBG-B

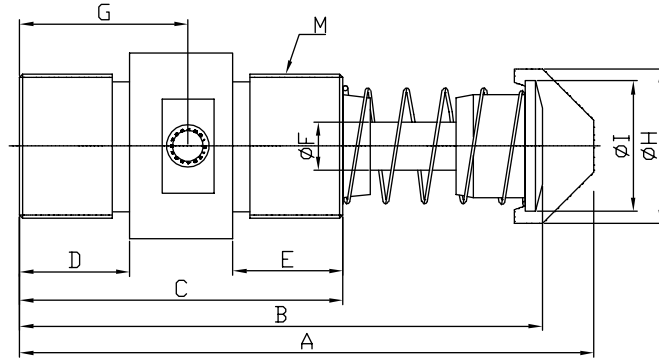
**Dimensions-Adjustable Type (Medium)**



Unit:mm

Model	Stroke	A	B	C	ØD	E	F	ØG	M
KUPA3035	35	198	148	35	10	24	10	28	M30XP1.5
KUPA3625	25	182	133	25	10	26	10	34	M36XP1.5
KUPA3650	50	232	158	50	10	26	10	34	M36XP1.5

**Dimensions-Adjustable Type (Large)**



Unit:mm

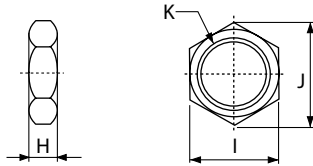
Model	Stroke	A	B	C	D	E	ØF	G	ØH	ØI	M
KUPA4225	25	167	152	94	32	29	14	49	45	38	M42XP1.5
KUPA4250	50	217	202	119	44	42	14	61.5	45	38	M42XP1.5
KUPA4275	75	267	252	144	56	55	14	74	45	38	M42XP1.5
KUPA64050	50	241	224	138	50	49	20	67.5	58	50	M64XP2.0
KUPA64100	100	341	324	188	74	74	20	95	58	50	M64XP2.0
KUPA64150	150	471	454	238	75	75	20	141	58	50	M65XP2.0
KUPA85050	50	270	240	143	45	45	22	75	78	70	M85XP2.0
KUPA85090	90	350	320	183	65	65	22	91.5	78	70	M85XP2.0
KUPA85125	125	425	395	218	65	65	22	116	78	70	M85XP2.0
KUPA85165	165	520	490	258	65	65	22	136	78	70	M85XP2.0

**Dimensions-Accessories**

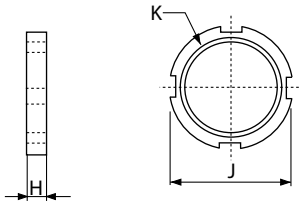
**Lock Nut (Standard)**

Material: Carbon steel

Standard & Medium  
(M12~M36)



Large  
(M42~M85)



※ M08~M36 include Lock Nut(2pcs)  
※ M42~M85 include Lock Nut(1pc)

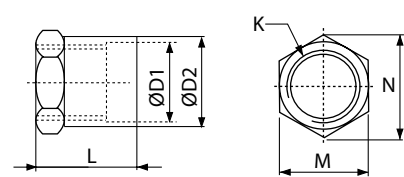
Unit:mm

Part no.	H	I	J	K
LOCK NUT 12	4	14	16	M12XP1.0
LOCK NUT 14	4	17	19.6	M14XP1.5
LOCK NUT 16	6	22	25.4	M16XP1.5
LOCK NUT 20	6	24	27.7	M20XP1.5
LOCK NUT 25	8	32	37	M25XP1.5
LOCK NUT 27	8	32	37	M27XP3.0
LOCK NUT 30	10	36	41.1	M30XP1.5
LOCK NUT 36	10	46	53.1	M36XP1.5
LOCK NUT 42	10	-	54	M42XP1.5
LOCK NUT 64	13	-	74	M64XP2.0
LOCK NUT 85	18	-	100	M85XP2.0

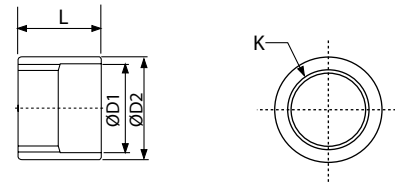
**Stop Collar**

Material: Carbon steel

Standard & Medium  
(M14~M27)



Large  
(M36~M85)



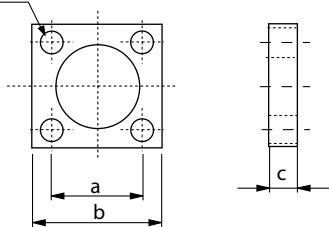
※ Only for M14~M27, M36~M85

Unit:mm

Part no.	H	M	N	ØD1	ØD2	L	K
STOP COLLAR 14	4	17	19.6	15	18	26	M14XP1.5
STOP COLLAR 16	6	22	25.4	17	19	25.4	M16XP1.5
STOP COLLAR 20	6	24	27.7	21	23	35	M20XP1.5
STOP COLLAR 25	8	32	37	26	31	40	M25XP1.5
STOP COLLAR 27	8	32	37	28	31	40	M27XP1.5
STOP COLLAR 36	10	-	-	37	45	60	M36XP1.5
STOP COLLAR 42	10	-	-	44	58	48	M42XP1.5
STOP COLLAR 64	13	-	-	66	75	60	M64XP2.0
STOP COLLAR 85	18	-	-	88	100	80	M85XP2.0

**Square Flange**

Material: Carbon steel  
4-Ød



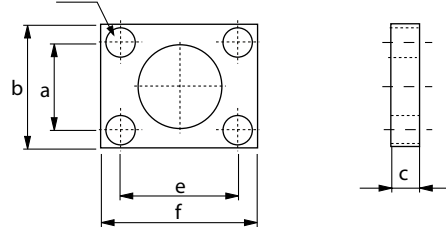
※ Only for M36, M42, M64, M85.

Unit:mm

Part no.	a	b	c	d
S/F 36	32	45	9	6
S/F 42	41.5	60	12	9
S/F 64	70	90	14	10
S/F 85	76	102	19	14

**Rectangular Flange**

Material: Carbon steel  
4-Ød



※ Only for M36, M42, M64.

Unit:mm

Part no.	a	b	c	d	e	f
R/F 36	32	45	9	6	41.3	58.8
R/F 42	41.5	60	12	9	60.5	80
R/F 64	70	90	14	10	83.5	105

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