

Aerial Cam Unit

Grade	Working Force [kN (tonf)]		Travel	Catalog No.	W	θ 5° increments	Spring Type PS
	1,000,000 strokes	300,000 strokes					
White	22.1 (2.2)	29.4 (3.0)	Long	VACWL	46	00~50	ISO ISOL

ISO, ISOL: Coil Spring



Order

Catalog No.	W	—	θ	—	PS	—	Option
VACWL	46	—	10	—	ISO		
VACWL	46	—	10	—	ISOL	—	SC60



Option

Option Code	Specification
SC	Mount face length is extended from 1 to 60 mm in increments of 1 mm.

Spring Force & Return Force

● Coil Spring

ISO

θ	Spring Force				Return Force	
	Initial Load		Final Load			
	N	kgf	N	kgf	N	kgf
00	108	11	1140	116	1522	155
05	154	15.7	1140	116	1520	155
10	222	22.7	1140	116	1518	155
15	118	12.1	1075	110	1431	146
20	144	14.6	1075	110	1429	146
25	169	17.2	1075	110	1427	146
30	194	19.8	1075	110	1425	145
35	219	22.4	1075	110	1422	145
40	244	24.9	1075	110	1420	145
45	244	24.9	1075	110	1418	145
50	269	27.5	1075	110	1415	144

● Coil Spring

ISOL

θ	Spring Force				Return Force	
	Initial Load		Final Load			
	N	kgf	N	kgf	N	kgf
00	76	7.8	805	82.2	1080	110
05	109	11.1	805	82.2	1078	110
10	157	16.0	805	82.2	1076	110
15	83	8.5	756	77.1	1009	103
20	101	10.3	756	77.1	1007	103
25	119	12.1	756	77.1	1005	103
30	136	13.9	756	77.1	1003	102
35	154	15.7	756	77.1	1000	102
40	172	17.5	756	77.1	998	102
45	172	17.5	756	77.1	996	102
50	189	19.3	756	77.1	994	101

Cam Travel

θ	Travel mm
00	28.9
05	30.5
10	31.1
15	32.2
20	34.1
25	36.0
30	38.0
35	40.1
40	42.4
45	46.5
50	49.8

Aerial Cam Unit

Weight*1

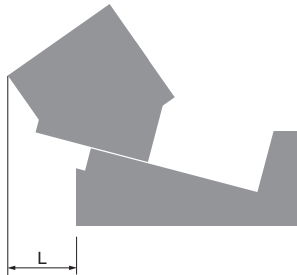
θ	Total Weight kg	Cam Slider Weight kg	Tool Weight*2 kg
00	5.6	2.0	2.0
05	5.6	2.0	2.0
10	5.6	2.0	2.0
15	5.5	2.0	2.1
20	5.4	2.0	2.1
25	5.4	2.0	2.2
30	5.3	2.0	2.3
35	5.3	2.0	2.4
40	5.3	2.0	2.6
45	5.3	2.0	2.8
50	5.4	2.0	3.3

*1 This is the weight without SC and WC option. Reduce tool weight when with SC and WC option since the slider gets heavier.

*2 Tool weight is estimated value. Allowable tool weight varies depending on press speed.

Rear Removal Space

θ	L mm
00	28.6
05	34.0
10	38.2
15	46.6
20	55.3
25	62.5
30	70.1
35	68.1
40	71.7
45	80.6
50	83.9

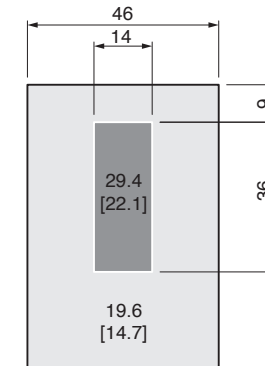


Working Force Distribution Diagram

The working forces indicated in the mount face distribution diagram are reached by putting the tooling center of gravity within each area for the following pictures.

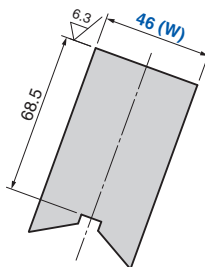
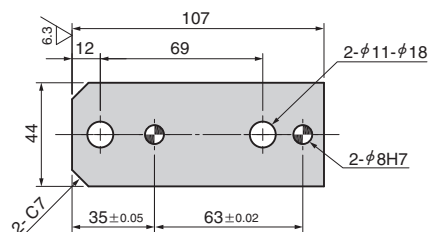
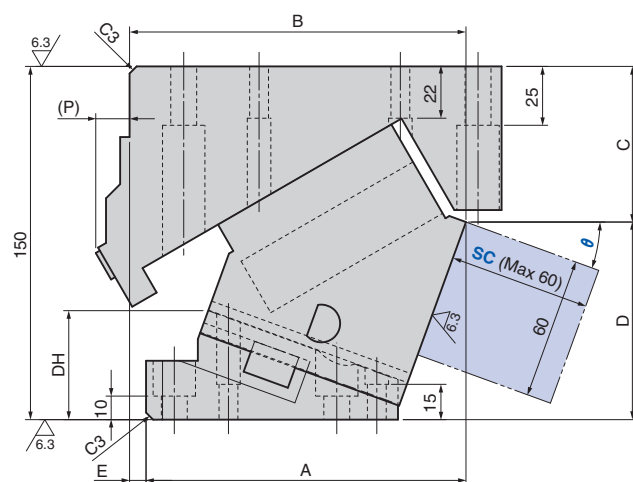
: Working force (kN) allowed for up to 300,000 strokes

[]: Working force (kN) allowed for up to 1,000,000 strokes



Technical drawing of a rectangular plate with the following specifications:

- Overall width: 46
- Overall height: 25
- Overall length: HL
- Distance from left edge to first hole center: HK2
- Distance between first and second hole centers: HJ2 ± 0.05
- Distance between second and third hole centers: HJ1 ± 0.02
- Distance from third hole center to right edge: HK1
- Two holes on the top surface, each with a diameter of $\phi 8H7$.
- Three holes on the bottom surface, each with a diameter of $\phi 11-\phi 18$.
- Surface finish symbol: 6.3



0°	5°	10°	15°	20°
25°	30°	35°	40°	45°
50°				