

Aerial Cam Unit

Grade	Working Force [kN (tonf)]		Catalog No.	W	θ 5° increments	Spring Type PS
	1,000,000 strokes	300,000 strokes				
Yellow	225.4 (23.0)	254.8 (26.0)	VACYL	300	00~70	GK NGK ISO
Pink	315.6 (30.2)	356.7 (36.4)	VACPL			

ISO: Coil Spring GK: Gas Spring (KALLER)
NGK: Without Gas Spring Parts for spring assembly are included.

Order	Catalog No.	W	—	θ	—	PS	—	Option
	VACYL	300	—	10	—	ISO		
	VACPL	300	—	10	—	GK	—	NF - K

Option	Option Code	Specification
	NF	Nitrogen gas not charged.
	K	Key attached.

Refer to page 388 for key specification.

Spring Force & Return Force

● Gas Spring
Yellow, Pink

θ	Spring Force		Return Force	
	N	kgf	N	kgf
00	22800	2327	30646	3127.1
05	22800	2327	30589	3121.3
10	22800	2327	30528	3115.1
15	22800	2327	30464	3108.6
20	22800	2327	30398	3101.8
25	22800	2327	30329	3094.8
30	22800	2327	30258	3087.5
35	22800	2327	30186	3080.2
40	22800	2327	30113	3072.7
45	22800	2327	30040	3065.3
50	22800	2327	29967	3057.9
55	22800	2327	32596	3326.1
60	22800	2327	36042	3677.8
65	22078	2253	39347	4015.0
70	20778	2120	42795	4366.9

● Coil Spring
Yellow, Pink

θ	Spring Force				Return Force	
	Initial Load		Final Load			
	N	kgf	N	kgf	N	kgf
00	1396	142.5	10996	1122.0	15067	1537.4
05	1396	142.5	10996	1122.0	15010	1531.6
10	1396	142.5	10996	1122.0	14949	1525.4
15	1396	142.5	10996	1122.0	14885	1518.9
20	1396	142.5	10996	1122.0	14819	1512.1
25	1396	142.5	10996	1122.0	14750	1505.1
30	1396	142.5	10996	1122.0	14679	1497.8
35	1396	142.5	10996	1122.0	14607	1490.5
40	1396	142.5	10996	1122.0	14534	1483.0
45	1396	142.5	10996	1122.0	14461	1475.6
50	1396	142.5	10996	1122.0	14388	1468.2
55	1396	142.5	10996	1122.0	15647	1596.6
60	1396	142.5	10996	1122.0	17302	1765.6
65	1396	142.5	10123	1033.0	17945	1831.1
70	1123	114.6	10328	1053.9	21159	2159.0

Cam Travel

θ	Travel mm
00	35.4
05	39.0
10	42.8
15	46.6
20	50.7
25	55.0
30	59.7
35	64.9
40	70.7
45	77.5
50	85.6
55	95.9
60	110.0
65	118.3
70	119.9

Aerial Cam Unit

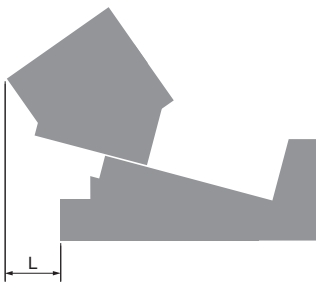
Weight

θ	Total Weight kg	Cam Slider Weight kg	Tool Weight*1 kg
00	152	64	42
05	152	64	42
10	152	64	43
15	152	64	45
20	150	64	46
25	149	64	48
30	148	64	50
35	147	64	54
40	149	64	58
45	151	64	63
50	155	64	63
55	158	67	60
60	158	66	61
65	162	68	59
70	168	74	53

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

Rear Removal Space

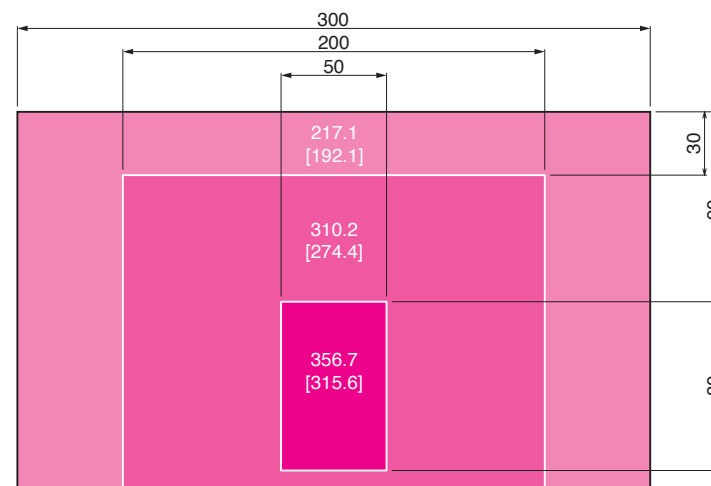
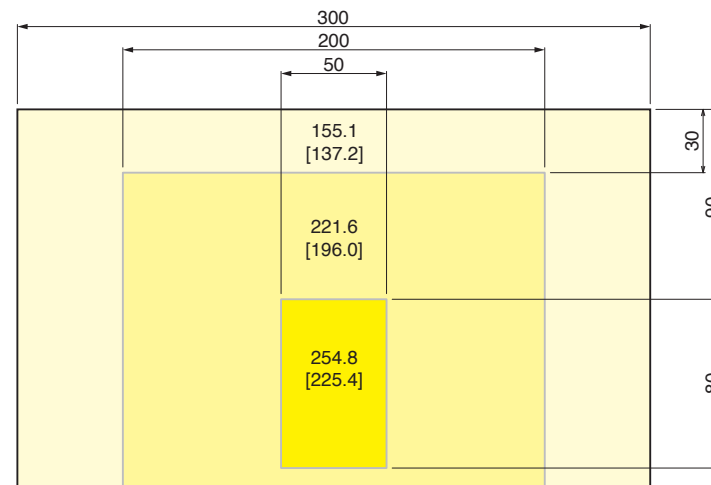
θ	L mm
00	46.9
05	55.7
10	63.0
15	70.7
20	82.9
25	98.6
30	113.6
35	128.5
40	143.1
45	158.4
50	169.2
55	184.3
60	187.1
65	181.2
70	178.1



Working Force Distribution Diagram

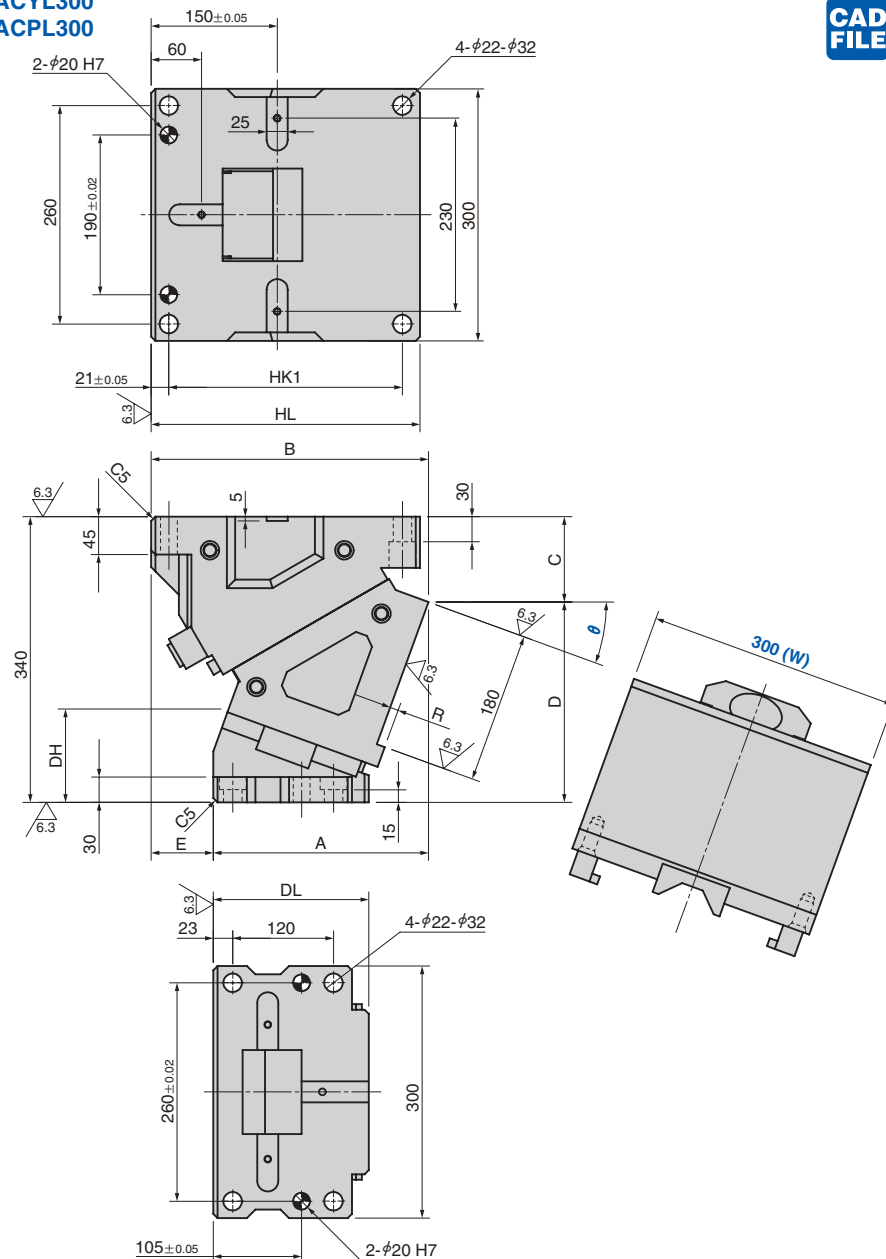
The working forces indicated in the mount face distribution diagram are reached by putting the tooling center of gravity within each area for the following pictures.

: Working force (kN) allowed for up to 300,000 strokes
[] : Working force (kN) allowed for up to 1,000,000 strokes



Aerial Cam Unit

VACYL300
VACPL300



θ	A	B	C	D	E	HL	HK1	DH	DL	R
00	180.00	303.00	68.00	272.00	123	285	243	71.0		
05	199.13	312.13	77.72	262.28	113	295	253	77.7		
10	218.87	319.87	86.26	253.74	101	305	263	87.0		
15	238.21	327.21	94.59	245.41	89	315	273	97.8		
20	256.18	330.18	101.67	238.33	74	320	278	111.0		
25	272.82	332.82	108.46	231.54	60	325	283	125.4	185	10
30	289.13	334.13	115.95	224.05	45	330	288	140.0		
35	303.16	332.16	127.11	212.89	29	330	288	151.5		
40	325.92	326.92	138.91	201.09	1	330	288	162.8		
45	336.46	317.46	154.33	185.67	-19	325	283	170.8		
50	350.80	308.80	171.35	168.65	-42	325	283	177.3		
55	364.97	299.97	179.42	160.58	-65	325	283	181.8		
60	376.72	295.72	178.36	161.64	-81	325	283	185.6	178	23
65	392.61	298.61	187.08	152.92	-94	325	283	188.6		32
70	409.88	295.88	197.14	142.86	-114	325	283	191.3		40

■ Cam Diagram

