

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	141.1 (14.4)	164.6 (16.8)	VACYL	200	00~70	GK NGK ISO
Pink	197.6 (20.1)	230.5 (23.5)	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 VACPL	200 200	—	10 10	—	ISO GK	—	NF — K

 Option	Option Code	Specification
	NF K	Nitrogen gas not charged. 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	13914	1420	18686	1906.8
05	13914	1420	18653	1903.4
10	13914	1420	18618	1899.8
15	13914	1420	18581	1896.0
20	13914	1420	18542	1892.0
25	13914	1420	18502	1888.0
30	13914	1420	18461	1883.7
35	13914	1420	18419	1879.5
40	13914	1420	18376	1875.1
45	13914	1420	18334	1870.8
50	13914	1420	18292	1866.5
55	13914	1420	19898	2030.5
60	13914	1420	22004	2245.3
65	13478	1375	24030	2452.1
70	12692	1295	26155	2668.9

● Coil Spring
Yellow, Pink

θ	Spring Force				Return Force	
	Initial Load		Final Load			
	N	kgf	N	kgf	N	kgf
00	873	89.0	6872	701.2	9391	958.3
05	873	89.0	6872	701.2	9358	954.9
10	873	89.0	6872	701.2	9323	951.3
15	873	89.0	6872	701.2	9286	947.6
20	873	89.0	6872	701.2	9247	943.6
25	873	89.0	6872	701.2	9207	939.5
30	873	89.0	6872	701.2	9166	935.3
35	873	89.0	6872	701.2	9124	931.0
40	873	89.0	6872	701.2	9082	926.7
45	873	89.0	6872	701.2	9039	922.4
50	873	89.0	6872	701.2	8997	918.1
55	873	89.0	6872	701.2	9786	998.6
60	873	89.0	6872	701.2	10823	1104.4
65	873	89.0	6326	645.5	11227	1145.6
70	702	71.6	6455	658.7	13242	1351.3

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

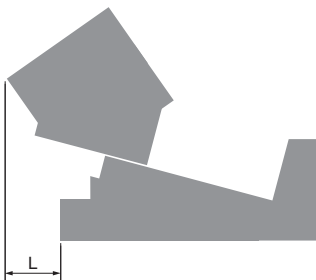
Weight

θ	Total Weight kg	Cam Slider Weight kg	Tool Weight*1 kg
00	89	37.2	24.8
05	89	37.2	24.9
10	89	37.2	25.3
15	88	37.2	26.5
20	87	37.2	26.8
25	85	37.2	28.1
30	85	37.2	29.7
35	84	37.2	31.6
40	85	37.2	34.1
45	87	37.2	37.2
50	86	37.2	37.2
55	90	38.1	36.3
60	89	36.8	37.6
65	91	37.7	36.7
70	95	40.6	33.8

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

Rear Removal Space

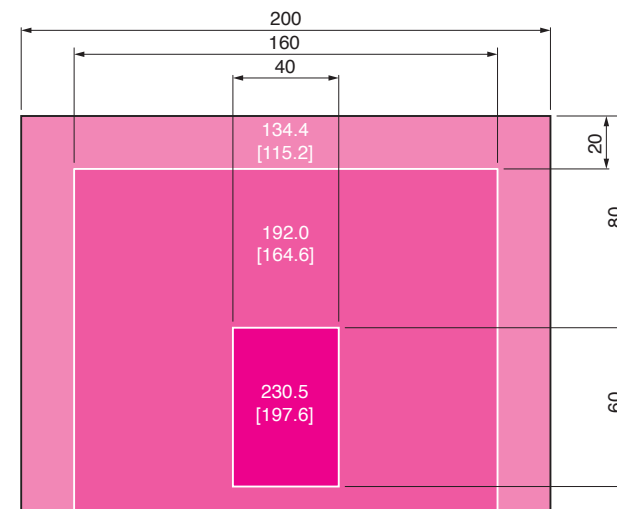
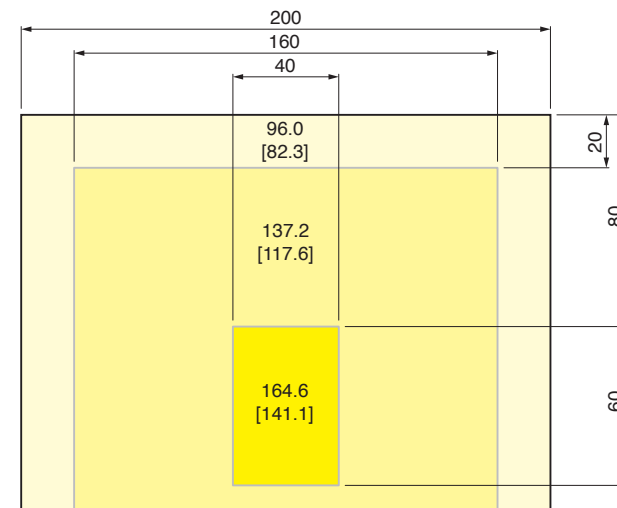
θ	L mm
00	45.5
05	55.3
10	63.8
15	71.8
20	84.2
25	96.5
30	106.0
35	120.0
40	132.0
45	144.0
50	153.0
55	162.0
60	162.0
65	159.0
70	154.0



Working Force Distribution Diagram

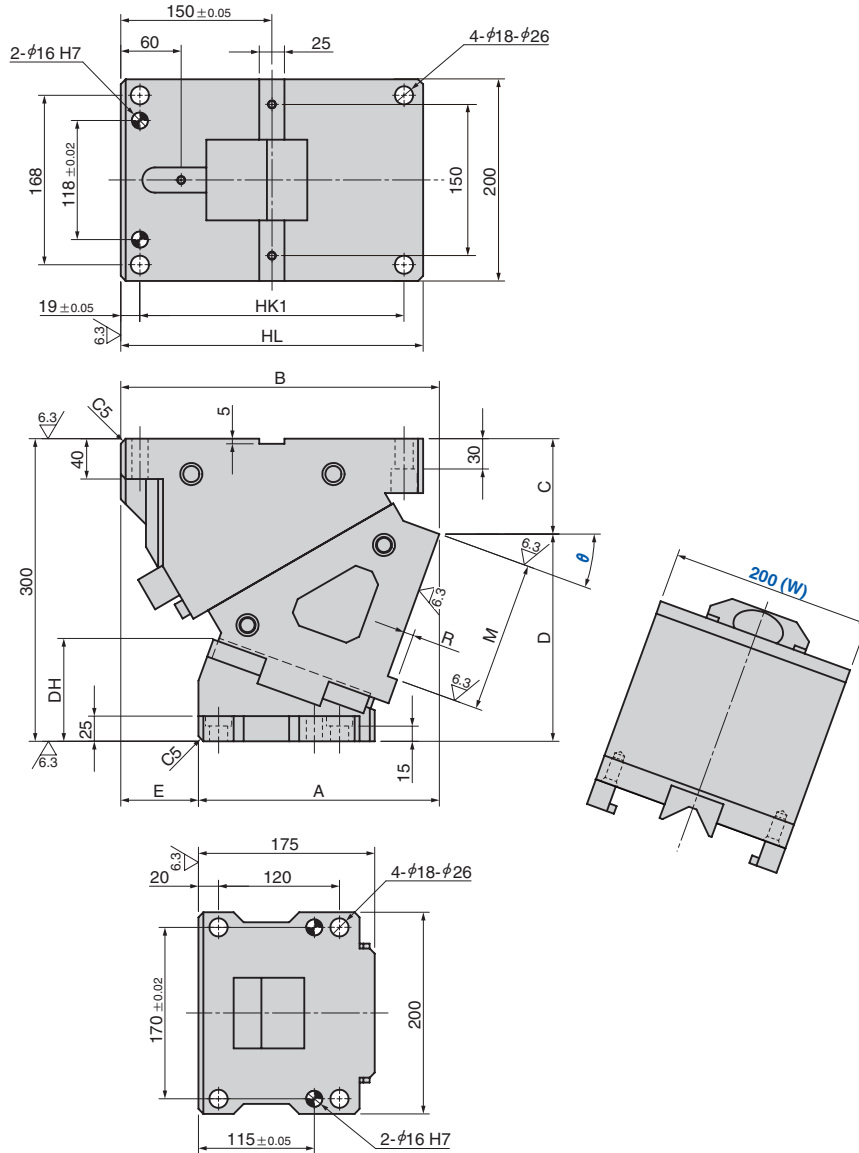
The working forces indicated in the mount face distribution diagram are reached by putting the tooling center of gravity within each area for the following pictures.

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



Aerial Cam Unit

VACYL200
VACPL200



θ	A	B	C	D	E	HL	HK1	DH	M	R
00	175.00	291.00	67.00	233.00	116	270	232	61.0		
05	191.87	299.87	75.71	224.29	108	280	242	67.8		
10	208.34	307.34	82.22	217.78	99	290	252	77.9		
15	224.43	312.43	88.49	211.51	88	295	257	89.4		
20	239.16	316.16	94.48	205.52	77	300	262	102.0		
25	251.55	317.55	100.18	199.82	66	305	267	115.8	150	10
30	266.63	318.63	108.55	191.45	52	310	272	127.5		
35	281.43	315.43	117.57	182.43	34	310	272	139.0		
40	295.99	309.99	128.21	171.79	14	310	272	149.4		
45	307.33	303.33	147.45	152.55	-4	310	272	151.7		
50	318.50	295.50	157.27	142.73	-23	310	272	163.5		
55	334.25	292.25	161.13	138.87	-42	310	272	169.5		
60	340.45	286.45	161.36	138.64	-54	310	272	172.5	160	18
65	356.31	287.31	165.70	134.30	-69	310	272	177.0		27
70	375.62	287.62	176.95	123.05	-88	310	272	175.8		35

Cam Diagram

