NEW VALCAM™

Yellow Pink Black Cam Width 100

Aerial Cam Unit

Grade	Working Force [kN (tonf)] 1,000,000 strokes	Working Force [kN (tonf)] 300,000 strokes	Catalog No.	W	θ 5° increments	Spring Type PS
Yellow	86.7 (8.8)	103.9 (10.6)	VACYL	100	00～70	GK NGK ISO
Pink	116.1 (11.8)	139.2 (14.2)	VACPL			
Black	170.0 (17.3)	200.0 (20.4)	VACBL			GK NGK

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	100	–	10	–	ISO		
VACPL	100	–	10	–	GK		– NF – K
VACBL	100	–	10	–	GK		

Option

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

Refer to page 388 for key specification.

■Spring Force & Return Force

● Gas Spring

Yellow, Pink, Black

θ	Spring Force Final Load N	Spring Force Final Load kgf	Return Force N	Return Force kgf
00	6836	698	9115	930
05	6836	698	9106	929
10	6836	698	9095	928
15	6836	698	9085	927
20	6836	698	9074	926
25	6836	698	9062	925
30	6836	698	9050	923
35	6836	698	9038	922
40	6836	698	9026	921
45	6836	698	9014	920
50	6836	698	9002	919
55	6993	714	10016	1022
60	6693	683	10597	1081
65	6930	707	12373	1263
70	6803	694	14044	1433

● Coil Spring

Yellow

θ	Spring Force Initial Load N	Spring Force Initial Load kgf	Spring Force Final Load N	Spring Force Final Load kgf	Return Force N	Return Force kgf
00	358	36.6	2822	288	3816.5	389
05	358	36.6	2822	288	3807.0	388
10	358	36.6	2822	288	3796.9	387
15	358	36.6	2822	288	3786.2	386
20	358	36.6	2822	288	3775.0	385
25	358	36.6	2822	288	3763.5	384
30	358	36.6	2822	288	3751.6	383
35	358	36.6	2822	288	3739.6	382
40	358	36.6	2822	288	3727.4	380
45	358	36.6	2822	288	3715.2	379
50	358	36.6	2822	288	3703.1	378
55	263	26.8	2731	279	3896.9	398
60	345	35.2	2704	276	4262.9	435
65	278	28.4	2710	277	4817.1	492
70	470	47.9	2662	272	5471.5	558

● Coil Spring

Pink

θ	Spring Force Initial Load N	Spring Force Initial Load kgf	Spring Force Final Load N	Spring Force Final Load kgf	Return Force N	Return Force kgf
00	275	28.0	5701	582	7616.8	777
05	275	28.0	5701	582	7607.3	776
10	275	28.0	5701	582	7597.1	775
15	275	28.0	5701	582	7586.5	774
20	275	28.0	5701	582	7575.3	773
25	275	28.0	5701	582	7563.8	772
30	275	28.0	5701	582	7551.9	771
35	275	28.0	5701	582	7539.8	769
40	275	28.0	5701	582	7527.7	768
45	275	28.0	5701	582	7515.5	767
50	275	28.0	5701	582	7503.3	766
55	252	25.7	5560	567	7958.0	812
60	402	41.1	5560	567	8797.1	898
65	336	34.3	5387	550	9610.8	981
70	283	28.9	5162	527	10647.0	1086

■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	81.9
60	82.0
65	82.8
70	81.9

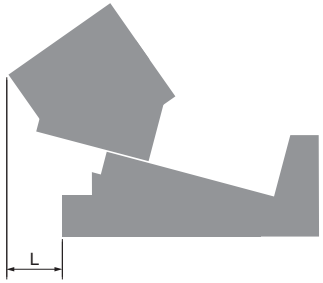
■Weight

θ	Total Weight kg	Cam Slider Weight kg	Tool Weight*1 kg
00	29.1	10.7	8.3
05	29.0	10.7	8.3
10	28.7	10.7	8.3
15	28.5	10.7	8.3
20	28.5	10.7	8.3
25	28.4	10.7	8.3
30	28.2	10.7	8.3
35	28.2	10.7	8.3
40	28.1	10.7	8.3
45	28.2	10.7	8.3
50	28.9	10.7	8.3
55	30.1	11.9	7.1
60	31.0	12.6	6.4
65	31.4	13.0	6.0
70	32.1	13.4	5.6

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

■Rear Removal Space

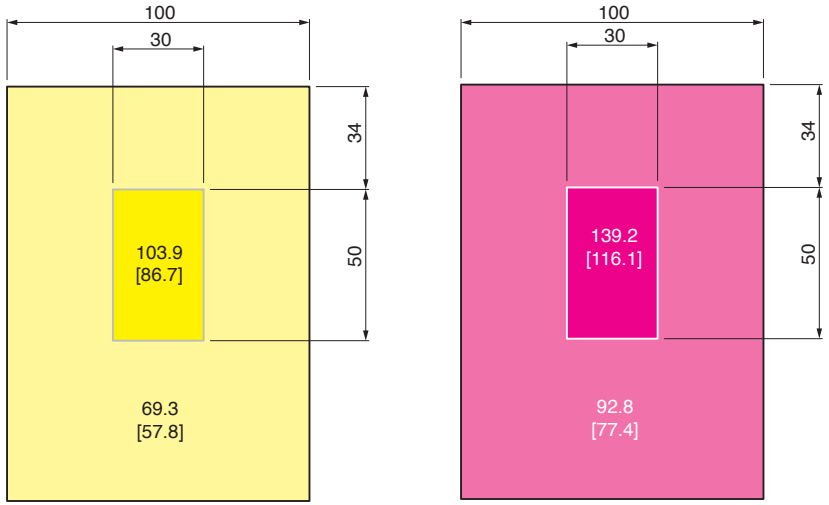
θ	L mm
00	0.0
05	1.0
10	9.9
15	16.9
20	27.0
25	37.7
30	50.4
35	60.8
40	71.0
45	74.7
50	74.1
55	82.4
60	88.1
65	93.4
70	101.5

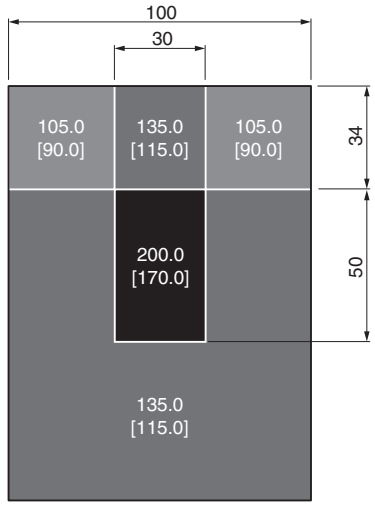


■Working Force Distribution Diagram

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.

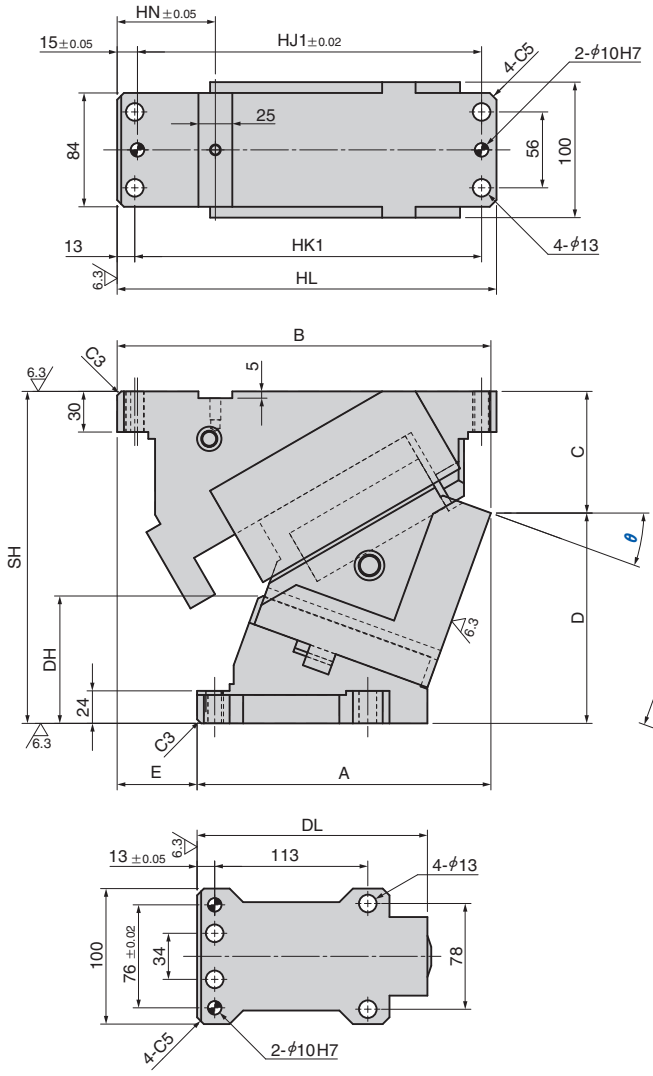
: Working force (kN) allowed for up to 300,000 strokes
[ ]: Working force (kN) allowed for up to 1,000,000 strokes





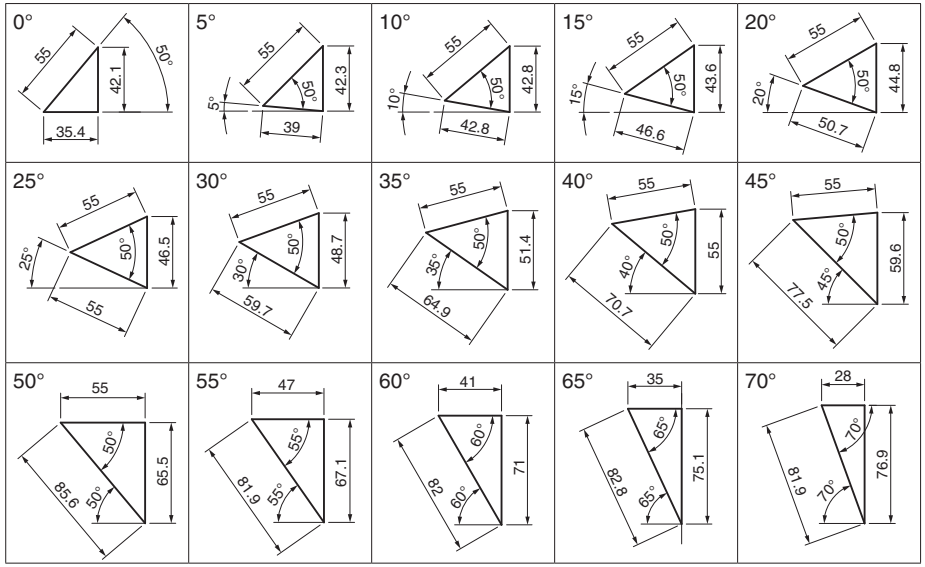
VACYL100
VACPL100
VACBL100

CAD FILE



θ	A	B	C	D	E	SH	HL	HK1	HJ1	HN	DH	DL	M
00	167.00	260.00	63.00	182.00	93		260	236	234		67.0		
05	178.96	266.96	69.88	175.12	88		265	241	239	112.5	72.5		
10	190.58	270.58	75.66	169.34	80		270	246	244		79.9		
15	203.88	273.88	82.31	162.69	70		275	251	249		87.1	170	
20	216.87	275.87	89.79	155.21	59	245	280	256	254		94.0		
25	227.56	277.56	97.08	147.92	50		285	261	259	72.5	101.6		108
30	235.97	274.97	105.16	139.84	39		285	261	259		108.7		
35	246.13	272.13	115.00	130.00	26		285	261	259		114.4		
40	252.04	267.04	123.59	121.41	15		285	261	259		121.4	165	
45	256.75	265.75	131.89	113.11	9		290	266	264		128.7	160	
50	264.26	266.26	146.90	103.10	2	250	295	271	269		134.5		
55	273.55	261.55	150.56	109.44	-12	260	295	271	269	102.5	140.2	155	110
60	280.64	255.64	156.44	113.56	-25		295	271	269		147.5		
65	291.60	252.60	155.42	114.58	-39	270	295	271	269		150.9	150	115
70	305.82	250.82	157.09	112.91	-55		295	271	269		157.2		120

■Cam Diagram



Refer to page 391 for Table of Components.

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