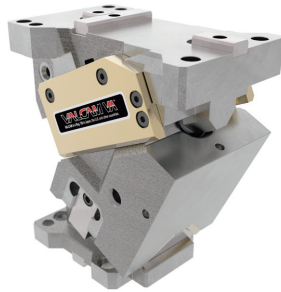


Product Information

- Complies with VDI.
- Compact design.
- High working forces.
- Suitable for high speed production.
- Bronze with solid lubricants wear plates.

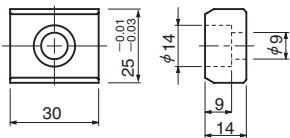


Mount face width	Working Force [kN] 1,000,000 strokes	Working Angle (5° increments)	Catalog No.	Spring Type
65	117	0°~75°	VACBV65	
85	162	0°~75°	VACBV85	
110	206	0°~75°	VACBV110	
165	323	0°~75°	VACBV165	
200	515	0°~75°	VACBV200	
260	603	0°~75°	VACBV260	
330	735	0°~75°	VACBV330	
400	882	0°~75°	VACBV400	

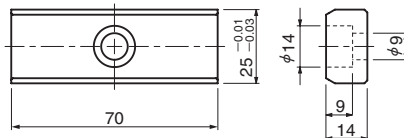
* Mount face widths 200, 260, 300, and 400 mm available in June 2024.

Key specifications

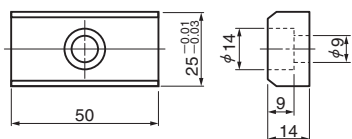
- Cam width 65, 85, 110, 165
(A M8 bolt is included.)



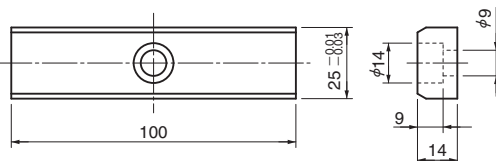
- Cam width 110
(A M8 bolt is included.)



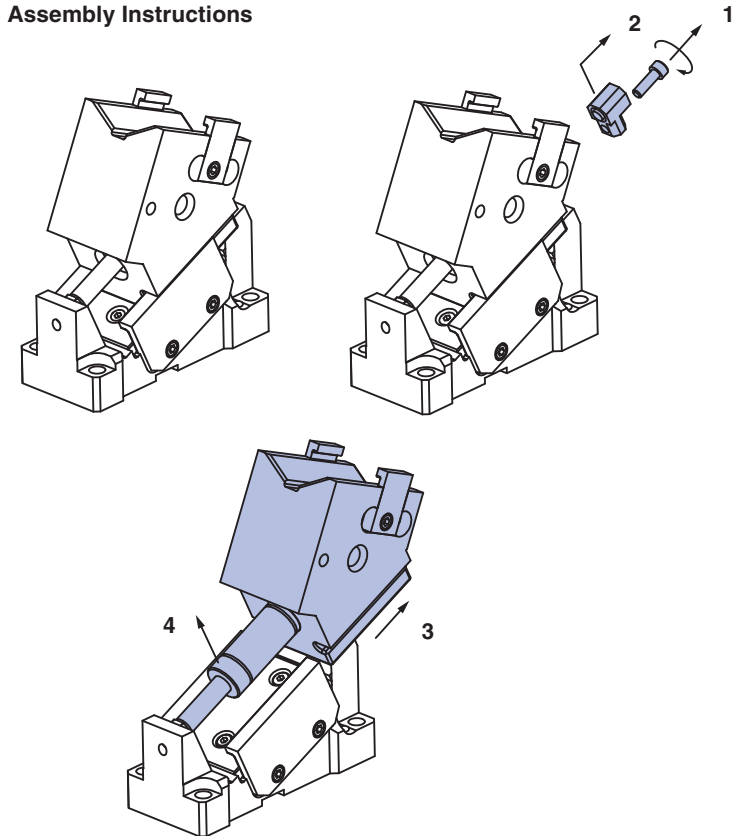
- Cam width 65, 85, 110, 165, 200, 260, 330, 400
LKU25-50 (A M8 bolt is included.)



- Cam width 165
LKU25-100 (A M8 bolt is included.)



VACBV65-85 Assembly Instructions



- Disassembly
 - 1) Remove Hexagon Socket Head Bolts.
 - 2) Pull out Stopper Plate.
 - 3) Remove Cam Slider to the rear. (until Gas Spring is removable.)
 - 4) Remove Gas Spring.

- Assembly

Assembly is the reverse procedure of disassembly.

 - Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
 - Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial number.
 - Make sure that all bolts are tighten to the recommended torque after assembly and disassembly.

- ⚠ Gas Spring

Please contact your local sales representative if you prefer to use a gas spring not specified in our catalog. For use and maintenance of gas spring, please contact the manufacturer directly.

Aerial Cam Unit

Working Force [kN] 1,000,000 strokes	Catalog No.	W	θ	Spring Type PS
162	VACBV	85	00~75 (5° increments)	GK NGK GD NGD

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO)
NGK/NGD: Without Gas Spring Parts for spring assembly are included.

Order	Catalog No.	W	θ	PS	Option
	VACBV	85	10	GK	
	VACBV	85	10	GK	NF

Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

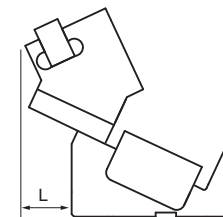
θ	GK			GD		
	Final Load kN	Return Force kN	Spring Model	Final Load kN	Return Force kN	Spring Model
00		7.1			6.8	
05		7.1			6.7	
10		7.1			6.7	
15		7.1			6.7	
20	5.4	7.1	X350-50	5.1	6.7	U.0400.050
25		7.1			6.7	
30		7.1			6.7	
35		7.1			6.7	
40		7.1			6.7	
45	5.3	7.0	X350-50	5.0	6.6	U.0400.050
50	5.2	6.8	X350-50	4.9	6.5	U.0400.050
55	5.3	7.5	X350-38	5.0	7.2	U.0400.038
60	5.3	8.4	X350-32	5.1	8.1	U.0400.032
65	5.0	9.0	X350-32	4.9	8.7	U.0400.032
70	5.0	10.4	X350-25	4.9	10.1	U.0400.025
75	5.1	12.6	X350-19	4.8	12.0	U.0400.019

Weight

θ	Total Weight kg	Cam Slider Weight kg	Max. Tool Length mm	Max. Tool Weight*1 kg
00	20.9			
05	20.6			
10	20.4			
15	20.0			
20	19.9			
25	19.6	7.6		
30	19.5			
35	19.4		100	4.5
40	19.3			
45	19.4			
50	19.3			
55	19.5	7.8		
60	19.7	7.8		
65	20.0	8.1		
70	20.4	8.4		
75	20.8	8.8		

Rear Removal Space

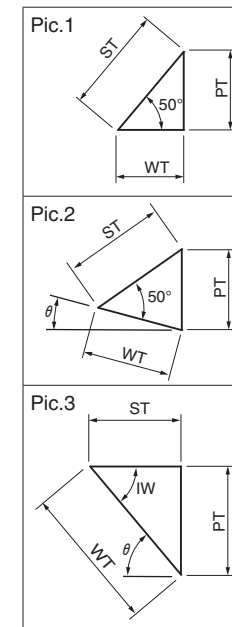
θ	L mm
00	7
05	16
10	24
15	33
20	38
25	48
30	61
35	73
40	75
45	85
50	97
55	99
60	103
65	108
70	113
75	118



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

Cam Diagram

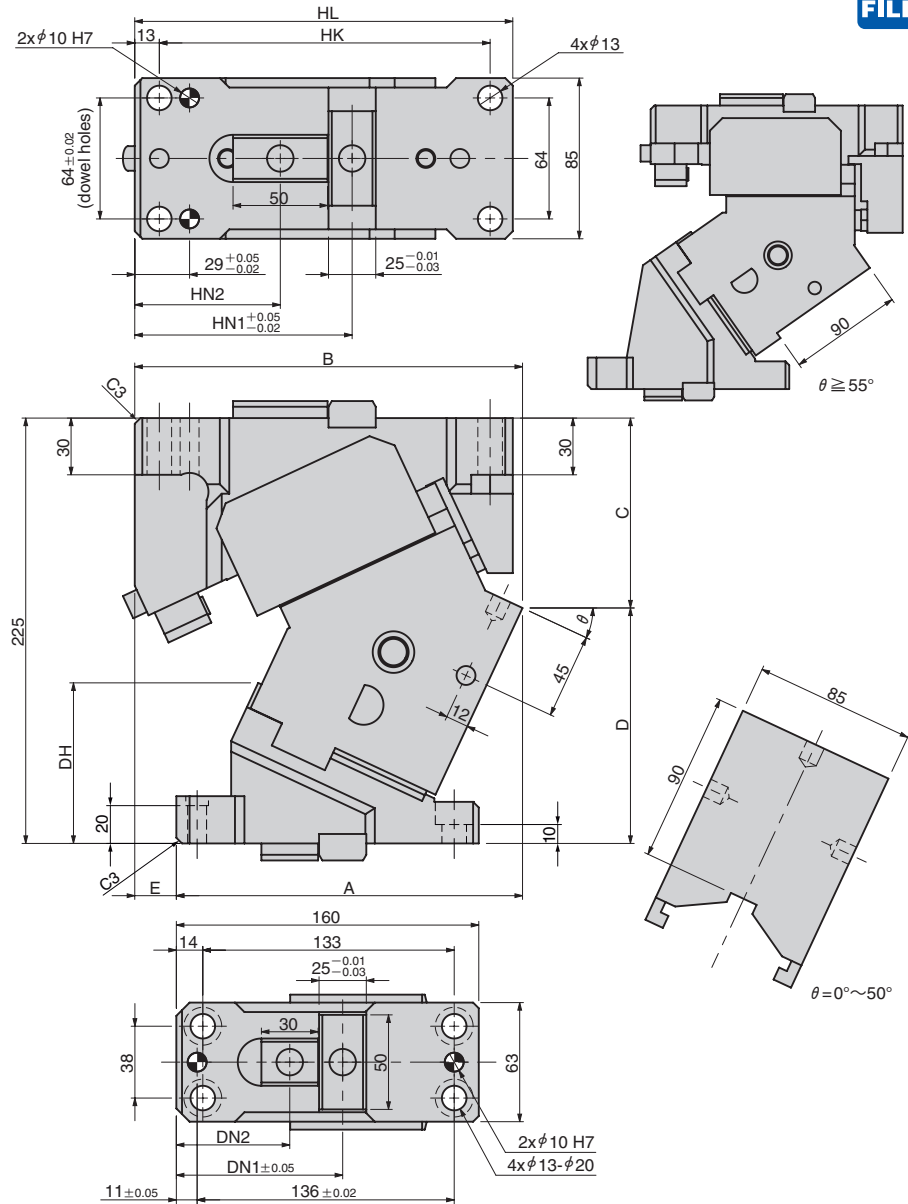
θ	WT	PT	ST	IW	Pic.
00	28.9	34.5			1
05	31.9	34.6			
10	35.0	35.0			
15	38.2	35.7			
20	41.5	36.7	45		
25	45.0	38.0			2
30	48.8	39.8			
35	53.1	42.1			
40	57.9	45.0			
45	62.0	47.7	44		
50	62.2	47.7	40	50	
55	59.3	48.6	34	55	
60	60.0	52.0	30	60	
65	59.2	53.6	25	65	3
70	58.5	55.0	20	70	
75	58.0	56.0	15	75	



Aerial Cam Unit

VACBV85

CAD FILE

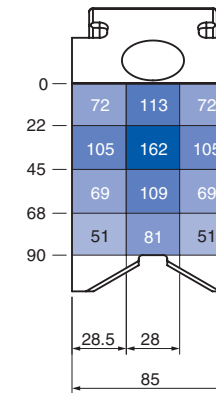


θ	A	B	C	D	E	HL	HK	HN1	HN2	DH	DN1	DN2
00	140.00	206.00	76.00	149.00	66	185	160			54.0	96	68
05	148.48	207.48	81.82	143.18	59	190	165			58.1	94	66
10	157.72	208.72	86.49	138.51	51	195	170			64.1	93	65
15	166.73	206.73	91.00	134.00	40	195	170			70.7	91	63
20	174.54	206.54	96.32	128.68	32	200	175	115	77	77.0		
25	183.15	205.15	100.45	124.55	22	200	175			84.9		
30	190.58	203.58	105.36	119.64	13	205	180			92.4		
35	198.85	200.85	110.03	114.97	2	205	180			100.2		
40	205.99	195.99	115.47	109.53	-10	205	180			107.5		
45	212.02	188.02	121.65	103.35	-24	205	180			114.0	88	60
50	216.96	175.96	126.56	98.44	-41					121.6		
55	223.97	173.97	128.85	96.15	-50					124.8		
60	230.14	171.14	130.18	94.82	-59	200	175	118	80	128.9		
65	237.98	168.98	133.11	91.89	-69					132.4		
70	245.99	165.99	135.00	90.00	-80					134.9		
75	253.93	162.93	137.64	87.36	-91					136.9		

Working Force Distribution Diagram

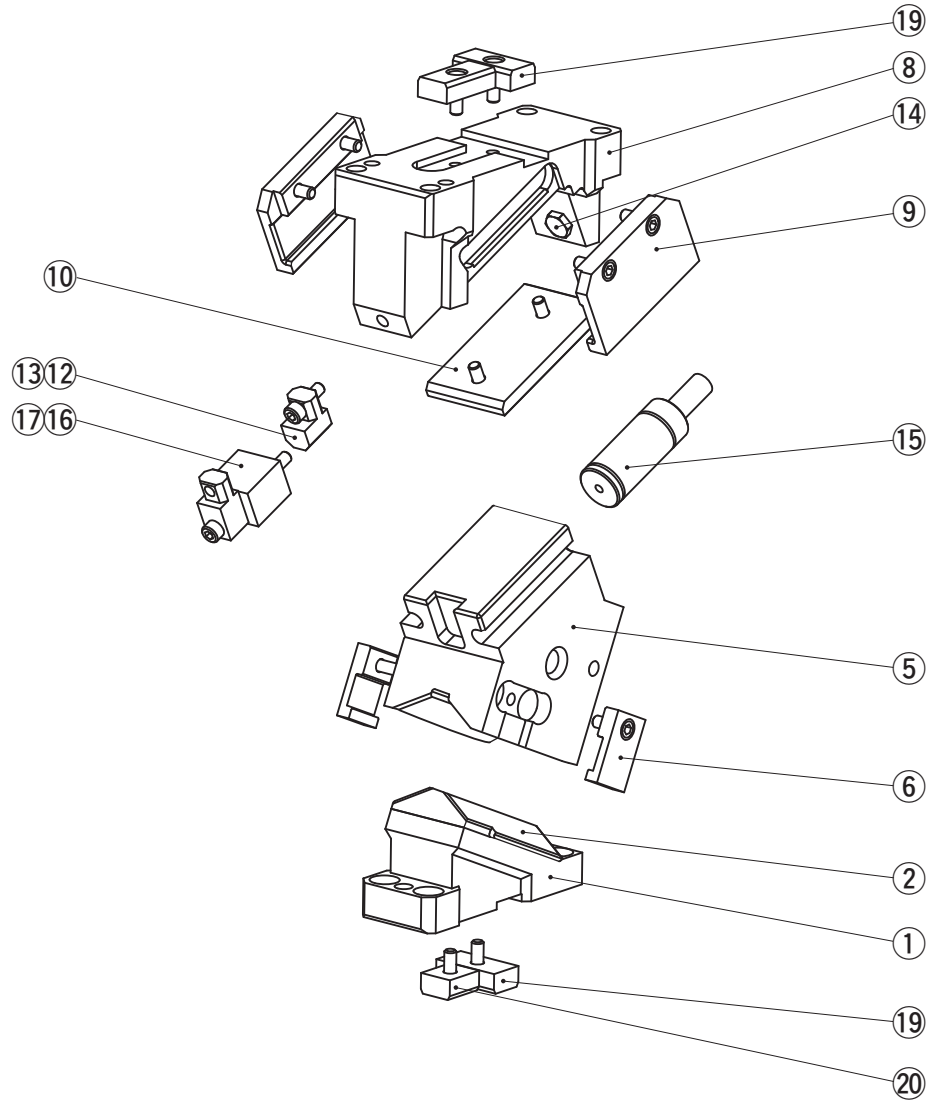
The working forces indicated in the mount face distribution diagram are reached by putting the tooling center of gravity within each area for the following pictures.

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

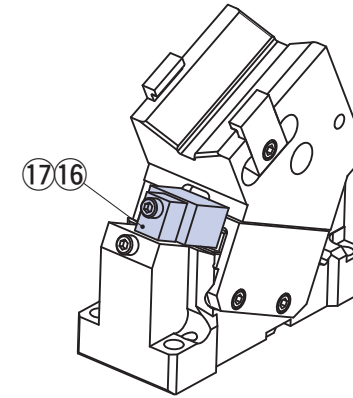


Aerial Cam Unit

VACBV65-85



● Lock System



No.	Description	Qty	Material and Remark
1	Cam Driver	1	Cast Iron
2	Cam Slide Guide	1	Bronze with Graphite
5	Cam Slider	1	Steel
6	Positive Return	2	Steel
8	Cam Holder	1	Cast Iron
9	Slide Keeper	2	Bronze with Graphite
10	Wear Plate	1	Bronze with Graphite
12	Stopper Plate	1	Steel
13	Stopper	1	—
14	Stop Pin	1	Steel
15	Gas Spring	1	Refer to the Spring Specification.
16	Lock Plate 01	1	Steel
17	Lock Plate 02	1	Steel
19	Key	3	LKU25-50
20	Key Holder	1	Steel

Bolts, nuts, dowels, and washers for assembly are not indicated.