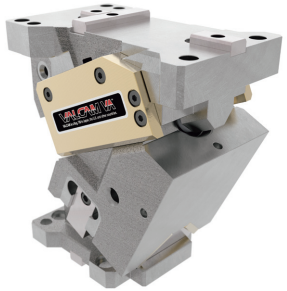
Product Information

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

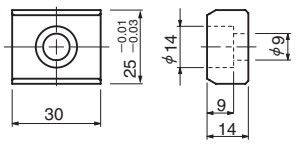


Mount face width	Working Force [kN] 1,000,000 strokes	Working Angle (5°increments)	Catalog No.	Spring Type
65	117	0°～75°	VACBV65	
85	162	0°～75°	VACBV85	
110	206	0°～75°	VACBV110	
165	323	0°～75°	VACBV165	
200	515	0°～75°	VACBV200	
260	603	0°～75°	VACBV260	
330	735	0°～75°	VACBV330	
400	882	0°～75°	VACBV400	

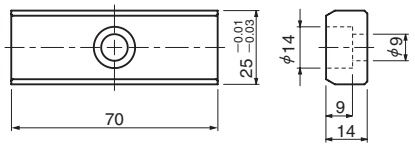
* Mount face widths 200, 260, 300, and 400 mm available in June 2024.

■Key specifications

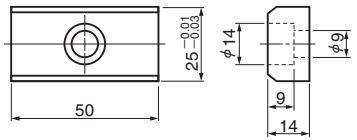
● Cam width 65, 85, 110, 165
(A M8 bolt is included.)



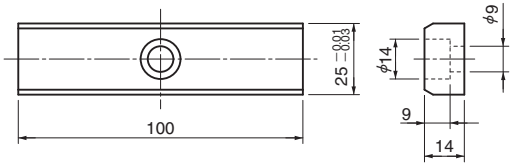
● Cam width 110
(A M8 bolt is included.)



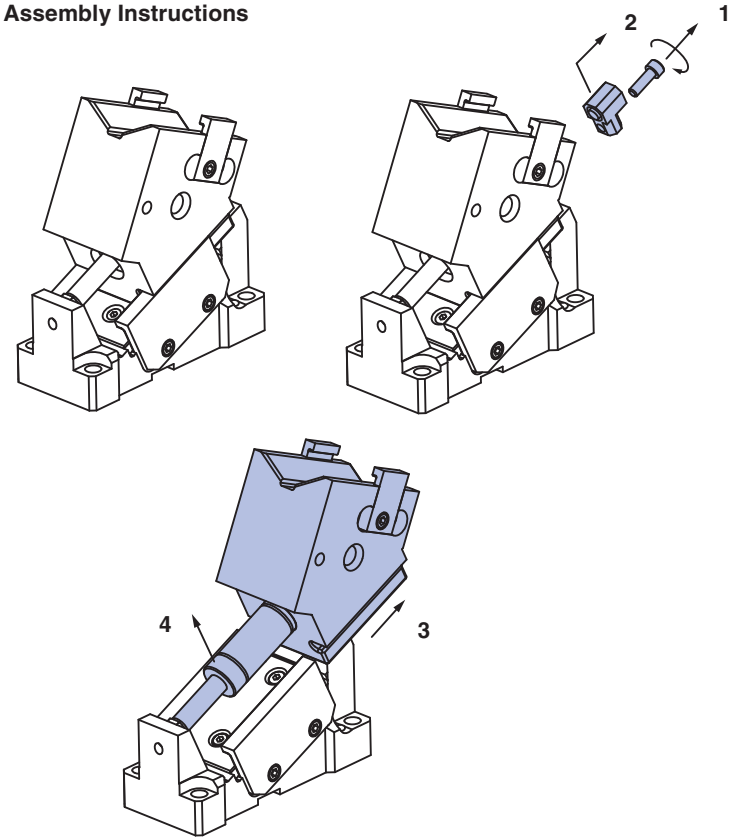
● Cam width 65, 85, 110, 165, 200, 260, 330, 400
LKU25-50 (A M8 bolt is included.)



● 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

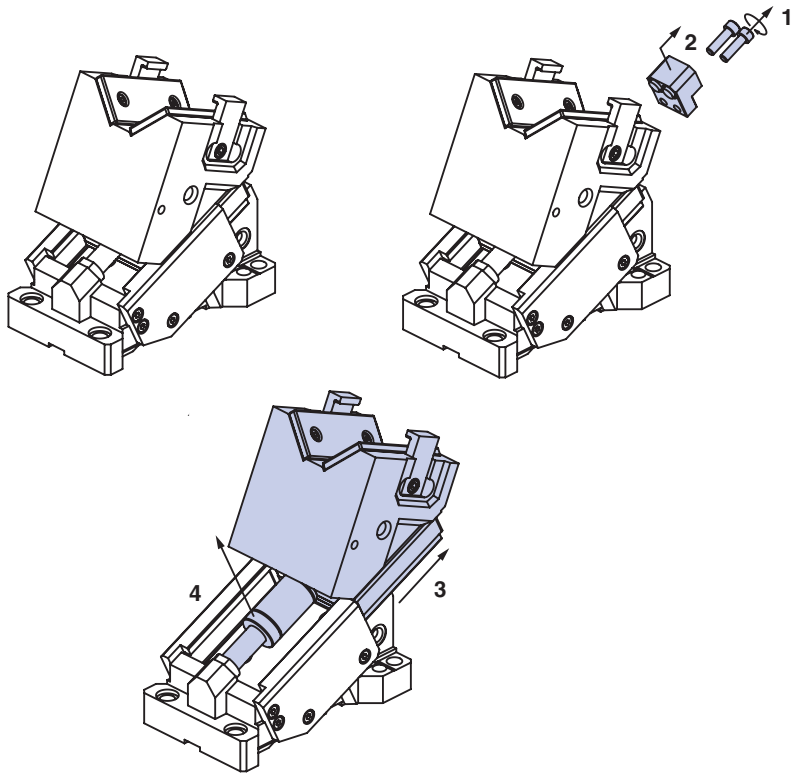
Assembly is the reverse procedure of disassembly.

- 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.

■VACBV110・165 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

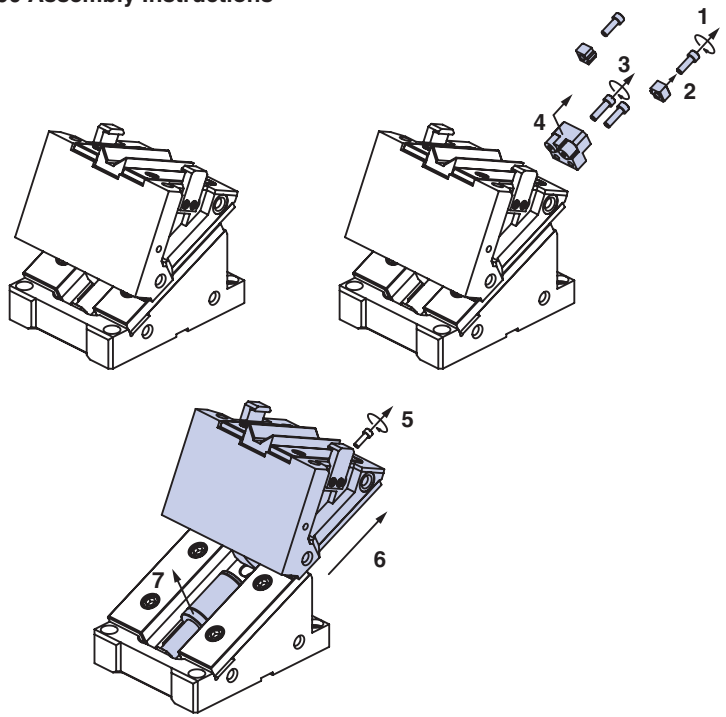
Assembly is the reverse procedure of disassembly.

・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.

■VACBV200・260 Assembly Instructions



● Disassembly

1）Remove Hexagon Socket Head Bolts.
2）Pull out Stopper Plate.
3）Remove Hexagon Socket Head Bolts.
4）Pull out Stopper Plate.
5）Remove Hexagon Socket Head Bolts of Gas Spring.
6）Remove Cam Slider to the rear.
7）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.

NEW VALCAM VA™

Aerial Cam Unit

Working Force [kN] 1,000,000 strokes	Catalog No.	W	θ	Spring Type PS
206	VACBV	110	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	110	–	10	–	GK		
VACBV	110	–	10	–	GK	–	NF

Option

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		9.4			9.3	
05		9.4			9.3	
10		9.4			9.3	
15		9.4			9.2	
20		9.4			9.2	
25	7.1	9.4	X500-50	6.9	9.2	U.0600.050
30		9.3			9.2	
35		9.3			9.2	
40		9.3			9.2	
45		9.3			9.1	
50		9.3			9.1	
55	6.8	9.7	X500-50	6.7	9.6	U.0600.050
60	7.1	11.2	X500-38	7.0	11.0	U.0600.038
65	7.0	12.6	X500-32	6.9	12.4	U.0600.032
70	6.6	13.6	X500-32	6.5	13.4	U.0600.032
75	6.6	16.3	X500-25	6.4	15.9	U.0600.025

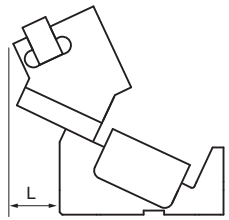
■Weight

θ	Total Weight kg	Cam Slider Weight kg	Max. Tool Length mm	Max. Tool Weight*1 kg
00	35.2			
05	34.9			
10	34.8			
15	34.7			
20	34.8			
25	34.9	15.0		
30	35.2			
35	35.4		110	9.0
40	35.6			
45	35.8			
50	36.2			
55	36.5	15.1		
60	36.9	15.2		
65	37.0	15.3		
70	37.1	15.2		
75	37.7	15.6		

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

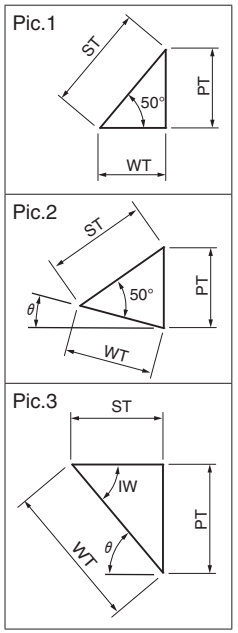
■Rear Removal Space

θ	L mm
00	24
05	34
10	46
15	57
20	70
25	84
30	96
35	107
40	119
45	126
50	138
55	146
60	151
65	155
70	156
75	161



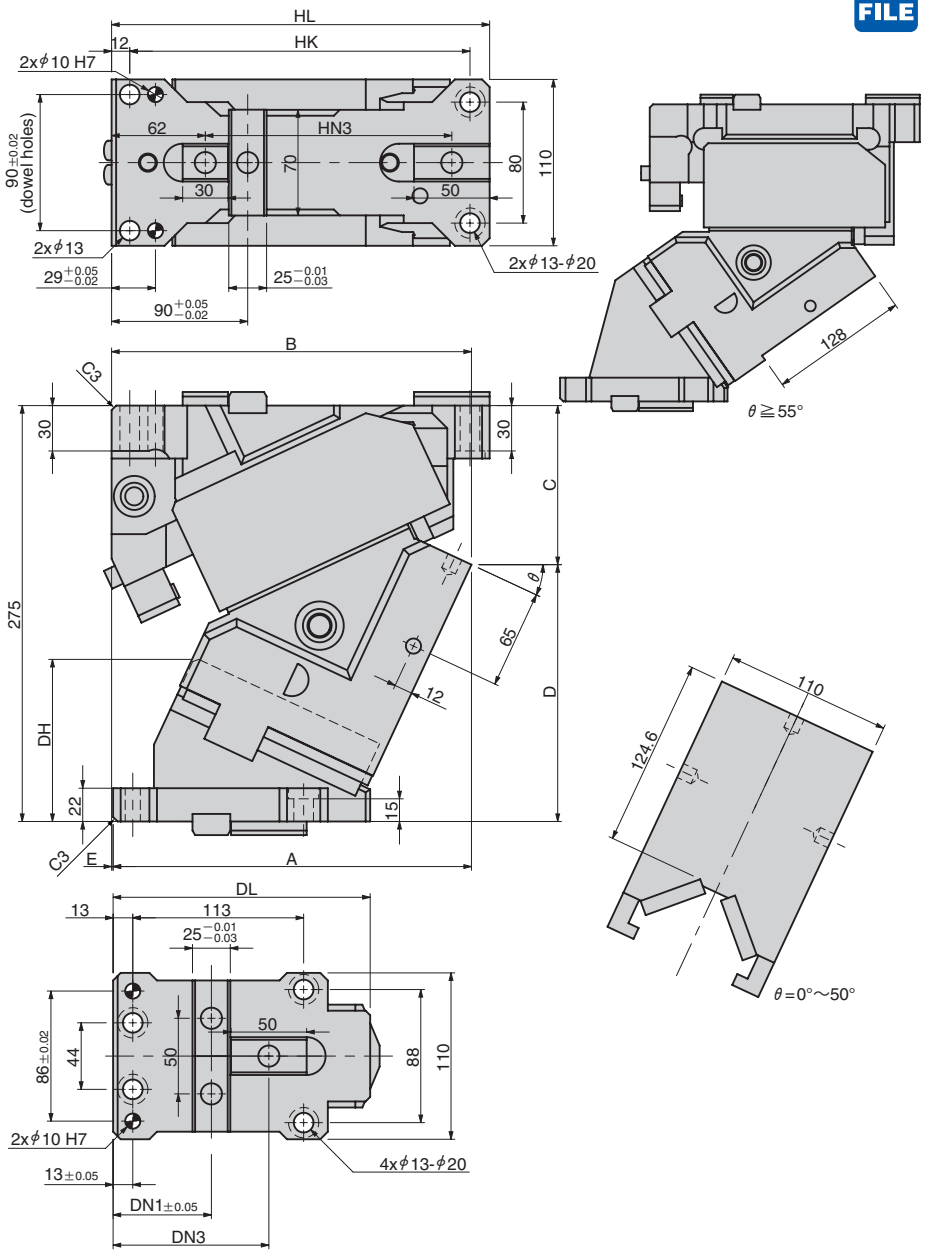
■Cam Diagram

θ	WT	PT	ST	IW	Pic.
00	30.9	36.8			1
05	34.1	36.9			
10	37.3	37.3			
15	40.7	38.1			
20	44.2	39.1			
25	48.0	40.6	48	–	2
30	52.1	42.5			
35	56.6	44.9			
40	61.7	48.0			
45	67.6	52.0			
50	74.7	57.2		50	
55	75.0	61.4	43	55	
60	74.0	64.1	37	60	3
65	73.4	66.5	31	65	
70	73.1	68.7	25	70	
75	73.4	70.9	19	75	



VACBV110

CAD FILE



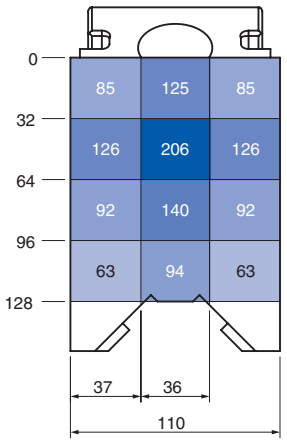
Refer to page 519 for Table of Components.

θ	A	B	C	D	E	HL	HK	HN3	DH	DL	DN1	DN3
00	167.00	230.00	70.00	205.00	63	225	200	138	72.0			
05	181.04	234.04	75.89	199.11	53	230	205	143	78.6			
10	194.75	234.75	81.68	193.32	40	235	210	148	86.1		70	108
15	210.14	236.14	88.34	186.66	26	240	215	153	93.6	170		
20	225.21	238.21	96.85	178.15	13	245	220	158	100.0			
25	236.98	237.98	105.17	169.83	1	250	225	163	107.2		65	103
30	248.47	237.47	114.29	160.71	-11	255	230		114.0			
35	260.70	234.70	125.18	149.82	-26	255	230	168	119.4			
40	267.69	228.69	134.82	140.18	-39	255	230		126.4	165		
45	274.46	224.46	144.18	130.82	-50	255	230		133.6	160		
50	283.03	214.03	156.26	118.74	-69				138.6			
55	291.80	208.80	159.17	115.83	-83				143.8	155	60	98
60	300.61	204.61	161.84	113.16	-96	250	225	163	150.7			
65	306.41	201.41	164.57	110.43	-105				153.7	150		
70	312.73	200.73	169.22	105.78	-112				157.9			
75	318.35	197.35	174.61	100.39	-121				161.8	142		

■Working Force Distribution Diagram

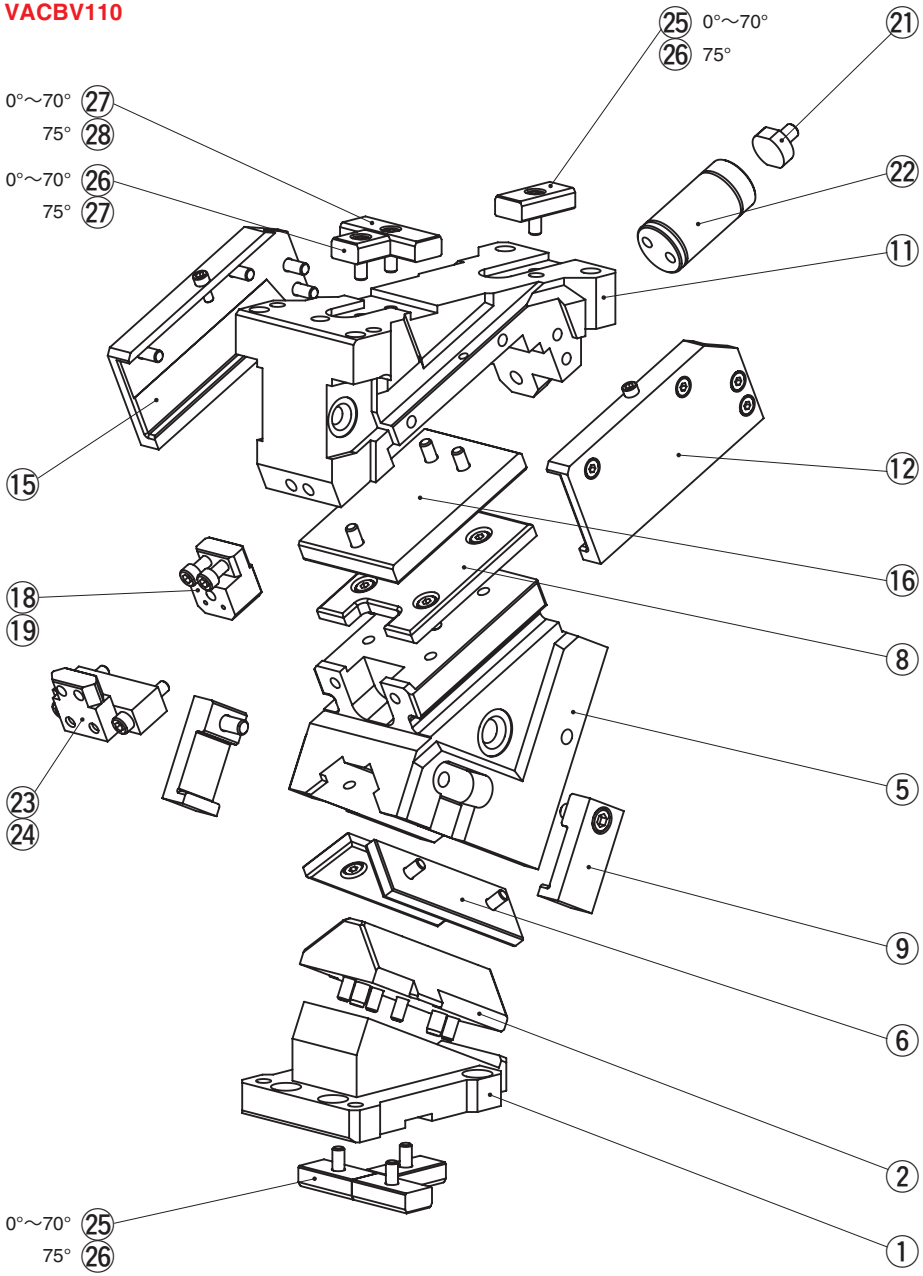
The working forces indicated in the mount face distribution diagram are reached by putting the tooling center of gravity within each area for the following pictures.

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

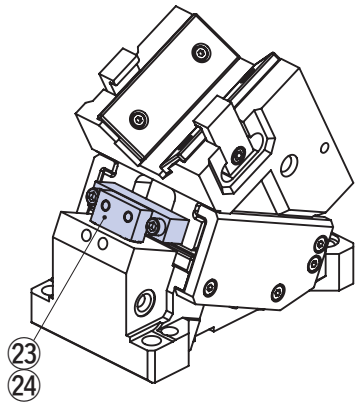


Aerial Cam Unit

VACBV110



● 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	Cast Iron
6	Slide Plate 01	2	Steel
8	Slide Plate 02	1	Steel
9	Positive Return	2	Steel
11	Cam Holder	1	Cast Iron
12	Slide Keeper A	1	Bronze with Graphite
15	Slide Keeper B	1	Bronze with Graphite
16	Wear Plate	1	Bronze with Graphite
18	Stopper Plate	1	Steel
19	Stopper	2	—
21	Pin	1	Steel
22	Gas Spring	1	Refer to the Spring Specification.
23	Lock Plate 01	1	Steel
24	Lock Plate 02	1	Steel
25	Key	4	LKU25-50 0°～70°
26	Key	4	LKU25-50 75°
26	Key	1	Steel 0°～70°
27	Key	1	Steel 75°
27	Key	1	Steel 0°～70°
28	Key	1	Steel 75°

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