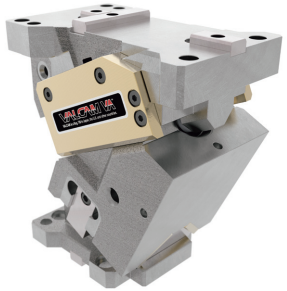
Product Information

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

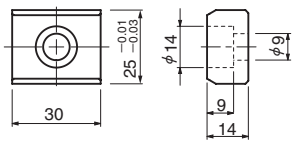


Mount face width	Working Force [kN] 1,000,000 strokes	Working Angle (5°increments)	Catalog No.	Spring Type
65	117	0°～75°	VACBV65	
85	162	0°～75°	VACBV85	
110	206	0°～75°	VACBV110	
165	323	0°～75°	VACBV165	
200	515	0°～75°	VACBV200	
260	603	0°～75°	VACBV260	
330	735	0°～75°	VACBV330	
400	882	0°～75°	VACBV400	

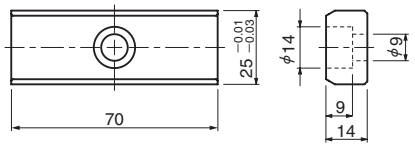
* Mount face widths 200, 260, 300, and 400 mm available in June 2024.

■Key specifications

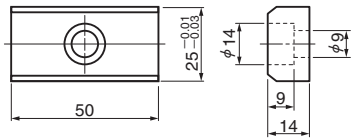
● Cam width 65, 85, 110, 165
(A M8 bolt is included.)



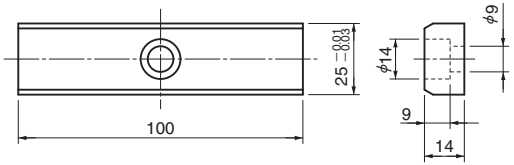
● Cam width 110
(A M8 bolt is included.)



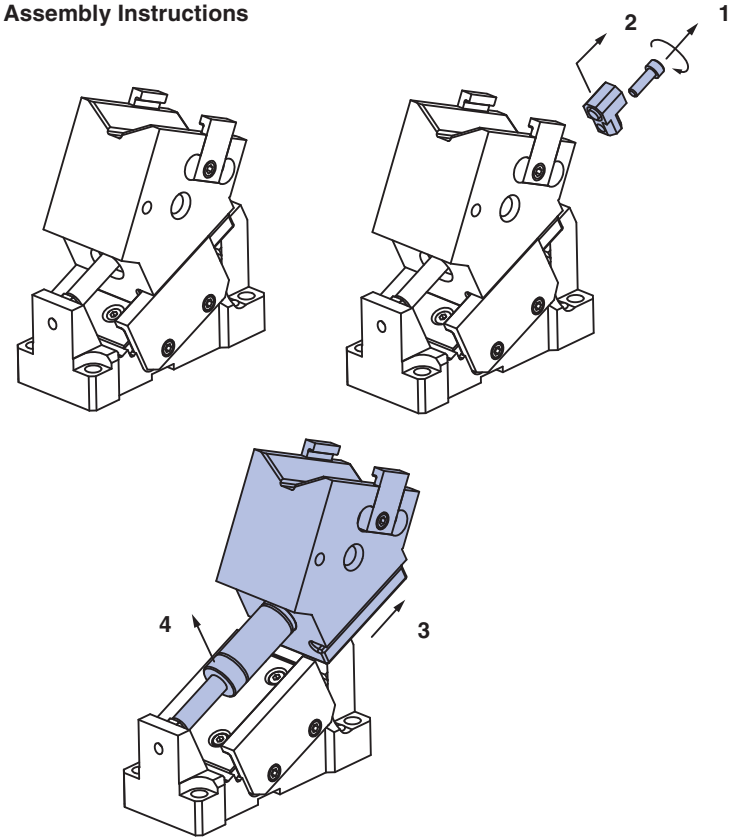
● Cam width 65, 85, 110, 165, 200, 260, 330, 400
LKU25-50 (A M8 bolt is included.)



● 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

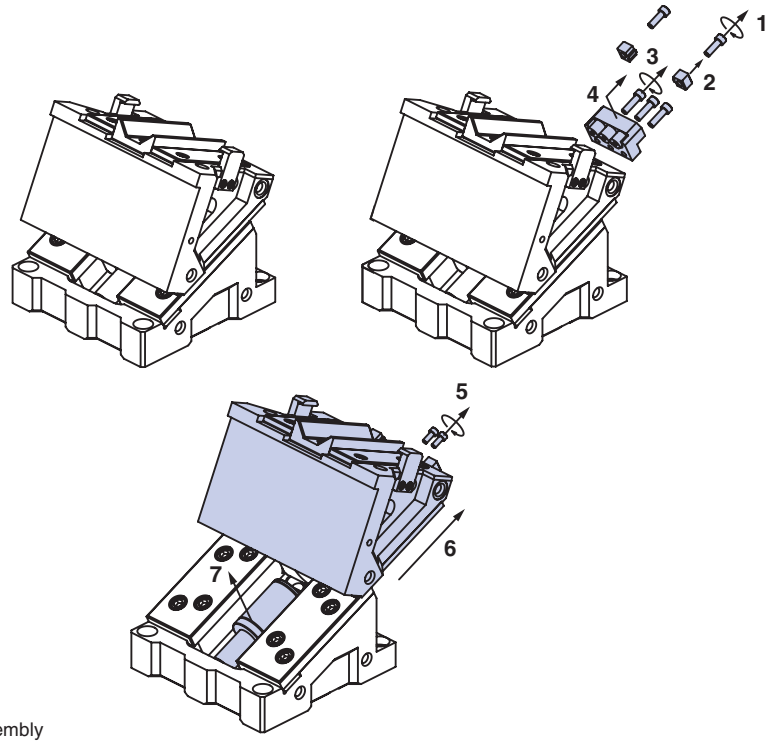
Assembly is the reverse procedure of disassembly.

- 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.

■VACBV330 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

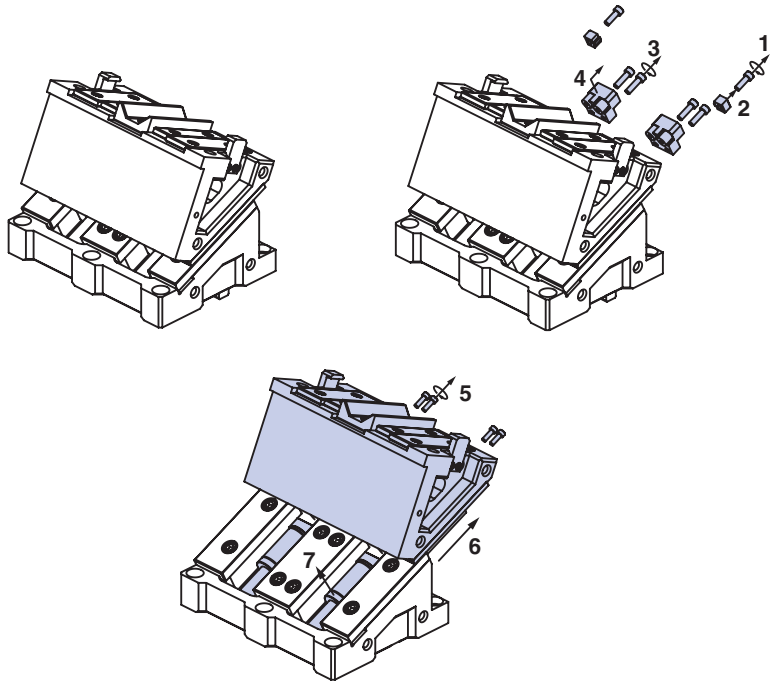
Assembly is the reverse procedure of disassembly.

・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.

■VACBV400 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
882	VACBV	400	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	400	–	10	–	GK		
VACBV	400	–	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		36.6			39.2	
05		36.5			39.2	
10		36.4			39.1	
15		36.3			39.0	
20		36.2			38.9	
25		36.2			38.8	
30	27.1	36.1	X1000-63	29.2	38.7	U.1000.063
35		36.0			38.6	
40		35.9			38.5	
45		35.8			38.4	
50		35.7			38.3	
55		38.8			41.7	
60		42.9			46.1	
65	26.3	46.8	X1000-63	28.1	50.1	U.1000.063
70	25.4	52.3	X1000-63	27.0	55.7	U.1000.063
75	24.9	61.3	X1000-50	26.5	65.4	U.1000.050

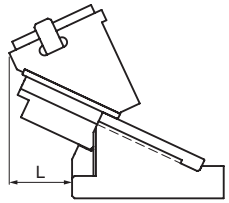
■Weight

θ	Total Weight kg	Cam Slider Weight kg	Max. Tool Length mm	Max. Tool Weight*1 kg
00	197.9			
05	197.2			
10	194.7			
15	192.7			
20	190.7			
25	188.0	88.9		
30	187.3			
35	187.0		140	70.0
40	188.2			
45	191.1			
50	195.5			
55	199.5	92.1		
60	200.0	90.8		
65	204.9	94.0		
70	212.0	99.8		
75	216.9	100.3		

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

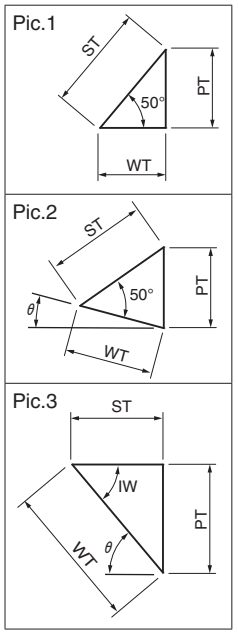
■Rear Removal Space

θ	L mm
00	59
05	67
10	79
15	89
20	107
25	127
30	142
35	153
40	164
45	175
50	179
55	194
60	197
65	191
70	192
75	208



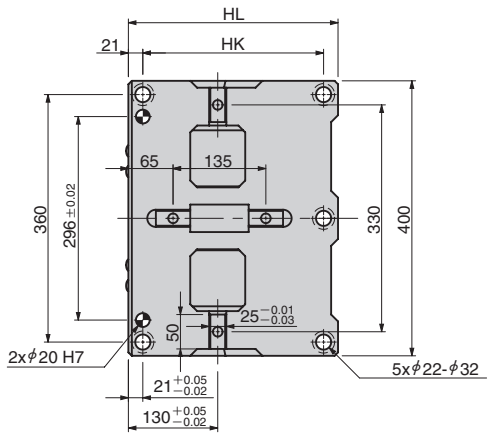
■Cam Diagram

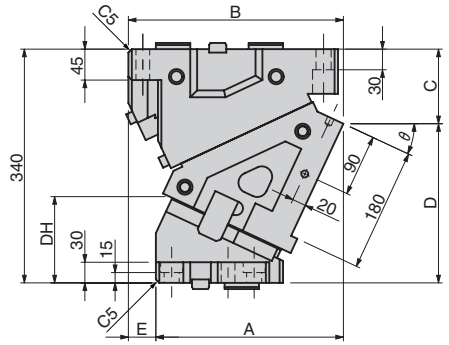
θ	WT	PT	ST	IW	Pic.
00	32.8	39.1			1
05	36.2	39.2			
10	39.7	39.7			
15	43.3	40.4			
20	47.0	41.6		–	
25	51.0	43.1			2
30	55.3	45.1	51		
35	60.1	47.7			
40	65.6	51.0			
45	71.9	55.3			
50	79.3	60.8		50	
55	88.9	72.8		55	
60	102.0	88.3		60	3
65	108.8	98.6	46	65	
70	119.9	112.6	41	70	
75	119.8	115.7	31	75	

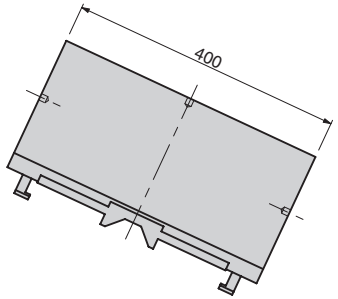


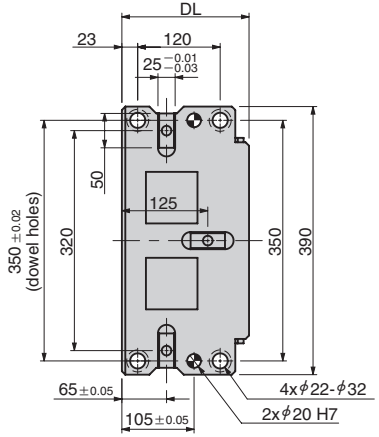
VACBV400

CAD FILE







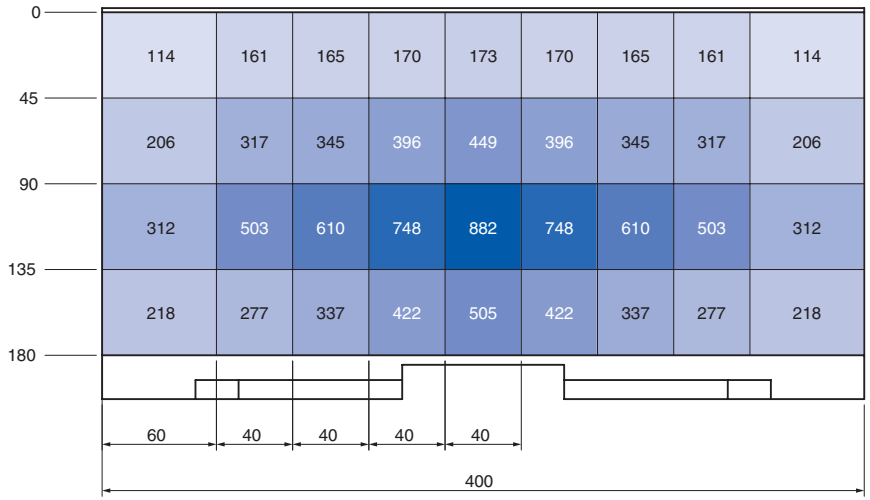


θ	A	B	C	D	E	HL	HK	DH	DL
00	180.00	295.00	68.00	272.00	115	280	238	71.0	
05	199.13	305.13	77.72	262.28	106	290	248	77.7	
10	218.87	308.87	86.26	253.74	90	295	253	87.0	
15	238.21	312.21	94.59	245.41	74	300	258	97.8	
20	256.18	315.18	101.67	238.33	59	305	263	111.0	
25	272.82	312.82	108.46	231.54	40	305	263	125.4	185
30	289.13	312.13	115.95	224.05	23	310	268	140.0	
35	303.16	312.16	127.11	212.89	9	310	268	151.5	
40	325.92	308.92	138.91	201.09	-17	310	268	162.8	
45	336.46	303.46	154.33	185.67	-33	310	268	170.8	
50	350.80	301.80	171.35	168.65	-49			177.3	
55	364.97	292.97	179.42	160.58	-72			181.8	
60	376.72	288.72	178.36	161.64	-88	315	273	185.6	
65	392.61	291.61	187.08	152.92	-101			188.6	180
70	409.88	288.88	197.14	142.86	-121			191.3	
75	426.54	283.54	196.04	143.96	-143			199.2	

■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



Refer to page 547 for Table of Components.

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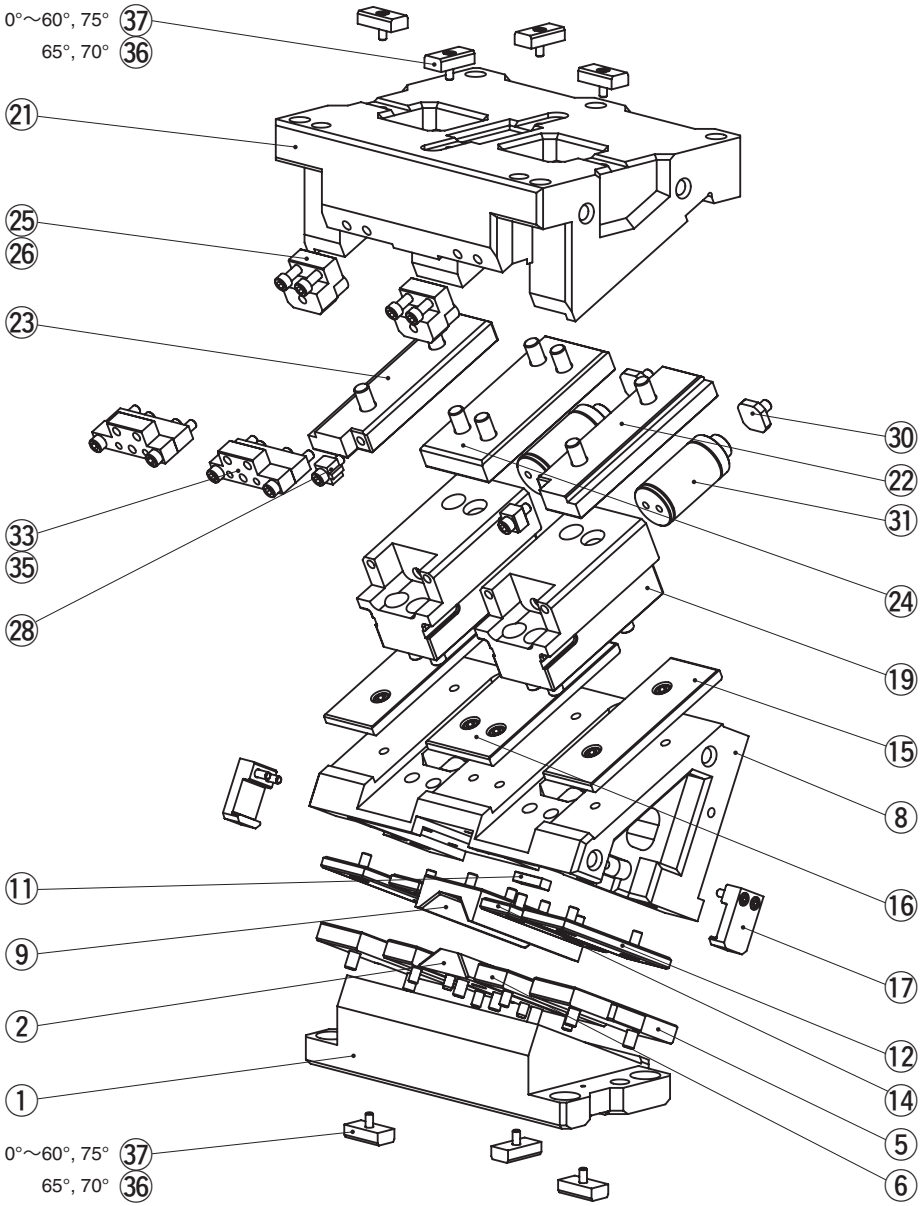
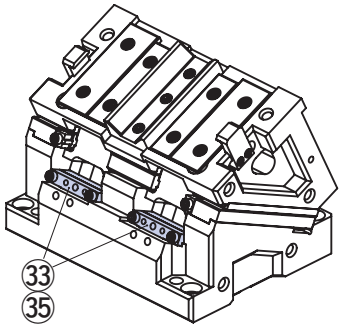
VACBV400



● Lock System



No.	Description	Qty	Material and Remark
1	Cam Driver	1	Cast Iron
2	Cam Slide Guide A	1	Bronze with Graphite
5	Driver Plate	2	Bronze with Graphite
6	Driver Plate 02	2	Bronze with Graphite
8	Cam Slider	1	Cast Iron
9	Cam Slide Guide B	1	Steel
11	Key	1	Steel
12	Slide Plate 01 (300)	2	Steel
14	Slide Plate 01 (200)	2	Steel
15	Slide Plate 02	2	Steel
16	Slide Plate 02 (400)	1	Steel
17	Positive Return	2	Steel
19	Spring Guide Plate	2	Cast Iron
21	Cam Holder	1	Cast Iron
22	Base Plate 01A	1	Bronze with Graphite
23	Base Plate 01B	1	Bronze with Graphite
24	Base Plate 02	1	Bronze with Graphite
25	Stopper Plate	2	Steel
26	Stopper	4	—
28	Safety Block	2	Steel
30	Pin	2	Steel
31	Gas Spring	2	Refer to the Spring Specification.
33	Lock Plate 01	2	Steel
35	Lock Plate 02	2	Steel
36	Key	7	LKU25-50 65°, 70°
37	Key	7	LKU25-50 0°～60°, 75°

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