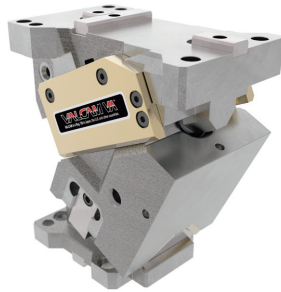


**Product Information**

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

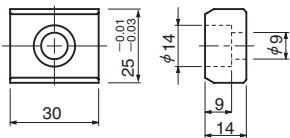


Mount face width	Working Force [kN] 1,000,000 strokes	Working Angle (5° increments)	Catalog No.	Spring Type
65	117	0°~75°	VACBV65	
85	162	0°~75°	VACBV85	
110	206	0°~75°	VACBV110	
165	323	0°~75°	VACBV165	
200	515	0°~75°	VACBV200	
260	603	0°~75°	VACBV260	
330	735	0°~75°	VACBV330	
400	882	0°~75°	VACBV400	

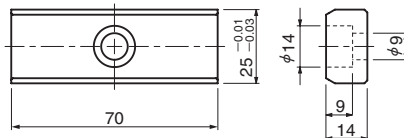
\* Mount face widths 200, 260, 300, and 400 mm available in June 2024.

**Key specifications**

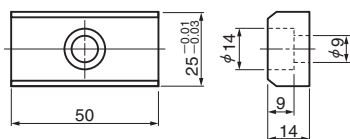
- Cam width 65, 85, 110, 165  
(A M8 bolt is included.)



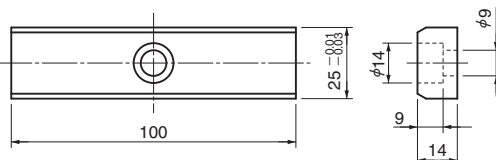
- Cam width 110  
(A M8 bolt is included.)



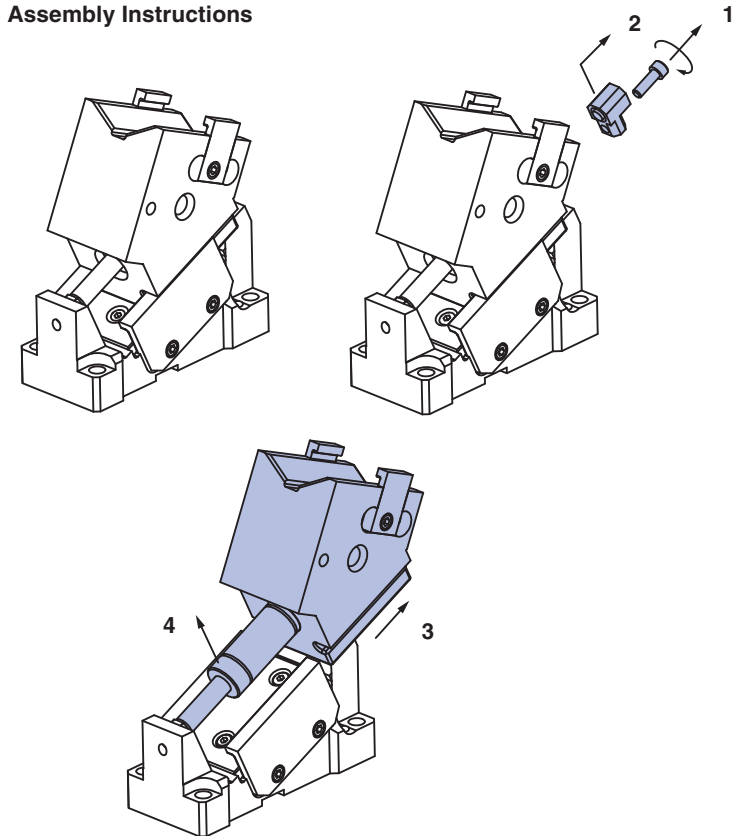
- Cam width 65, 85, 110, 165, 200, 260, 330, 400  
LKU25-50 (A M8 bolt is included.)



- 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.

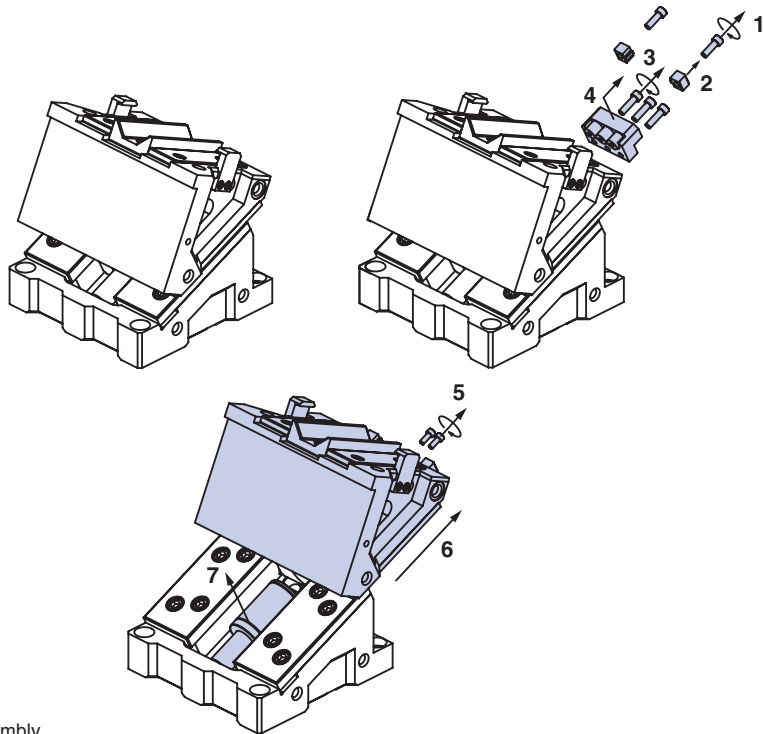
  - Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
  - Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial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

**Product Information**

■ 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

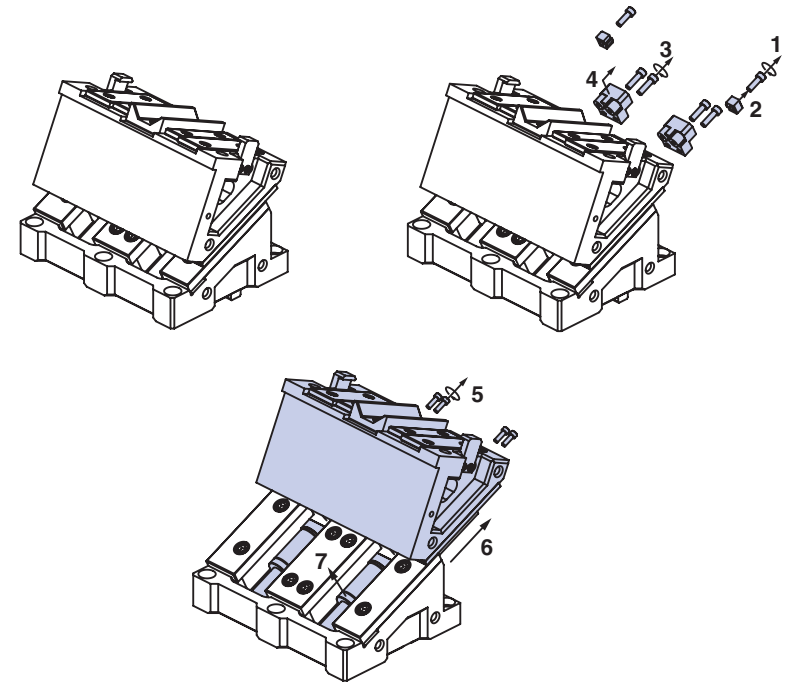
Assembly is the reverse procedure of disassembly.

- 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.

**Aerial Cam Unit**

Working Force [kN] 1,000,000 strokes	Catalog No.	W	$\theta$	Spring Type PS
735	<b>VACBV</b>	<b>330</b>	<b>00~75</b> (5° increments)	<b>GK NGK</b> <b>GD NGD</b>

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

Order	Catalog No.	W	$\theta$	PS	Option
	<b>VACBV</b>	<b>330</b>	<b>10</b>	<b>GK</b>	
	<b>VACBV</b>	<b>330</b>	<b>10</b>	<b>GK</b>	<b>NF</b>

Option Code	Specification
<b>NF</b>	Nitrogen gas not charged.

**Spring Specification**

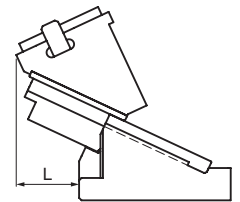
$\theta$	GK			GD		
	Final Load kN	Return Force kN	Spring Model	Final Load kN	Return Force kN	Spring Model
00		29.9			29.8	
05		29.8			29.8	
10		29.8			29.7	
15		29.7			29.7	
20		29.6			29.6	
25		29.6			29.5	
30	22.2	29.5	X1500-63	22.2	29.5	U.1600.063
35		29.4			29.4	
40		29.4			29.3	
45		29.3			29.3	
50		29.2			29.2	
55		31.8			31.7	
60		35.1			35.1	
65	21.5	38.3	X1500-63	21.5	38.3	U.1600.063
70	20.8	42.8	X1500-63	20.8	42.9	U.1600.063
75	20.4	50.3	X1500-50	20.5	50.5	U.1600.050

**Weight**

$\theta$	Total Weight kg	Cam Slider Weight kg	Max. Tool Length mm	Max. Tool Weight*1 kg
00	150.2			
05	149.9			
10	148.1			
15	146.9			
20	145.7			
25	143.7	66.7		
30	143.1			
35	142.9		140	58.0
40	144.5			
45	146.4			
50	150.1			
55	153.6	69.5		
60	153.1	67.8		
65	157.1	70.4		
70	163.0	75.8		
75	166.2	76.1		

**Rear Removal Space**

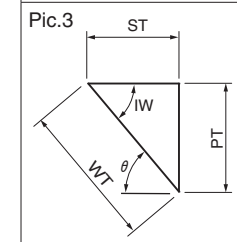
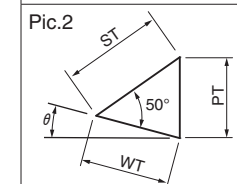
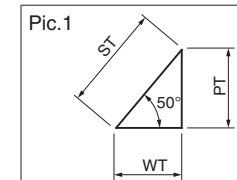
$\theta$	L mm
00	59
05	67
10	79
15	89
20	107
25	127
30	142
35	153
40	164
45	175
50	179
55	194
60	197
65	191
70	192
75	208



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

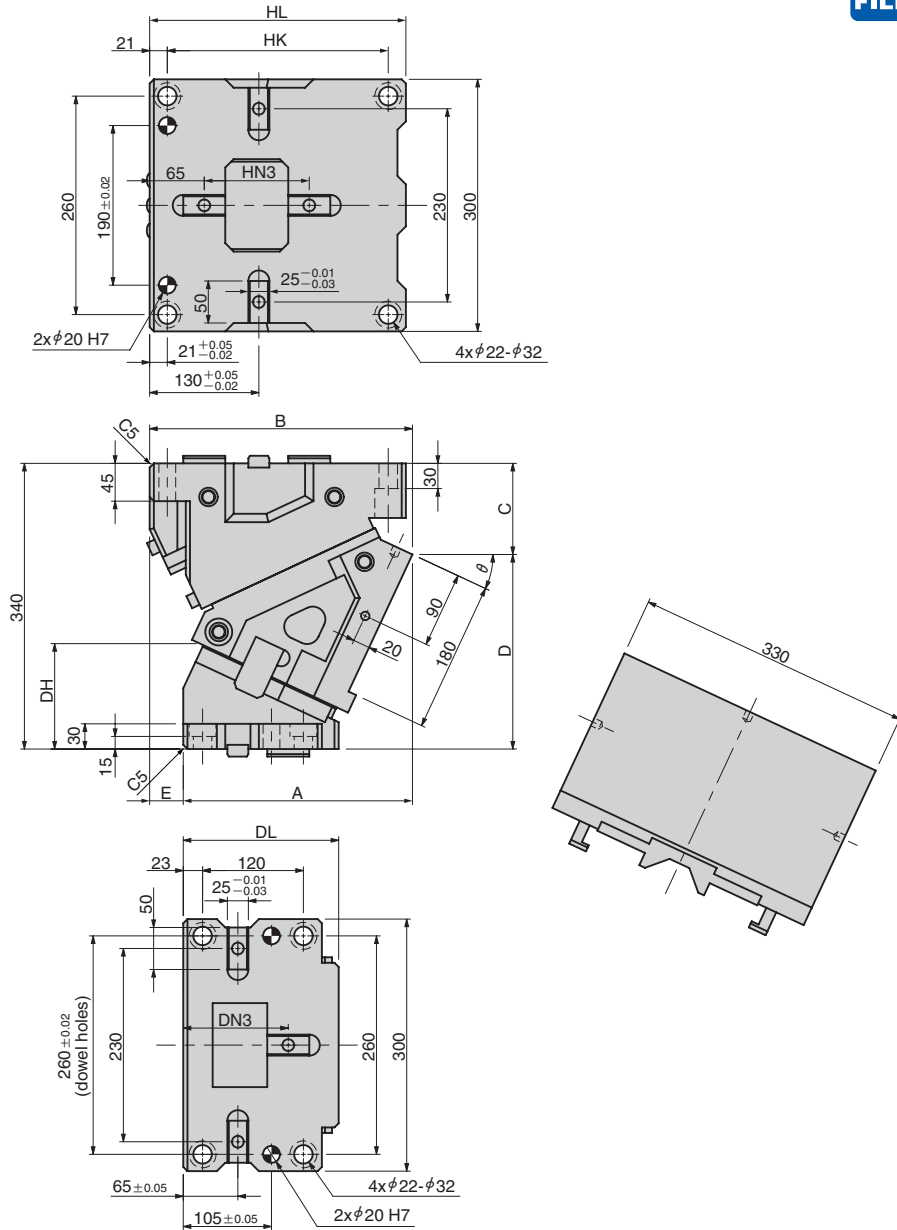
**Cam Diagram**

$\theta$	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	
65	108.8	98.6	46	65	3
70	119.9	112.6	41	70	
75	119.8	115.7	31	75	



**Aerial Cam Unit**

VACBV330

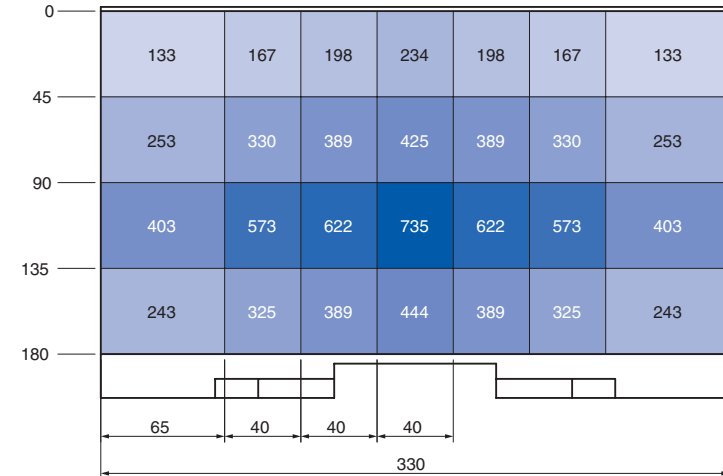


$\theta$	A	B	C	D	E	HL	HK	HN3	DH	DL	DN3
00	180.00	295.00	68.00	272.00	115	280	238	190	71.0		125
05	199.13	305.13	77.72	262.28	106	290	248	200	77.7		
10	218.87	308.87	86.26	253.74	90	295	253	205	87.0		
15	238.21	312.21	94.59	245.41	74	300	258	210	97.8		120
20	256.18	315.18	101.67	238.33	59	305	263	125	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	130	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	135	162.8		125
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			150	185.6		
65	392.61	291.61	187.08	152.92	-101	315	273		188.6	178	140
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.

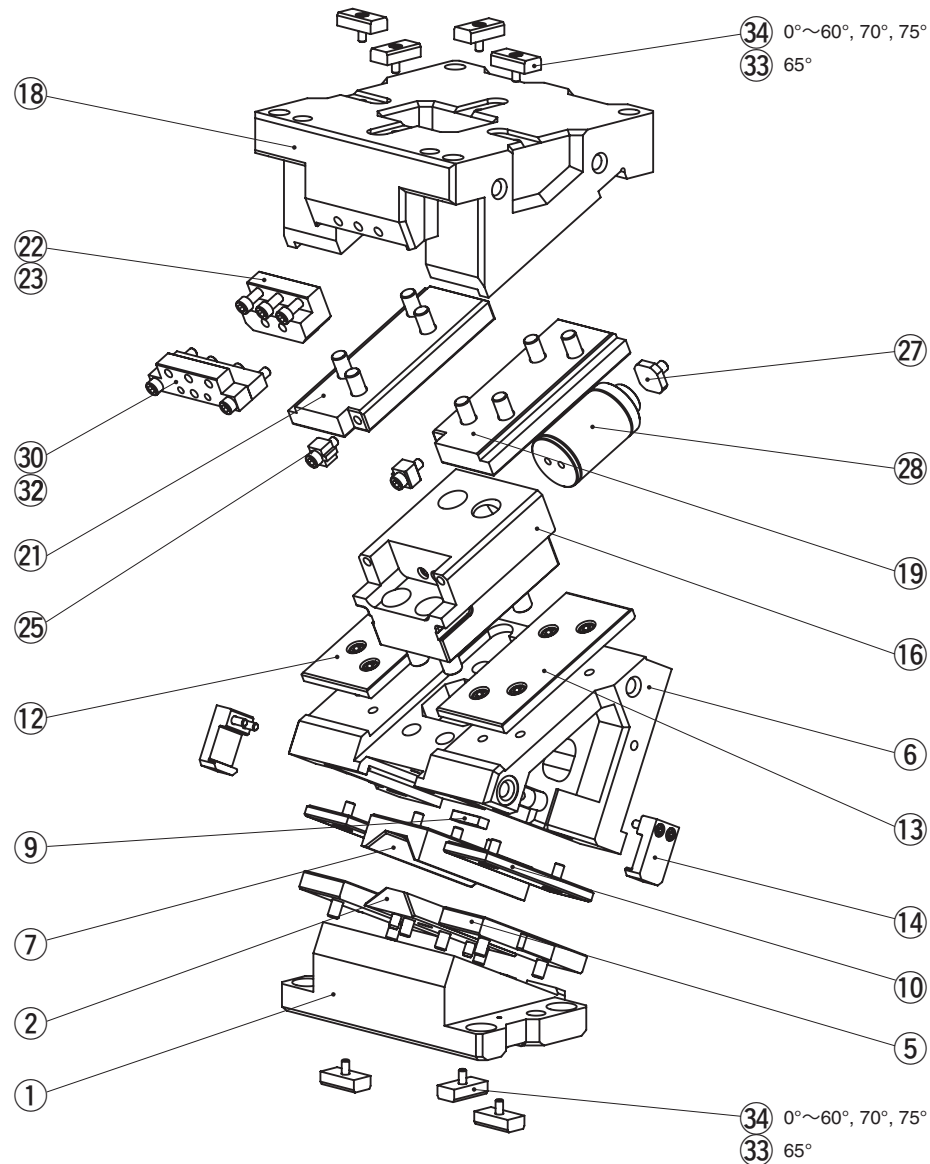
Working force (kN) allowed for up to 1,000,000 strokes



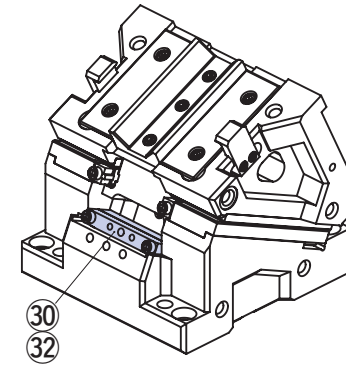
Refer to page 541 for Table of Components.

**Aerial Cam Unit**

VACBV330



● 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	Cam Slider	1	Cast Iron
7	Cam Slide Guide B	1	Steel
9	Key	1	Steel
10	Slide Plate 01 (300)	2	Steel
12	Slide Plate 02 (300) A	1	Steel
13	Slide Plate 02 (300) B	1	Steel
14	Positive Return	2	Steel
16	Spring Guide Plate	1	Cast Iron
18	Cam Holder	1	Cast Iron
19	Base Plate A	1	Bronze with Graphite
21	Base Plate B	1	Bronze with Graphite
22	Stopper Plate	1	Steel
23	Stopper	3	—
25	Safety Block	2	Steel
27	Pin	1	Steel
28	Gas Spring	1	Refer to the Spring Specification.
30	Lock Plate 01	1	Steel
32	Lock Plate 02	1	Steel
33	Key	7	LKU25-50 65°
34	Key	7	LKU25-50 0°~60°, 70°, 75°

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