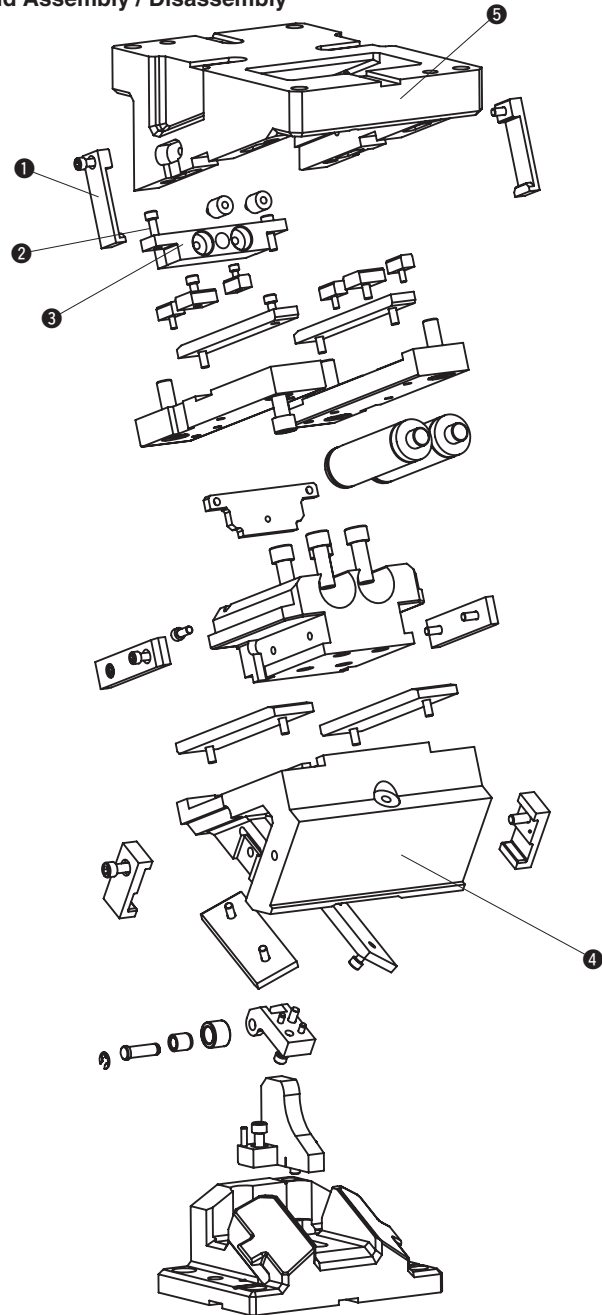


## ■ UCMSV165/200/250/300/400

## Structure and Assembly / Disassembly



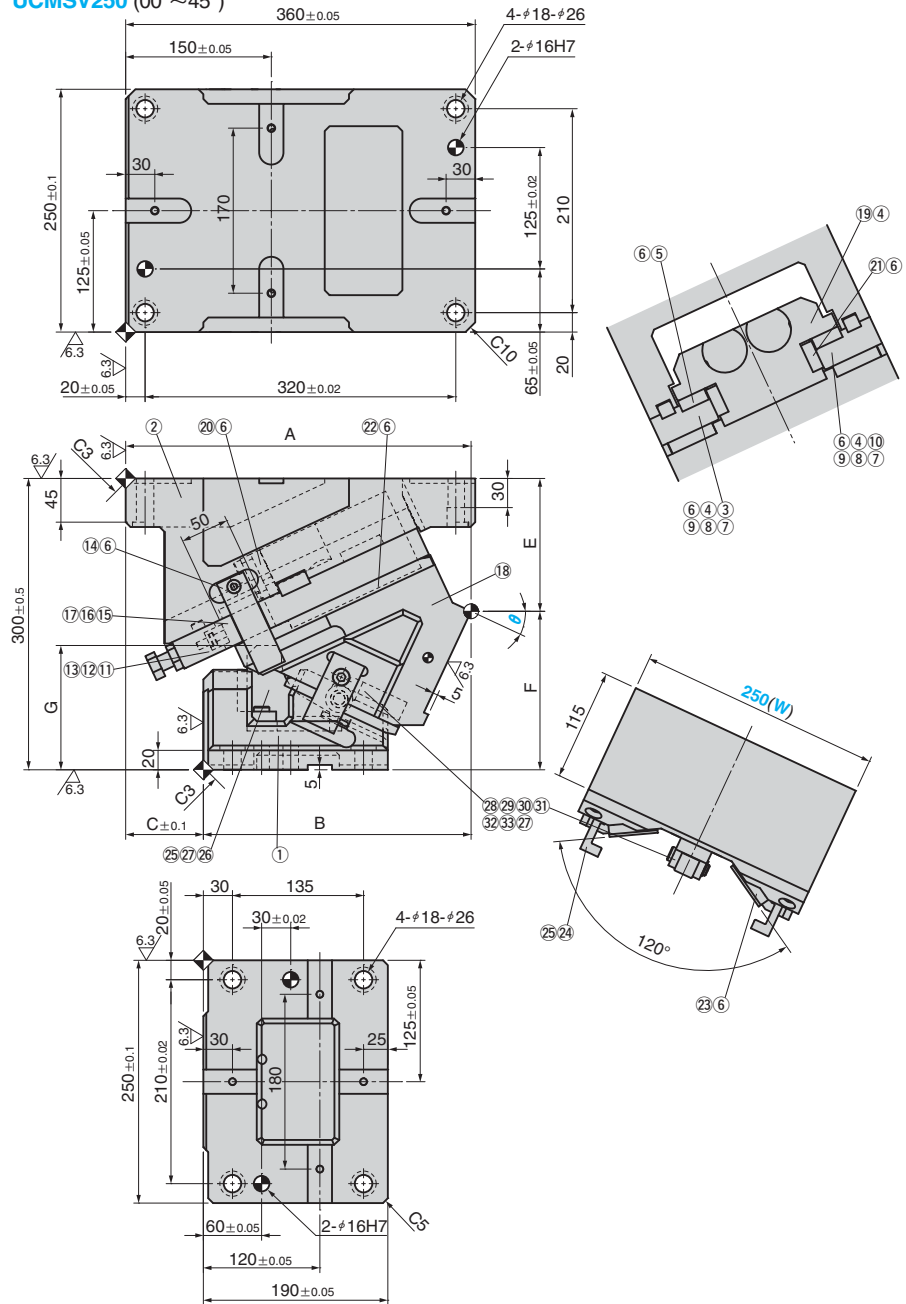
- Disassembly method of UCMSV 165 / 200 / 250 / 300 / 400

- 1) Remove safety plate (1) .
- 2) Remove hexagon socket head bolt(2) and stopper plate(3).
- 3) Remove cam slider (4) from cam holder (5) at rear of cam.

- Assembly method of UCMSV 165 / 200 / 250 / 300 / 400

- 1) Assemble components in the reverse order to which they were removed.
  - Make sure that there is no foreign matter on the slide surfaces before assembly.
  - The clearance between the cam slider and the cam holder is carefully controlled. Check that the serial number stamped on both parts is the same.
  - Please ensure that all bolts removed are re-installed and tightened.

UCMSV250 (00°~45°)



$\theta$	Travel	A	B	C	E	F	G
00	32.1	360.00	210.00	150	95.00	205.00	92
05	35.5	356.43	222.43	134	98.92	201.08	102
10	38.9	359.62	241.62	118	109.12	190.88	103
15	42.4	356.30	245.30	111	120.53	179.47	109
20	46.1	356.37	263.37	93	128.12	171.88	119
25	50.0	355.73	275.73	80	136.81	163.19	128
30	54.3	358.28	288.28	70	146.55	153.45	138
35	59.0	346.94	282.94	64	157.25	142.75	150
40	64.3	345.56	287.56	58	168.85	131.15	161
45	70.4	346.27	306.27	40	181.24	118.76	172

Working Force kN	Catalog No.	(W)	$\theta$	Spring Type PS
284	UCMSV	250	00	
			05	
			10	GS
			15	GK
			20	GD
			25	*NGS
			30	*NGK
			35	*NGD
			40	
			45	

Mark \* Without gas spring but accessories for installation of each type are included.

Order **Catalog No.** (W) -  $\theta$  - PS  
**UCMSV 250 - 25 - GK**

Spring Specification (Qty 2)

Spring Type PS	Spring Force N			Gas Spring Catalog No.
	F <sub>A</sub>	F <sub>E</sub>	F <sub>AP</sub>	
GS	10000	13180	12230	SPF.500.63 (SANKYO)
GK	9400	13200	12124	TU500-63.5-TD (Kaller)
		12300	11478	90.10..00500.063 (Dadco)

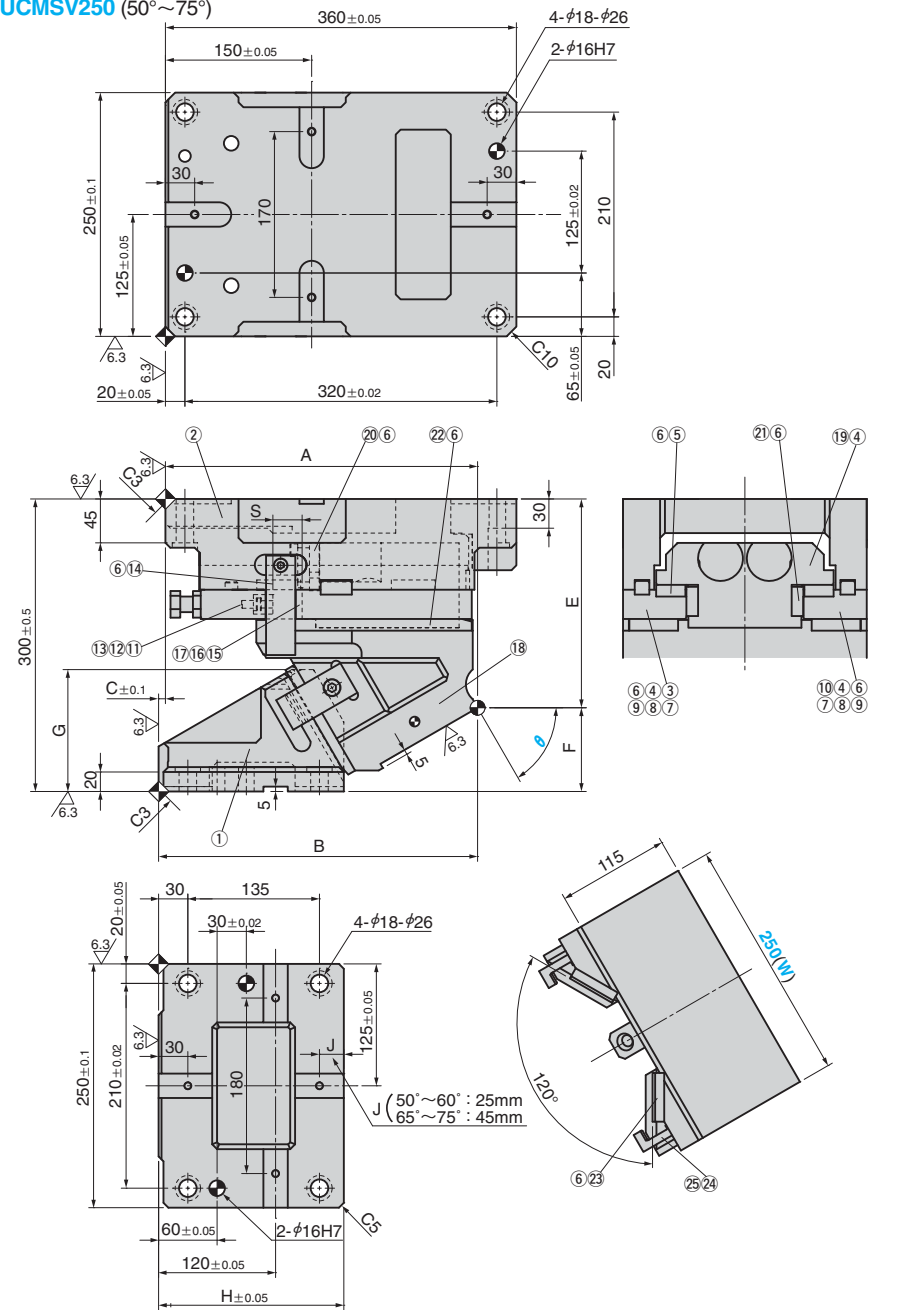
NOTE  
 F<sub>A</sub> :Initial Force  
 F<sub>E</sub> :Final Force  
 F<sub>AP</sub> :Force at working point

Option	Code	Specification
	LA	without accelerator
	K	with key
	NF	without nitrogen gas

Parts list is shown in p.1537  
 Detail of key is shown in p.1536  
 Cam diagram is shown in p.1535  
 NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

Order **UCMSV250 - 25 - GK - NF**

UCMSV250 (50°~75°)



$\theta$	Travel	A	B	C	E	F	G	S	H
50	77.8	328.80	318.80	10	194.34	105.66	140	50	
55	52.3	326.84	326.84	0	208.48	91.52	125		190
60	60.0	320.19	327.19	-7	214.13	85.87	125	30	
65	71.0	319.23	334.23	-15	231.40	68.60	135		
70	58.5	313.07	338.07	-25	245.67	54.33	135		210
75	77.3	306.08	341.08	-35	260.24	39.76	135	20	

Working Force kN	Catalog No.	(W)	$\theta$	Spring Type PS
284	UCMSV	250	50	GS
			55	GK
			60	GD
			65	*NGS
			70	*NGK
			75	*NGD

Mark \*  
Without gas spring but accessories for installation of each type are included.

Order **Catalog No.** **(W)** -  **$\theta$**  - **PS**  
**UCMSV 250 - 60 - GK**

Spring Specification (Qty 2)

Spring Type PS	$\theta$	Spring Force N			Gas Spring Catalog No.
		F <sub>A</sub>	F <sub>E</sub>	F <sub>AP</sub>	
GS	50	10000	13180	12230	SPF.500.63 (SANKYO)
	55~65			11562	SPF.500.50 (SANKYO)
	70~75			11290	SPF.500.38 (SANKYO)
GK	50	9400	13200	12124	TU500-63.5-TD (Kaller)
	55~65			11206	TU500-50-TD (Kaller)
	70~75			13000	10926
GD	50	9400	12300	11478	90.10.00500.063 (Dadco)
	55~65			10830	90.10.00500.050 (Dadco)
	70~75			10524	90.10.00500.038 (Dadco)

NOTE

F<sub>A</sub> :Initial Force  
 F<sub>E</sub> :Final Force  
 F<sub>AP</sub> :Force at working point



Option

Code	Specification
<b>K</b>	with key
<b>NF</b>	without nitrogen gas



• Parts list is shown in p.1537  
 • Detail of key is shown in p.1536  
 • Cam diagram is shown in p.1535  
 • NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order **UCMSV250 - 60 - GK - NF**



# UCMSV250 Aerial Cam Unit Table of Components

## FOR PIERCE AND FLANGE

■  $\theta = 00^\circ \sim 45^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	FCD600(GGG60)
②	Cam Holder	1	FCD600(GGG60)
③	Base Plate R	1	S45C
④	Hexagon Socket Head Bolt	8	SCM435 M16×45
⑤	Wear Plate	2	Bronze With Graphite(VSM)
⑥	Hexagon Socket Head Bolt	22	SCM435 M8×20
⑦	Key	4	SS400
⑧	Hexagon Socket Head Bolt	4	SCM435 M6×20
⑨	Key	2	SS400
⑩	Base Plate L	1	S45C
⑪	Stopper Plate	1	SS400
⑫	Stopper	2	Urethane(PCU20)
⑬	Hexagon Socket Head Bolt	2	SCM435 M8×30
⑭	Safety Plate	2	S45C
⑮	Lock Block	1	SS400
⑯	Hexagonal Bolt	1	SCM435 M12×140
⑰	Hexagonal Nut	1	SCM435 M12
⑱	Cam Slider	1	FCD600(GGG60)
⑲	Spring Guide	1	S45C
⑳	Gas Spring Guide Plate	1	SS400
㉑	Wear Plate	2	Bronze With Graphite(VSM)
㉒	Wear Plate	2	Bronze With Graphite(VSM)
㉓	Wear Plate	2	Bronze With Graphite(VSM)
㉔	Cam Positive Return Plate	2	S45C
㉕	Hexagon Socket Head Bolt	4	SCM435 M10×30
㉖	Roller Driver	1	S45C
㉗	Dowel Pin with Female Thread	4	SUJ2 #6-30
㉘	Roller Bracket	1	SS400
㉙	Roller	1	S45C
㉚	Oiless Bush	1	Bronze with Graphite(SO#50SP2)
㉛	Roller Pin	1	S45C
㉜	E-Ring	1	
㉝	Hexagon Socket Head Bolt	2	SCM435 M8×25

■  $\theta = 50^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	FCD600(GGG60)
②	Cam Holder	1	FCD600(GGG60)
③	Base Plate R	1	S45C
④	Hexagon Socket Head Bolt	8	SCM435 M16×45
⑤	Wear Plate	2	Bronze With Graphite(VSM)
⑥	Hexagon Socket Head Bolt	22	SCM435 M8×20
⑦	Key	4	SS400
⑧	Hexagon Socket Head Bolt	4	SCM435 M6×20
⑨	Key	2	SS400
⑩	Base Plate L	1	S45C
⑪	Stopper Plate	1	SS400
⑫	Stopper	2	Urethane(PCU20)
⑬	Hexagon Socket Head Bolt	2	SCM435 M8×30
⑭	Safety Plate	2	S45C
⑮	Lock Block	1	SS400
⑯	Hexagonal Bolt	1	SCM435 M12×140
⑰	Hexagonal Nut	1	SCM435 M12
⑱	Cam Slider	1	FCD600(GGG60)
⑲	Spring Guide	1	S45C
⑳	Gas Spring Guide Plate	1	SS400
㉑	Wear Plate	2	Bronze With Graphite(VSM)
㉒	Wear Plate	2	Bronze With Graphite(VSM)
㉓	Wear Plate	2	Bronze With Graphite(VSM)
㉔	Cam Positive Return Plate	2	S45C
㉕	Hexagon Socket Head Bolt	2	SCM435 M10×30