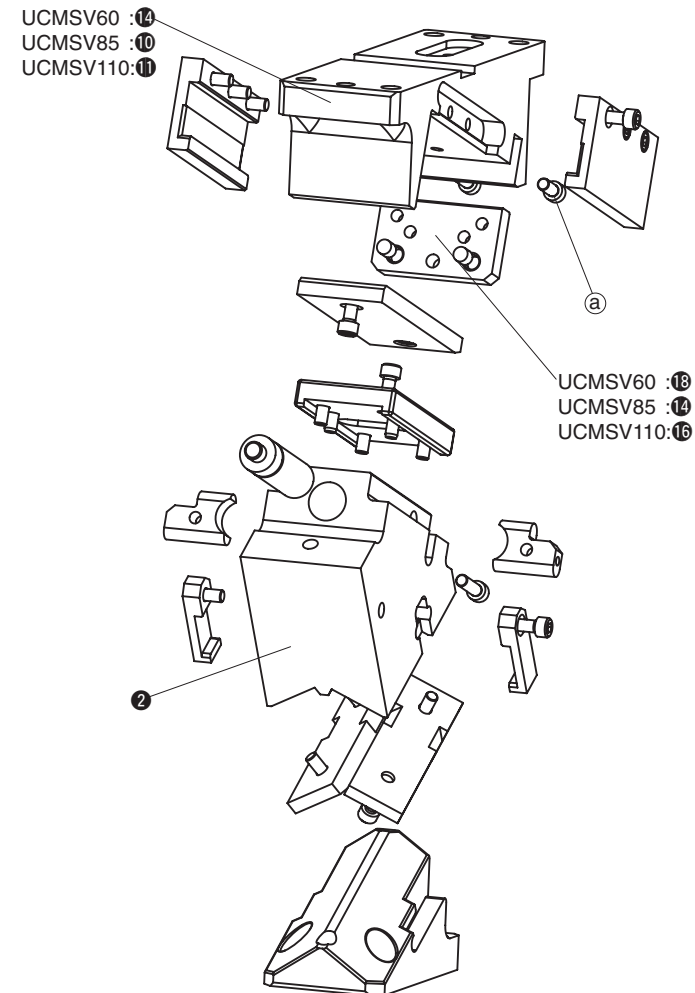


- 60, 85, 110, 165, 200, 250, 300, 350 and 400mm mounting widths are available.
- Available angles are from 0° to 75° in increments of 5°.
- Gas spring can be removed from the cam whilst in the die/press.
- Complying with VDI-BAK specification.

■UCMSV Specifications

Mounting width	Surface height	Working Angle	Travel	Working Force kN(tonf)	Mounting width	Surface height	Working Angle	Travel	Working Force kN(tonf)	Mounting width	Surface height	Working Angle	Travel	Working Force kN(tonf)
60	225	00	19.3	75 (7.6)	165	300	00	32.1	171 (17.5)	300	375	00	38.6	364 (37.1)
		05	21.3				05	35.5				05	42.6	
		10	23.3				10	38.9				10	46.7	
		15	25.4				15	42.4				15	50.9	
		20	27.6				20	46.1				20	55.3	
		25	30.0				25	50.0				25	60.0	
		30	32.6				30	54.3				30	65.1	
		35	35.4				35	59.0				35	70.8	
		40	38.6				40	64.3				40	77.1	
		45	42.3				45	70.4				45	84.5	
		50	46.7				50	77.8				50	93.3	
		55	52.3				55	81.0				55	104.6	
		60	60.0				60	90.0				60	120.0	
		65	71.0				65	104.6				65	136.6	
		70	81.9				70	120.0				70	153.1	
		75	108.2				75	136.6				75	171.6	
85	225	00	19.3	100 (10.2)	200	300	00	32.1	218 (22.2)	350	375	00	38.6	405 (41.3)
		05	21.3				05	35.5				05	42.6	
		10	23.3				10	38.9				10	46.7	
		15	25.4				15	42.4				15	50.9	
		20	27.6				20	46.1				20	55.3	
		25	30.0				25	50.0				25	60.0	
		30	32.6				30	54.3				30	65.1	
		35	35.4				35	59.0				35	70.8	
		40	38.6				40	64.3				40	77.1	
		45	42.3				45	70.4				45	84.5	
		50	46.7				50	77.8				50	93.3	
		55	52.3				55	81.0				55	104.6	
		60	60.0				60	90.0				60	120.0	
		65	71.0				65	104.6				65	136.6	
		70	81.9				70	120.0				70	153.1	
		75	108.2				75	136.6				75	171.6	
110	275	00	32.1	150 (15.3)	250	300	00	32.1	284 (29.0)	400	375	00	38.6	450 (45.9)
		05	35.5				05	35.5				05	42.6	
		10	38.9				10	38.9				10	46.7	
		15	42.4				15	42.4				15	50.9	
		20	46.1				20	46.1				20	55.3	
		25	50.0				25	50.0				25	60.0	
		30	54.3				30	54.3				30	65.1	
		35	59.0				35	59.0				35	70.8	
		40	64.3				40	64.3				40	77.1	
		45	70.4				45	70.4				45	84.5	
		50	77.8				50	77.8				50	93.3	
		55	81.0				55	81.0				55	104.6	
		60	90.0				60	90.0				60	120.0	
		65	104.6				65	104.6				65	136.6	
		70	120.0				70	120.0				70	153.1	
		75	136.6				75	136.6				75	171.6	

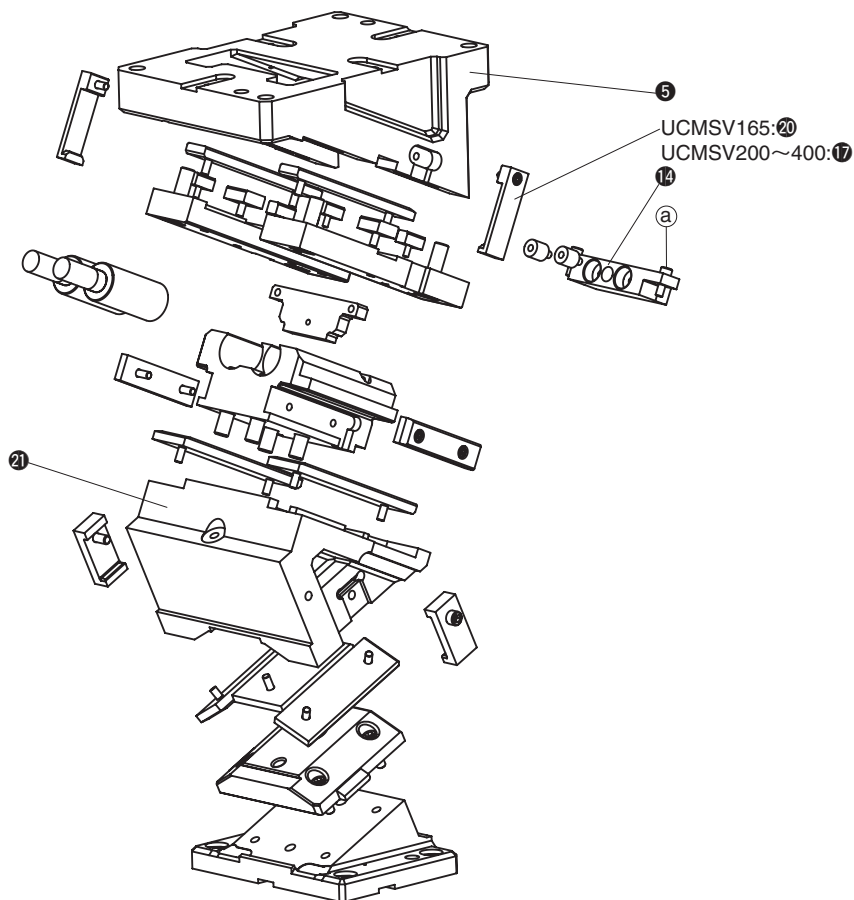
■UCMSV60/85/110 Structure and Assembly / Disassembly



- Disassembly method of UCMSV 60 / 85 / 110
 - 1) Remove hexagon socket head bolt (a) and stopper plate (UCMSV60:18, UCMSV85:14, UCMSV110:16).
 - 2) Remove cam slider (2) from cam holder (UCMSV60:14, UCMSV85:10, UCMSV110:11) at rear of cam.
- Assembly method of UCMSV 60 / 85 / 110
 - 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.

■ UCMSV165/200/250/300/350/400

Structure and Assembly / Disassembly



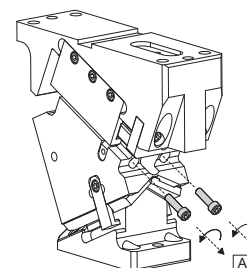
• Disassembly method of UCMSV 165 / 200 / 250 / 300 / 350 / 400

- 1) Remove safety plate (UCMSV165: 20, UCMSV200~400: 17).
- 2) Remove hexagon socket head bolt (a) and stopper plate (14).
- 3) Remove cam slider (21) from cam holder (5) at rear of cam.

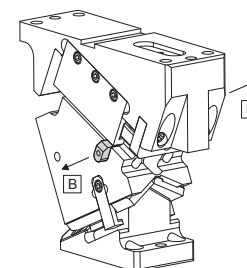
• Assembly method of UCMSV 165 / 200 / 250 / 300 / 400

- 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.

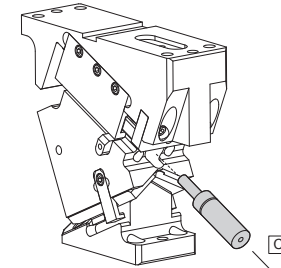
■ UCMSV60/85/110 Removing gas spring



Remove the screws of the spring stopper [A]

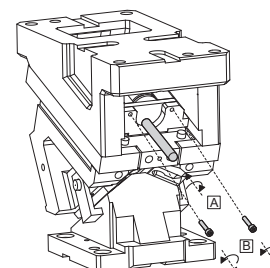


Slide out the spring stopper [B]

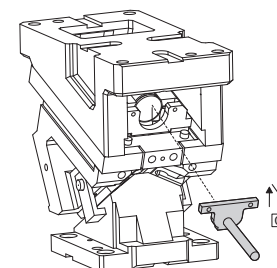


Remove the gas spring backward [C]

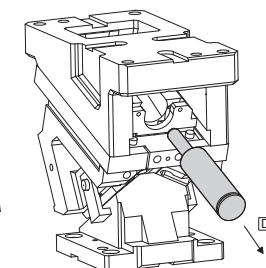
■ UCMSV165/200/250/300/350/400 Removing gas spring



-Screw the mounting lever [A]
-Remove the screws of the spring stopper [B]

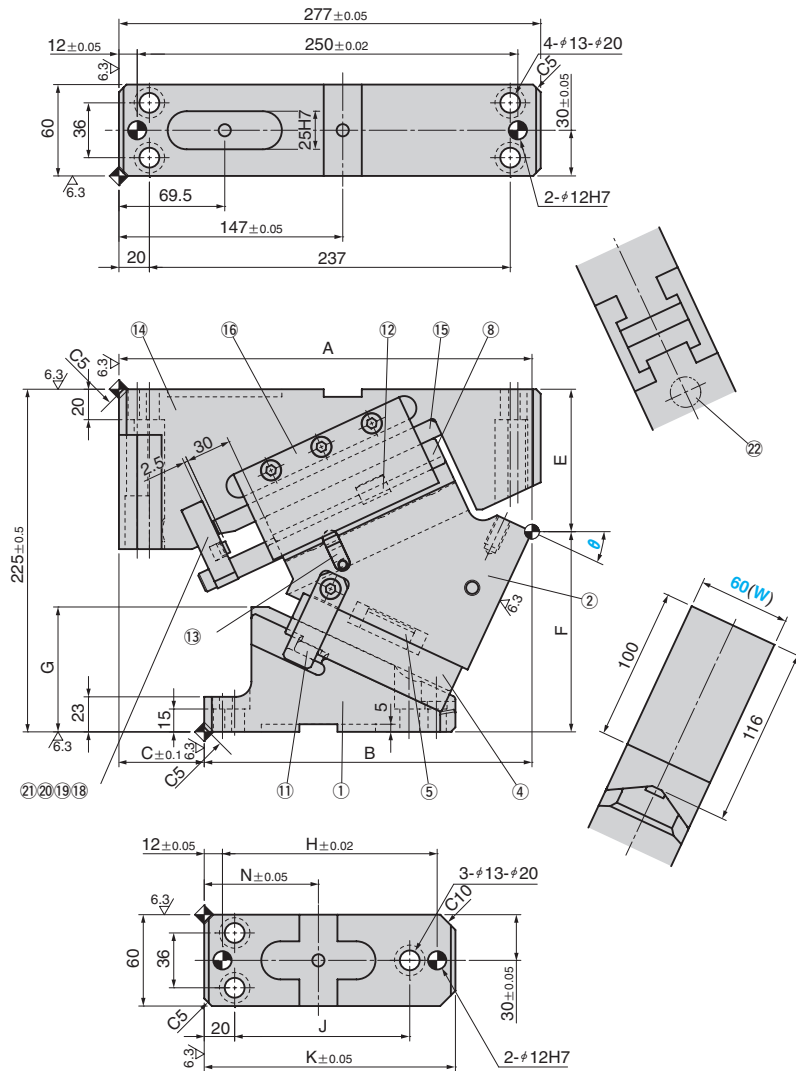


Slide out the spring stopper [C]



Remove the gas spring backward [D]

UCMSV60 (00°~45°)



θ	Travel	A	B	C	E	F	G	H	J	K	N
00	19.3	267.00	167.00	100	69.00	156.00	38.0				
05	21.3	274.45	179.45	95	73.08	151.92	46.5				
10	23.3	272.04	186.04	86	77.56	147.44	55.0				
15	25.4	273.74	196.74	77	82.44	142.56	62.0	141	115	165	75
20	27.6	273.50	204.50	69	88.73	136.27	71.0				
25	30.0	271.28	215.28	56	93.53	131.47	82.0				
30	32.6	270.02	222.02	48	98.57	126.43	96.5				
35	35.4	266.76	217.76	49	105.15	119.85	101.0				
40	38.6	262.47	223.47	39	112.10	112.90	108.0	121	95	145	65
45	42.3	256.13	225.13	31	126.50	98.50	110.0				

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	3667 (374.2)			00	
	3661 (373.5)			05	
	3654 (372.8)			10	GS
	3647 (372.1)			15	GK
	3640 (371.4)			20	GD
75	3632 (370.6)	UCMSV	60	25	*NGS
	3624 (369.8)			30	*NGK
	3616 (369.0)			35	*NGD
	3608 (368.2)			40	
	3600 (367.4)			45	

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

Order **Catalog No.** **(W)** - **θ** - **PS**
UCMSV 60 - 25 - GK

Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)	Model
GK		Initial Force Final Force	
GD	00~45	2568 (262.0) 2458 (250.8)	X170-038-TD (KALLER) U.0175.038.TO (DADCO)
GS		2734 (279.0)	SFC.170.38 (SDT)

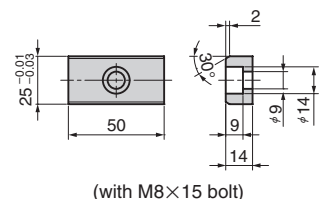


Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

- Parts list is shown in p.1647
- Cam diagram is shown in p.1645
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

Key Specification



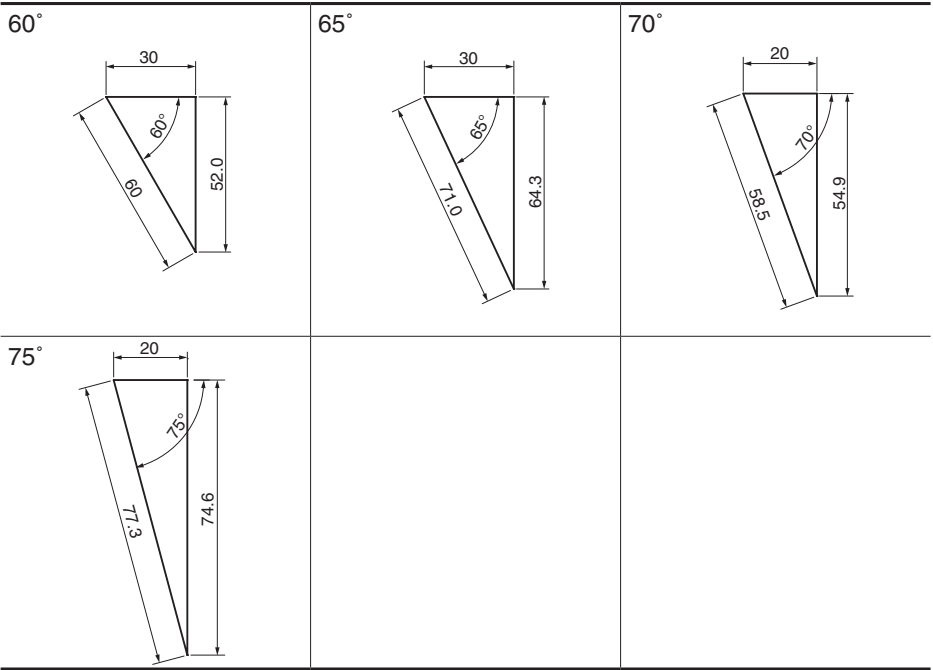
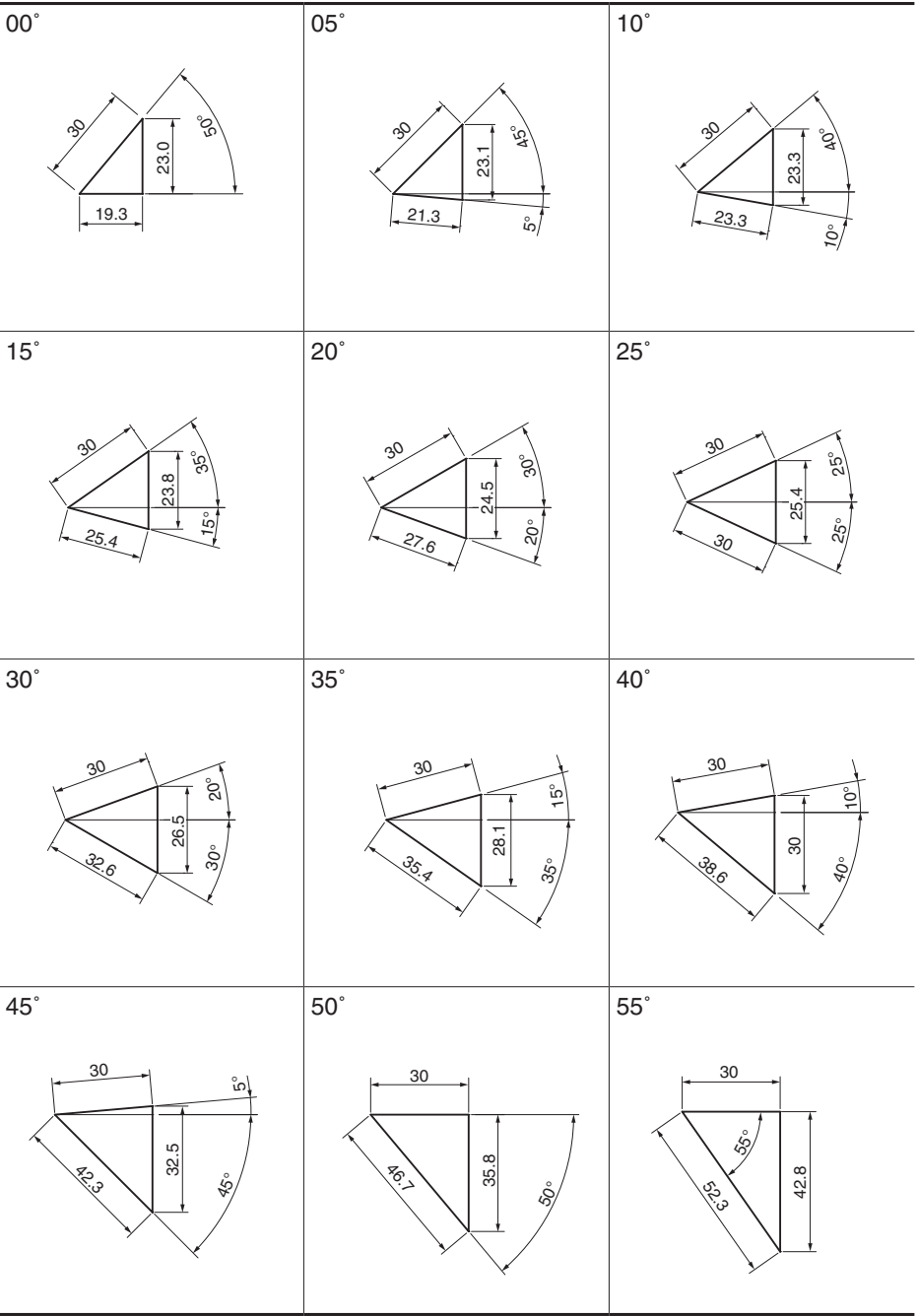
Order **UCMSV60 - 25 - GK - NF**

**UCMSV
60**

Aerial Cam Unit UCMSV60 Cam Diagram

VDI-BAK STANDARD

Cam Unit



Aerial Cam Unit Table of Components

VDI-BAK STANDARD

■ $\theta = 00^\circ \sim 65^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
④	Cam Bottom Slide Plate	1	Bronze with Graphite
⑤	KEY-B-V60-00-50	1	SS400
⑧	Slide Plate	1	S45C
⑪	Positive Return	2	S45C
⑫	Key A	1	SS400
⑬	Spring Stopper Plate	2	S45C
⑭	Cam Holder	1	GGG60
⑮	Slide Plate(VSM-19)	1	Bronze with Graphite
⑯	Slide Keeper	2	Bronze with Graphite
⑰	Stopper Plate	1	S45C
⑲	Stopper	2	Urethane (DXHK10-8-5-13)
⑳	Hexagon Socket Head Bolt	1	SCM435 M8×60
㉑	Lock Block-00-65	1	SS400
㉒	Gas Spring	1	Refer to the specification table

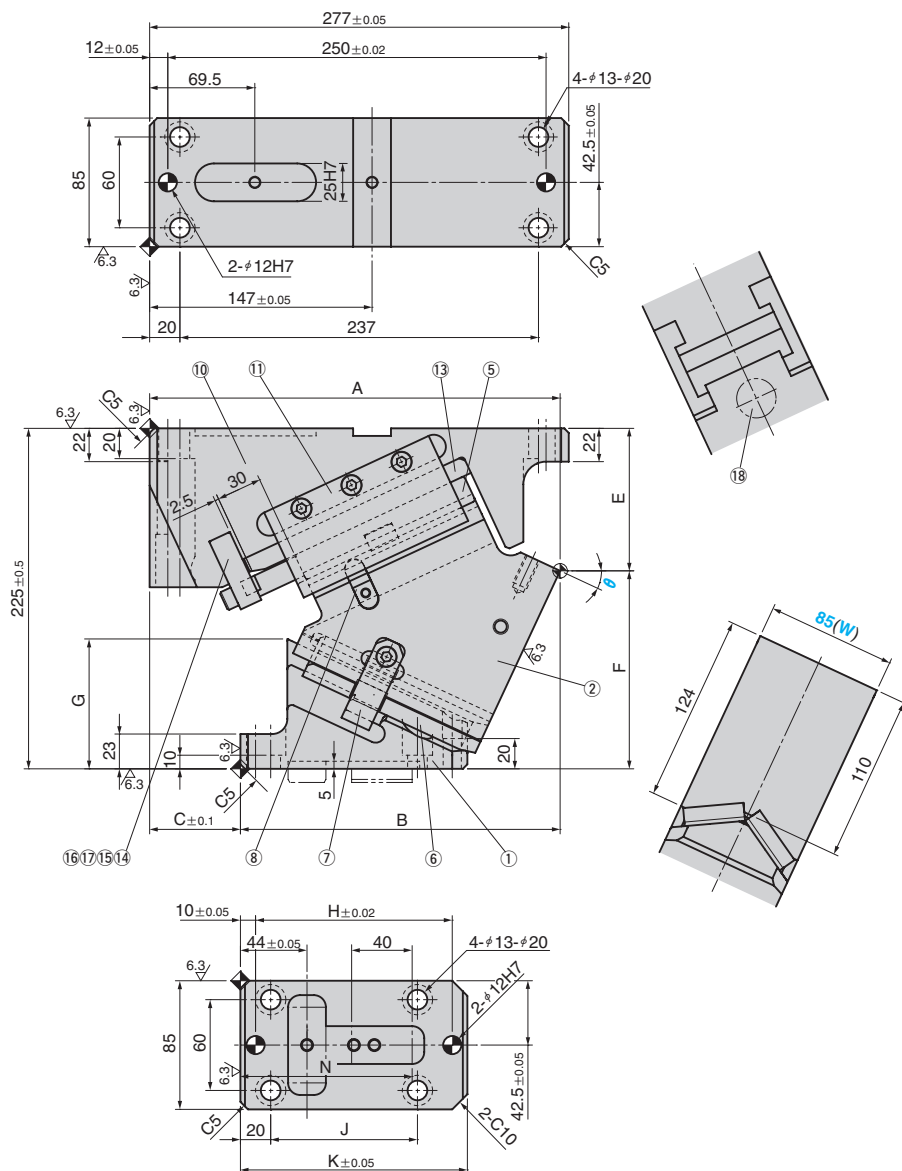
Bolts for assembly are not indicated.

■ $\theta = 70^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
④	Cam Bottom Slide Plate	1	Bronze with Graphite
⑤	KEY-B-V60-55-75	1	SS400
⑧	Slide Plate	1	S45C
⑪	Positive Return	2	S45C
⑫	Key A	1	SS400
⑬	Spring Stopper Plate	2	S45C
⑭	Cam Holder	1	GGG60
⑮	Slide Plate(VSM-18)	1	Bronze with Graphite
⑯	Slide Keeper	2	Bronze with Graphite
⑰	Stopper Plate	1	S45C
⑲	Stopper	2	Urethane (DXHK10-8-5-13)
⑳	Hexagon Socket Head Bolt	1	SCM435 M8×50
㉑	Lock Block-70-75	1	SS400
㉒	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV85 (00°~45°)



θ	Travel	A	B	C	E	F	G	H	J	K	N
00	19.3	267.00	152.00	115	63.00	162.00	45.0				
05	21.3	272.39	162.39	110	67.16	157.84	51.9				
10	23.3	275.07	174.07	101	71.77	153.23	59.7				
15	25.4	277.99	185.99	92	79.72	145.28	65.7	130	97	150	113.5
20	27.6	273.08	204.08	69	88.43	136.57	71.0				
25	30.0	271.30	211.30	60	94.15	130.85	85.8				
30	32.6	269.61	217.61	52	100.26	124.74	93.0				
35	35.4	265.99	218.99	47	103.46	121.54	104.0				
40	38.6	262.39	225.39	37	110.53	114.47	110.0	120	87	140	106.5
45	42.3	256.82	233.82	23	117.97	107.03	115.0				

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
100	7446 (759.8)	UCMSV	85	00	GS GK GD *NGP
	7436 (758.8)			05	
	7426 (757.8)			10	
	7416 (756.7)			15	
	7405 (755.6)			20	
	7393 (754.4)			25	
	7382 (753.2)			30	
	7370 (752.0)			35	
	7358 (750.8)			40	
	7346 (749.6)			45	

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



Order

Catalog No. (W) – θ – PS
UCMSV 85 – 25 – GK

■ Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	00~45		4858 (495.7)	X320-038-TD (KALLER)
GD		—	4574 (466.7)	U.0325.038.TO (DADCO)
GS			5576 (569.0)	SFC.320.38 (SDT)



Options

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



• Parts list is shown in p.1655

- Cam diagram is shown in p.1653

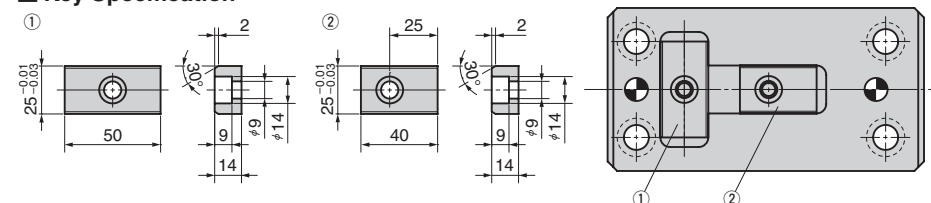
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



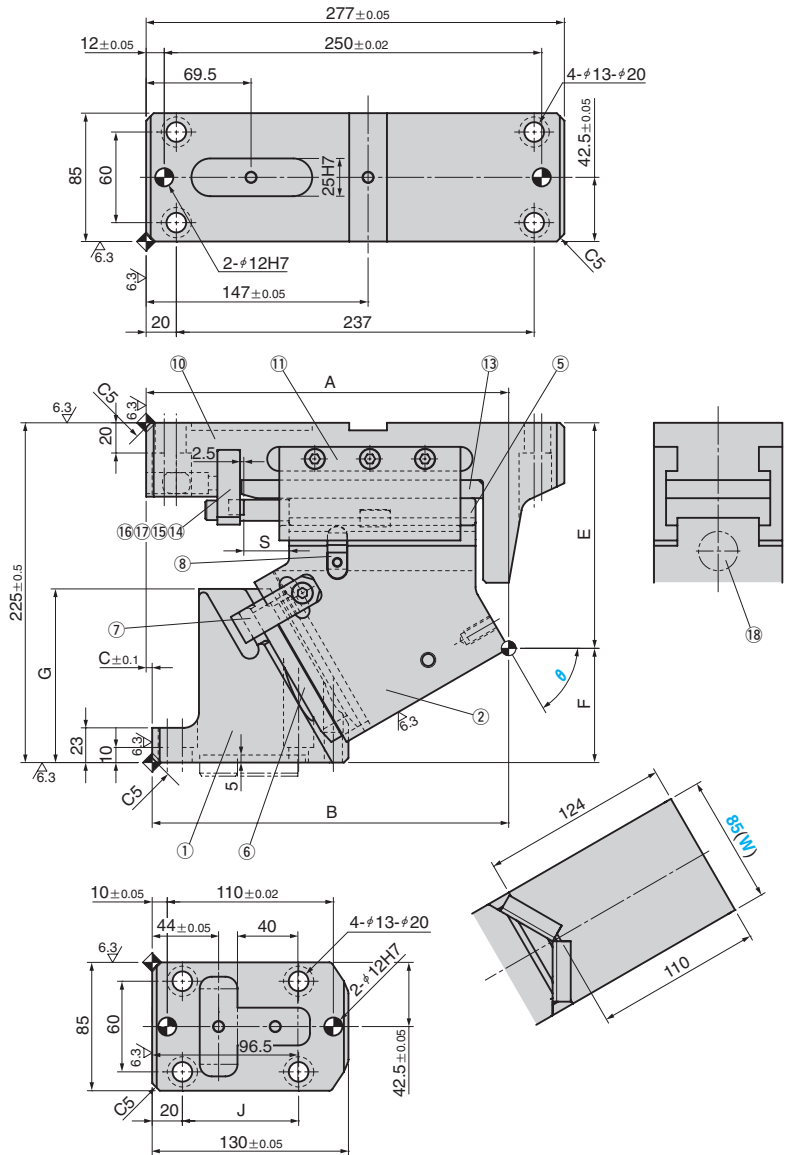
Order

UCMSV85 - 25 - GK - NF

■ Key Specification

UCMSV
85

UCMSV85 (50°~75°)



θ	Travel	A	B	C	E	F	G	S	J
50	46.7	249.24	229.24	20	133.48	91.52	115.0		
55	52.3	250.67	231.67	19	140.79	84.21	110.0	30	77
60	60.0	240.10	236.10	4	149.35	75.65	115.0		
65	71.0	235.00	240.00	-5	159.05	65.95	120.0		
70	58.5	230.00	245.00	-15	168.88	56.12		20	80
75	77.3	228.00	253.00	-25	186.99	38.01	135.0		90

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	7334 (748.3)			50	
	7979 (814.2)			55	GS
	8822 (900.2)			60	GK
	9948 (1015.1)			65	GD
	11571 (1180.7)			70	*NGP
	13839 (1412.2)			75	

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

Order **Catalog No.** (W) - θ - PS
UCMSV 85 - 60 - GK

Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	50~65		4858 (495.7)	X320-038-TD (KALLER)
GD		—	4574 (466.7)	U.0325.038.TO (DADCO)
GS			5576 (569.0)	SFC.320.38 (SDT)
GK	70・75		4800 (489.8)	X320-025-TD (KALLER)
GD		—	4592 (468.6)	U.0325.025.TO (DADCO)
GS			5608 (572.2)	SFC.320.25 (SDT)



Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



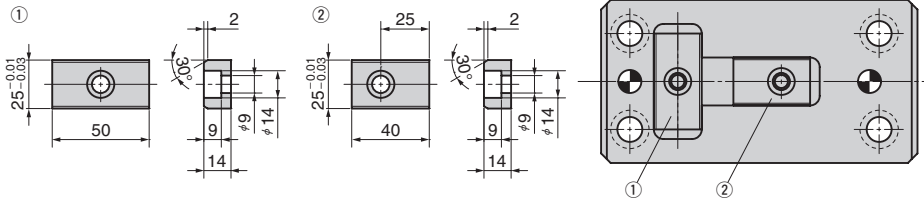
• Parts list is shown in p.1655
 • Cam diagram is shown in p.1653
 • NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

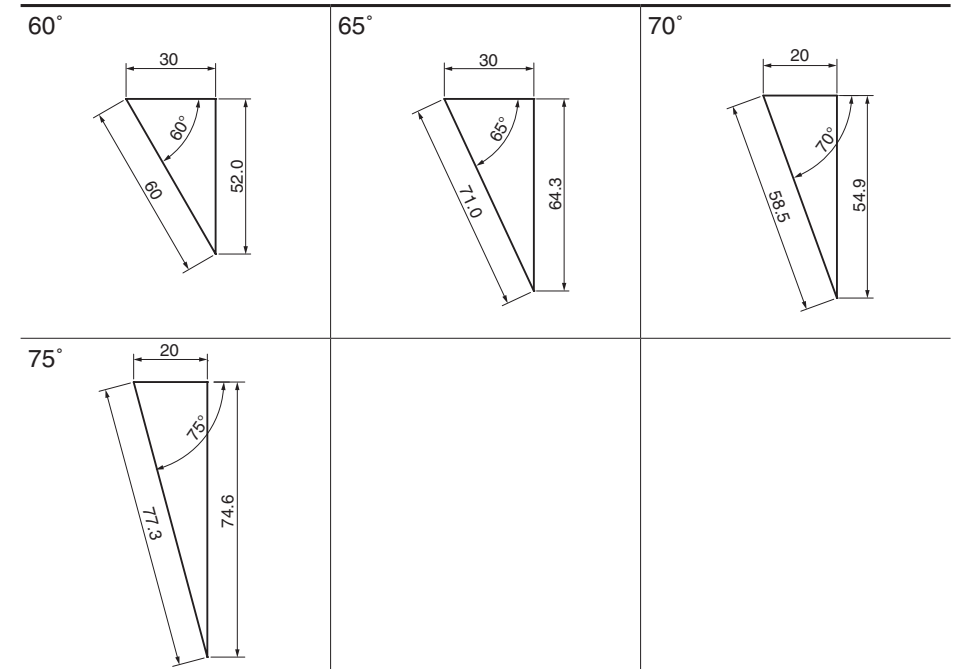
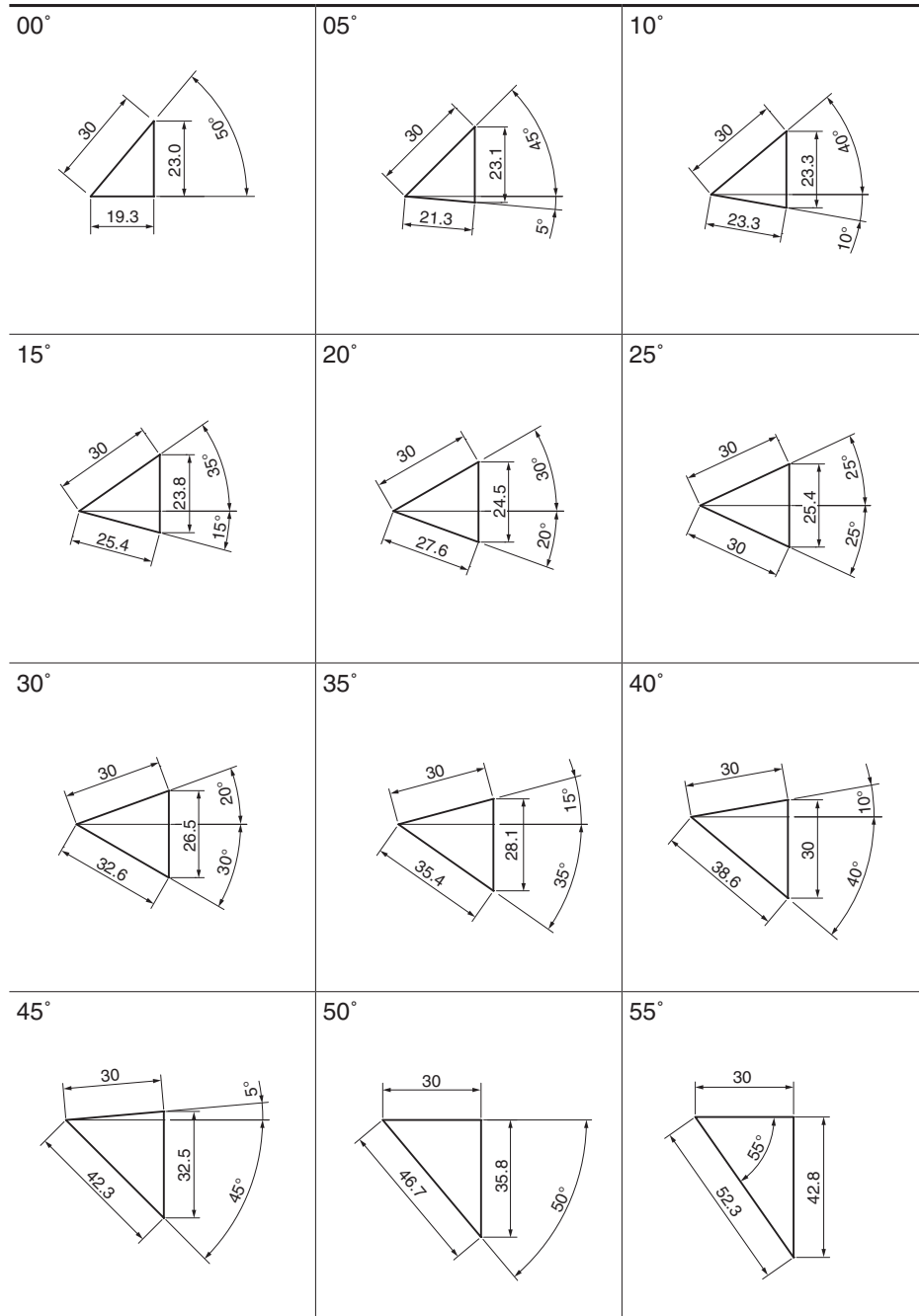
UCMSV85 - 60 - GK - NF

Key Specification



Aerial Cam Unit UCMSV85 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 65^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
⑤	Slide Plate	1	S45C
⑥	Slide Plate(VSM-18)	2	Bronze with Graphite
⑦	Positive Return	2	S45C
⑧	Spring Stopper Plate	2	S45C
⑩	Cam Holder	1	GGG60
⑪	Slide Keeper	2	Bronze with Graphite
⑬	Slide Plate (VSM-29)	1	Bronze with Graphite
⑭	Stopper Plate	1	S45C
⑮	Stopper	2	Urethane
⑯	Lock Block-00-65	1	SS400
⑰	Hexagon Socket Head Bolt	1	SCM435 M8×60
⑱	Gas Spring	1	Refer to the specification table

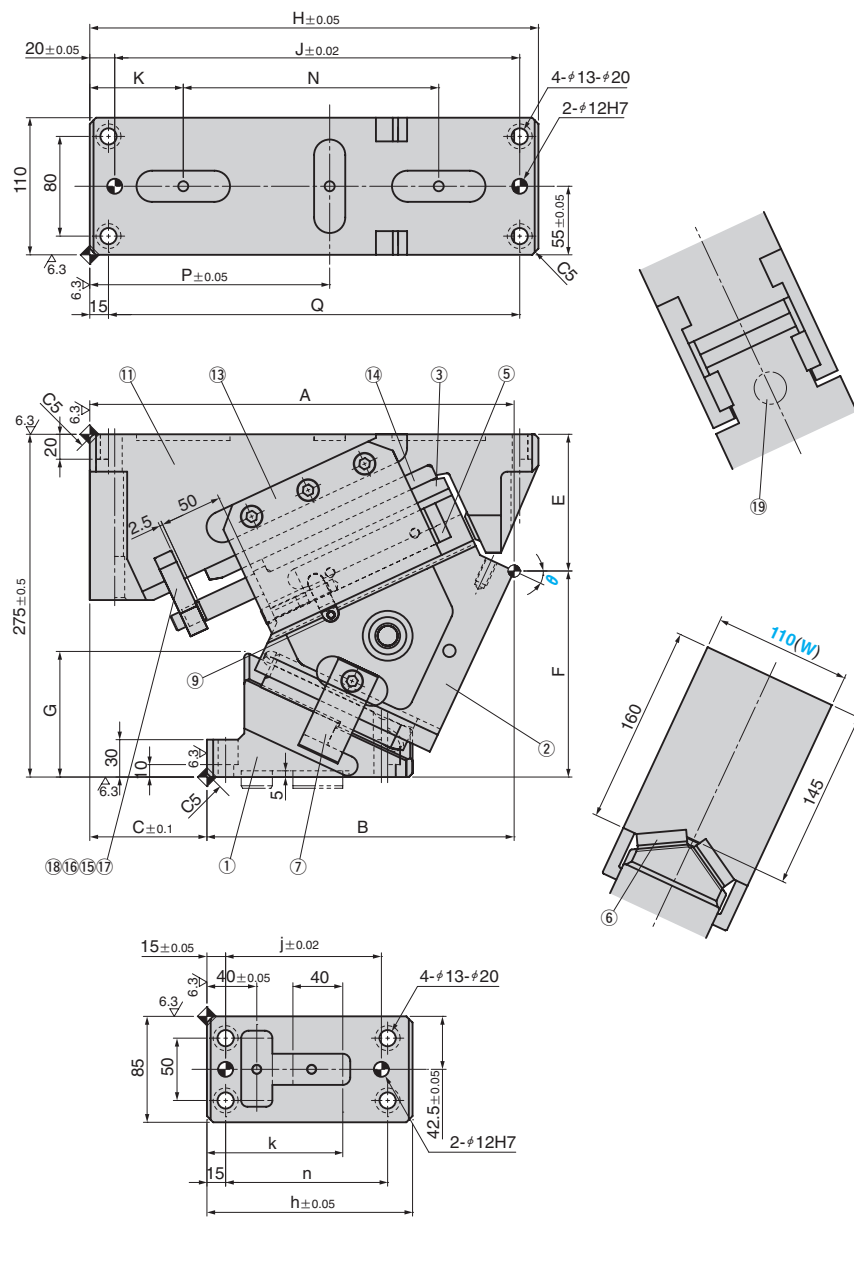
Bolts for assembly are not indicated.

■ $\theta = 70^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
⑤	Slide Plate	1	S45C
⑥	Slide Plate(VSM-17)	2	Bronze with Graphite
⑦	Positive Return	2	S45C
⑧	Spring Stopper Plate	2	S45C
⑩	Cam Holder	1	GGG60
⑪	Slide Keeper	2	Bronze with Graphite
⑬	Slide Plate (VSM-28)	1	Bronze with Graphite
⑭	Stopper Plate	1	S45C
⑮	Stopper	2	Urethane
⑯	Lock Block-70-75	1	SS400
⑰	Hexagon Socket Head Bolt	1	SCM435 M8×55
⑱	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV110 (00°~45°)



θ	Travel	A	B	C	E	F	G	H	J	K	N	P	Q
00	32.1	318.00	180.00	138	70.00	205.00	55.0	330	295	70	185	137.5	300
05	35.5	324.46	194.46	130	79.26	195.74	59.6						
10	38.9	330.22	209.22	121	84.13	190.87	70.2						
15	42.4	336.2	222.2	114	94.45	180.55	76.8	360	325	75	205	192.5	330
20	46.1	339.32	234.32	105	100.42	174.58	89.3						
25	50.0	340.51	246.51	94	109.67	165.33	100.8						
30	54.3	348.36	278.36	70	120.54	154.46	124.5						
35	59.0	343.52	289.52	54	127.82	147.18	125.0						
40	64.3	332.59	268.59	64	139.41	135.59	130.0						
45	70.4	322.52	277.52	45	149.44	125.56	140.0						

j	k	n	h	Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type P3
125	109	130	165	150	7533 (768.7)	UCMSV	110	00	GS GK GD *NGP
					7516 (767.0)			05	
					7499 (765.2)			10	
					7480 (763.3)			15	
					7461 (761.3)			20	
140	115	145	180	150	7441 (759.2)	UCMSV	110	25	GS GK GD *NGP
					7420 (757.1)			30	
					7399 (755.0)			35	
105	95	110	150	150	7378 (752.8)	UCMSV	110	40	GS GK GD *NGP
					7356 (750.6)			45	

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



Order

Catalog No. (W) – θ – PS
UCMSV 110 – 25 – GK

■ **Spring Specification (Qty 1)**

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	00~45		4867 (496.6)	X320-063-TD (KALLER)
GD		—	4581 (467.4)	U.0325.063.TO (DADCO)
GS			5589 (570.3)	SFC.320.63 (SDT)



Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

 • Parts list is shown in p.1663

- Cam diagram is shown in p.1661

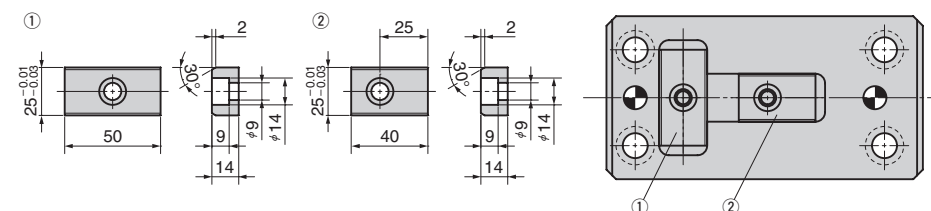
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

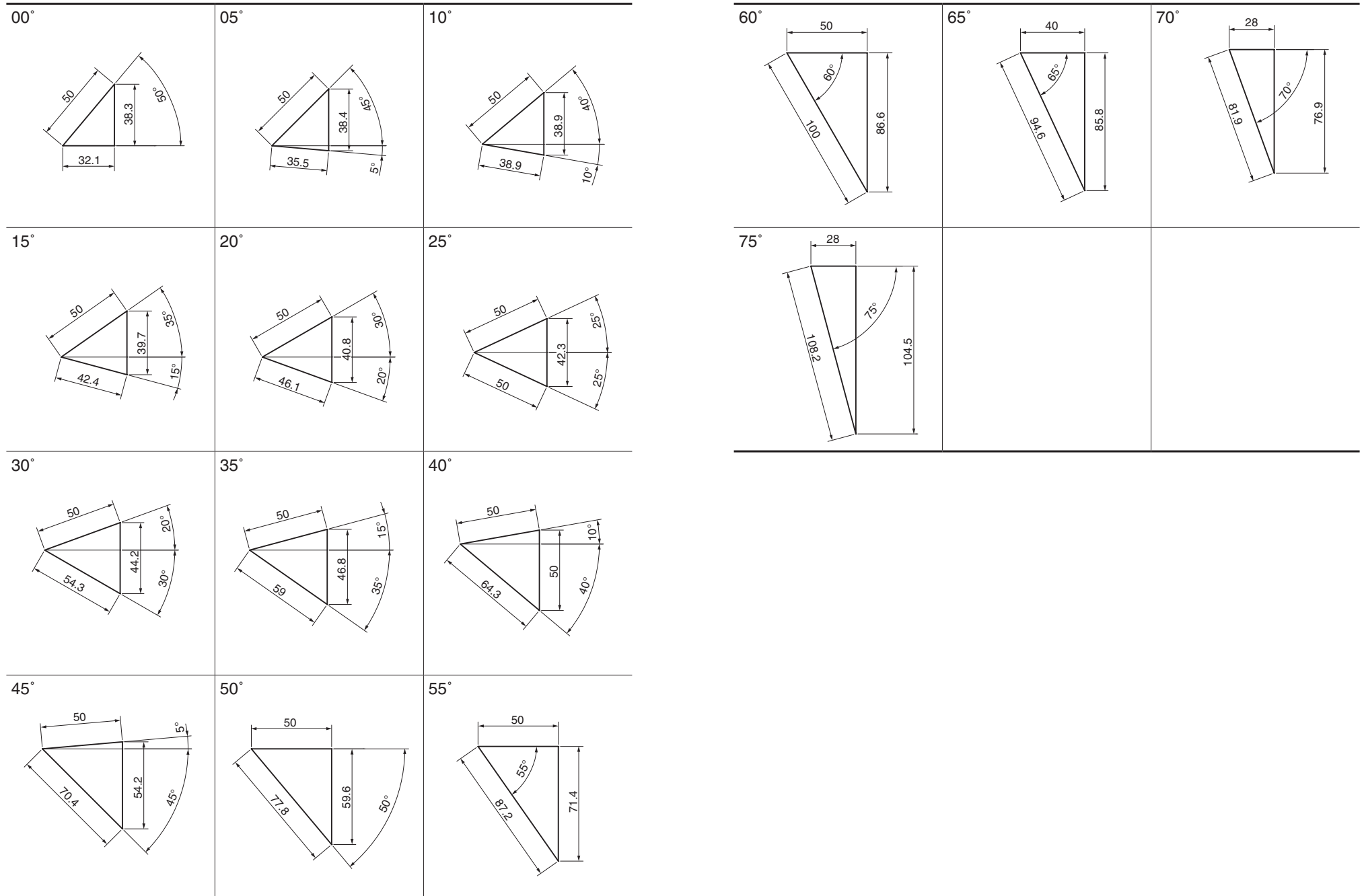
UCMSV110 - 25 - GK - NF

■ Key Specification

UCMSV
110

Aerial Cam Unit UCMSV110 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 60^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
③	Slide Plate(VSM-34)	1	Bronze with Graphite
⑤	Oilless Plate C	2	SCM435
⑥	Slide Plate(VSM-18)	2	Bronze with Graphite
⑦	Positive Return Plate	2	S45C
⑨	Spring Stopper Plate	2	S45C
⑪	Cam Holder	1	GGG60
⑬	Slide Keeper	2	Bronze with Graphite
⑭	Slide Plate(VSM-65)	1	SCM435
⑮	Stopper	2	Urethane
⑯	Stopper Plate	1	S45C
⑰	Look Block	1	SS400
⑱	Hexagon Socket Head Bolt	1	SCM435 M8×80
⑲	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

■ $\theta = 65^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
③	Slide Plate(VSM-34)	1	Bronze with Graphite
⑤	Oilless Plate C	2	SCM435
⑥	Slide Plate(VSM-18)	2	Bronze with Graphite
⑦	Positive Return Plate	2	S45C
⑨	Spring Stopper Plate	2	S45C
⑪	Cam Holder	1	GGG60
⑬	Slide Keeper	2	Bronze with Graphite
⑭	Slide Plate(VSM-65)	1	SCM435
⑮	Stopper	2	Urethane
⑯	Stopper Plate	1	S45C
⑰	Lock Block	1	SS400
⑱	Hexagon Socket Head Bolt	1	SCM435 M8×75
⑲	Gas Spring	1	Refer to the specification table

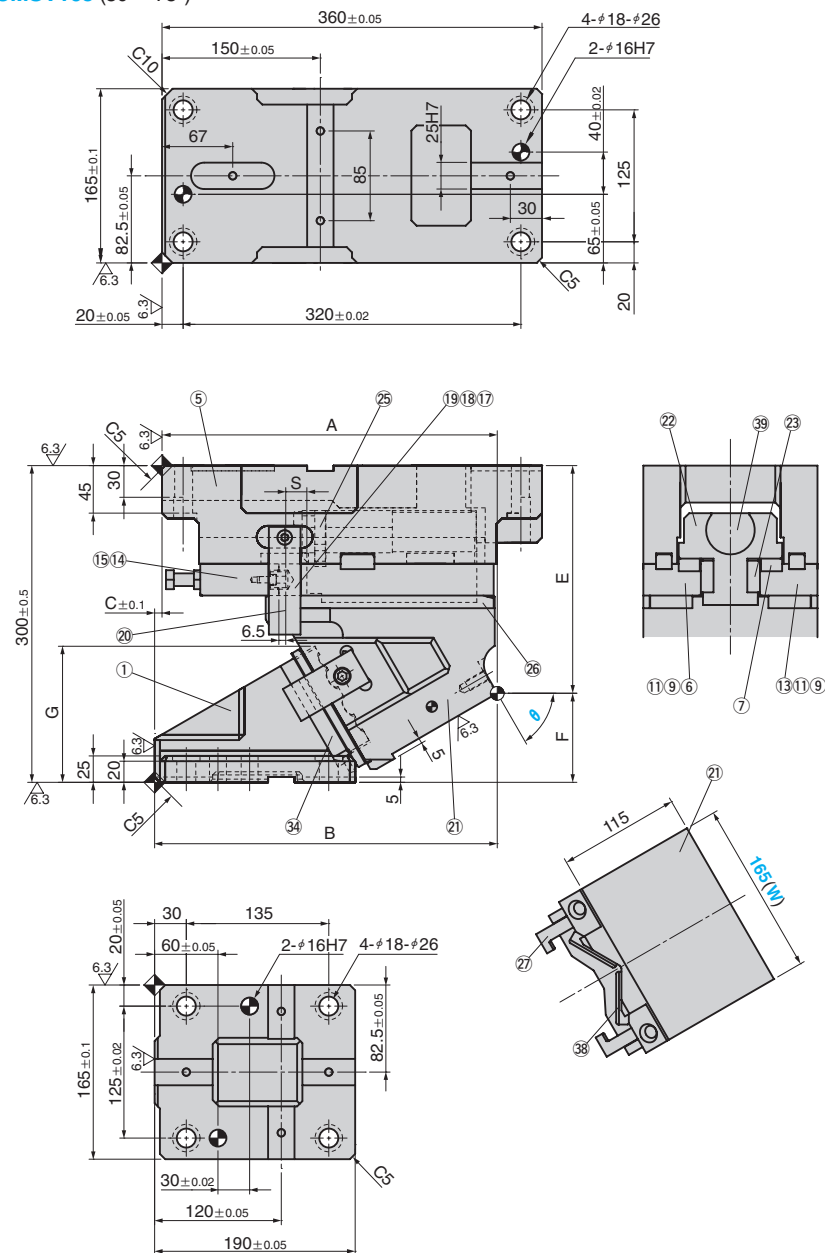
Bolts for assembly are not indicated.

■ $\theta = 70^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
②	Cam Slider	1	GGG60
③	Slide Plate(VSM-34)	1	Bronze with Graphite
⑤	Oilless Plate C	2	SCM435
⑥	Slide Plate(VSM-18)	2	Bronze with Graphite
⑦	Positive Return Plate	2	S45C
⑨	Spring Stopper Plate	2	S45C
⑪	Cam Holder	1	GGG60
⑬	Slide Keeper	2	Bronze with Graphite
⑭	Slide Plate(VSM-65)	1	SCM435
⑮	Stopper	2	Urethane
⑯	Stopper Plate	1	S45C
⑰	Look Block	1	SS400
⑱	Hexagon Socket Head Bolt	1	SCM435 M8×60
⑲	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV165 (50°~75°)



θ	Travel	A	B	C	E	F	G	S
50	77.8	327.27	317.27	10	195.63	104.37	141.2	50
55	61.0	324.39	324.39	0	210.20	89.80	127.3	35
60	40.0	317.59	324.59	-7	215.63	84.37	128.9	20
65	47.3	314.23	329.23	-15	231.40	68.60	132.5	
70	58.5	308.07	333.07	-25	245.67	54.33	132.9	
75	58.0	301.08	336.08	-35	260.24	39.76	132.3	15

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	14705 (1500.5)			50	
	15372 (1568.5)			55	GS
171	15715 (1603.6)	UCMSV	165	60	GK
	17719 (1808.0)			65	GD
	20488 (2090.6)			70	*NGP
	22993 (2346.2)			75	

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



Order

Catalog No.	(W)	—	θ	—	PS
UCMSV	165	—	60	—	GK

■ Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	50	—	10892 (1111.4)	X750-063-TD (KALLER)
GD			10526 (1074.1)	U.0800.063.TO (DADCO)
GS			11190 (1141.8)	SFC.750.63 (SDT)
GK	55	—	10480 (1069.4)	X750-050-TD (KALLER)
GD			10148 (1035.5)	U.0800.050.TO (DADCO)
GS			10755 (1097.4)	SFC.750.50 (SDT)
GK	60~70	—	9716 (991.4)	X750-038-TD (KALLER)
GD			9446 (963.9)	U.0800.038.TO (DADCO)
GS			9947 (1015.0)	SFC.750.38 (SDT)
GK	75	—	9137 (932.3)	X750-038-TD (KALLER)
GD			8915 (909.7)	U.0800.038.TO (DADCO)
GS			9336 (952.7)	SFC.750.38 (SDT)



 Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



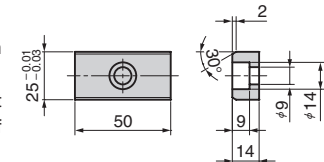
Order

UCMSV165 - 60 - GK - NF

■ Key Specification



- Parts list is shown in p.1671
- Cam diagram is shown in p.1669
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

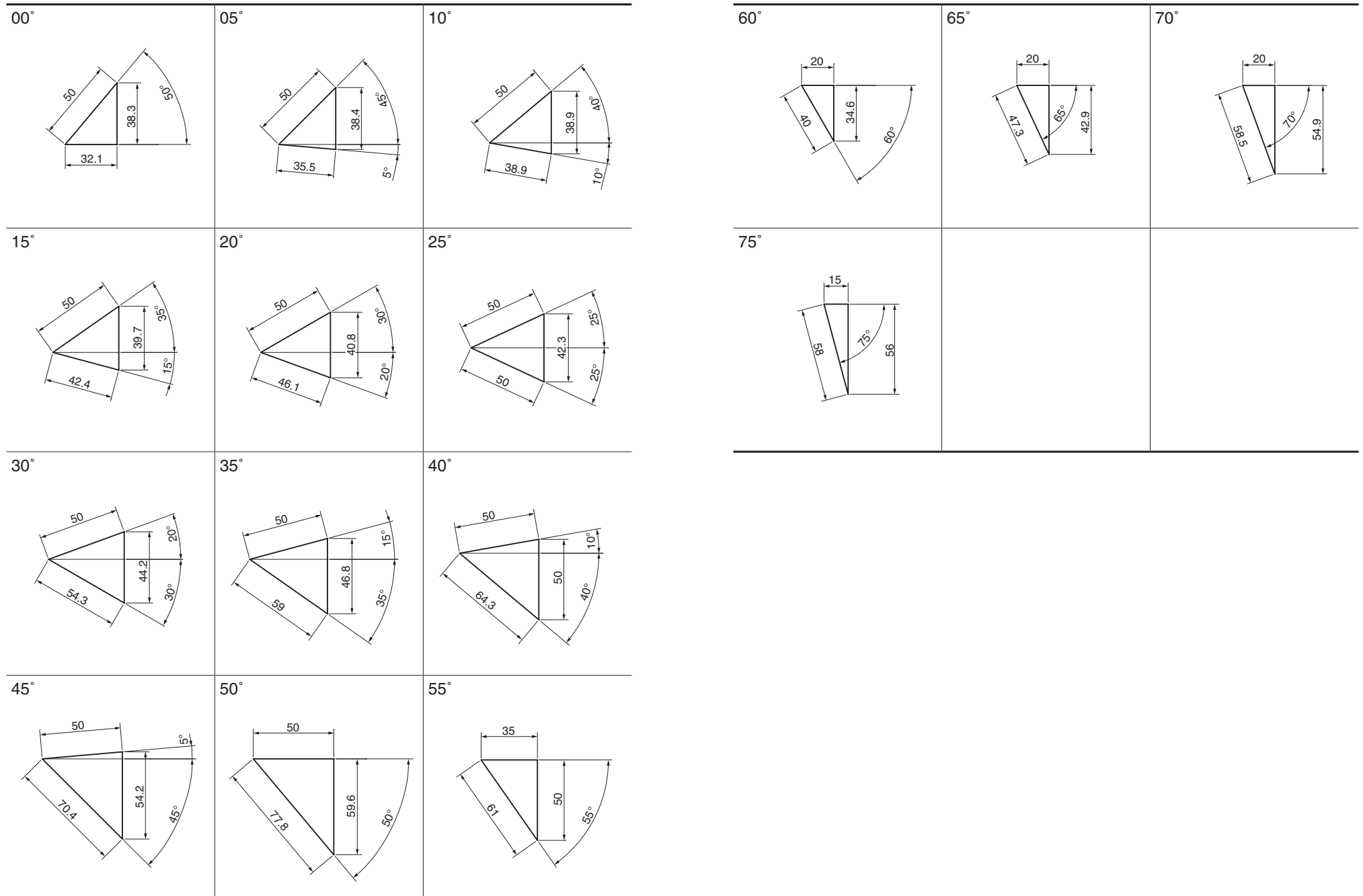


(with M8×15 bolt)

UCMSV
165

Aerial Cam Unit UCMSV165 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 50^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Wear Plate	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	1	Urethane (PCU15)
⑰	Lock Block	1	SS400
⑱	Hexagonal Bolt	2	SCM435 M12×140
⑲	Hexagonal Nut	2	SCM435 M12
⑳	Safety Plate	2	S45C
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Slide Plate(VSM-13)	2	Bronze with Graphite
㉔	Gas Spring Guide Plate	1	S45C
㉕	Slide Plate(VSM-20)	2	Bronze with Graphite
㉖	Cam Positive Return Plate	2	S45C
㉗	Cam Slide Guide	1	S45C
㉘	Slide Plate(VSM-24)	2	Bronze with Graphite
㉙	Gas Spring	1	Refer to the specification table

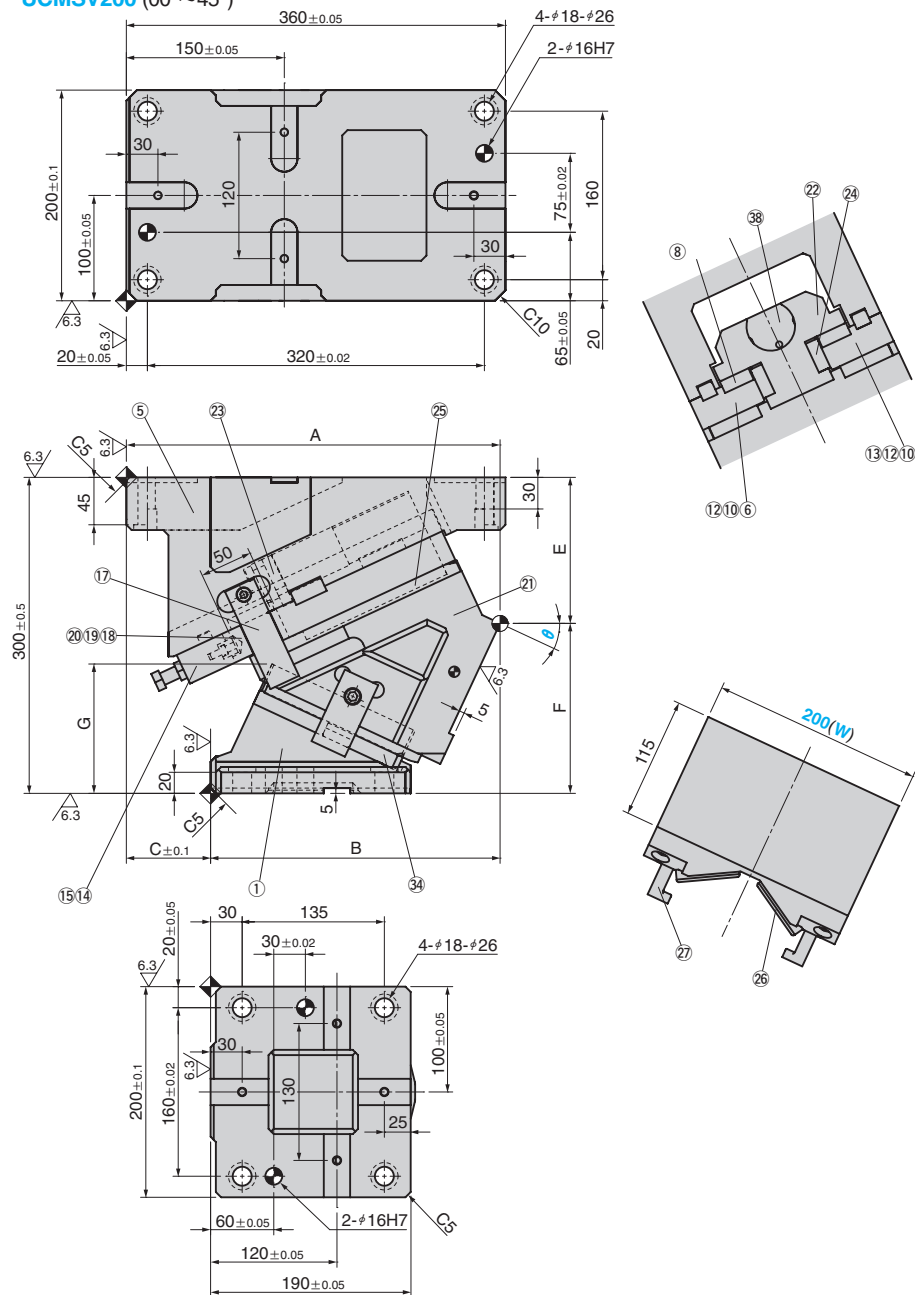
Bolts for assembly are not indicated.

■ $\theta = 55^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Wear Plate	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	1	Urethane (PCU15)
⑰	Lock Block	1	SS400
⑱	Hexagonal Bolt	2	SCM435 M12×140
⑲	Hexagonal Nut	2	SCM435 M12
⑳	Safety Plate	2	S45C
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Slide Plate(VSM-13)	2	Bronze with Graphite
㉔	Gas Spring Guide Plate	1	S45C
㉕	Slide Plate(VSM-20)	2	Bronze with Graphite
㉖	Cam Positive Return Plate	2	S45C
㉗	Cam Slide Guide	1	S45C
㉘	Slide Plate(VSM-23)	2	Bronze with Graphite
㉙	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV200 (00°~45°)



θ	Travel	A	B	C	E	F	G
00	32.1	360.00	210.00	150	95.00	205.00	78.5
05	35.5	356.25	222.25	134	100.91	199.09	88.8
10	38.9	359.27	241.27	118	111.09	188.91	95.6
15	42.4	355.78	244.78	111	122.47	177.53	101.9
20	46.1	355.68	262.68	93	130.00	170.00	112.7
25	50.0	354.88	274.88	80	138.62	161.38	122.8
30	54.3	357.28	287.28	70	148.28	151.72	132.2
35	59.0	345.80	281.80	64	158.89	141.11	140.7
40	64.3	344.27	286.27	58	170.38	129.62	148.4
45	70.4	344.86	304.86	40	182.66	117.34	155.2

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	15061 (1536.8)			00	
	15030 (1533.6)			05	
	14996 (1530.2)			10	
	14961 (1526.7)			15	GS
218	14925 (1523.0)	UCMSV	200	20	GK
	14887 (1519.1)			25	GD
	14849 (1515.2)			30	*NGP
	14810 (1511.2)			35	
	14770 (1507.2)			40	
	14730 (1503.1)			45	

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



Order

Catalog No.	(W)	—	θ	—	PS
UCMSV	200	—	25	—	GK

■ Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	00~45		10892 (1111.4)	X750-063-TD (KALLER)
GD		—	10526 (1074.1)	U.0800.063.TO (DADCO)
GS			11190 (1141.8)	SFC.750.63 (SDT)



Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



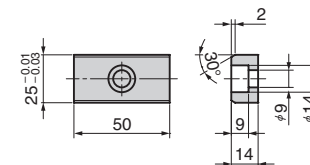
Order

UCMSV200 – 25 – GK – NF

■ Key Specification



- Parts list is shown in p.1679
- Cam diagram is shown in p.1677
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

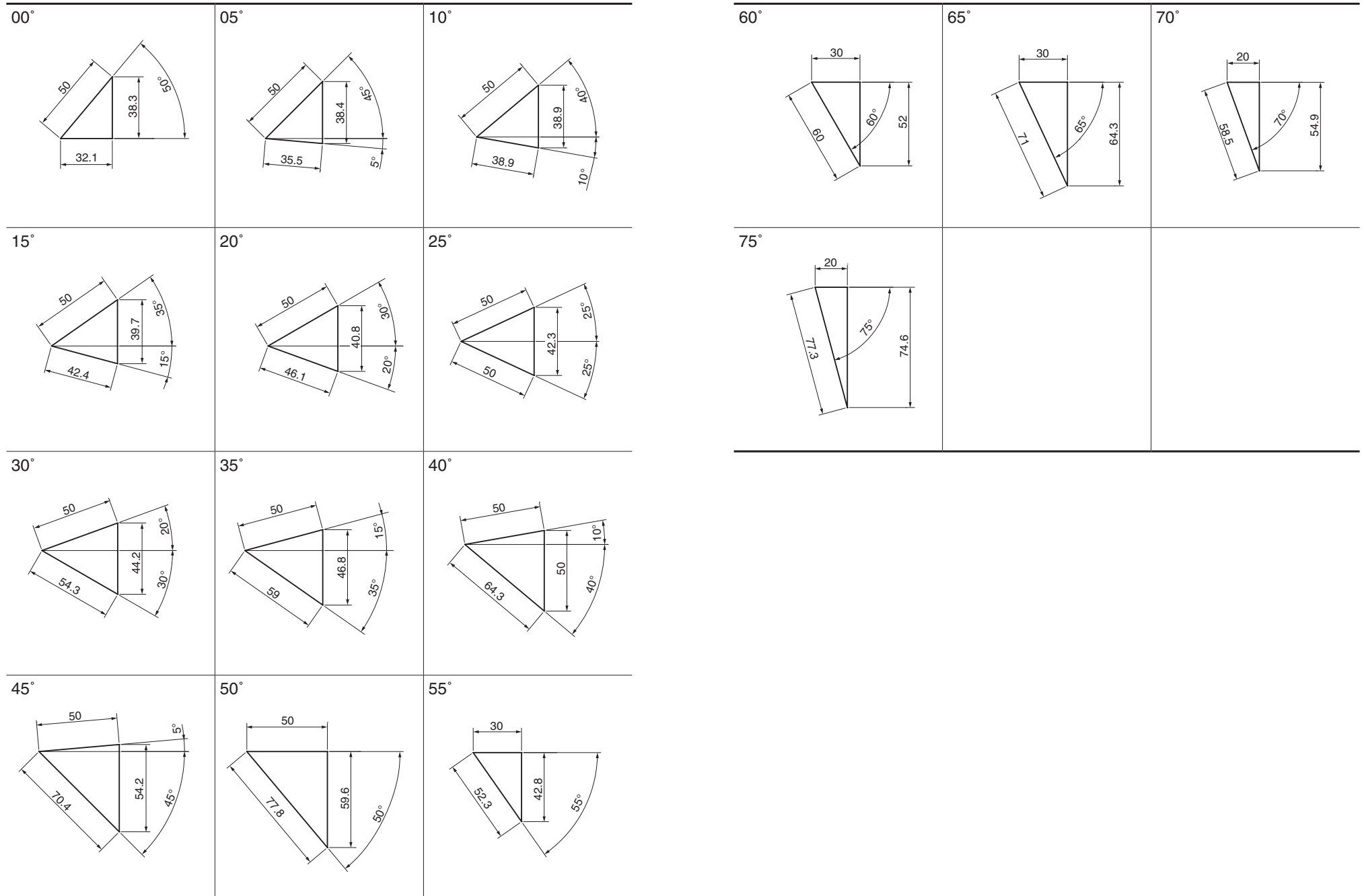


(with M8×15 bolt)

**UCMSV
200**

Aerial Cam Unit UCMSV200 Cam Diagram

VDI-BAK STANDARD



UCMSV200 Aerial Cam Unit Table of Components

VDI-BAK STANDARD

■ $\theta = 00^\circ \sim 50^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑧	Slide Plate(VSM-15)	2	Bronze with Graphite
⑩	Key	4	SS400
⑫	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	1	Urethane (PCU15)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	2	SCM435 M12×140
⑳	Hexagonal Nut	2	SCM435 M12
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-13)	2	Bronze with Graphite
㉕	Slide Plate(VSM-25)	2	Bronze with Graphite
㉖	Slide Plate(VSM-29)	2	Bronze with Graphite
㉗	Cam Positive Return Plate	2	S45C
㉘	Cam Slide Plate	1	S45C
㉙	Gas Spring	1	Refer to the specification table

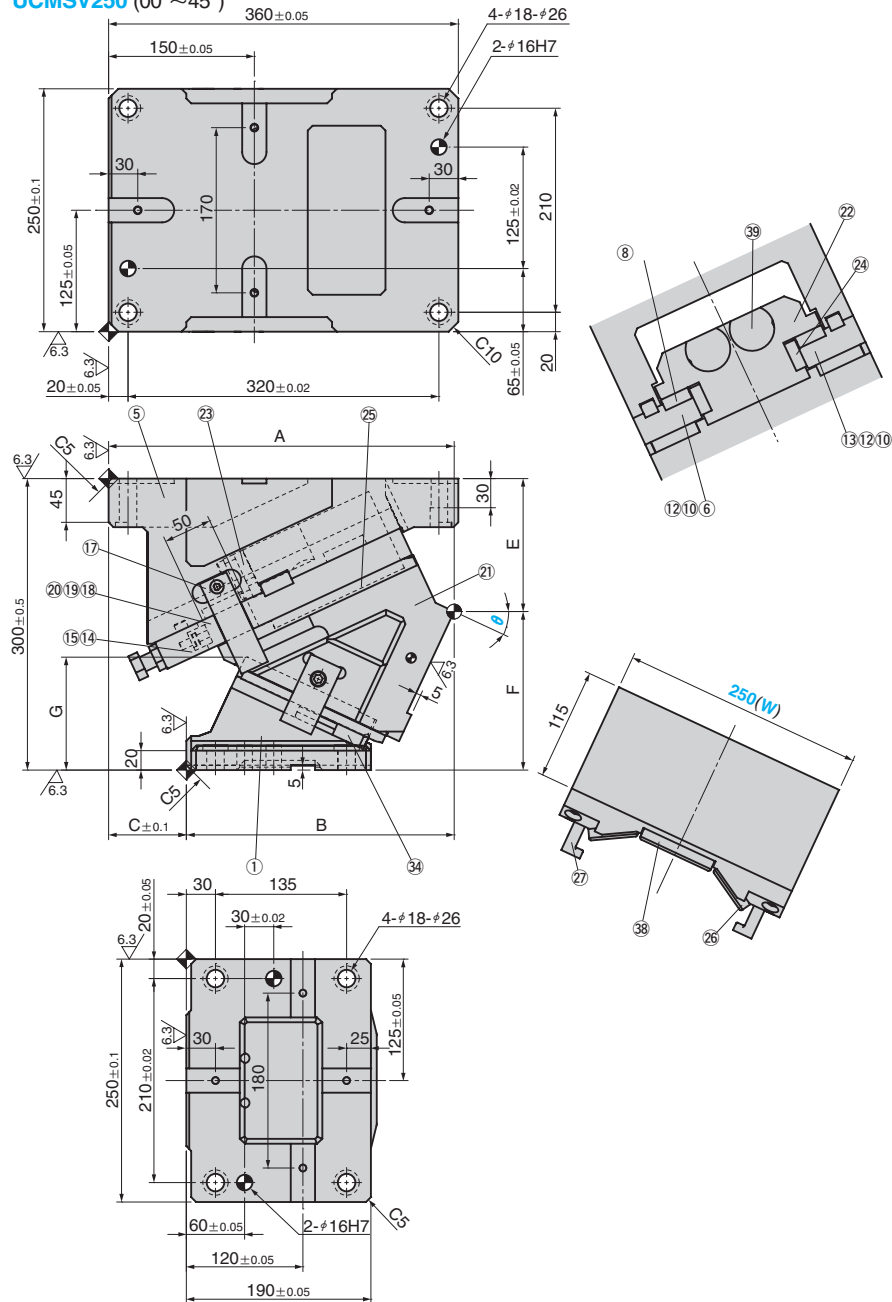
Bolts for assembly are not indicated.

■ $\theta = 55^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑧	Slide Plate(VSM-15)	2	Bronze with Graphite
⑩	Key	4	SS400
⑫	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	1	Urethane (PCU15)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	2	SCM435 M12×140
⑳	Hexagonal Nut	2	SCM435 M12
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-13)	2	Bronze with Graphite
㉕	Slide Plate(VSM-25)	2	Bronze with Graphite
㉖	Slide Plate(VSM-28)	2	Bronze with Graphite
㉗	Cam Positive Return Plate	2	S45C
㉘	Cam Slide Plate	1	S45C
㉙	Gas Spring	1	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV250 (00°~45°)



θ	Travel	A	B	C	E	F	G
00	32.1	360.00	210.00	150	95.00	205.00	72.5
05	35.5	356.43	222.43	134	98.92	201.08	84.8
10	38.9	359.62	241.62	118	109.12	190.88	91.7
15	42.4	356.30	245.30	111	120.53	179.47	96.8
20	46.1	356.37	263.37	93	128.12	171.88	107.2
25	50.0	355.73	275.73	80	136.81	163.19	117.1
30	54.3	358.28	288.28	70	146.55	153.45	126.2
35	59.0	346.94	282.94	64	157.25	142.75	134.6
40	64.3	345.56	287.56	58	168.85	131.15	142.1
45	70.4	346.27	306.27	40	181.24	118.76	148.8

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	29916 (3052.7)			00	
	29876 (3048.5)			05	
	29832 (3044.0)			10	
	29786 (3039.4)			15	GS
284	29738 (3034.5)	UCMSV	250	20	GK
	29688 (3029.4)			25	GD
	29637 (3024.2)			30	*NGP
	29586 (3019.0)			35	
	29534 (3013.6)			40	
	29481 (3008.3)			45	

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



Order **Catalog No.** **(W)** - **θ** - **PS**
UCMSV 250 - 25 - GK

Spring Specification (Qty 2)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK			21784 (2222.9)	X750-063-TD (KALLER)
GD	00~50	—	21053 (2148.3)	U.0800.063.TO (DADCO)
GS			22381 (2283.8)	SFC.750.63 (SDT)



Option

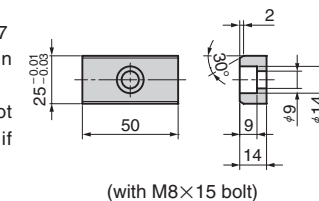
Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



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

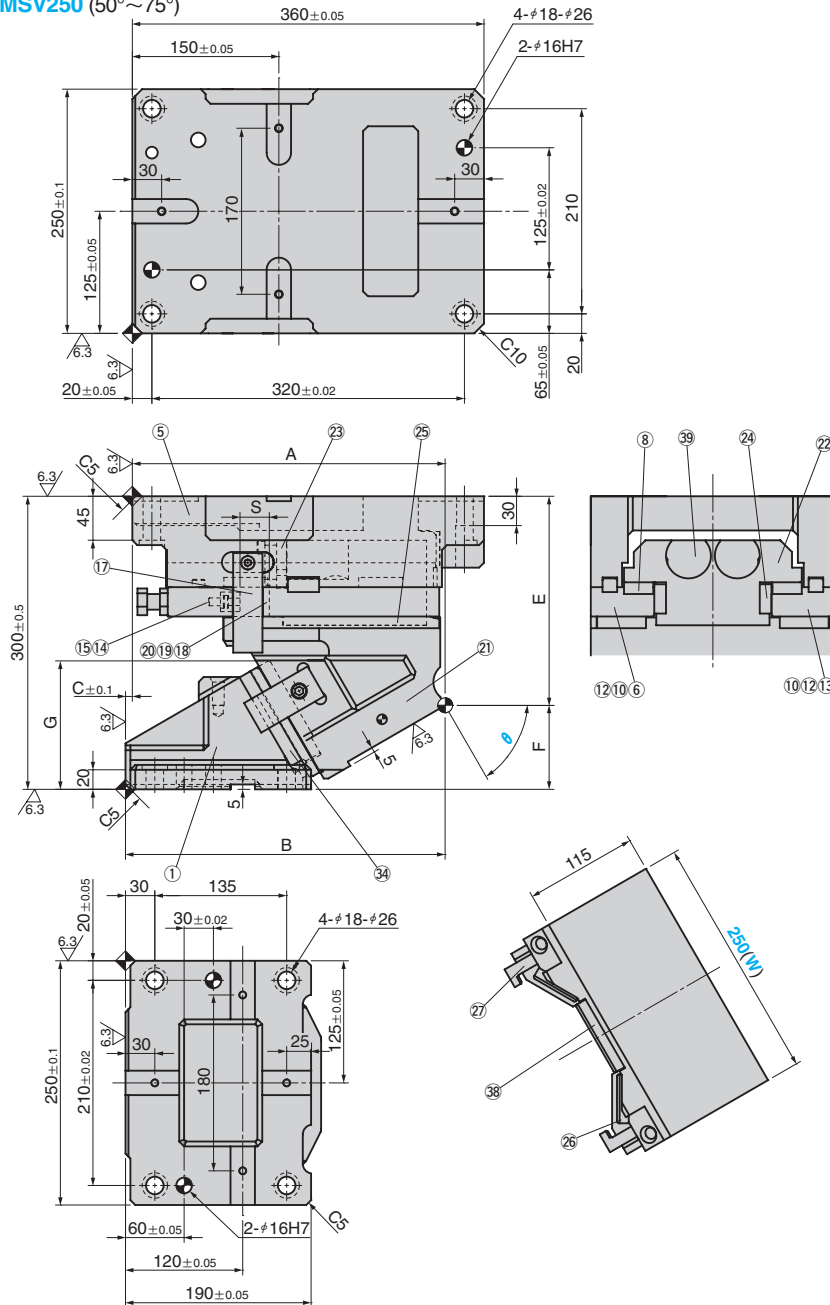
Key Specification

- Parts list is shown in p.1687
- Cam diagram is shown in p.1685
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



**UCMSV
250**

UCMSV250 (50°~75°)



θ	Travel	A	B	C	E	F	G	S
50	77.8	328.80	318.80	10	194.34	105.66	139.2	50
55	52.3	326.84	326.84	0	208.48	91.52	126.1	30
60	60.0	320.19	327.19	-7	214.13	85.87	132.2	
65	71.0	319.23	334.23	-15	231.40	68.60	135.0	
70	58.5	313.07	338.07	-25	245.67	54.33	135.9	20
75	77.3	306.08	341.08	-35	260.24	39.76	135.9	

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	29429 (3003.0)			50	
	29429 (3003.0)			55	GS
284	32542 (3320.6)	UCMSV	250	60	GK
	36709 (3745.8)			65	GD
	41018 (4185.5)			70	*NGP
	49066 (5006.7)			75	

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



Order

Catalog No. (W) – θ – PS
UCMSV 250 – 60 – GK

■ **Spring Specification (Qty 2)**

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	50		21784 (2222.9)	X750-063-TD (KALLER)
GD		—	21053 (2148.3)	U.0800.063.TO (DADCO)
GS			22381 (2283.8)	SFC.750.63 (SDT)
GK	55~65		20080 (2049.0)	X750-050-TD (KALLER)
GD		—	22720 (2318.4)	U.0800.050.TO (DADCO)
GS			20580 (2100.0)	SFC.750.50 (SDT)
GK	70・75		19432 (1982.9)	X750-038-TD (KALLER)
GD		—	18893 (1927.9)	U.0800.038.TO (DADCO)
GS			19895 (2030.1)	SFC.750.38 (SDT)



 **Option**

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.



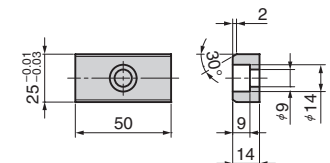
Order

UCMSV250 - 60 - GK - NF

■ Key Specification



- Parts list is shown in p.1687
- Cam diagram is shown in p.1685
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

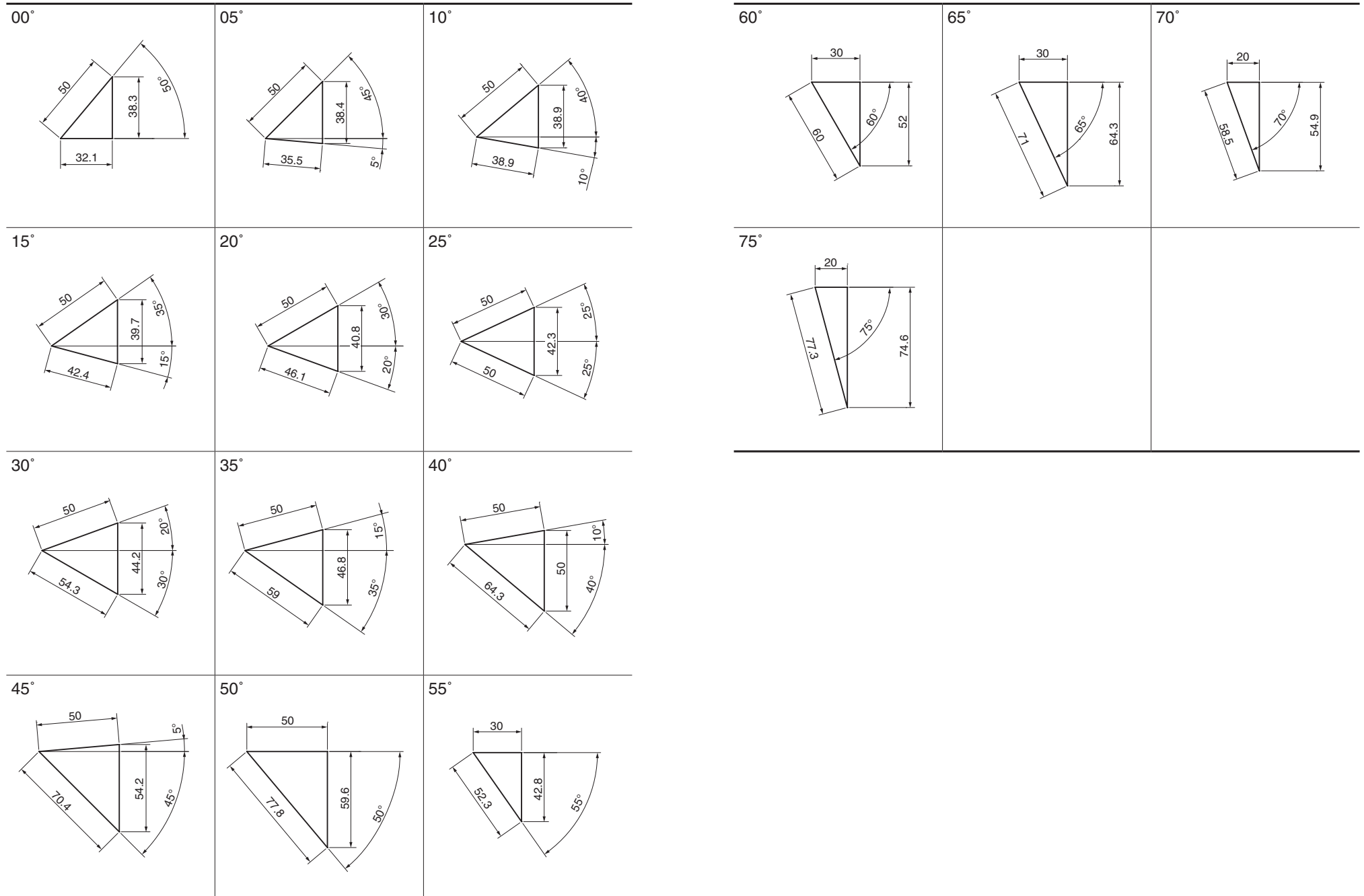


(with M8×15 bolt)

**UCMSV
250**

Aerial Cam Unit UCMSV250 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 50^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑧	Slide Plate (VSM-15)	2	Bronze with Graphite
⑩	Key	4	SS400
⑫	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	2	Urethane (PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×140
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate (VSM-13)	2	Bronze with Graphite
㉕	Slide Plate (VSM-25)	2	Bronze with Graphite
㉖	Slide Plate (VSM-24)	2	Bronze with Graphite
㉗	Com Positive Return Plate	2	S45C
㉘	Cam Slide Guide (Lower)	1	S45C
㉙	Slide Plate (VSM-33)	1	Bronze with Graphite
㉚	Gas Spring	2	Refer to the specification table

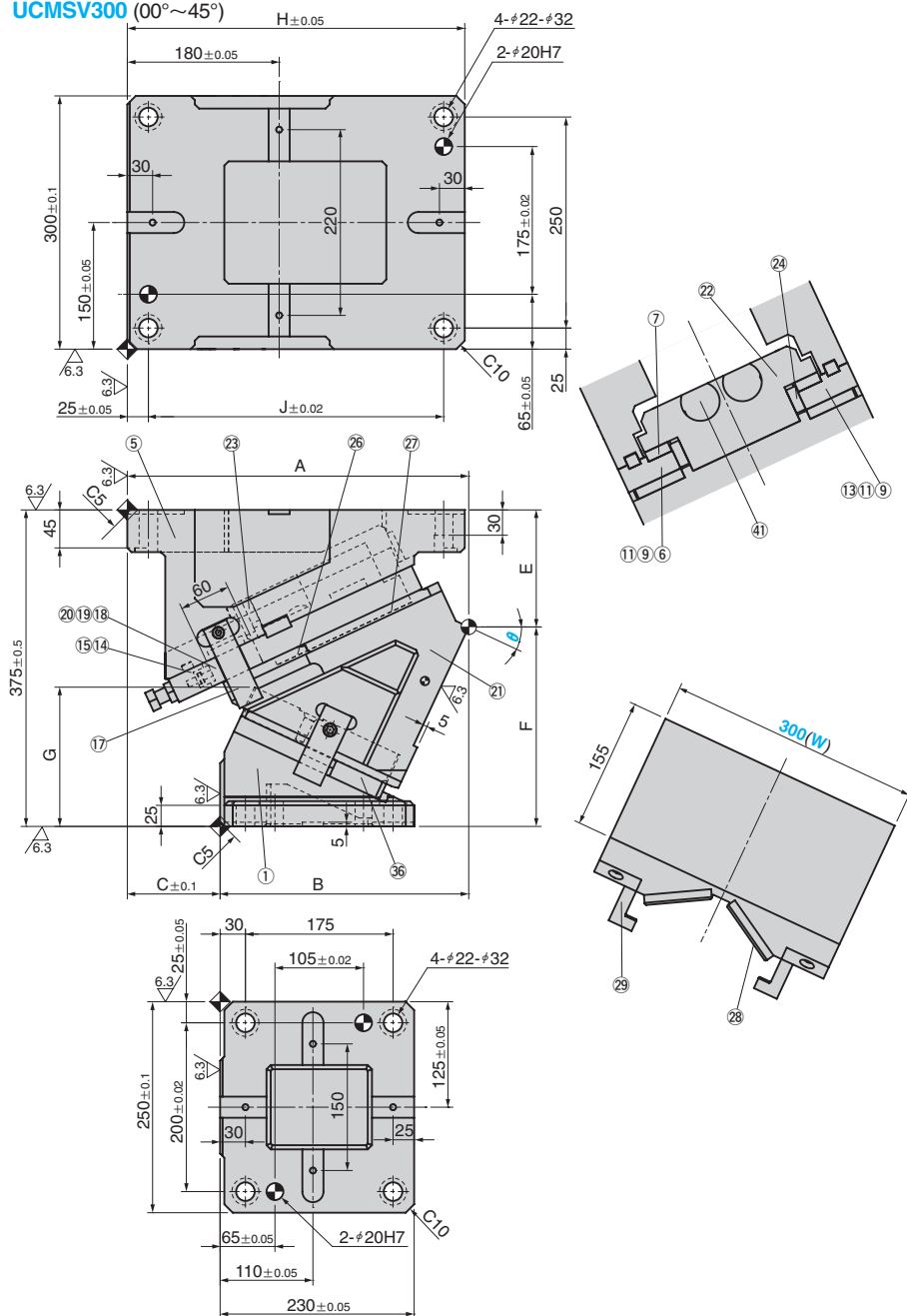
Bolts for assembly are not indicated.

■ $\theta = 55^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑧	Slide Plate (VSM-15)	2	Bronze with Graphite
⑩	Key	4	SS400
⑫	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	2	Urethane (PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×140
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-13)	2	Bronze with Graphite
㉕	Slide Plate(VSM-25)	2	Bronze with Graphite
㉖	Slide Plate(VSM-23)	2	Bronze with Graphite
㉗	Cam Positive Return Plate	2	S45C
㉘	Cam Slide Guide(Lower)	1	S45C
㉙	Slide Plate (VSM-32)	1	Bronze with Graphite
㉚	Gas Spring	2	Refer to the specification table

Bolts for assembly are not indicated.

UCMSV300 (00°~45°)



θ	Travel	A	B	C	E	F	G	H	J
00	38.6	395.00	232.00	163	98.00	277.00	105.0		
05	42.6	387.15	232.15	155	104.19	270.81	116.9		
10	46.7	394.13	249.13	145	111.86	263.14	128.5	390	340
15	50.9	395.82	260.82	135	121.01	253.99	139.6		
20	55.3	397.08	277.08	120	131.59	243.41	150.2		
25	60	404.71	294.71	110	138.65	236.35	165.0		
30	65.1	408.22	323.22	85	146.89	228.11	179.2		
35	70.8	404.52	334.52	70	159.17	215.83	189.6	400	350
40	77.1	400.46	345.46	55	167.30	207.70	204.5		
45	84.5	394.84	354.84	40	179.24	195.76	215.6		

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	29608 (3021.2)			00	
	29543 (3014.6)			05	
	29475 (3007.6)			10	
	29402 (3000.2)			15	GS
364	29327 (2992.6)	UCMSV	300	20	GK
	29250 (2984.7)			25	GD
	29170 (2976.5)			30	*NGP
	29089 (2968.3)			35	
	29007 (2959.9)			40	
	28925 (2951.5)			45	

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



Order

Catalog No.	(W)	—	θ	—	PS
UCMSV	300	—	25	—	GK

■ **Spring Specification (Qty 2)**

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	00~45		21550 (2199.0)	X750-080-TD (KALLER)
GD		—	20700 (2112.2)	U.0800.080.TO (DADCO)
GS			21975 (2242.3)	SFC.750.80 (SDT)

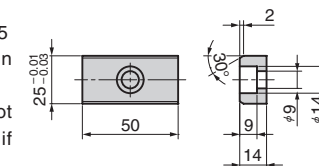


Option

■ Key Specification

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

- Parts list is shown in p.1695
- Cam diagram is shown in p.1693
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



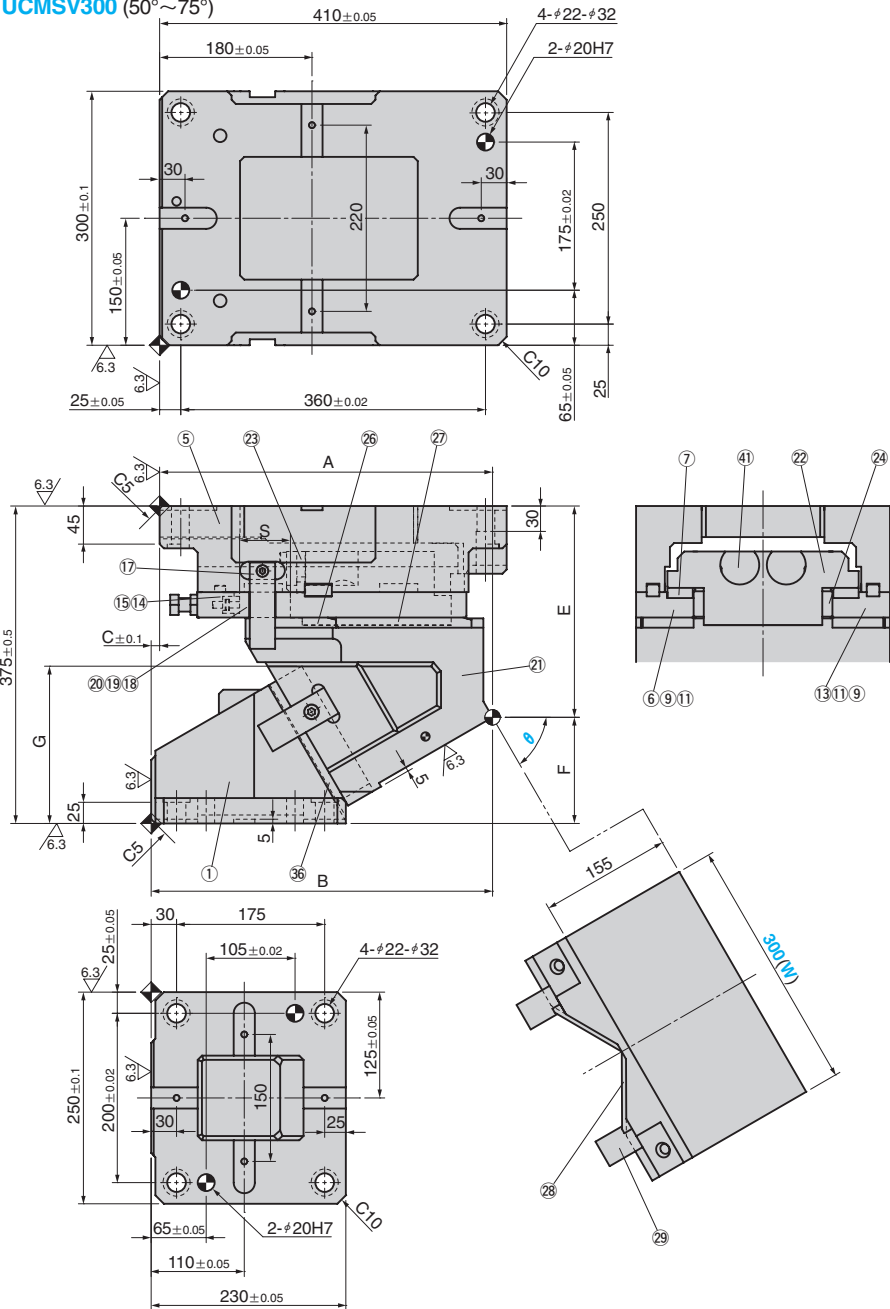
(with M8×15 bolt)



Order

UCMSV300 – 25 – GK – NF

UCMSV300 (50°~75°)



θ	Travel	A	B	C	E	F	G	S
50	93.3	393.35	376.35	17	196.04	178.96	194.8	
55	104.6	393.35	393.35	0	222.75	152.25	188.8	60
60	120.0	393.35	403.35	-10	249.61	125.39	182.3	
65	94.6	387.48	415.48	-28	266.49	108.51	185.4	40
70	73.1	378.65	423.65	-45	281.99	93.01	189.2	
75	96.6	364.72	429.72	-65	296.88	78.12	193.0	25

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	28842 (2943.1)			50	
	31364 (3200.4)			55	GS
	34665 (3537.2)			60	GK
	37172 (3793.0)			65	GD
	40388 (4121.2)			70	*NGP
	48308 (4929.4)			75	

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



Order

Catalog No. (W) θ PS
UCMSV 300 - 60 - GK

Spring Specification (Qty 2)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	50~60		21550 (2199.0)	X750-080-TD (KALLER)
GD			20700 (2112.2)	U.0800.080.TO (DADCO)
GS			21975 (2242.3)	SFC.750.80 (SDT)
GK	65		20387 (2080.3)	X750-063-TD (KALLER)
GD			22720 (2318.4)	U.0800.063.TO (DADCO)
GS			20905 (2133.2)	SFC.750.63 (SDT)
GK	70~75		19200 (1959.2)	X750-050-TD (KALLER)
GD			18680 (1906.1)	U.0800.050.TO (DADCO)
GS			19650 (2005.1)	SFC.750.50 (SDT)



Option

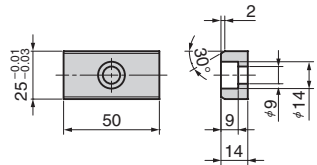
Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

- Parts list is shown in p.1695
- Cam diagram is shown in p.1693
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order UCMSV300 - 60 - GK - NF

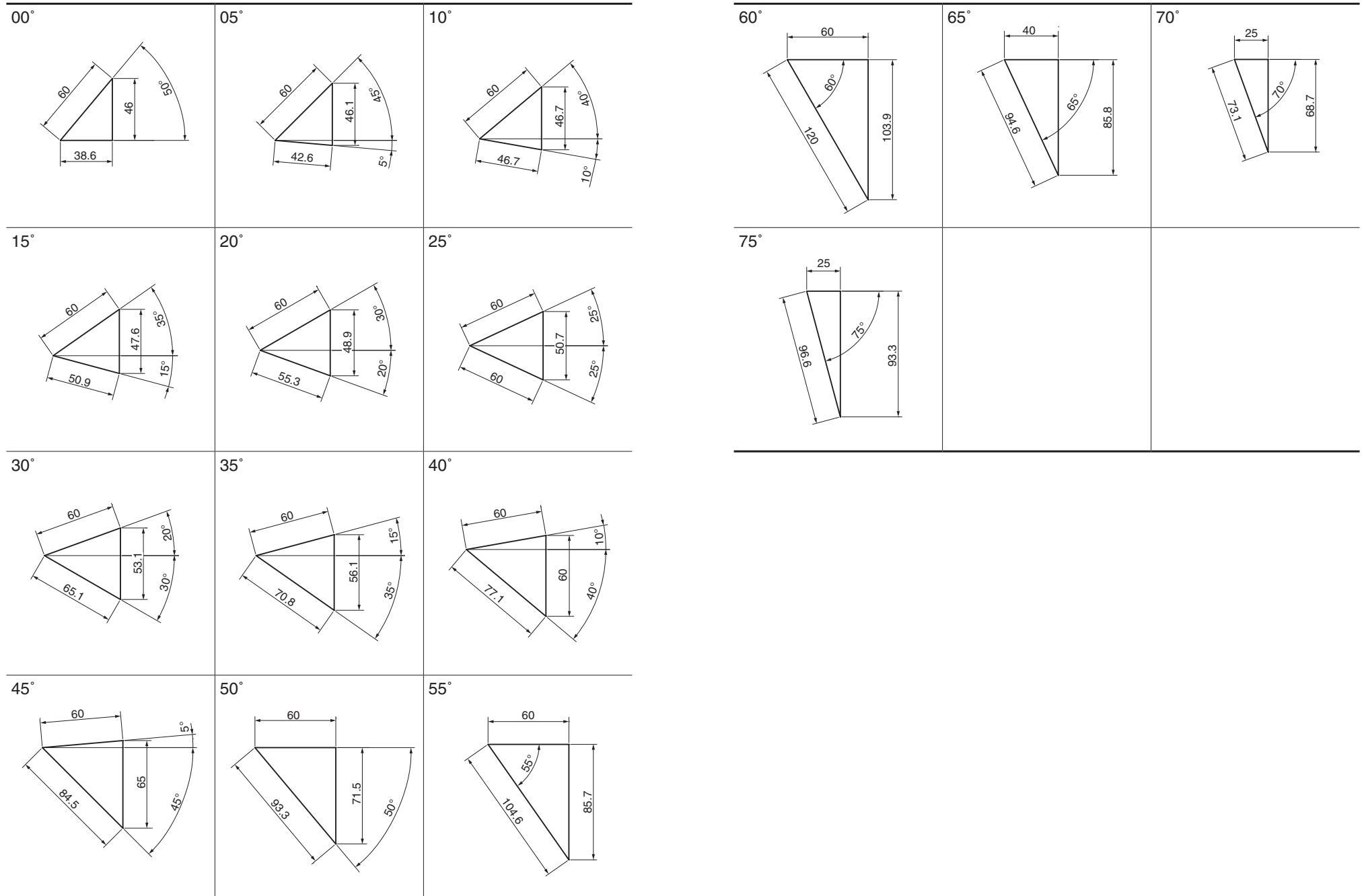
Key Specification



(with M8×15 bolt)

Aerial Cam Unit UCMSV300 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 50^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Slide Plate(VSM-15)	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper plate	1	S45C
⑮	Stopper	4	Urethane(PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×150
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-14)	2	Bronze with Graphite
㉖	Slide Plate(VSM-26)	2	Bronze with Graphite
㉗	Slide Plate(VSM-29)	2	Bronze with Graphite
㉘	Slide Plate(VSM-35)	2	Bronze with Graphite
㉙	Positive Return Plate	2	S45C
㉚	Cam Slide Guide(Lower)	1	S45C
㉛	Gas Spring	2	Refer to the specification table

Bolts for assembly are not indicated.

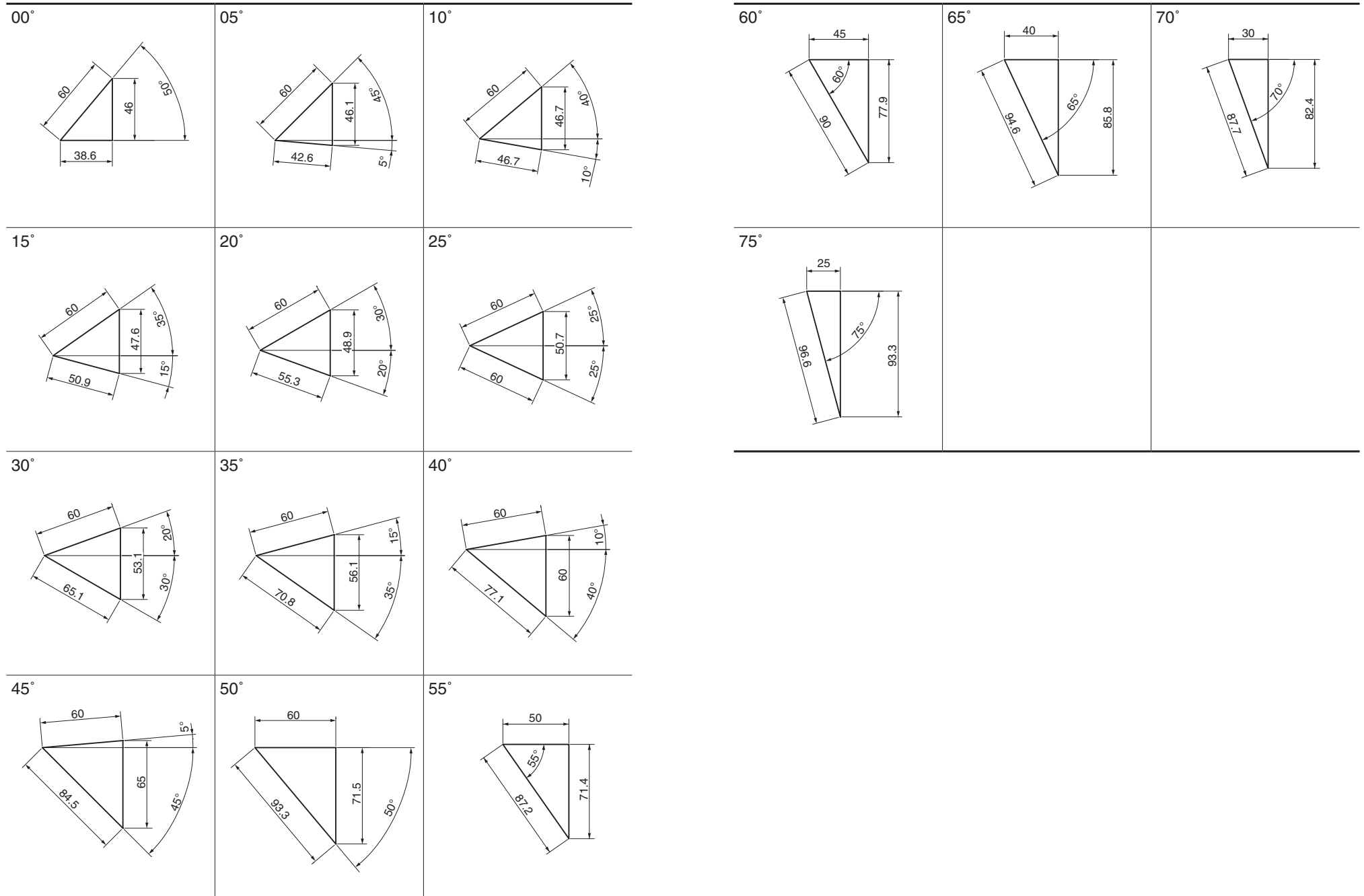
■ $\theta = 55^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Slide Plate(VSM-15)	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper plate	1	S45C
⑮	Stopper	4	Urethane(PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×150
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-14)	2	Bronze with Graphite
㉖	Slide Plate(VSM-26)	2	Bronze with Graphite
㉗	Slide Plate(VSM-29)	2	Bronze with Graphite
㉘	Slide Plate(VSM-34)	2	Bronze with Graphite
㉙	Positive Return Plate	2	S45C
㉚	Cam Slide Guide(Lower)	1	S45C
㉛	Gas Spring	2	Refer to the specification table

Bolts for assembly are not indicated.

Aerial Cam Unit UCMSV350 Cam Diagram

VDI-BAK STANDARD



■ $\theta = 00^\circ \sim 45^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Slide Plate(VSM-15)	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	4	Urethane(PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×150
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-14)	2	Bronze with Graphite
㉖	Slide Plate(VSM-31)	2	Bronze with Graphite
㉗	Slide Plate(VSM-34)	2	Bronze with Graphite
㉘	Slide Plate(VSM-25)	2	Bronze with Graphite
㉙	Positive Return Plate	2	S45C
㉚	Cam Slide Guide(Lower)	1	S45C
㉛	Gas Spring	2	Refer to the specification table
㉜	Slide Plate(VSM-20)	2	Bronze with Graphite

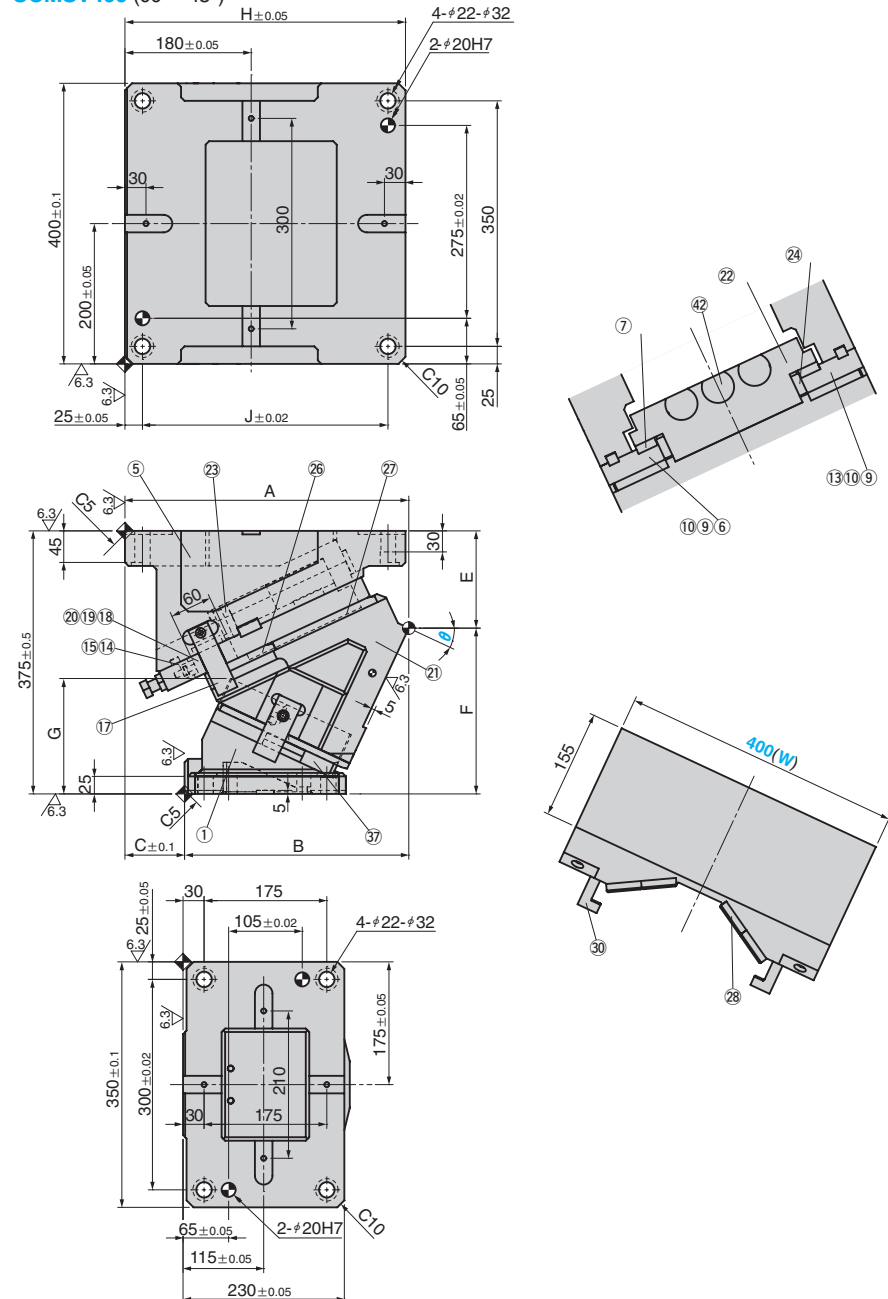
Bolts for assembly are not indicated.

■ $\theta = 50^\circ \sim 75^\circ$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Slide Plate(VSM-15)	2	Bronze with Graphite
⑨	Key	4	SS400
⑪	Key	2	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	4	Urethane(PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×150
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-14)	2	Bronze with Graphite
㉖	Slide Plate(VSM-31)	2	Bronze with Graphite
㉗	Slide Plate(VSM-34)	2	Bronze with Graphite
㉘	Slide Plate(VSM-24)	2	Bronze with Graphite
㉙	Positive Return Plate	2	S45C
㉚	Cam Slide Guide(Lower)	1	S45C
㉛	Gas Spring	2	Refer to the specification table
㉜	Slide Plate(VSM-19)	2	Bronze with Graphite

Bolts for assembly are not indicated.

UCMSV400 (00°~45°)



θ	Travel	A	B	C	E	F	G	H	J
00	38.6	395.00	237.00	158	88.00	287.00	116.0		
05	42.6	387.15	232.15	155	94.19	280.81	126.4		
10	46.7	394.13	249.13	145	106.86	268.14	133.0	390	340
15	50.9	395.82	260.82	135	118.01	256.99	142.1		
20	55.3	397.08	297.08	100	131.59	243.41	149.7		
25	60	404.71	319.71	85	138.65	236.35	1654.5		
30	65.1	408.22	343.22	65	146.89	228.11	178.7		
35	70.8	404.52	354.52	50	159.17	215.83	189.2	400	350
40	77.1	400.46	360.46	40	167.30	207.70	204.1		
45	84.5	394.84	374.84	20	179.24	195.76	215.2		

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	44337 (4524.1)			00	
	44248 (4515.1)			05	
	44154 (4505.5)			10	
	44055 (4495.4)			15	GS
450	43951 (4484.8)	UCMSV	400	20	GK
	43844 (4473.9)			25	GD
	43734 (4462.6)			30	*NGP
	43621 (4451.2)			35	
	43508 (4439.6)			40	
	43395 (4428.0)			45	

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

Order **Catalog No.** **(W)** - **θ** - **PS**
UCMSV 400 - 25 - GK

Spring Specification (Qty 3)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK			32325 (3298.5)	X750-080-TD (KALLER)
GD	00~45	—	31050 (3168.4)	U.0800.080.TO (DADCO)
GS			32963 (3363.6)	SFC.750.80 (SDT)



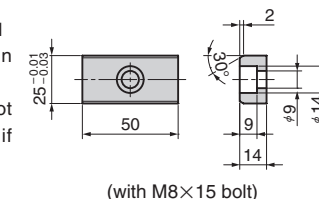
Option

Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

Order **UCMSV400 - 25 - GK - NF**

Key Specification

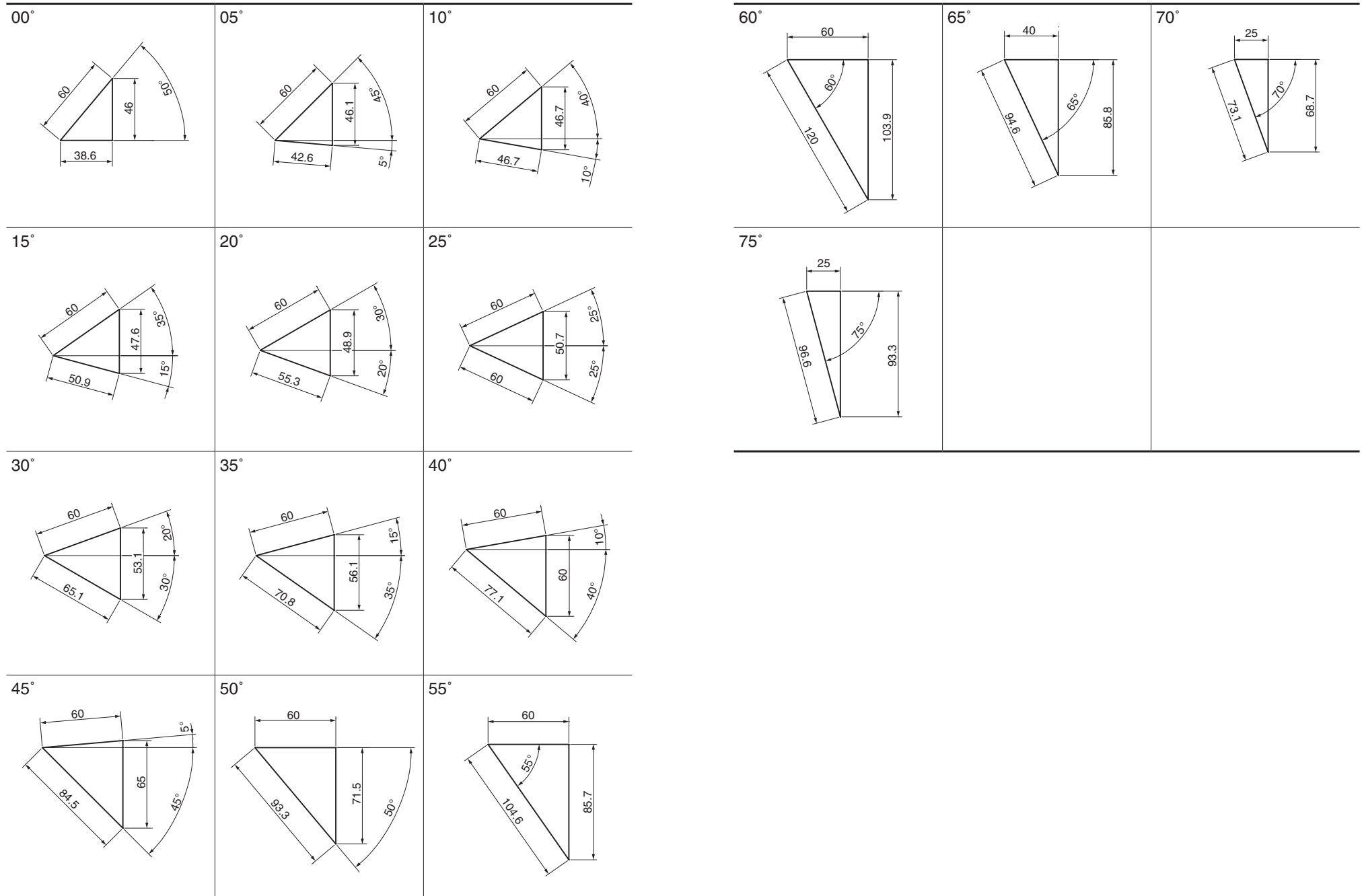
- Parts list is shown in p.1711
- Cam diagram is shown in p.1709
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.



**UCMSV
400**

Aerial Cam Unit UCMSV400 Cam Diagram

VDI-BAK STANDARD



Aerial Cam Unit Table of Components

VDI-BAK STANDARD

■ $\theta = 00^{\circ} \sim 75^{\circ}$

No.	Description	Qty	Material and Remark
①	Cam Driver	1	GGG60
⑤	Cam Holder	1	GGG60
⑥	Base Plate R	1	S45C
⑦	Slide Plate(VSM-15)	2	Bronze with Graphite
⑨	Key	2	SS400
⑩	Key	4	SS400
⑬	Base Plate L	1	S45C
⑭	Stopper Plate	1	S45C
⑮	Stopper	4	Urethane(PCU20)
⑰	Safety Plate	2	S45C
⑱	Lock Block	1	SS400
⑲	Hexagonal Bolt	1	SCM435 M16×150
⑳	Hexagonal Nut	1	SCM435 M16
㉑	Cam Slider	1	GGG60
㉒	Spring Guide	1	S45C
㉓	Gas Spring Guide Plate	1	S45C
㉔	Slide Plate(VSM-14)	2	Bronze with Graphite
㉖	Slide Plate(VSM-31)	2	Bronze with Graphite
㉗	Slide Plate(VSM-34)	2	Bronze with Graphite
㉘	Slide Plate(VSM-25)	4	Bronze with Graphite
㉚	Positive Return Plate	2	S45C
㉛	Cam Slide Guide(Lower)	1	S45C
㉜	Gas Spring	3	Refer to the specification table

 Bolts for assembly are not indicated.