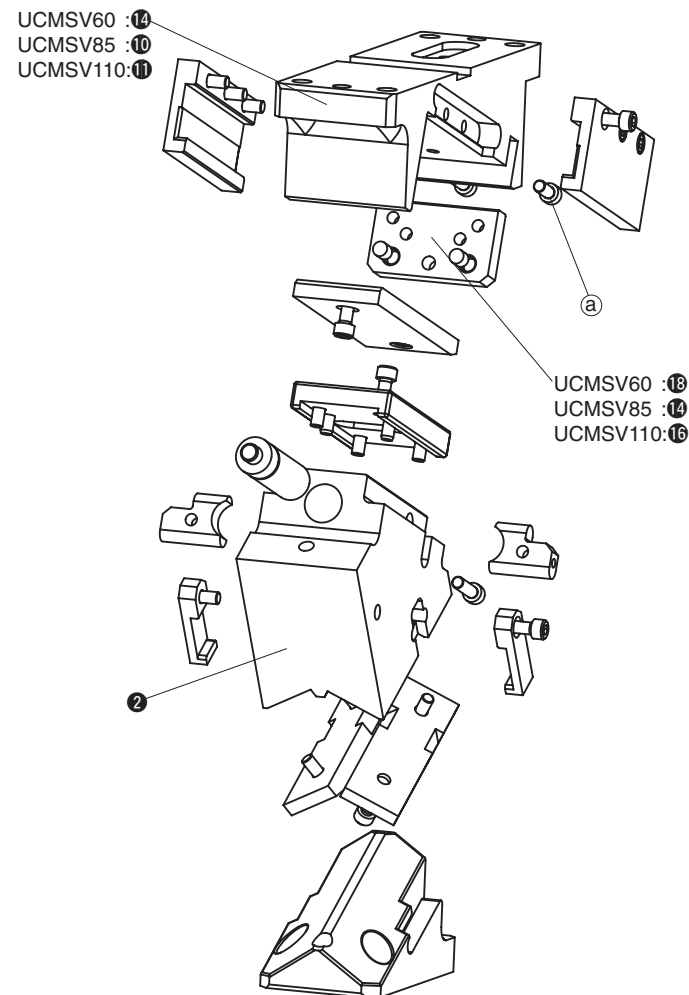


- 60, 85, 110, 165, 200, 250, 300, 350 and 400mm mounting widths are available.
- Available angles are from 0° to 75° in increments of 5°.
- Gas spring can be removed from the cam whilst in the die/press.
- Complying with VDI-BAK specification.

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	87.2				55	104.6	
		60	60.0				60	100.0				60	120.0	
		65	71.0				65	146.6				65	150.0	
		70	81.9				70	189.9				70	194.6	
75	108.2	75	259.9	75	266.6									
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	87.2				55	104.6	
		60	60.0				60	100.0				60	120.0	
		65	71.0				65	146.6				65	150.0	
		70	81.9				70	189.9				70	194.6	
75	108.2	75	259.9	75	266.6									
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	87.2				55	87.2				55	104.6	
		60	100.0				60	100.0				60	120.0	
		65	119.9				65	129.9				65	149.9	
		70	143.9				70	159.9				70	184.6	
75	182.2	75	219.9	75	246.6									

UCMSV60/85/110 Structure and Assembly / Disassembly



Disassembly method of UCMSV 60 / 85 / 110

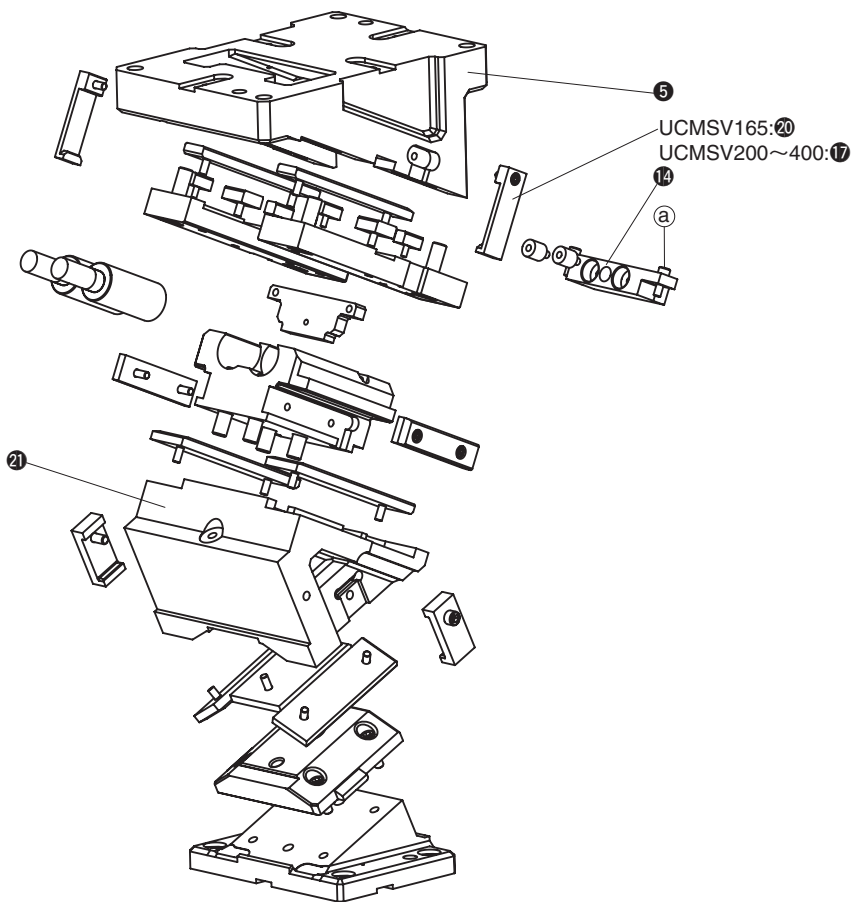
- 1) Remove hexagon socket head bolt (Ⓐ) and stopper plate (UCMSV60: 18, UCMSV85: 14, UCMSV110: 16).
- 2) Remove cam slider (2) from cam holder (UCMSV60: 14, UCMSV85: 10, UCMSV110: 11) at rear of cam.

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



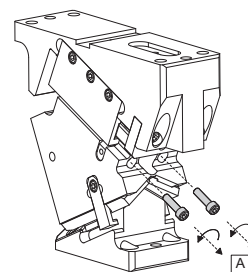
• Disassembly method of UCMSV 165 / 200 / 250 / 300 / 350 / 400

- 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.

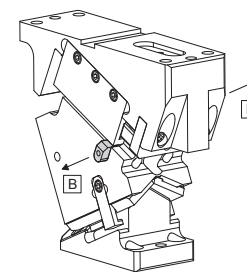
• Assembly method of UCMSV 165 / 200 / 250 / 300 / 400

- 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.

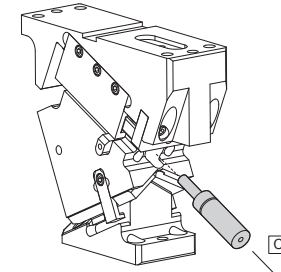
■ UCMSV60/85/110 Removing gas spring



Remove the screws of the spring stopper [A]

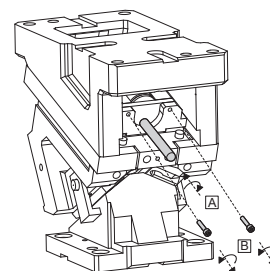


Slide out the spring stopper [B]

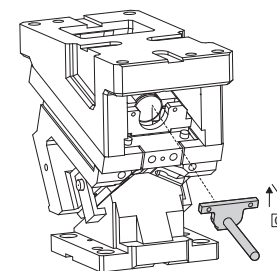


Remove the gas spring backward [C]

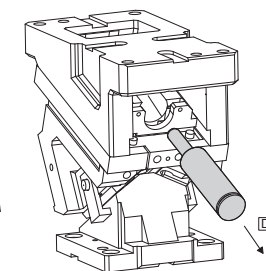
■ UCMSV165/200/250/300/350/400 Removing gas spring



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

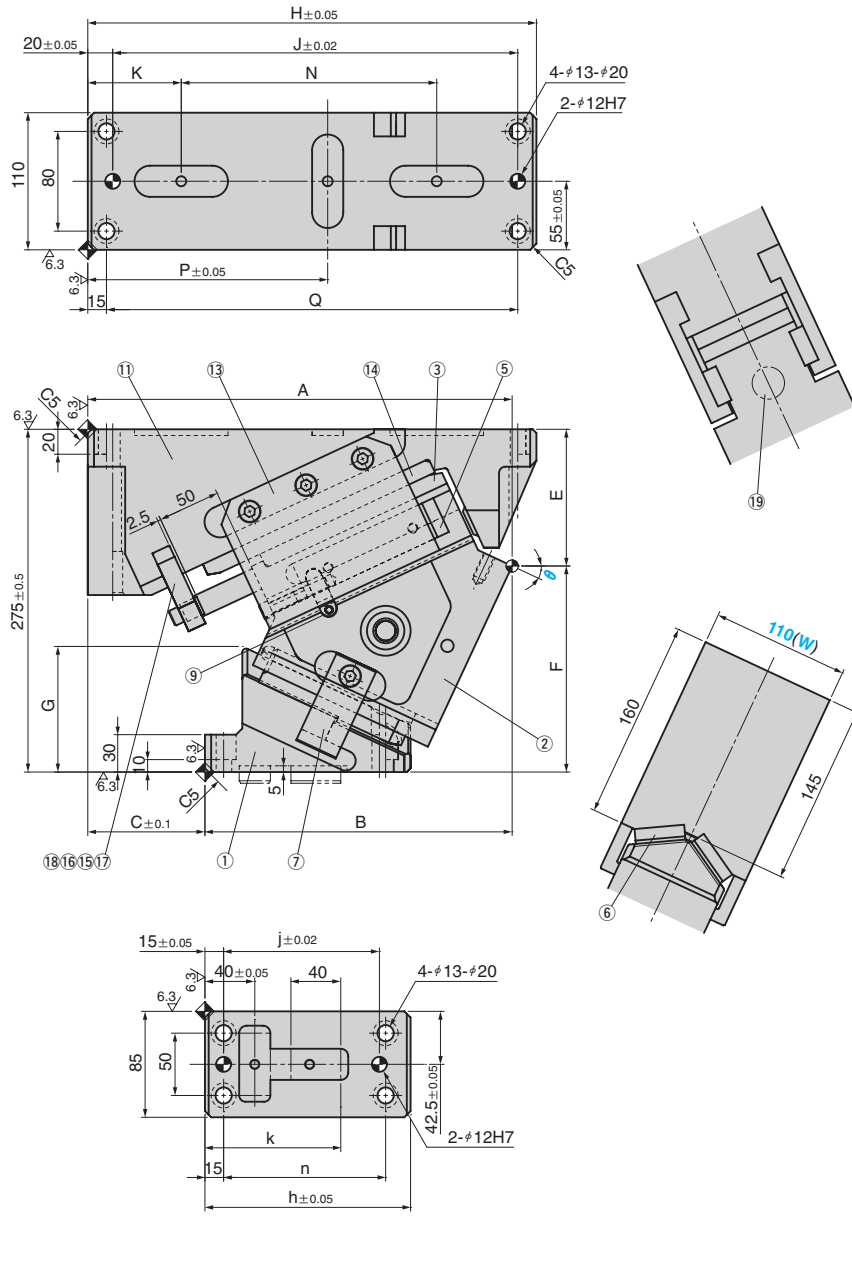


Slide out the spring stopper [C]



Remove the gas spring backward [D]

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							
20	46.1	339.32	234.32	105	100.42	174.58	89.3	360	325	75	205	192.5	330	
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 PS
125	109	130	165	150	7533 (768.7)	UCMSV	110	00	GS
					7516 (767.0)			05	
					7499 (765.2)			10	
					7480 (763.3)			15	
					7461 (761.3)			20	
					7441 (759.2)			25	
140	115	145	180		7420 (757.1)	UCMSV	110	30	*NGP
					7399 (755.0)			35	
					7378 (752.8)			40	
105	95	110	150		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)	

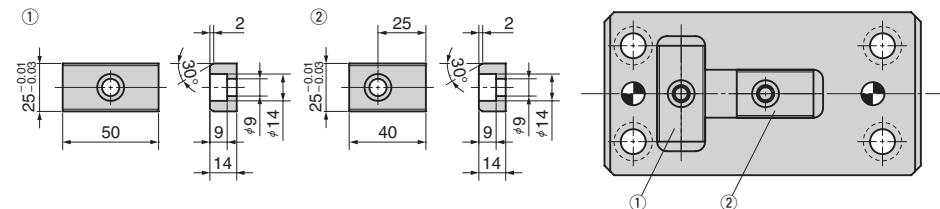


Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

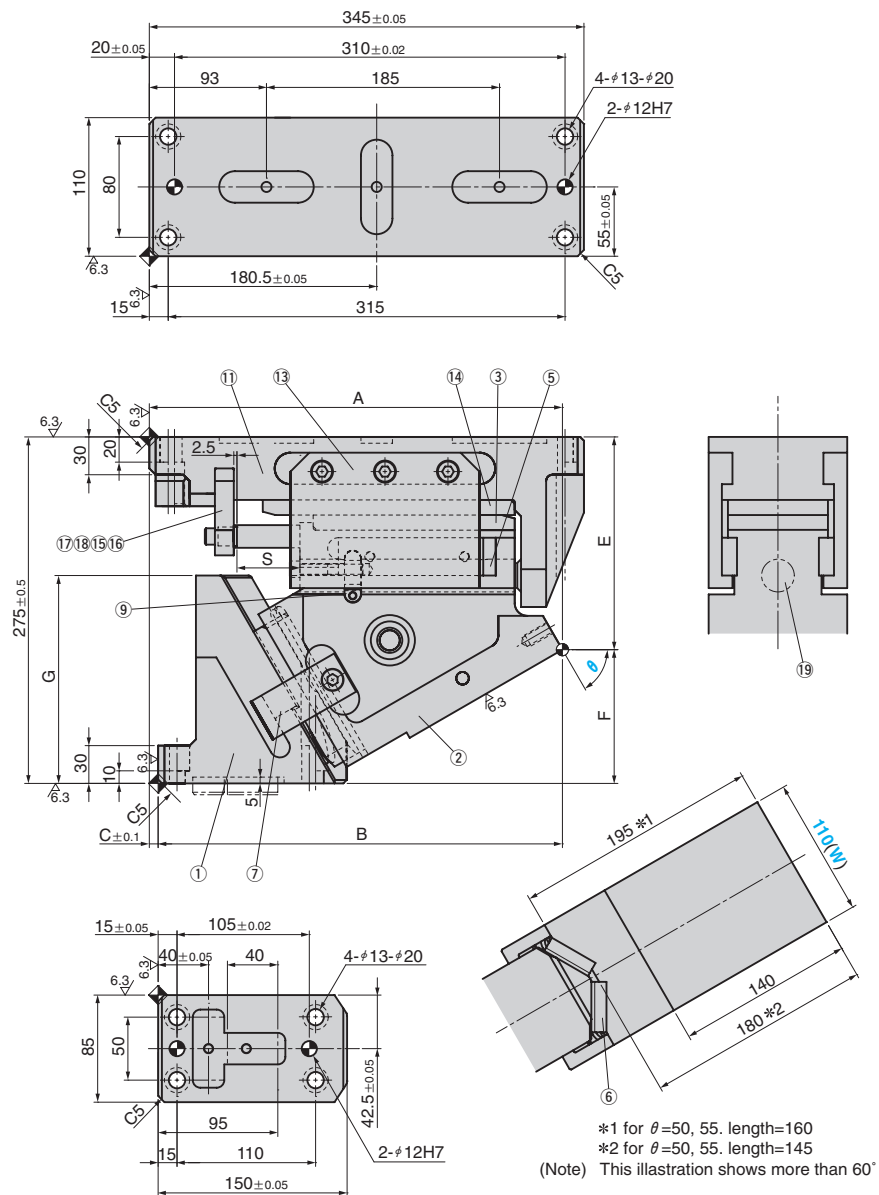
- Parts list is shown in p.1663
- Cam diagram is shown in p.1661
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

Order **UCMSV110 - 25 - GK - NF**

Key Specification



UCMSV110 (50°~75°)



θ	Travel	A	B	C	E	F	G	S
50	77.8	309.47	284.47	25	156.17	118.83	150.0	
55	87.2	311.07	293.07	18	169.79	105.21	155.0	50
60	100.0	327.93	320.93	7	168.85	106.15		
65	94.6	317.17	327.17	-10	185.00	90.00		40
70	81.9	313.12	333.12	-20	205.00	70.00	165.0	
75	108.2	306.76	336.76	-30	225.00	50.00		28

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
150	7335 (748.5)	UCMSV	110	50	*NGP
	7979 (814.2)			55	
	8819 (899.8)			60	
	9977 (1018.1)			65	
	11141 (1136.9)			70	
	13323 (1359.5)		75		

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

Order **Catalog No.** **(W)** - **θ** - **PS**
UCMSV 110 - 60 - GK

Spring Specification (Qty 1)

Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK	50~60	-	4867 (496.6)	X320-063-TD (KALLER)
GD		-	4581 (467.4)	U.0325.063.TO (DADCO)
GS		-	5589 (570.3)	SFC.320.63 (SDT)
GK	65	-	4880 (498.0)	X320-050-TD (KALLER)
GD		-	4592 (468.6)	U.0325.050.TO (DADCO)
GS		-	5608 (572.2)	SFC.320.50 (SDT)
GK	70~75	-	4747 (484.4)	X320-038-TD (KALLER)
GD		-	4482 (457.3)	U.0325.038.TO (DADCO)
GS		-	5418 (552.9)	SFC.320.38 (SDT)

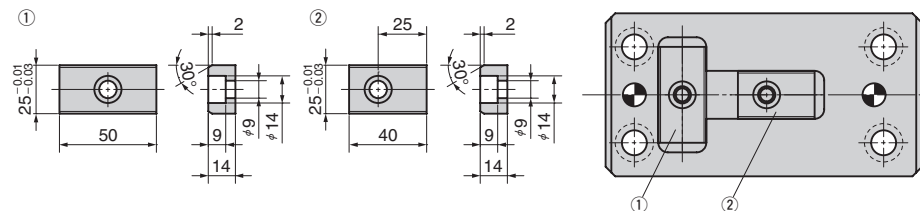


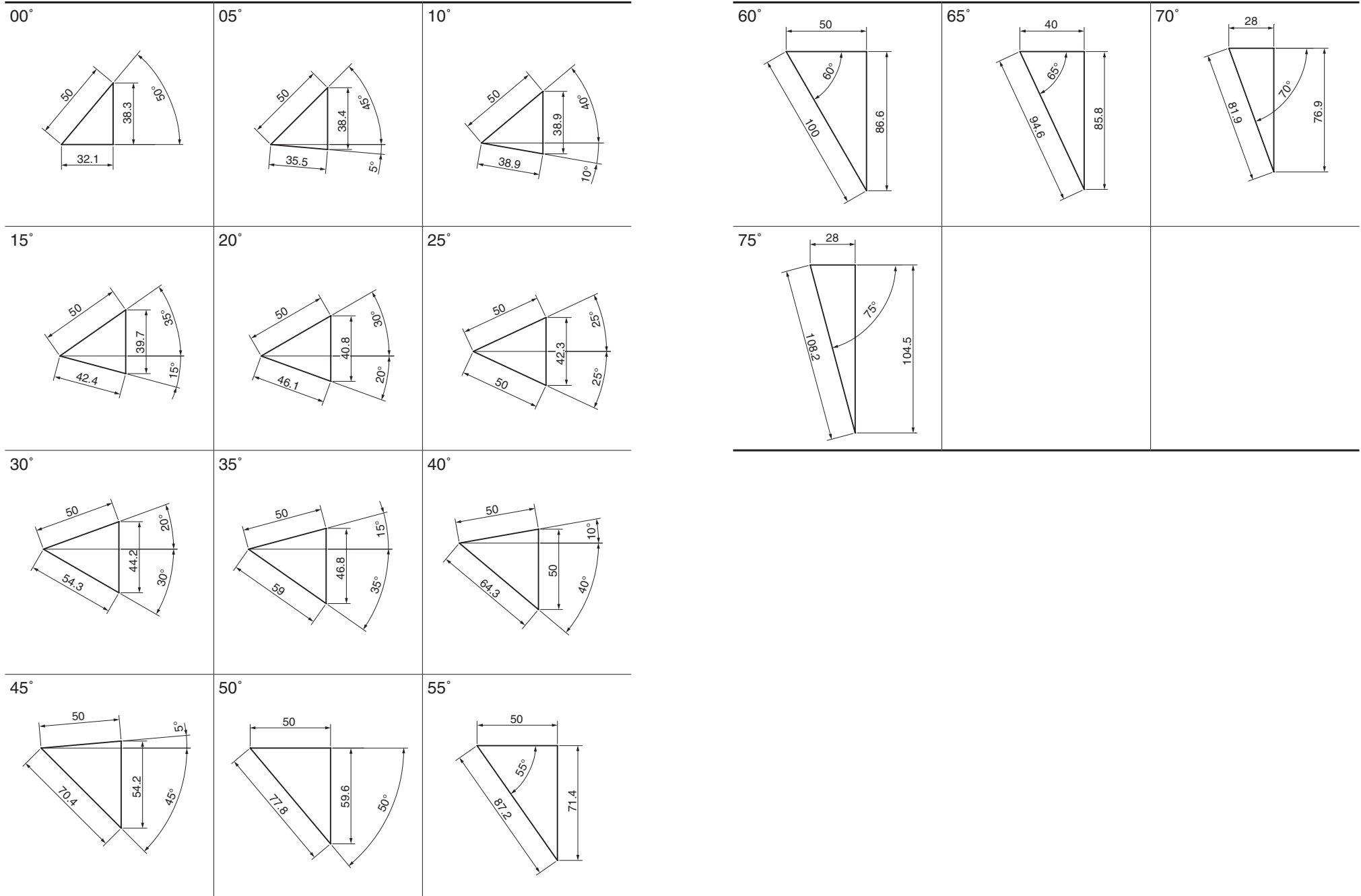
Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

- 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 - 60 - GK - NF**

Key Specification





■ $\theta = 00^\circ \sim 60^\circ$

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.

■ $\theta = 70^\circ \cdot 75^\circ$

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.

■ $\theta = 65^\circ$

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.