

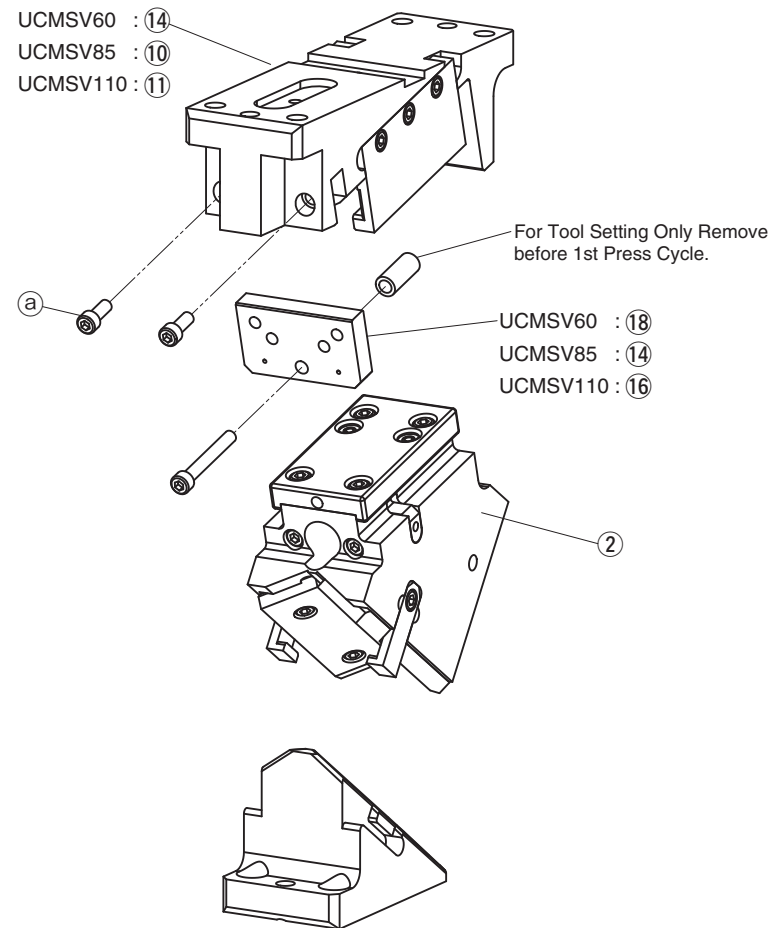


- 60, 85, 110, 165, 200, 250, 300, 350 and 400mm mounting widths are available.
- Available angles are from 0° to 75° in increments of 5°.
- Gas spring can be removed from the cam whilst in the die / press.
- Complying with VDI-BAK specification.

UCMSV Specifications

Mount face		Working Angle	Travel	Working Force kN(tonf)	Mount face		Working Angle	Travel	Working Force kN(tonf)	Mount face		Working Angle	Travel	Working Force kN(tonf)
W	H				W	H				W	H			
60	100	00	19.3	75 (7.6)	165	115	00	32.1	171 (17.5)	300	155	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	120.0				60	120.0	
		65	71.0				65	150.0				65	150.0	
70	81.9	70	181.9	70	181.9									
75	108.2	75	238.2	75	238.2									
85	110	00	19.3	100 (10.2)	200	115	00	32.1	218 (22.2)	350	155	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	120.0				60	120.0	
		65	71.0				65	150.0				65	150.0	
70	81.9	70	181.9	70	181.9									
75	108.2	75	238.2	75	238.2									
110	145	00	32.1	150 (15.3)	250	115	00	32.1	284 (29.0)	400	155	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				119.9	65				140.0		
70	140.0	70	140.0	70	160.0									
75	160.0	75	160.0	75	180.0									

UCMSV60 / 85 / 110 Assembly Instructions



Disassembly

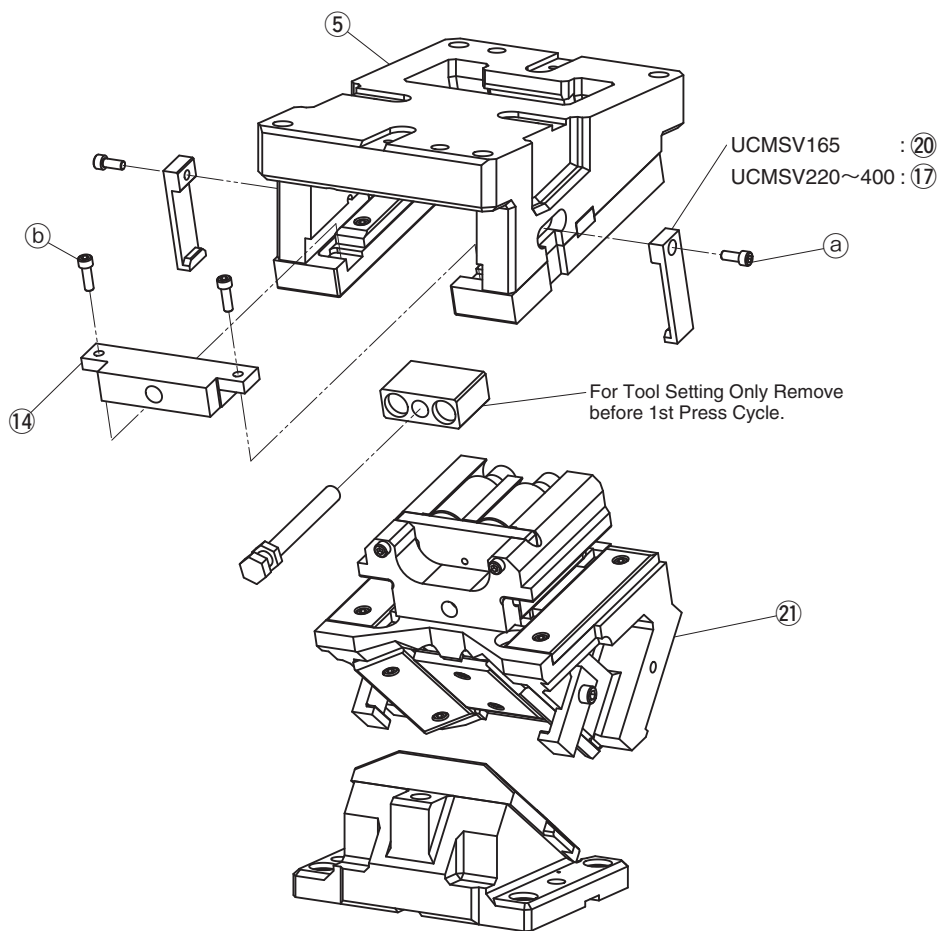
- 1) Remove Hexagon Socket Head Bolts (①), to pull out Stopper Plate (UCMSV60: ⑱, UCMSV85: ⑭, UCMSV110: ⑰).
- 2) Pull out and remove Cam Slider (②) from Cam Holder (UCMSV60: ⑭, UCMSV85: ⑩, UCMSV110: ⑪) to the rear.

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 tightened to the recommended torque after assembly and disassembly.

■ UCMSV165/200/250/300/350/400 Assembly Instructions



● Disassembly

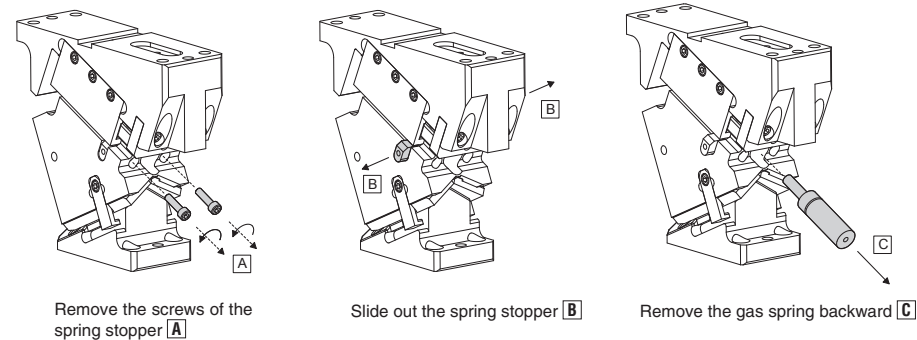
- 1) Remove Hexagon Socket Head Bolts (a), and remove Safety Plate (UCMSV165: 20, UCMSV200~400: 17).
- 2) Remove Hexagon Socket Head Bolts (b), and remove Stopper Plate (14).
- 3) Pull out and remove Cam Slider (21) from Cam Holder (5) to the rear.

● Assembly

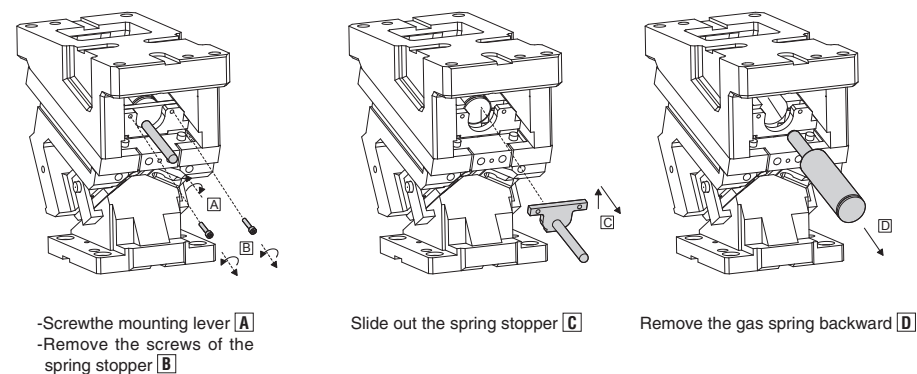
Assembly is the reverse procedure of disassembly.

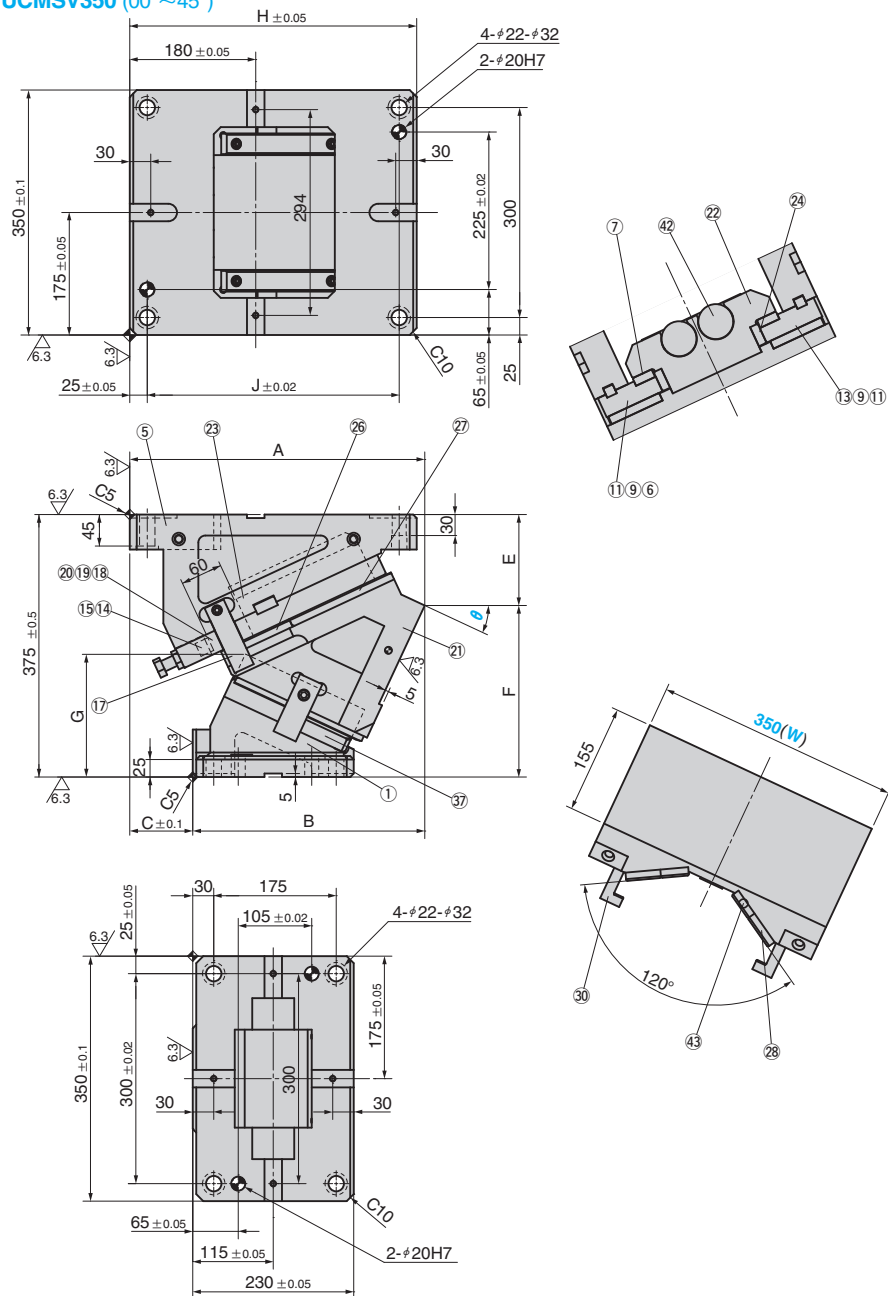
- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial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

■ UCMSV60/85/110 Removing gas spring



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



UCMSV350 (00°~45°)


θ	Travel	A	B	C	E	F	G	H	J
00	38.6	395.00	235.00	160	85.00	290.00	117.5		
05	42.6	409.62	254.62	155	95.02	279.98	126.0	390	340
10	46.7	414.52	274.52	140	104.67	270.33	136.1		
15	50.9	408.60	293.60	115	113.76	261.24	147.7		
20	55.3	422.92	312.92	110	122.21	252.79	160.8		
25	60.0	421.53	331.53	90	129.96	245.04	175.3		
30	65.1	418.50	348.50	70	136.94	238.06	191.2	410	360
35	70.8	415.89	365.89	50	153.12	221.88	198.2		
40	77.1	410.78	380.78	30	168.43	206.57	206.2		
45	84.5	405.25	395.25	10	182.84	192.16	215.1		

Working Force kN	Return Force N(kgf)	Catalog No.	(W)	θ	Spring Type PS
	42142 (4300.2)			00	
	42067 (4292.6)			05	
	41988 (4284.5)			10	
	41904 (4275.9)			15	GS
405	41816 (4266.9)	UCMSV	350	20	GK
	41725 (4257.7)			25	GD
	41632 (4248.2)			30	*NGP
	41537 (4238.5)			35	
	41442 (4228.7)			40	
	41346 (4218.9)			45	

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

Order **Catalog No.** **(W)** - **θ** - **PS**
UCMSV 350 - 25 - GK

Spring Specification (Qty 2)

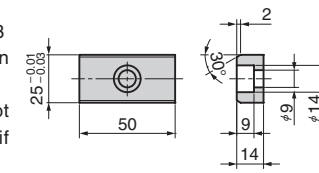
Spring Type PS	θ	Spring Force N(kgf)		Model
		Initial Force	Final Force	
GK			26800 (2734.7)	X1000-080-TD (KALLER)
GD	00~45	-	31225 (3186.2)	U.1200.080.TO (DADCO)
GS			31400 (3204.1)	SFC.1000.80 (SDT)



Option

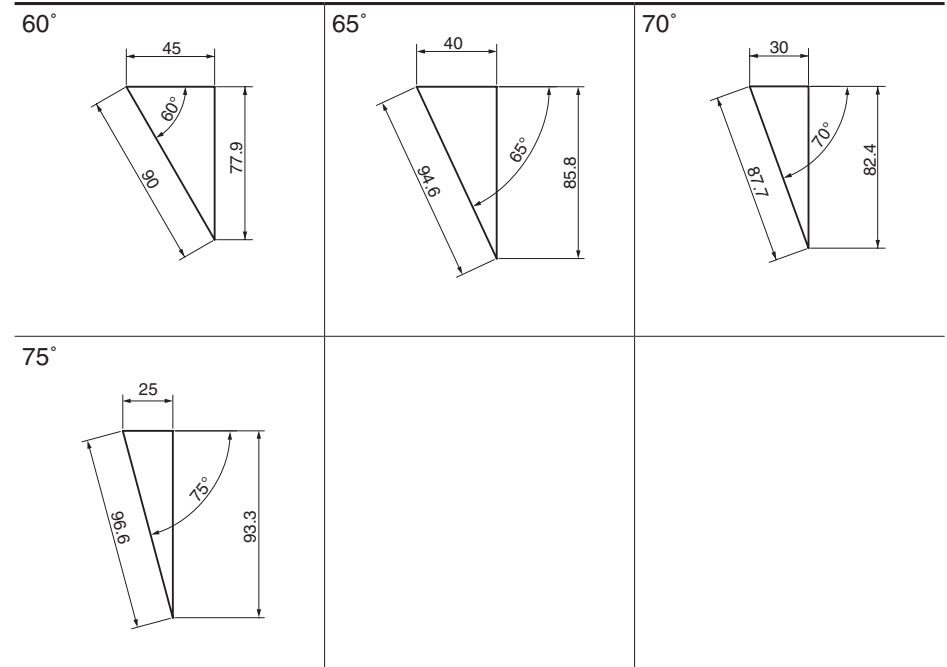
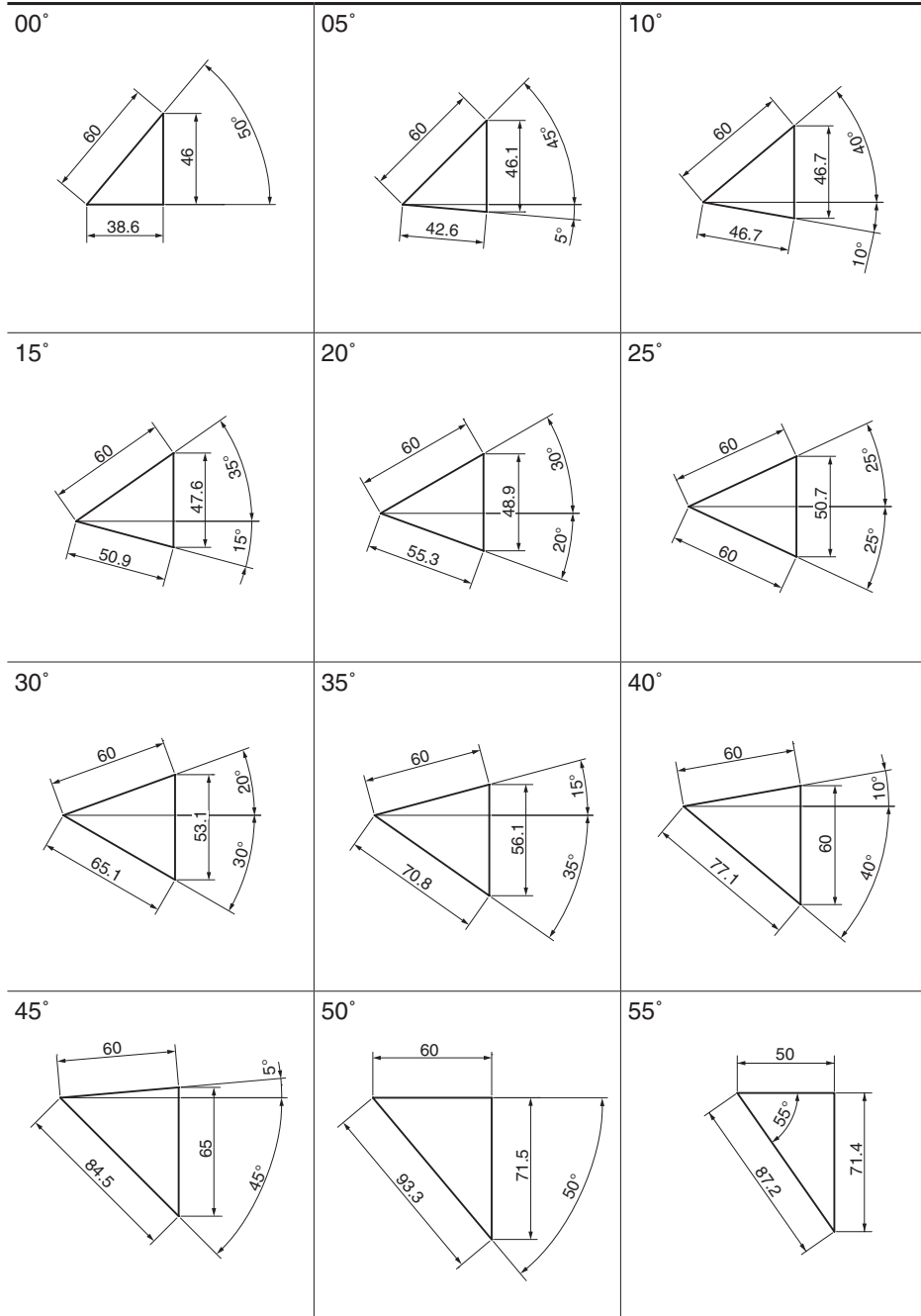
Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit)
NF	Nitrogen gas is not charged. Applicable to GK, GS and GD only.

- Parts list is shown in p.1703
- Cam diagram is shown in p.1701
- NF : Gas Springs are not filled with nitrogen gas if delivery is by air freight.

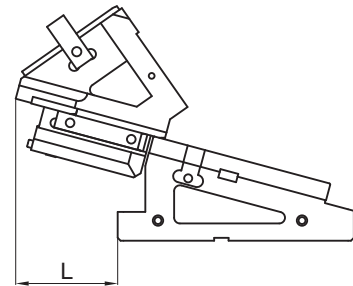


(with M8×15 bolt)

Order **UCMSV350 - 25 - GK - NF**



■ Rear Removal Space



θ	L
00	68
05	81
10	100
15	126
20	128
25	146
30	164
35	177
40	188
45	195
50	201
55	200
60	200
65	200
70	200
75	200

■ $\theta = 00^\circ \sim 45^\circ$

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
㉜	Gas Spring	2	Refer to the specification table
㉝	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
㉜	Gas Spring	2	Refer to the specification table
㉝	Slide Plate(VSM-19)	2	Bronze with Graphite

Bolts for assembly are not indicated.