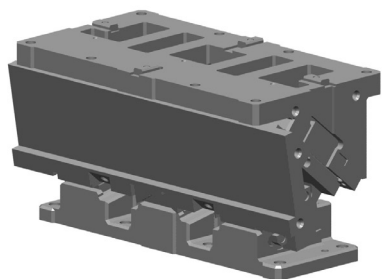


# Aerial Cam Unit General Description of UCMSL

## LARGE TYPE FOR PIERCE AND FLANGE



- 500 to 1000 mm at increments of 100 mm are available for the mounting width.
- Available angle is 0° to 60° at increments of 5°.
- Spring can be removed from back so it is easy to adjust at the bottom.

▲ 65°/ 70°/ 75° type or 1100 to 1600 mm wide type are also available.  
Please contact your sales representative.

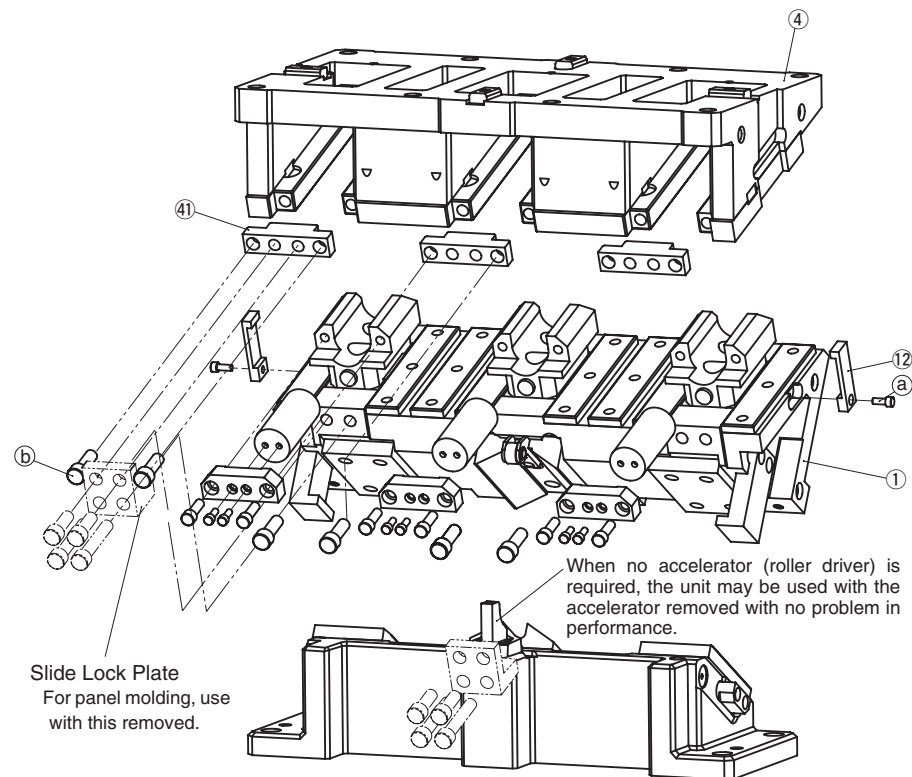
▲ Notes : How to handle the Gas Spring

- If you are planning to use any other gas springs than the ones Sankyo recommends, please let us know first.
- For the handling of the gas spring you have/ use, including the maintenance of it on a standalone basis, please contact the gas spring manufacturer from where you purchased

### UCMSL Specifications

Mounting Surface		Working Angle	Travel	Working Force kN(tonf)(tonf)	Spring Force N(kgf)
W	H				
500 600	180	00	38.6	313.6 (32.0)	18682.0 (1906.3)
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.5		
		50	93.3		
		55	104.6		
700 800	180	00	38.6	470.4 (48.0)	28023.0 (2859.5)
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.5		
		50	93.3		
		55	104.6		
900 1000	180	00	38.6	627.2 (64.0)	37364.0 (3812.7)
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.6		
		50	93.3		
		55	104.6		
60	120.0				

### UCMSL Structure and Assembly / Disassembly



#### Disassembly method of UCMSL

- 1) Loosen hexagon socket bolt (a) and remove safety plate (12).
- 2) Loosen hexagon socket head bolt (b) and remove stopper plate (41).
- 3) Pull and remove cam slider (1) from cam holder (4) to the rear.

#### Assembly method of UCMSL

- 1) Assemble components in the reverse order of disassembly.
  - Make sure that there is no foreign matter on the sliding area and assemble components.
  - The clearance between the cam slider and the cam holder is controlled. Match the stamped serial number on the holder and slider before assembly.
  - When cam is disassembled and then reassembled, please do not forget to assemble all bolts provided.

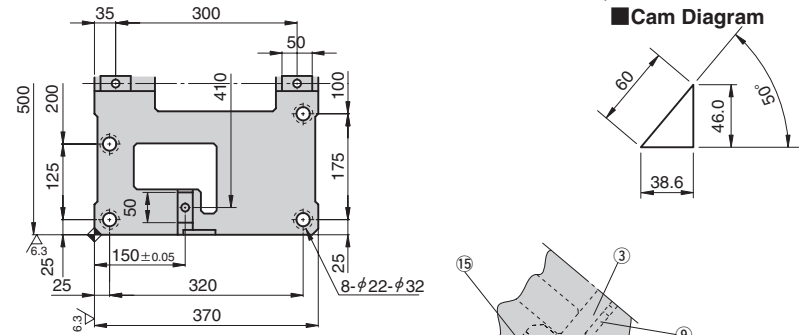
# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE

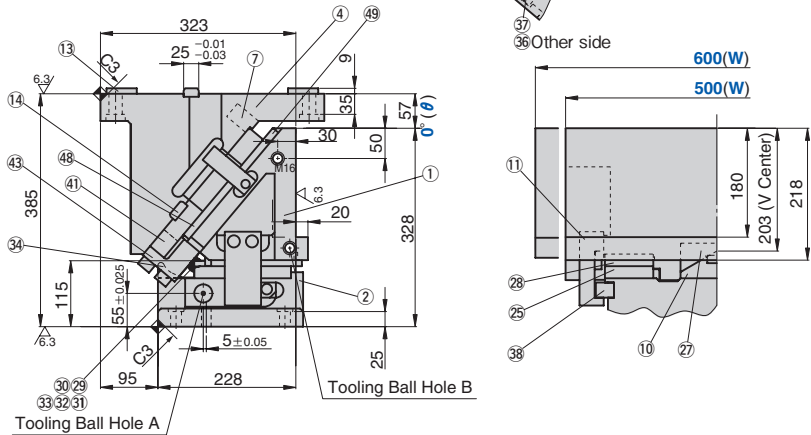
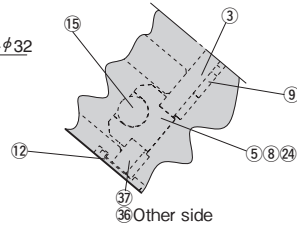


UCMSL500 - 00 / UCMSL600 - 00

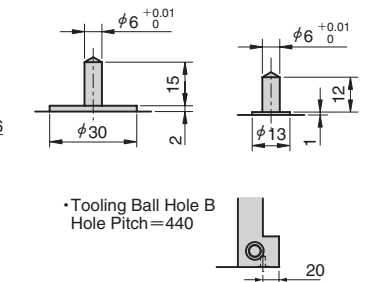
\*The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.



Cam Diagram



Tooling Ball Hole A Tooling Ball Hole B



• Tooling Ball Hole B Hole Pitch = 440

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type
		Initial Load	Final Load					PS
38.6	313.6 (32.0)	-	18682.0 (1906.3)	25575 (2609.7)	UCMSL	500 600	00	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	00	GK
UCMSL	600	00	NGK

.....Without gas spring

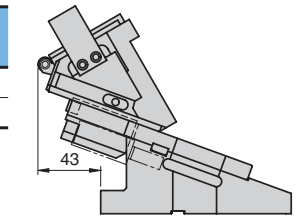
### Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
15	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

### Weight (kg)

W	Slider Weight	Total Weight
500	106.1	265.6
600	112.9	272.4

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 00 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate A	1	S45C (1045)
4	Cam Holder	1	FC250
5	Spring Guide Block	2	Bronze with Graphite
7	Guide Pin Block	2	SS400 (1020)
8	Spring Guide Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)
12	Safety Plate	2	S45C (1045)
13	Key A	4	SS400 (1020)
14	Key B	4	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification
24	Stopper	4	Urethane PCU20
25	Cam Slide Plate A	2	Bronze with Graphite

No.	Description	Qty	Material and Remark
27	Cam Slide Guide	1	S45C (1045)
28	Lower Slide Plate	2	S45C (1045)
29	Roller Bracket	1	S45C (1045)
30	Roller	1	S45C (1045)
31	Roller Pin	1	S45C (1045)
32	Bushing	1	Bronze with Graphite (SOB12-18-16)
33	Snap Ring E Type	2	φ9
34	Roller Driver	1	S45C (1045)
36	Base Plate B (R)	1	S45C (1045)
37	Base Plate B (L)	1	S45C (1045)
38	Positive Return Block	2	Bronze with Graphite
41	Stopper Plate	2	SS400 (1020)
43	Locking Plate	2	SS400 (1020)
48	Slide Plate	2	Bronze with Graphite
49	Slide Plate	2	Bronze with Graphite



Bolts for assembly are not indicated.

# Aerial Cam Unit

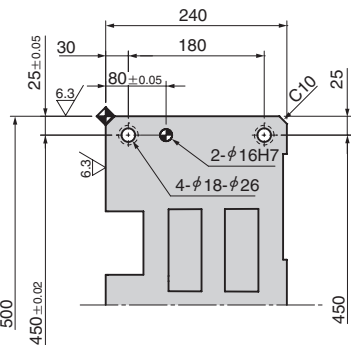
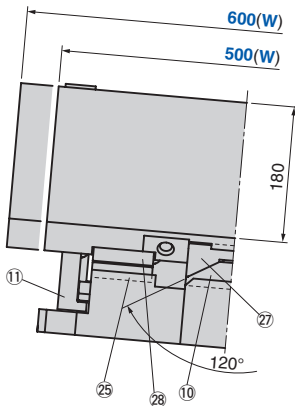
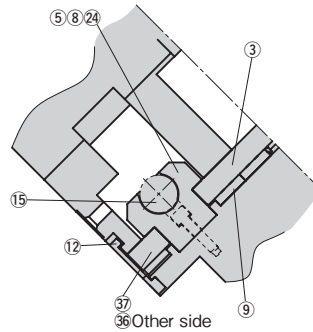
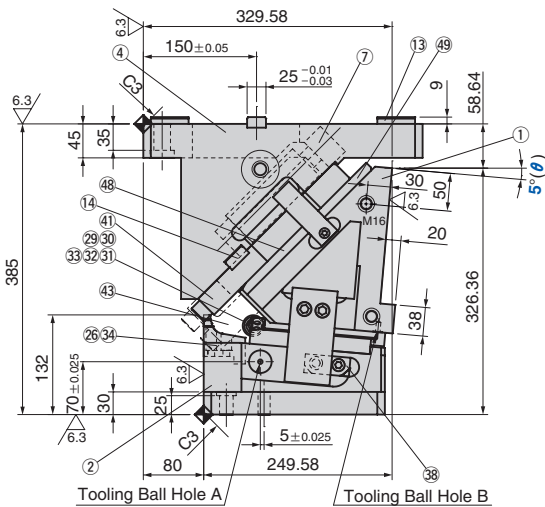
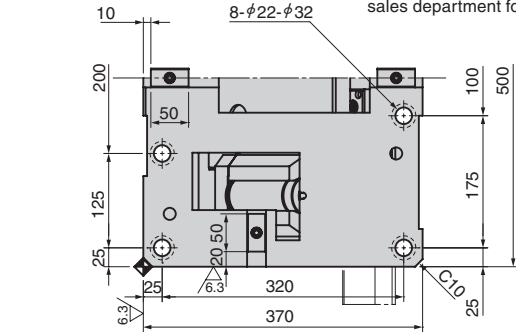
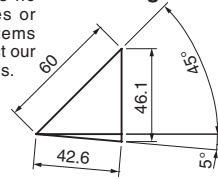
LARGE TYPE FOR PIERCE AND FLANGE

CAD FILE

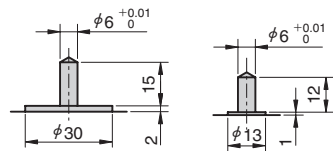
UCMSL500 - 05 / UCMSL600 - 05

\* The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.

### Cam Diagram



Tooling Ball Hole A Tooling Ball Hole B



• Tooling Ball Hole B Hole Pitch = 440

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
42.6	313.6 (32.0)	-	18682.0 (1906.3)	25481 (2600.1)	UCMSL	500 600	05	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	05	GK
UCMSL	600	05	NGK

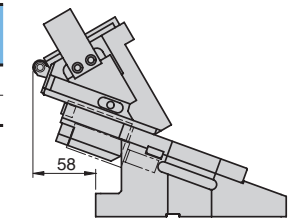
.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	Weight (kg)		
			W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	262.4
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	269.2
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas is not charged.



Order

UCMSL500 - 05 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	27	Cam Slide Guide	1	S45C (1045)
2	Cam Driver	1	FC250	28	Lower Slide Plate	2	S45C (1045)
3	Base Plate A	1	S45C (1045)	29	Roller Bracket	1	S45C (1045)
4	Cam Holder	1	FC250	30	Roller	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	31	Roller Pin	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	32	Bushing	1	Bronze with Graphite (SOB12-18-16)
8	Spring Guide Plate	2	SS400 (1020)	33	Snap Ring E Type	2	φ9
9	Slide Lower Plate B	4	Bronze with Graphite	34	Roller Driver	1	S45C (1045)
10	Cam Slide Guide	1	Bronze with Graphite	36	Base Plate B (R)	1	S45C (1045)
11	Positive Return Follower	2	S45C (1045)	37	Base Plate B (L)	1	S45C (1045)
12	Safety Plate	2	S45C (1045)	38	Positive Return Block	2	Bronze with Graphite
13	Key A	4	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
14	Key B	4	SS400 (1020)	43	Locking Plate	2	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification	48	Slide Plate	2	Bronze with Graphite
24	Stopper	4	Urethane PCU20	49	Slide Plate	2	Bronze with Graphite
25	Cam Slide Plate A	2	Bronze with Graphite				



Bolts for assembly are not indicated.

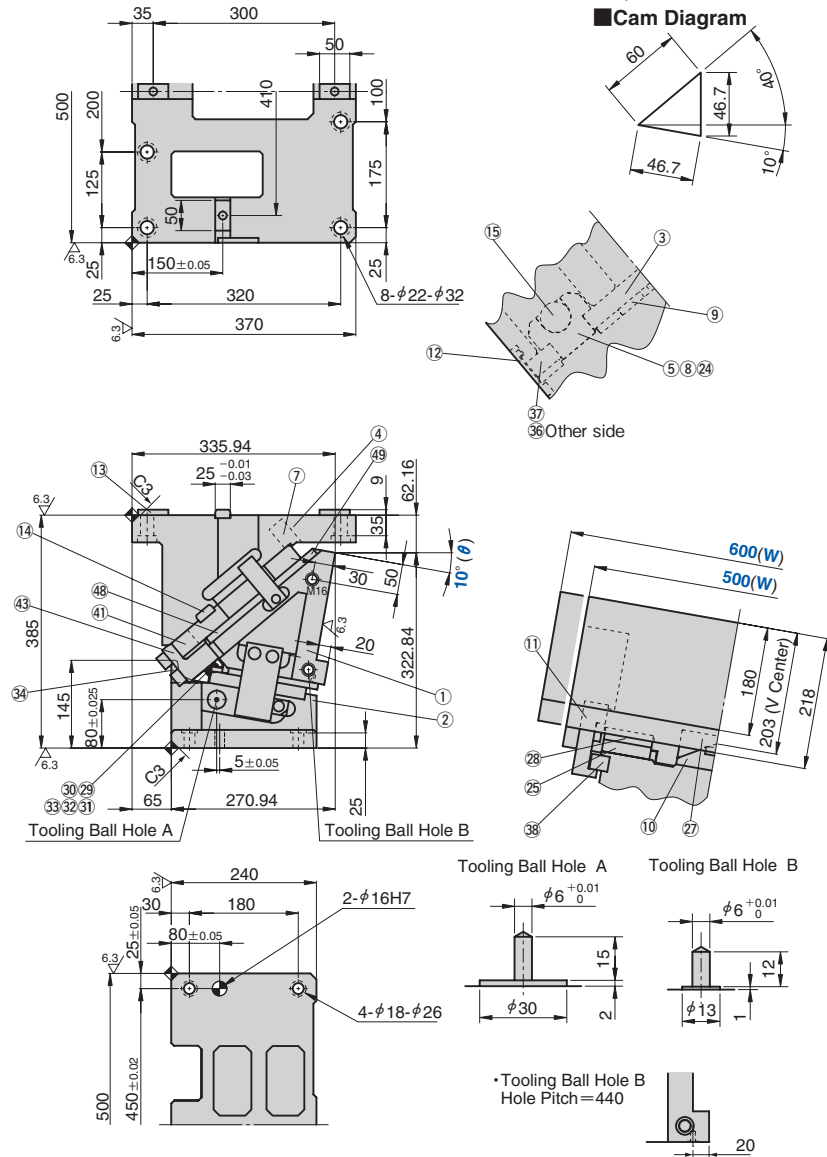
# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 10 / UCMSL600 - 10

\*The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
46.7	313.6 (32.0)	-	18682.0 (1906.3)	25381 (2589.9)	UCMSL	500 600	10	GS *NGS GD *NGD GK *NGK

\* Parts for spring assembly are included.



Order

Catalog No. W - θ - PS

UCMSL 500 - 10 - GK

UCMSL 600 - 10 - NGK

.....Without gas spring

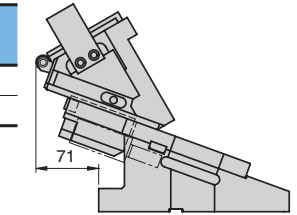
### Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
15	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

### Weight (kg)

W	Slider Weight	Total Weight
500	106.1	261.0
600	112.9	267.9

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 10 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate A	1	S45C (1045)
4	Cam Holder	1	FC250
5	Spring Guide Block	2	Bronze with Graphite
7	Guide Pin Block	2	SS400 (1020)
8	Spring Guide Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)
12	Safety Plate	2	S45C (1045)
13	Key A	4	SS400 (1020)
14	Key B	4	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification
24	Stopper	4	Urethane PCU20
25	Cam Slide Plate A	2	Bronze with Graphite

No.	Description	Qty	Material and Remark
27	Cam Slide Guide	1	S45C (1045)
28	Lower Slide Plate	2	S45C (1045)
29	Roller Bracket	1	S45C (1045)
30	Roller	1	S45C (1045)
31	Roller Pin	1	S45C (1045)
32	Bushing	1	Bronze with Graphite (SOB12-18-16)
33	Snap Ring E Type	2	φ9
34	Roller Driver	1	S45C (1045)
36	Base Plate B (R)	1	S45C (1045)
37	Base Plate B (L)	1	S45C (1045)
38	Positive Return Block	2	Bronze with Graphite
41	Stopper Plate	2	SS400 (1020)
43	Locking Plate	2	SS400 (1020)
48	Slide Plate	2	Bronze with Graphite
49	Slide Plate	2	Bronze with Graphite



Bolts for assembly are not indicated.

# Aerial Cam Unit

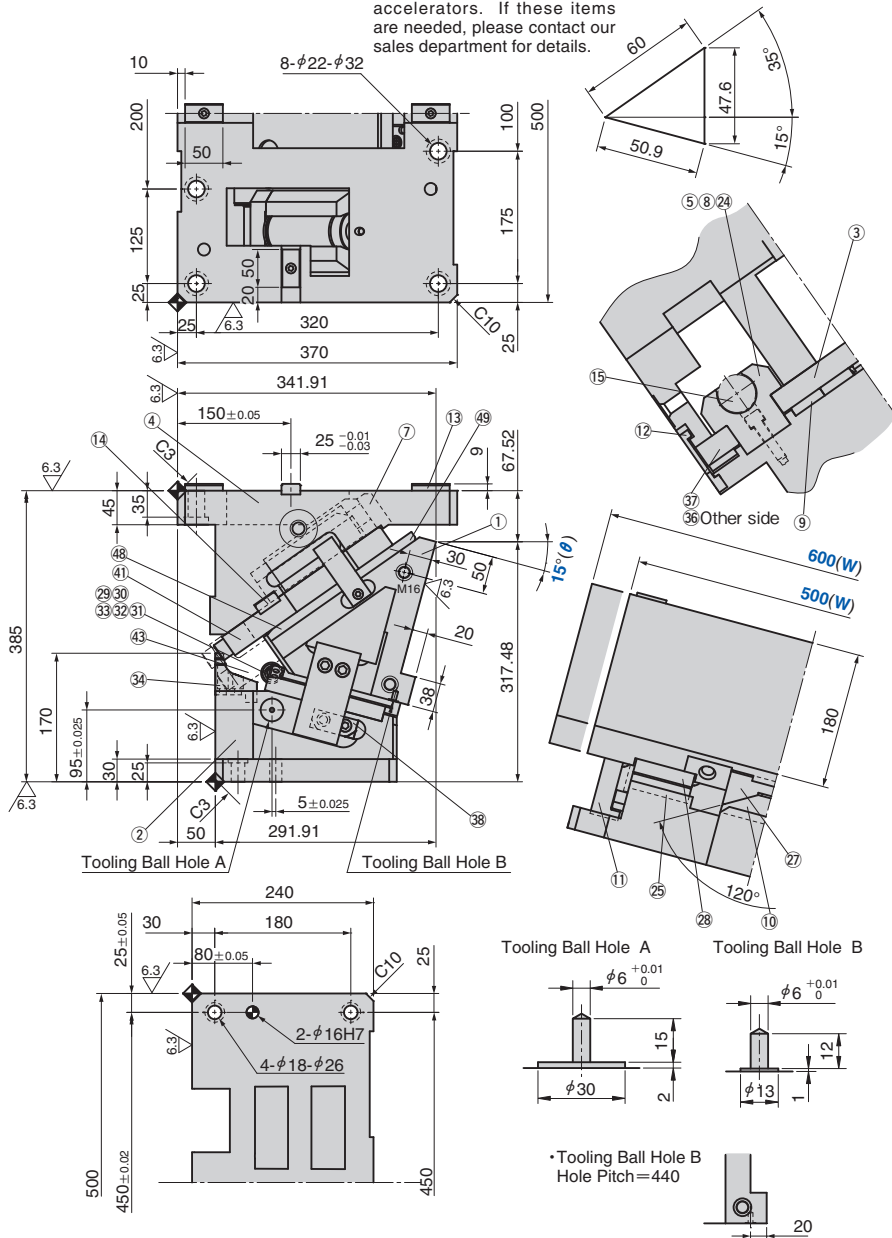
LARGE TYPE FOR PIERCE AND FLANGE

CAD FILE

UCMSL500 - 15 / UCMSL600 - 15

\* The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.

### Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
50.9	313.6 (32.0)	-	18682.0 (1906.3)	25275 (2579.1)	UCMSL	500 600	15	GK *NGK
								GD *NGD
								GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	15	GK
UCMSL	600	15	NGK

.....Without gas spring

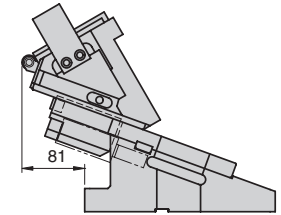
### Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
15	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

### Weight (kg)

No.	PS	W	Slider Weight	Total Weight
	GK	500	106.1	260.2
15	GD	600	112.9	267.1
	GS			

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 15 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate A	1	S45C (1045)
4	Cam Holder	1	FC250
5	Spring Guide Block	2	Bronze with Graphite
7	Guide Pin Block	2	SS400 (1020)
8	Spring Guide Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)
12	Safety Plate	2	S45C (1045)
13	Key A	4	SS400 (1020)
14	Key B	4	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification
24	Stopper	4	Urethane PCU20
25	Cam Slide Plate A	2	Bronze with Graphite

No.	Description	Qty	Material and Remark
27	Cam Slide Guide	1	S45C (1045)
28	Lower Slide Plate	2	S45C (1045)
29	Roller Bracket	1	S45C (1045)
30	Roller	1	S45C (1045)
31	Roller Pin	1	S45C (1045)
32	Bushing	1	Bronze with Graphite (SOB12-18-16)
33	Snap Ring E Type	2	φ9
34	Roller Driver	1	S45C (1045)
36	Base Plate B (R)	1	S45C (1045)
37	Base Plate B (L)	1	S45C (1045)
38	Positive Return Block	2	Bronze with Graphite
41	Stopper Plate	2	SS400 (1020)
43	Locking Plate	2	SS400 (1020)
48	Slide Plate	2	Bronze with Graphite
49	Slide Plate	2	Bronze with Graphite



Bolts for assembly are not indicated.

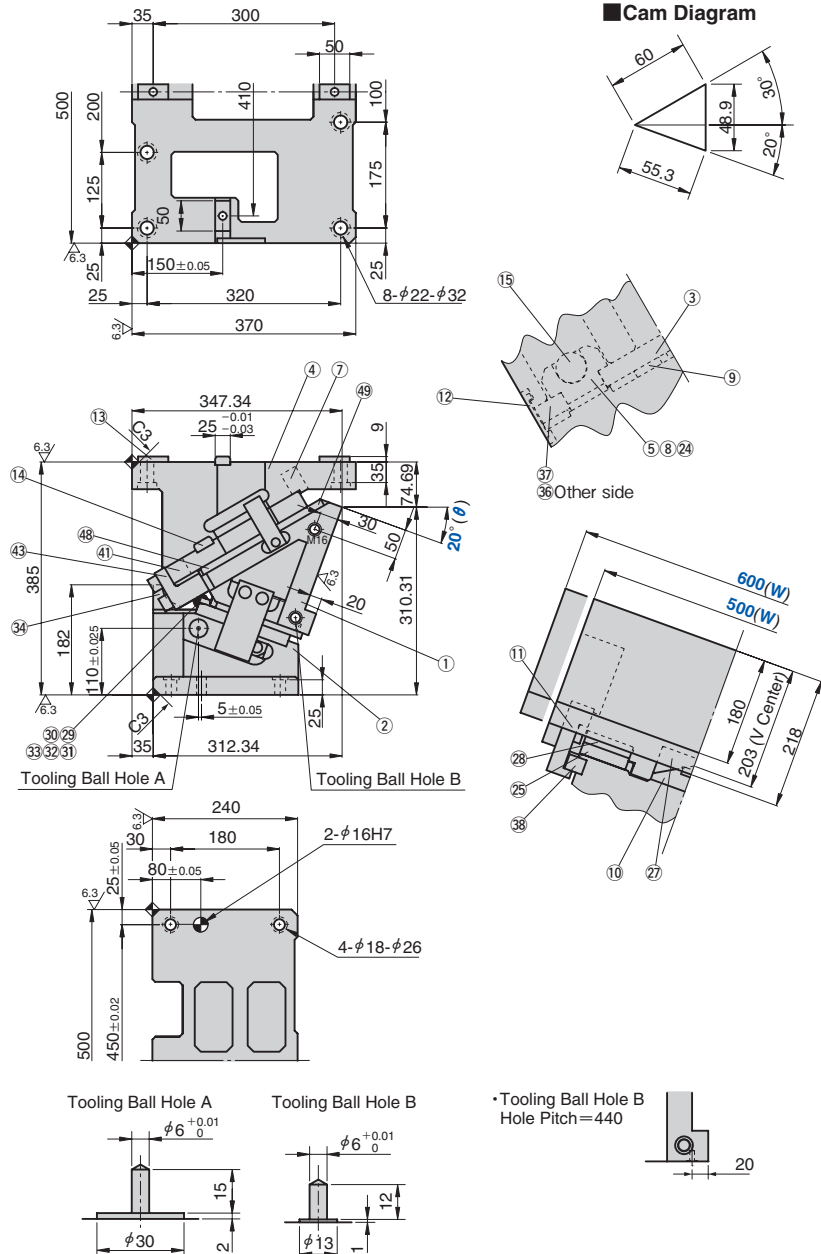
# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 20 / UCMSL600 - 20

\*The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
55.3	313.6 (32.0)	-	18682.0 (1906.3)	25164 (2567.8)	UCMSL	500 600	20	GK *NGK GD *NGD GS *NGS

\*Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	20	GK
UCMSL	600	20	NGK

.....Without gas spring

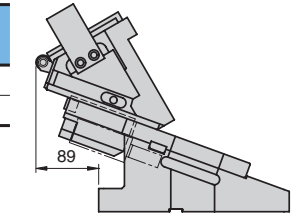
### Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
15	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

### Weight (kg)

W	Slider Weight	Total Weight
500	106.1	260.7
600	112.9	267.6

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 20 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	27	Cam Slide Guide	1	S45C (1045)
2	Cam Driver	1	FC250	28	Lower Slide Plate	2	S45C (1045)
3	Base Plate A	1	S45C (1045)	29	Roller Bracket	1	S45C (1045)
4	Cam Holder	1	FC250	30	Roller	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	31	Roller Pin	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	32	Bushing	1	Bronze with Graphite (SOB12-18-16)
8	Spring Guide Plate	2	SS400 (1020)	33	Snap Ring E Type	2	φ9
9	Slide Lower Plate B	4	Bronze with Graphite	34	Roller Driver	1	S45C (1045)
10	Cam Slide Guide	1	Bronze with Graphite	36	Base Plate B (R)	1	S45C (1045)
11	Positive Return Follower	2	S45C (1045)	37	Base Plate B (L)	1	S45C (1045)
12	Safety Plate	2	S45C (1045)	38	Positive Return Block	2	Bronze with Graphite
13	Key A	4	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
14	Key B	4	SS400 (1020)	43	Locking Plate	2	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification	48	Slide Plate	2	Bronze with Graphite
24	Stopper	4	Urethane PCU20	49	Slide Plate	2	Bronze with Graphite
25	Cam Slide Plate A	2	Bronze with Graphite				



Bolts for assembly are not indicated.

# Aerial Cam Unit

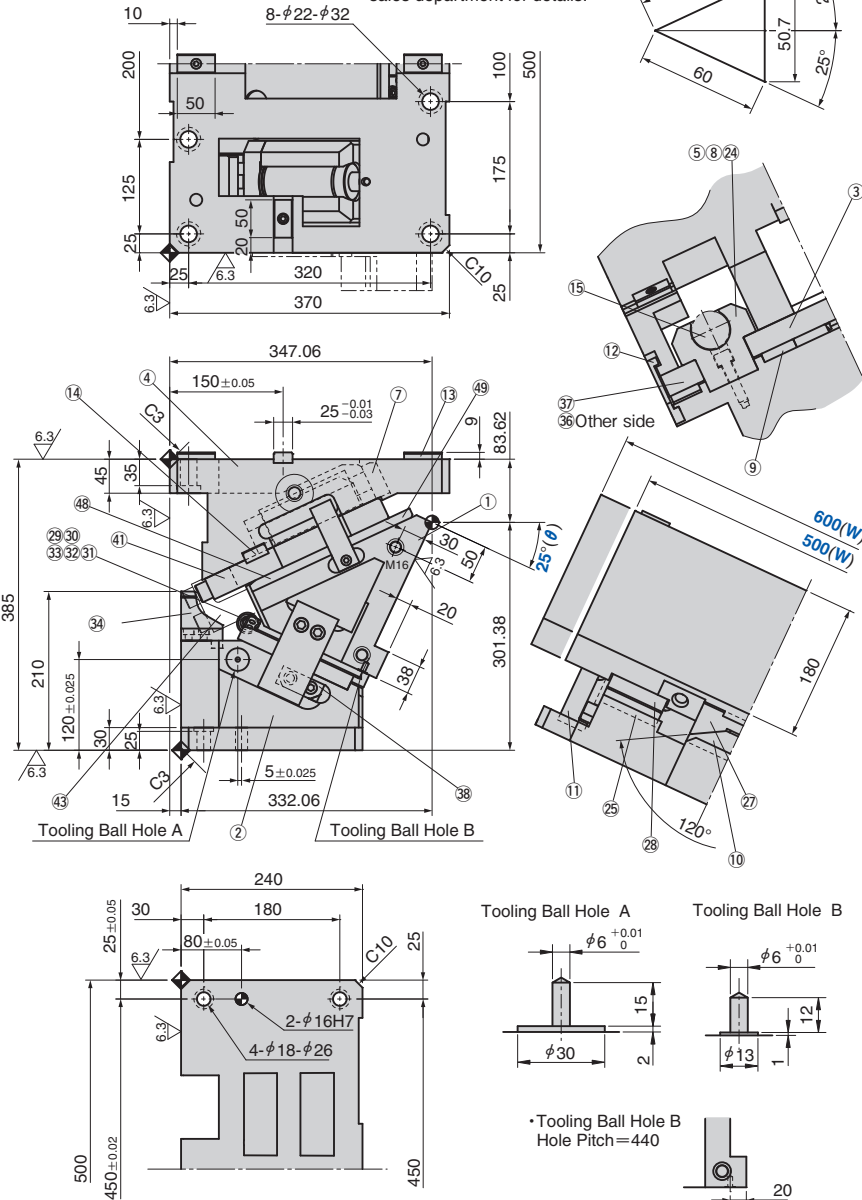
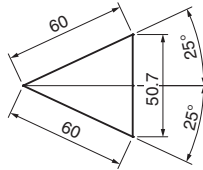
LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 25 / UCMSL600 - 25

\* The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.

### Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
60.0	313.6 (32.0)	-	18682.0 (1906.3)	25050 (2556.1)	UCMSL	500 600	25	GK *NGK
								GD *NGD
								GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
-------------	---	---	----

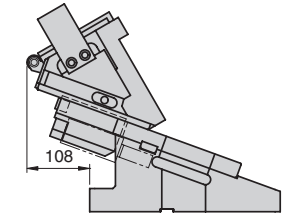
UCMSL 500 - 25 - GK  
UCMSL 600 - 25 - NGK .....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	260.8
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	267.7
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 25 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	27	Cam Slide Guide	1	S45C (1045)
2	Cam Driver	1	FC250	28	Lower Slide Plate	2	S45C (1045)
3	Base Plate A	1	S45C (1045)	29	Roller Bracket	1	S45C (1045)
4	Cam Holder	1	FC250	30	Roller	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	31	Roller Pin	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	32	Bushing	1	Bronze with Graphite (SOB12-18-16)
8	Spring Guide Plate	2	SS400 (1020)	33	Snap Ring E Type	2	φ9
9	Slide Lower Plate B	4	Bronze with Graphite	34	Roller Driver	1	S45C (1045)
10	Cam Slide Guide	1	Bronze with Graphite	36	Base Plate B (R)	1	S45C (1045)
11	Positive Return Follower	2	S45C (1045)	37	Base Plate B (L)	1	S45C (1045)
12	Safety Plate	2	S45C (1045)	38	Positive Return Block	2	Bronze with Graphite
13	Key A	4	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
14	Key B	4	SS400 (1020)	43	Locking Plate	2	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification	48	Slide Plate	2	Bronze with Graphite
24	Stopper	4	Urethane PCU20	49	Slide Plate	2	Bronze with Graphite
25	Cam Slide Plate A	2	Bronze with Graphite				

Bolts for assembly are not indicated.

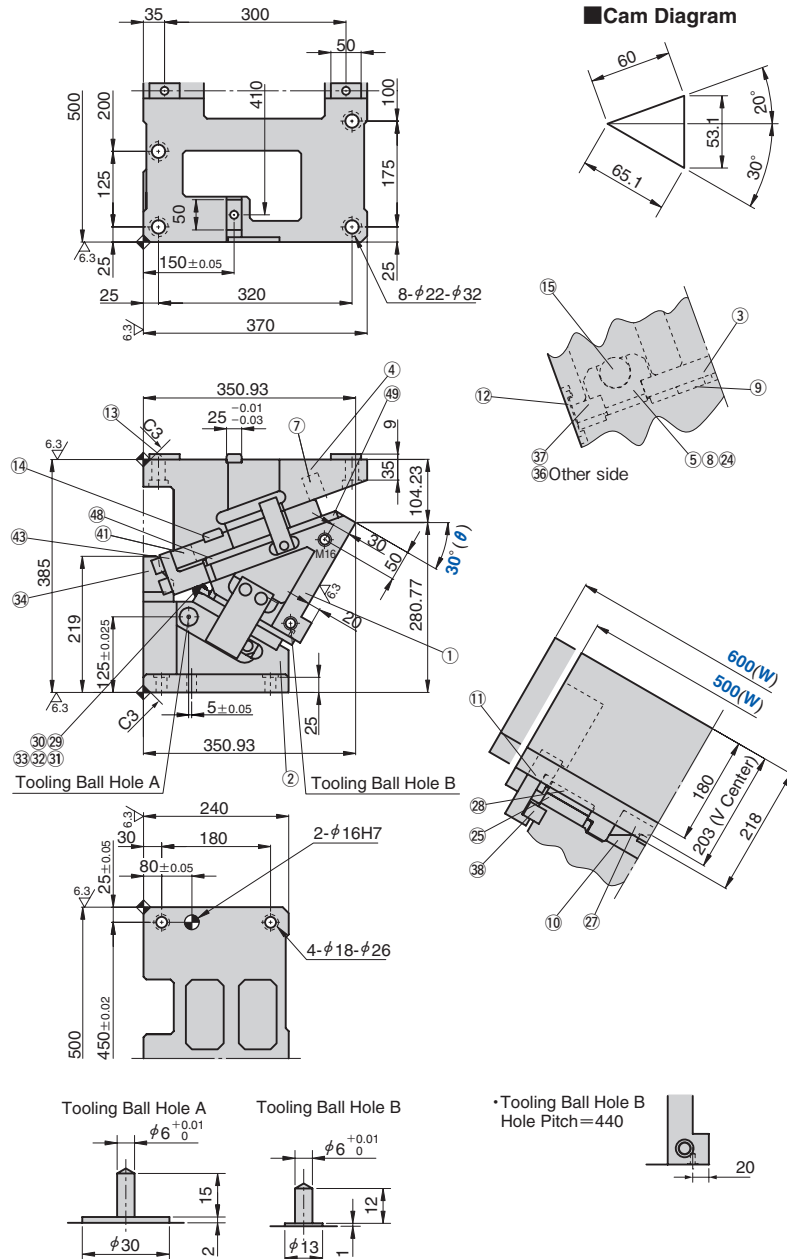
# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 30 / UCMSL600 - 30

\*The cam diagram shows no roller bracket assemblies or accelerators. If these items are needed, please contact our sales department for details.



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
65.1	313.6 (32.0)	-	18682.0 (1906.3)	24932 (2544.1)	UCMSL	500 600	30	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.

Order Catalog No. W - θ - PS

UCMSL	500	-	30	-	GK
UCMSL	600	-	30	-	NGK

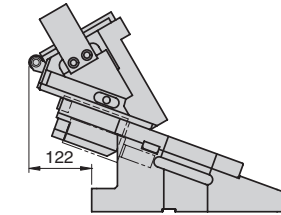
.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	264.4
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	271.3
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option Option Code Specification

NF	Nitrogen gas not charged.
----	---------------------------

Order UCMSL500 - 30 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	27	Cam Slide Guide	1	S45C (1045)
2	Cam Driver	1	FC250	28	Lower Slide Plate	2	S45C (1045)
3	Base Plate A	1	S45C (1045)	29	Roller Bracket	1	S45C (1045)
4	Cam Holder	1	FC250	30	Roller	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	31	Roller Pin	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	32	Bushing	1	Bronze with Graphite (SOB12-18-16)
8	Spring Guide Plate	2	SS400 (1020)	33	Snap Ring E Type	2	φ9
9	Slide Lower Plate B	4	Bronze with Graphite	34	Roller Driver	1	S45C (1045)
10	Cam Slide Guide	1	Bronze with Graphite	36	Base Plate B (R)	1	S45C (1045)
11	Positive Return Follower	2	S45C (1045)	37	Base Plate B (L)	1	S45C (1045)
12	Safety Plate	2	S45C (1045)	38	Positive Return Block	2	Bronze with Graphite
13	Key A	4	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
14	Key B	4	SS400 (1020)	43	Locking Plate	2	SS400 (1020)
15	Gas Spring	2	Refer to the Spring Specification	48	Slide Plate	2	Bronze with Graphite
24	Stopper	4	Urethane PCU20	49	Slide Plate	2	Bronze with Graphite
25	Cam Slide Plate A	2	Bronze with Graphite				

Bolts for assembly are not indicated.

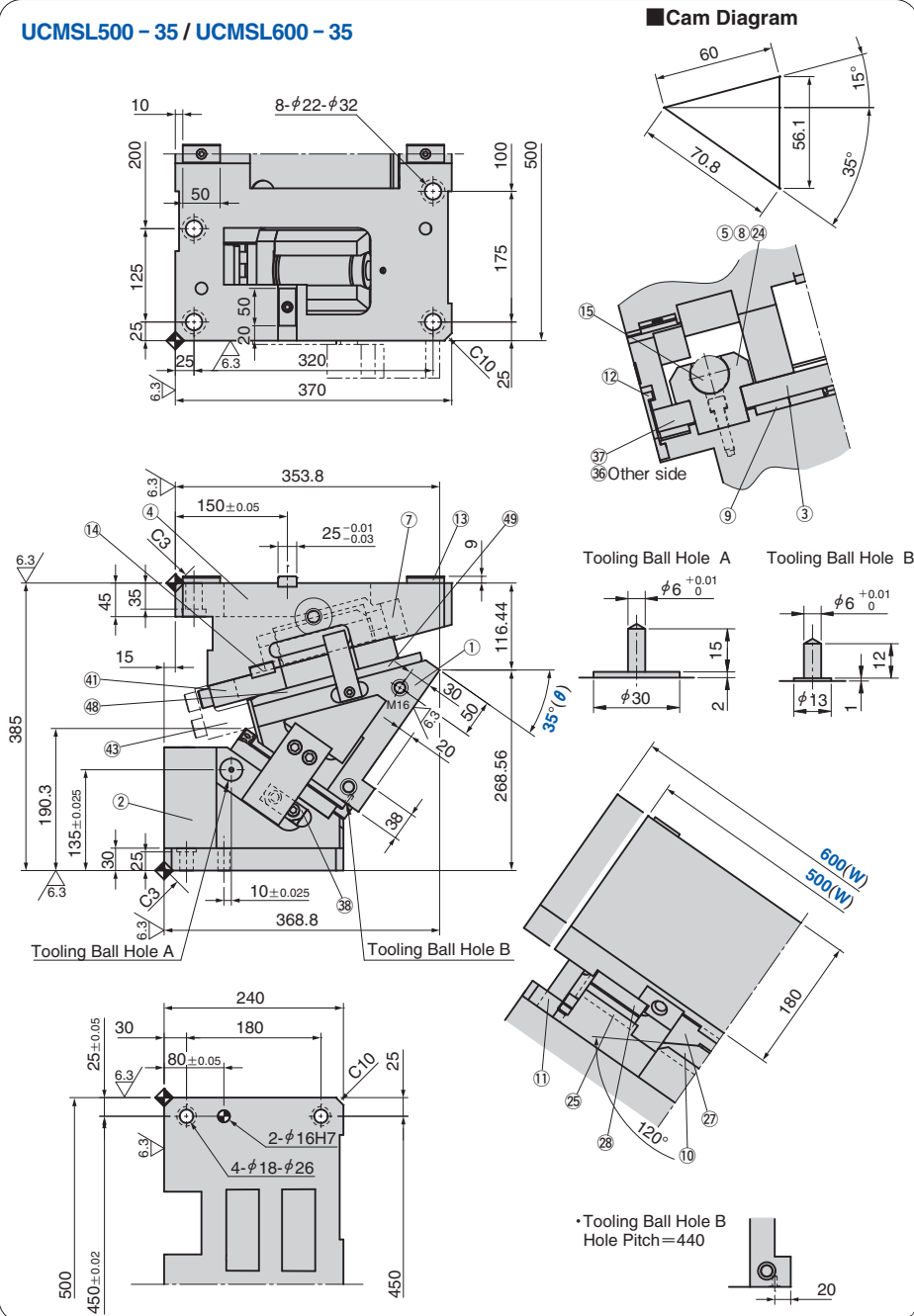


# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 35 / UCMSL600 - 35



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
70.8	313.6 (32.0)	-	18682.0 (1906.3)	24813 (2531.9)	UCMSL	500 600	35	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	35	GK
UCMSL	600	35	NGK

.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	269.9
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	276.7
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 35 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	25	Cam Slide Plate A	2	Bronze with Graphite
2	Cam Driver	1	FC250	27	Cam Slide Guide	1	S45C (1045)
3	Base Plate A	1	S45C (1045)	28	Lower Slide Plate	2	S45C (1045)
4	Cam Holder	1	FC250	36	Base Plate B (R)	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	37	Base Plate B (L)	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	38	Positive Return Block	2	Bronze with Graphite
8	Spring Guide Plate	2	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite	43	Locking Plate	2	SS400 (1020)
10	Cam Slide Guide	1	Bronze with Graphite	48	Slide Plate	2	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)	49	Slide Plate	2	Bronze with Graphite
12	Safety Plate	2	S45C (1045)				
13	Key A	4	SS400 (1020)				
14	Key B	4	SS400 (1020)				
15	Gas Spring	2	Refer to the Spring Specification				
24	Stopper	4	Urethane PCU20				



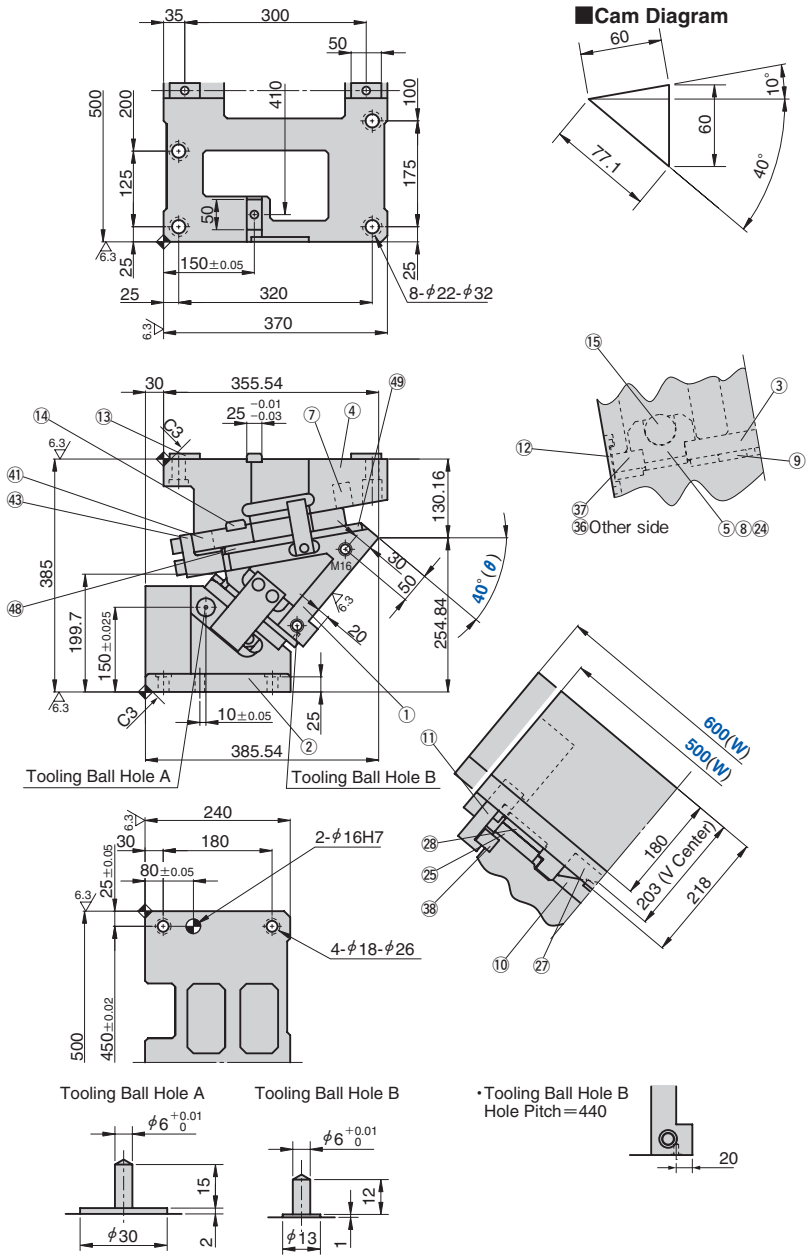
Bolts for assembly are not indicated.

# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 40 / UCMSL600 - 40



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
77.1	313.6 (32.0)	-	18682.0 (1906.3)	24692 (2519.6)	UCMSL	500 600	40	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	40	GK
UCMSL	600	40	NGK

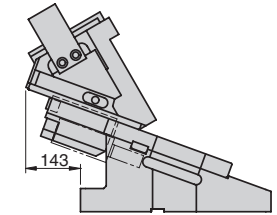
.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	274.5
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	281.3
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 40 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	25	Cam Slide Plate A	2	Bronze with Graphite
2	Cam Driver	1	FC250	27	Cam Slide Guide	1	S45C (1045)
3	Base Plate A	1	S45C (1045)	28	Lower Slide Plate	2	S45C (1045)
4	Cam Holder	1	FC250	36	Base Plate B (R)	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	37	Base Plate B (L)	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	38	Positive Return Block	2	Bronze with Graphite
8	Spring Guide Plate	2	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite	43	Locking Plate	2	SS400 (1020)
10	Cam Slide Guide	1	Bronze with Graphite	48	Slide Plate	2	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)	49	Slide Plate	2	Bronze with Graphite
12	Safety Plate	2	S45C (1045)				
13	Key A	4	SS400 (1020)				
14	Key B	4	SS400 (1020)				
15	Gas Spring	2	Refer to the Spring Specification				
24	Stopper	4	Urethane PCU20				



Bolts for assembly are not indicated.

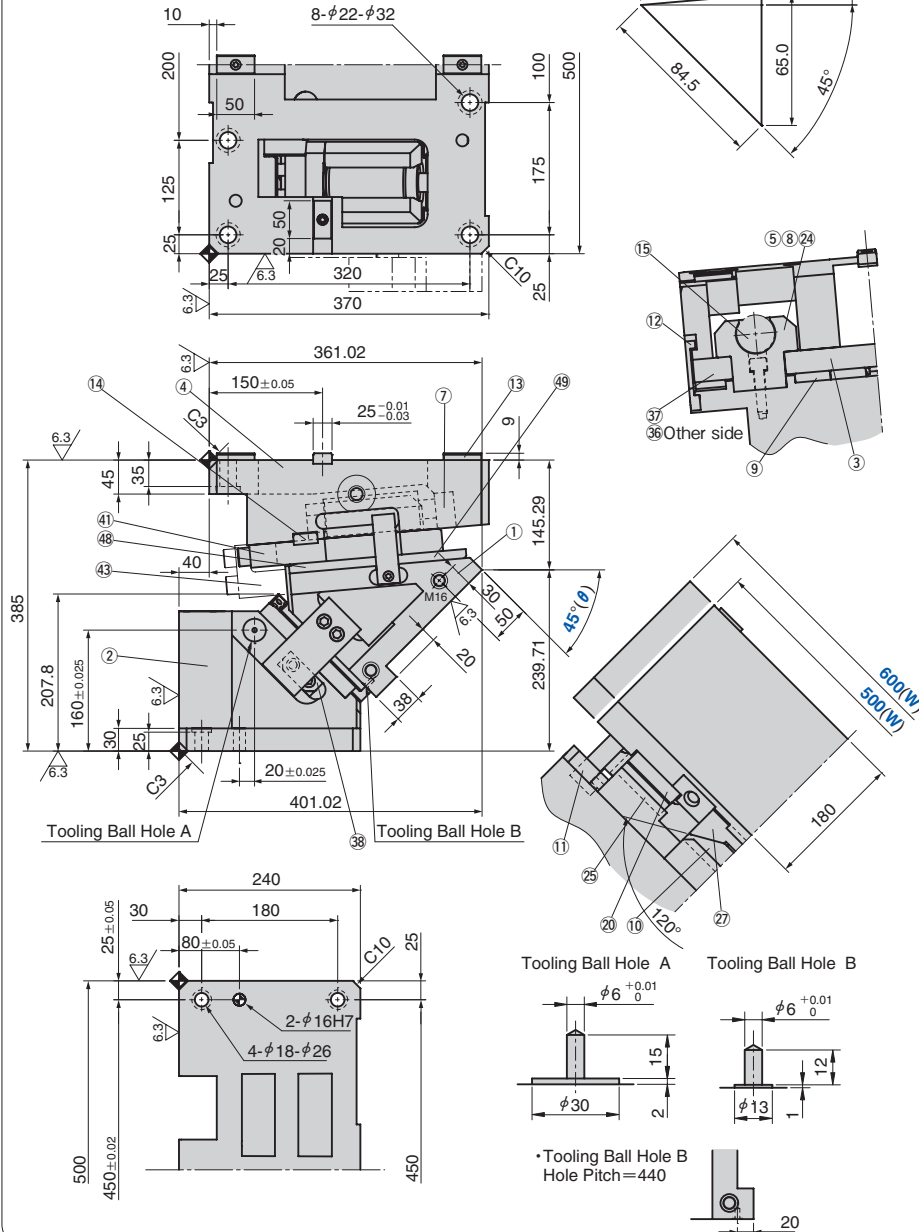
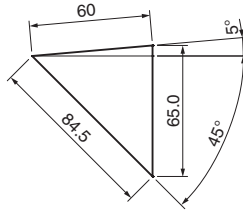
# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 45 / UCMSL600 - 45

### Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
84.5	313.6 (32.0)	-	18682.0 (1906.3)	24571 (2507.2)	UCMSL	500 600	45	GK *NGK
								GD *NGD
								GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	45	GK
UCMSL	600	45	NGK

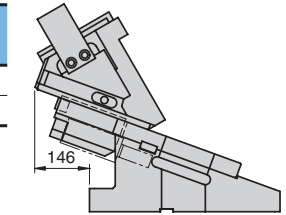
.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	281.6
15	GD	L.750.075.TO.140 (DADCO)	600	112.9	288.5
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 45 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	25	Cam Slide Plate A	2	Bronze with Graphite
2	Cam Driver	1	FC250	27	Cam Slide Guide	1	S45C (1045)
3	Base Plate A	1	S45C (1045)	28	Lower Slide Plate	2	S45C (1045)
4	Cam Holder	1	FC250	36	Base Plate B (R)	1	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	37	Base Plate B (L)	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	38	Positive Return Block	2	Bronze with Graphite
8	Spring Guide Plate	2	SS400 (1020)	41	Stopper Plate	2	SS400 (1020)
9	Slide Lower Plate B	4	Bronze with Graphite	43	Locking Plate	2	SS400 (1020)
10	Cam Slide Guide	1	Bronze with Graphite	48	Slide Plate	2	Bronze with Graphite
11	Positive Return Follower	2	S45C (1045)	49	Slide Plate	2	Bronze with Graphite
12	Safety Plate	2	S45C (1045)				
13	Key A	4	SS400 (1020)				
14	Key B	4	SS400 (1020)				
15	Gas Spring	2	Refer to the Spring Specification				
24	Stopper	4	Urethane PCU20				



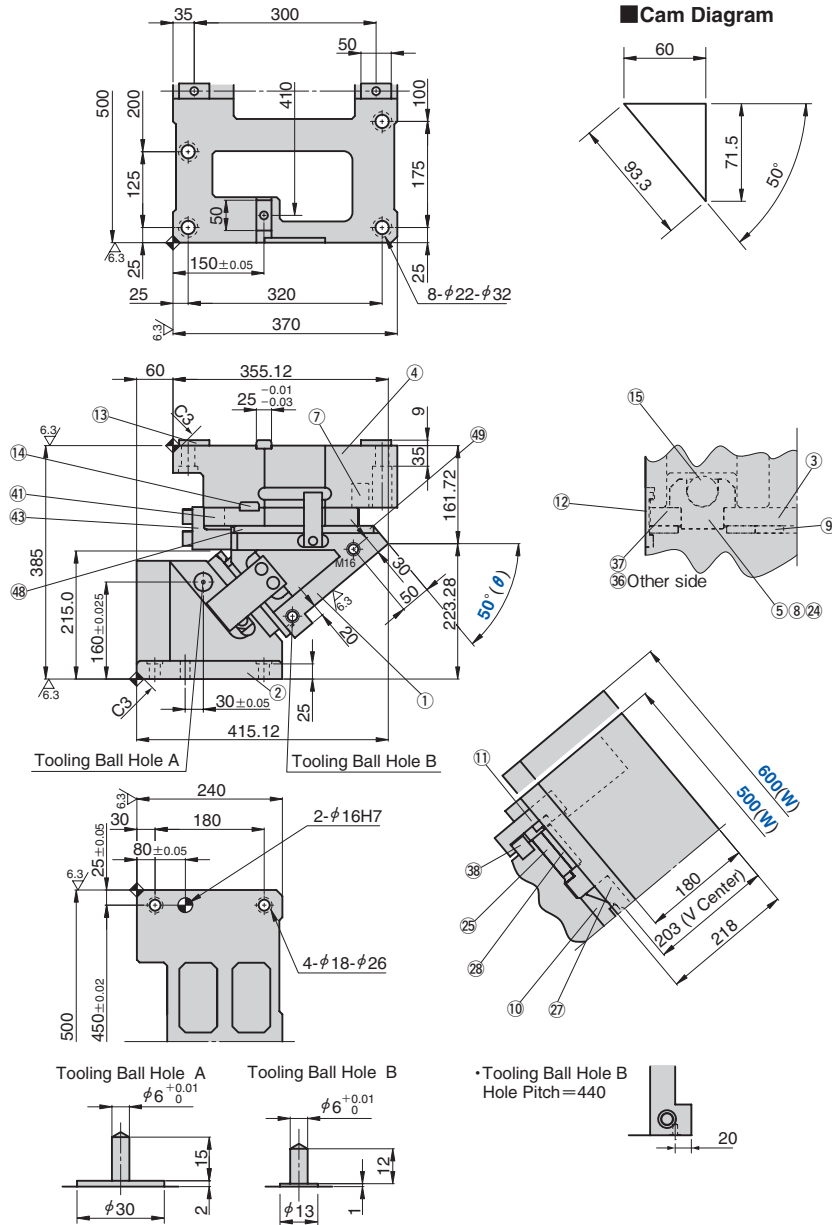
Bolts for assembly are not indicated.

# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE

CAD FILE

UCMSL500 - 50 / UCMSL600 - 50



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
93.3	313.6 (32.0)	-	18682.0 (1906.3)	24451 (2495.0)	UCMSL	500 600	50	GK *NGK
								GD *NGD
								GS *NGS

\*Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	50	GK
UCMSL	600	50	NGK

.....Without gas spring

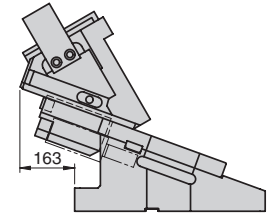
## Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
15	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

## Weight (kg)

No.	PS	W	Slider Weight	Total Weight
	GK	500	106.1	282.0
15	GD	600	112.9	288.9
	GS			

## Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 50 - GK - NF

## Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	24	Stopper	4	Urethane PCU20
2	Cam Driver	1	FC250	25	Cam Slide Plate A	2	Bronze with Graphite
3	Base Plate A	1	S45C (1045)	27	Cam Slide Guide	1	S45C (1045)
4	Cam Holder	1	FC250	28	Lower Slide Plate	2	S45C (1045)
5	Spring Guide Block	2	Bronze with Graphite	36	Base Plate B (R)	1	S45C (1045)
7	Guide Pin Block	2	SS400 (1020)	37	Base Plate B (L)	1	S45C (1045)
8	Spring Guide Plate	2	SS400 (1020)	38	Positive Return Block	2	Bronze with Graphite
9	Slide Lower Plate B	4	Bronze with Graphite	41	Stopper Plate	2	SS400 (1020)
10	Cam Slide Guide	1	Bronze with Graphite	43	Locking Plate	2	SS400 (1020)
11	Positive Return Follower	2	S45C (1045)	48	Slide Plate	2	Bronze with Graphite
12	Safety Plate	2	S45C (1045)	49	Slide Plate	2	Bronze with Graphite
13	Key A	4	SS400 (1020)				
14	Key B	4	SS400 (1020)				
15	Gas Spring	2	Refer to the Spring Specification				



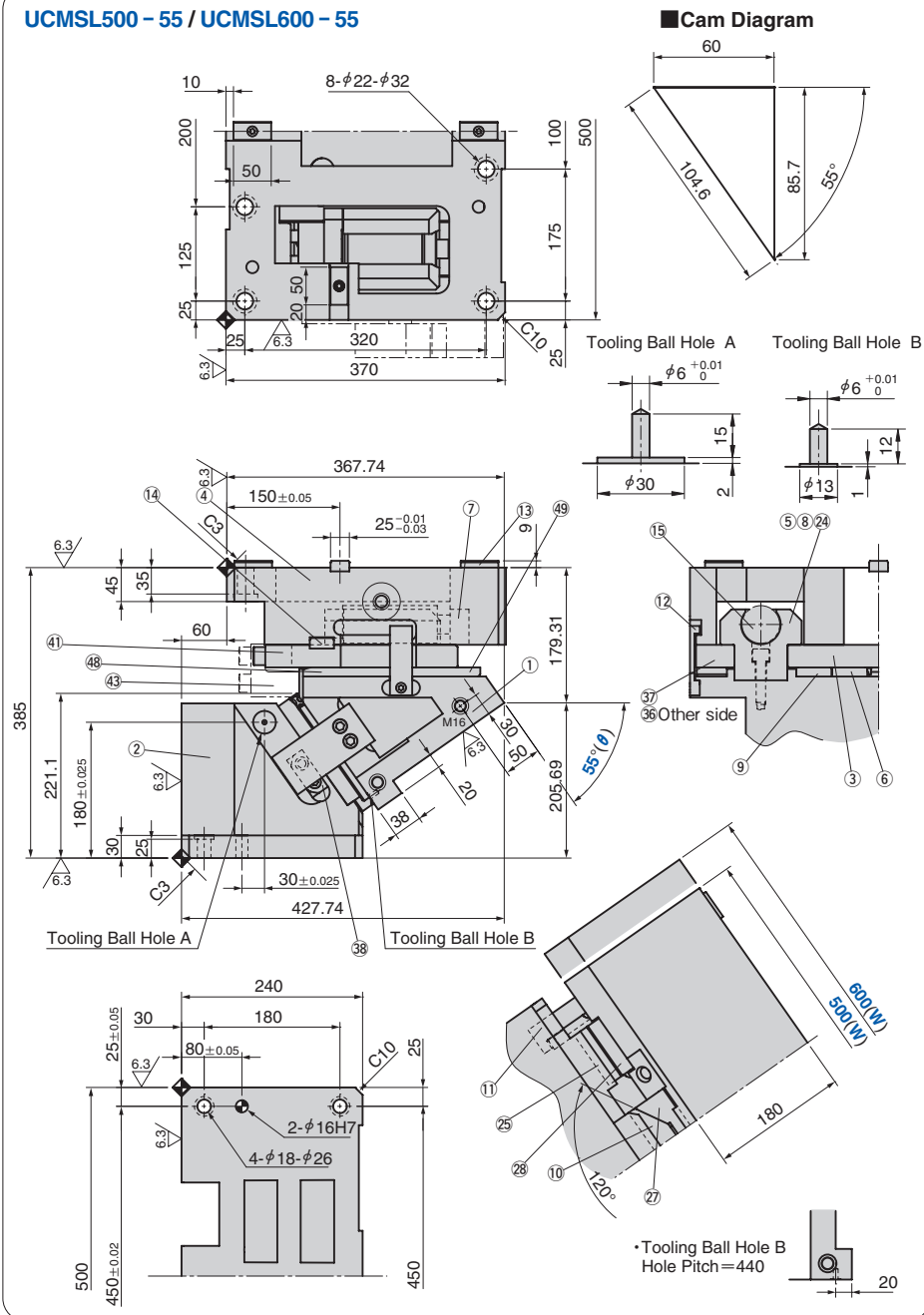
Bolts for assembly are not indicated.

# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE



UCMSL500 - 55 / UCMSL600 - 55



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	$\theta$	Spring Type PS
		Initial Load	Final Load					
104.6	313.6 (32.0)	-	18682.0 (1906.3)	26590 (2713.2)	UCMSL	500 600	55	GK *NGK GD *NGD GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	$\theta$	PS
UCMSL 500	-	55	GK
UCMSL 600	-	55	NGK

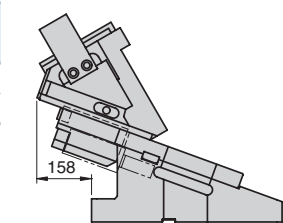
.....Without gas spring

### Spring Specification (Qty 2)

No.	PS	Spring Model	Weight (kg)		
			W	Slider Weight	Total Weight
	GK	K750-80-TD (KALLER)	500	106.1	291.5
⑮	GD	L.750.075.TO.140 (DADCO)	600	112.9	299.2
	GS	SM0750.75 (SDT)			

### Weight (kg)

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 55 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑳	Stopper	4	Urethane PCU20
②	Cam Driver	1	FC250	㉑	Cam Slide Plate A	2	Bronze with Graphite
③	Base Plate A	1	S45C (1045)	㉒	Cam Slide Guide	1	S45C (1045)
④	Cam Holder	1	FC250	㉓	Lower Slide Plate	2	S45C (1045)
⑤	Spring Guide Block	2	Bronze with Graphite	㉔	Base Plate B (R)	1	S45C (1045)
⑥	Wear Plate A	2	Bronze with Graphite	㉕	Base Plate B (L)	1	S45C (1045)
⑦	Guide Pin Block	2	SS400 (1020)	㉖	Positive Return Block	2	Bronze with Graphite
⑧	Spring Guide Plate	2	SS400 (1020)	㉗	Stopper Plate	2	SS400 (1020)
⑨	Slide Lower Plate B	2	Bronze with Graphite	㉘	Locking Plate	2	SS400 (1020)
⑩	Cam Slide Guide	1	Bronze with Graphite	㉙	Slide Plate	2	Bronze with Graphite
⑪	Positive Return Follower	2	S45C (1045)	㉚	Slide Plate	2	Bronze with Graphite
⑫	Safety Plate	2	S45C (1045)				
⑬	Key A	4	SS400 (1020)				
⑭	Key B	4	SS400 (1020)				
⑮	Gas Spring	2	Refer to the Spring Specification				



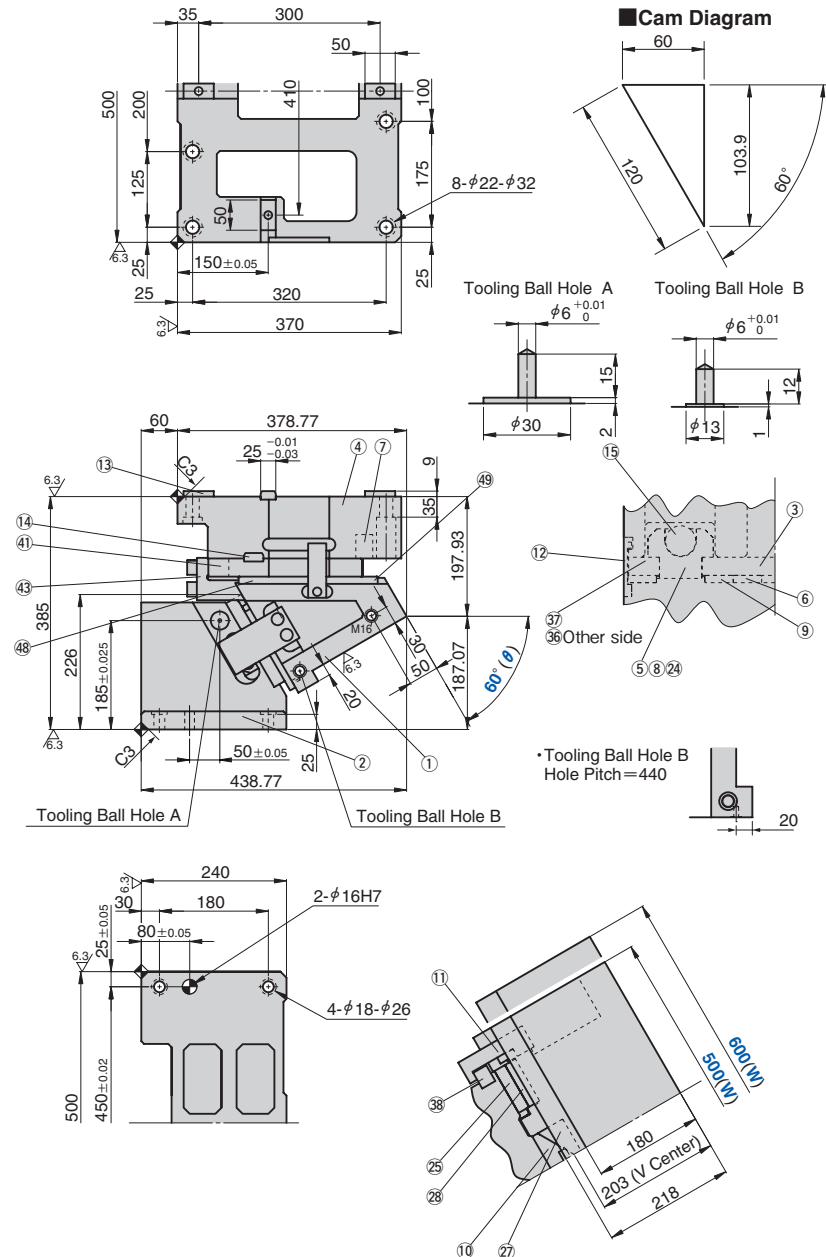
Bolts for assembly are not indicated.

# Aerial Cam Unit

LARGE TYPE FOR PIERCE AND FLANGE

CAD  
FILE

UCMSL500 - 60 / UCMSL600 - 60



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
120.0	313.6 (32.0)	-	18682.0 (1906.3)	29388 (2998.8)	UCMSL	500 600	60	GK *NGK
								GD *NGD
								GS *NGS

\* Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS
UCMSL	500	60	GK
UCMSL	600	60	NGK

.....Without gas spring

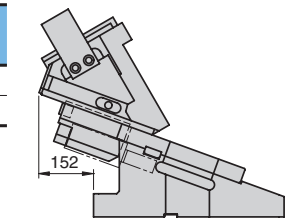
### Spring Specification (Qty 2)

No.	PS	Spring Model
	GK	K750-80-TD (KALLER)
⑮	GD	L.750.075.TO.140 (DADCO)
	GS	SM0750.75 (SDT)

### Weight (kg)

W	Slider Weight	Total Weight
500	106.1	300.1
600	112.9	308.7

### Space for removing



Option

Option Code	Specification
NF	Nitrogen gas not charged.



Order

UCMSL500 - 60 - GK - NF

### Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate A	1	S45C (1045)
④	Cam Holder	1	FC250
⑤	Spring Guide Block	2	Bronze with Graphite
⑥	Wear Plate A	2	Bronze with Graphite
⑦	Guide Pin Block	2	SS400 (1020)
⑧	Spring Guide Plate	2	SS400 (1020)
⑨	Slide Lower Plate B	2	Bronze with Graphite
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C (1045)
⑫	Safety Plate	2	S45C (1045)
⑬	Key A	4	SS400 (1020)
⑭	Key B	4	SS400 (1020)
⑮	Gas Spring	2	Refer to the Spring Specification

No.	Description	Qty	Material and Remark
⑮	Stopper	4	Urethane PCU20
⑮	Cam Slide Plate A	2	Bronze with Graphite
⑮	Cam Slide Guide	1	S45C (1045)
⑮	Lower Slide Plate	2	S45C (1045)
⑮	Base Plate B (R)	1	S45C (1045)
⑮	Base Plate B (L)	1	S45C (1045)
⑮	Positive Return Block	2	Bronze with Graphite
⑮	Stopper Plate	2	SS400 (1020)
⑮	Locking Plate	2	SS400 (1020)
⑮	Slide Plate	2	Bronze with Graphite
⑮	Slide Plate	2	Bronze with Graphite



Bolts for assembly are not indicated.