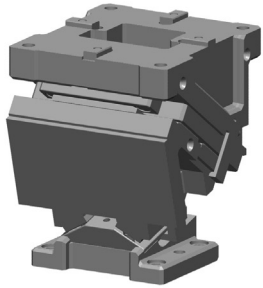


Aerial Cam Unit General Description of UCMSNR

NAAMS STANDARD



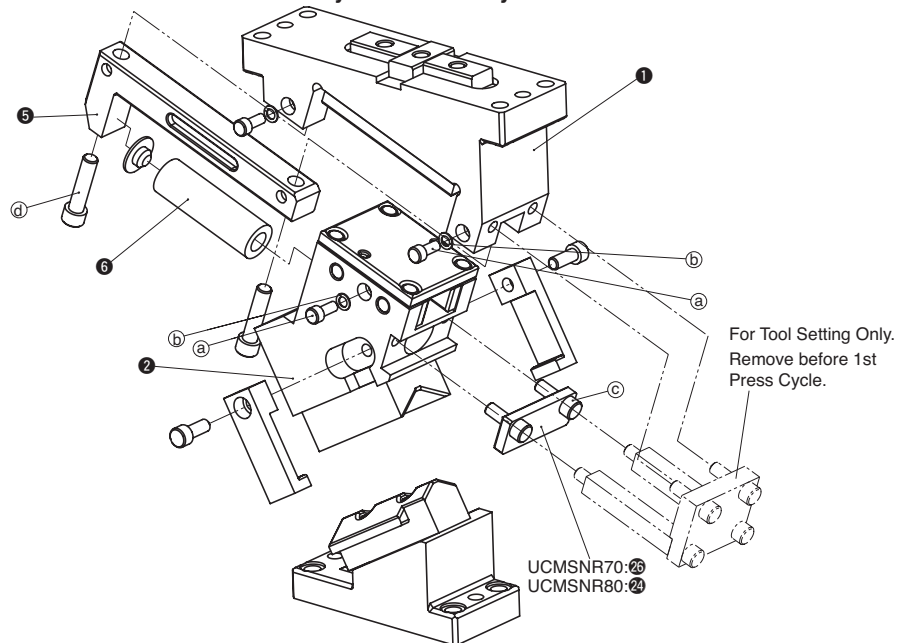
- Mounting surface widths 70, 80, 165, 200, 300, and 400 mm.
- Working angles from 0° to 60° in 5° increments.
- Easier adjustment of Slide Lock for the mounting surface width 165 mm or more.
- High-rigid structure with the material S45C.
- NAAMS Standard adapted.

▲ 65°/ 70°/ 75° upon request.

▲ **Gas Spring**

Please contact your local sales representative, if you prefer to use a gas spring not specified in our catalog. For use and maintenance of gas spring, please contact the manufacturer directly.

■ UCMSNR 70 and 80 Assembly / Dis-assembly



● Disassembling UCMSNR 70 and 80

- 1) Remove Hexagon Socket Head Bolt (a) and Coned Disc Spring (b).
- 2) Loosen Hexagon Socket Head Bolt (c), and remove Spring Stopper Plate (UCMSNR70: ⑥ UCMSNR80: ②). Pull out Spring (⑥).
- 3) Loosen Hexagon Socket Bolt (d), and remove Guide Bar (⑤) and Cam Slider (②) from Cam Holder (①).
- 4) Pull up to remove Guide Bar from Cam Slider.

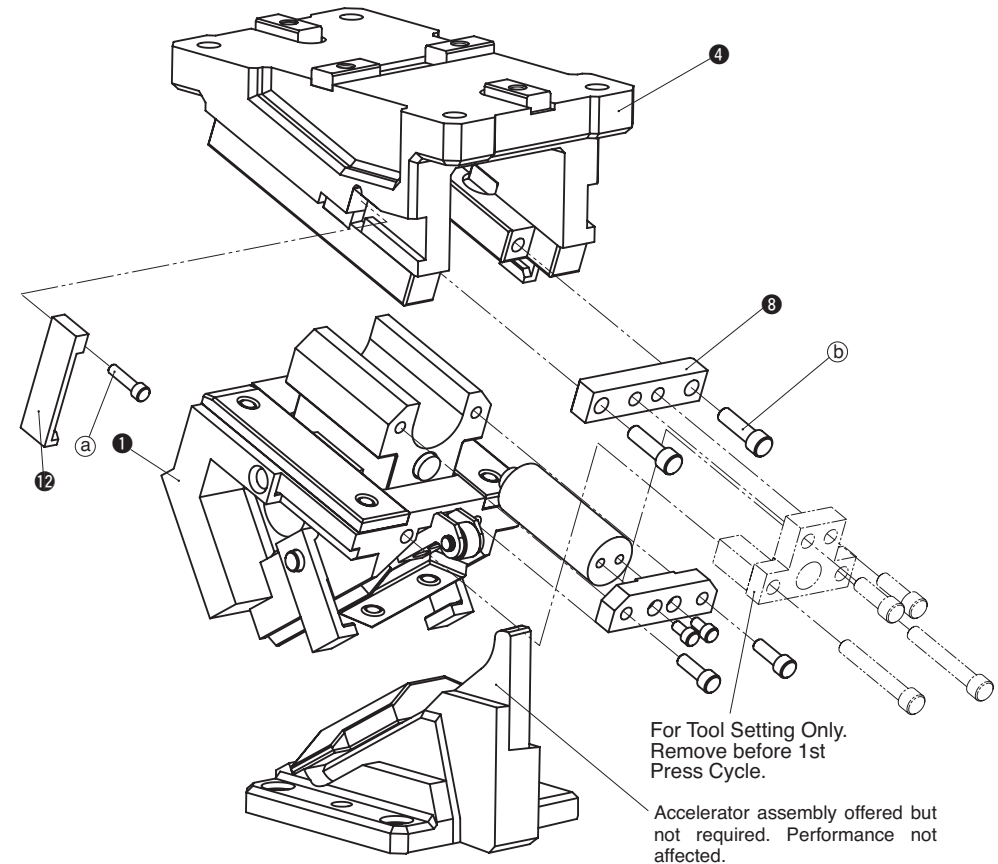
● Re-assembly

Reassembly in the reverse procedure of disassembly.

NOTES ● Ensure that all parts are clean, particularly the sliding components, to which a small amount of grease is applied and is then placed on position.

- Take care the respective tolerances are observed when assembling the slider and holder, which also should be identified by the same serial number.
- Ensure that all bolts are tightened to the recommended torque.

■ UCMSNR 165, 200, 300, and 400 Assembly / Dis-assembly



● Disassembling UCMSNR 165, 200, 300, and 400

- 1) Loosen Hexagon Socket Head Bolt (a) and remove Safety Plate (12).
- 2) Loosen Hexagon Socket Head Bolt (b) and remove Stopper Plate (8).
- 3) Pull up to remove Cam Slider (1) from Cam Holder (4).

● Re-assembly

Reassembly in the reverse procedure of disassembly.

NOTES ● Ensure that all parts are clean, particularly the sliding components, to which a small amount of grease is applied and is then placed on position.

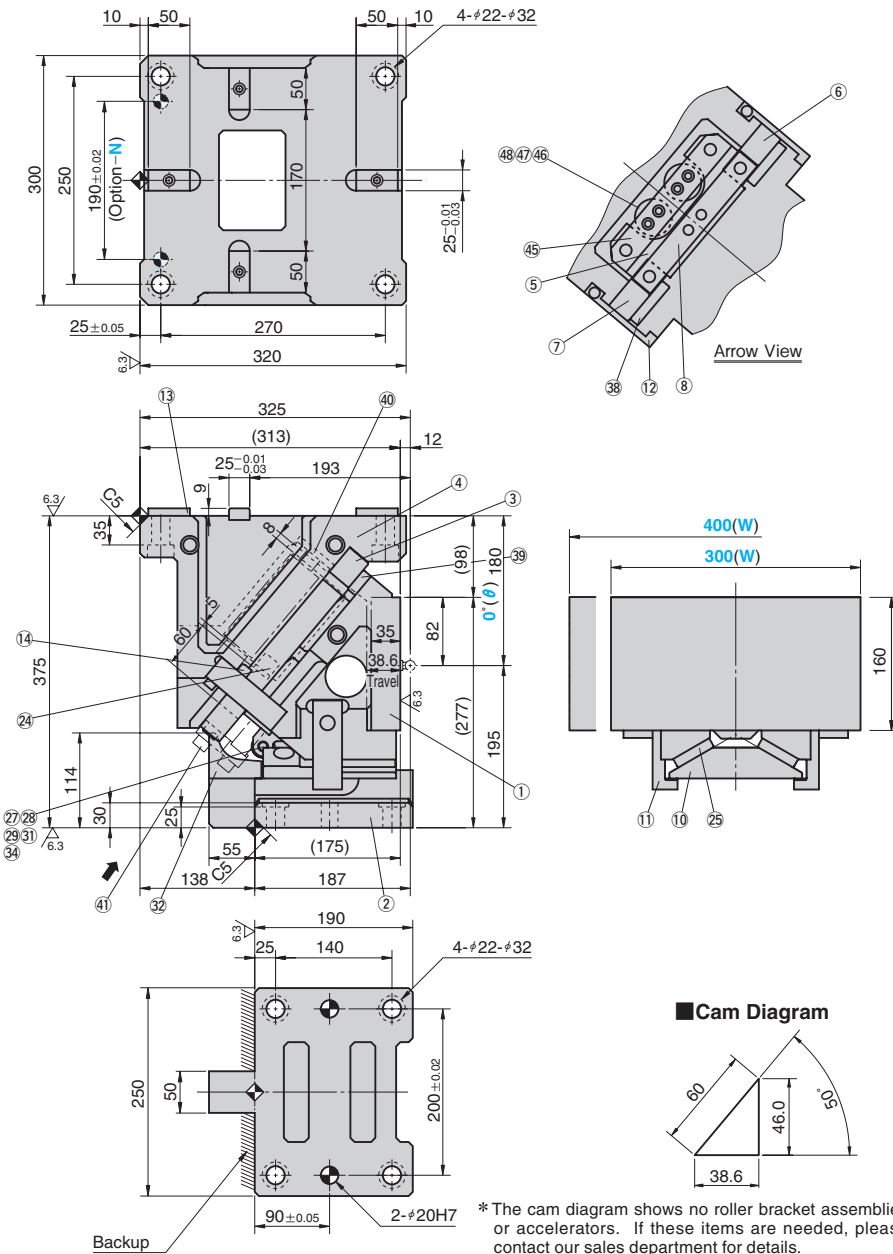
- Take care the respective tolerances are observed when assembling the slider and holder, which also should be identified by the same serial number.
- Ensure that all bolts are tightened to the recommended torque.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-00
UCMSNR400-00



* 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)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
38.6	451.1 (46.0)	-	10668.0 (1087.8)	14544 (1484.1)	153.2 (54.8)	160.2 (59.2)	UCMSNR	300 400	00	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)							9198.0 (937.9)

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	00	GK
UCMSNR	300	00	NGK
UCMSNR	300	00	NISO

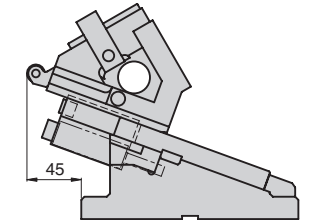
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 00 - GK - N
UCMSNR300 - 00 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



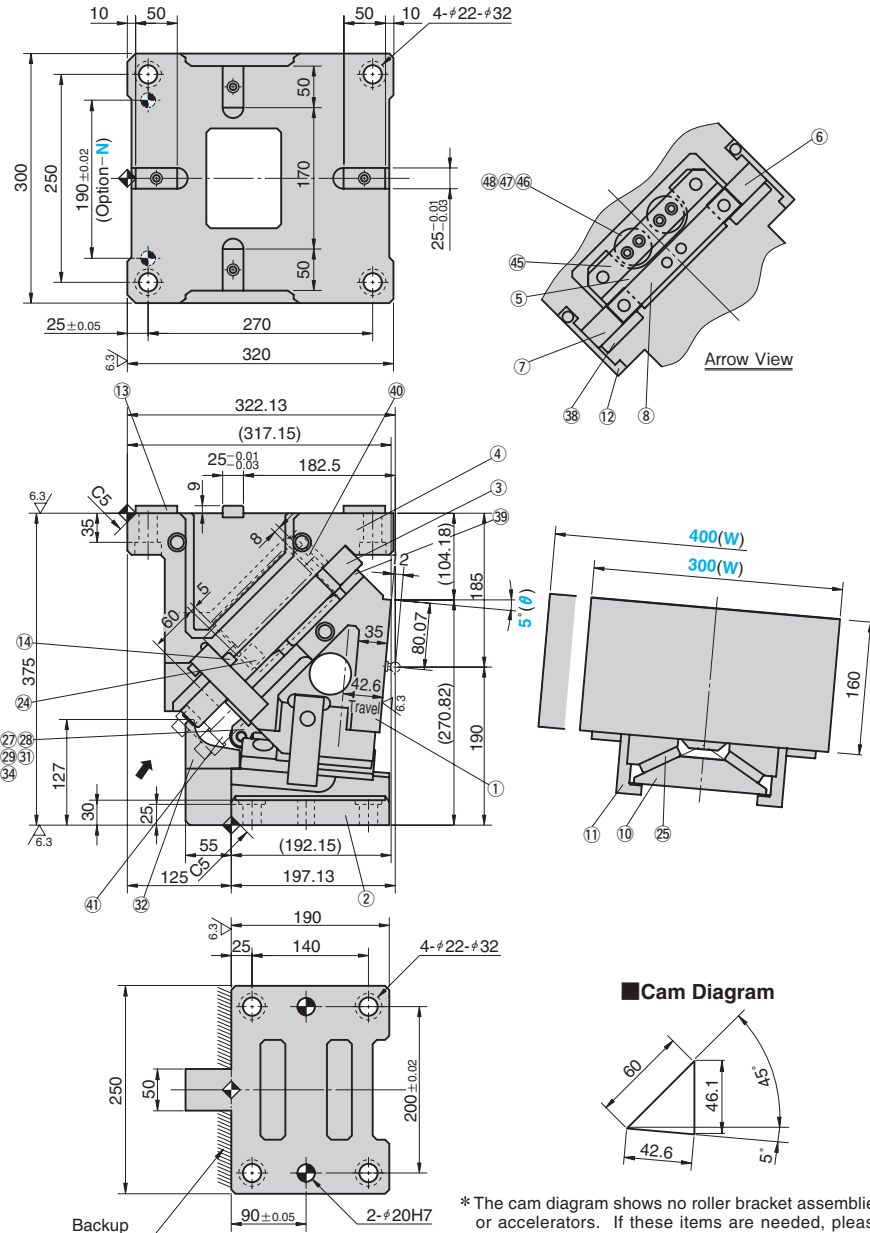
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-05
UCMSNR400-05



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
42.6	451.1 (46.0)	-	10668.0 (1087.8)	14495 (1479.1)	152.5 (54.8)	159.5 (59.2)	UCMSNR	300 400	05	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			9198.0 (937.9)							ISO *NISO
			1314.1 (134.0)							

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
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UCMSNR 400 - 05 - GK - N
UCMSNR 300 - 05 - NGKWithout gas spring
UCMSNR 300 - 05 - NISOWithout coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.



Order

UCMSNR300 - 05 - GK - N
UCMSNR300 - 05 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

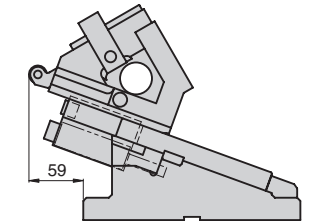
No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



Bolts for assembly are not indicated.

Space for removing

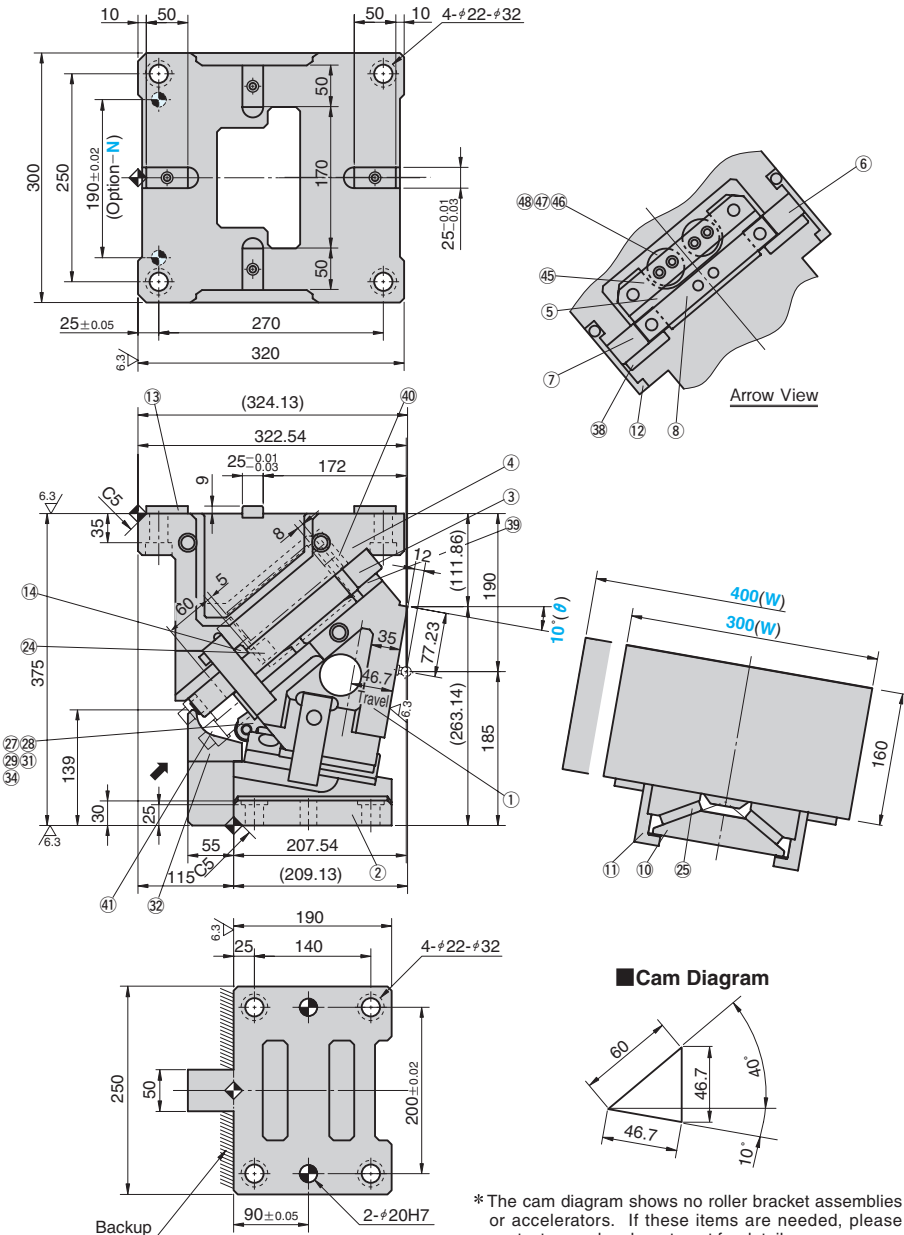


Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-10
UCMSNR400-10



* 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)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
46.7	451.1 (46.0)	-	10668.0 (1087.8)	14443 (1473.8)	151.4 (54.8)	158.4 (59.2)	UCMSNR	300 400	10	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)	9198.0 (937.9)						ISO *NISO

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
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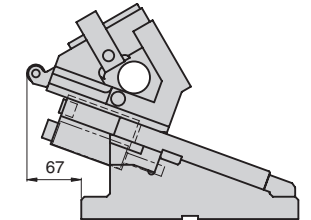
UCMSNR 400 - 10 - GK - N
UCMSNR 300 - 10 - NGKWithout gas spring
UCMSNR 300 - 10 - NISOWithout coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 10 - GK - N
UCMSNR300 - 10 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



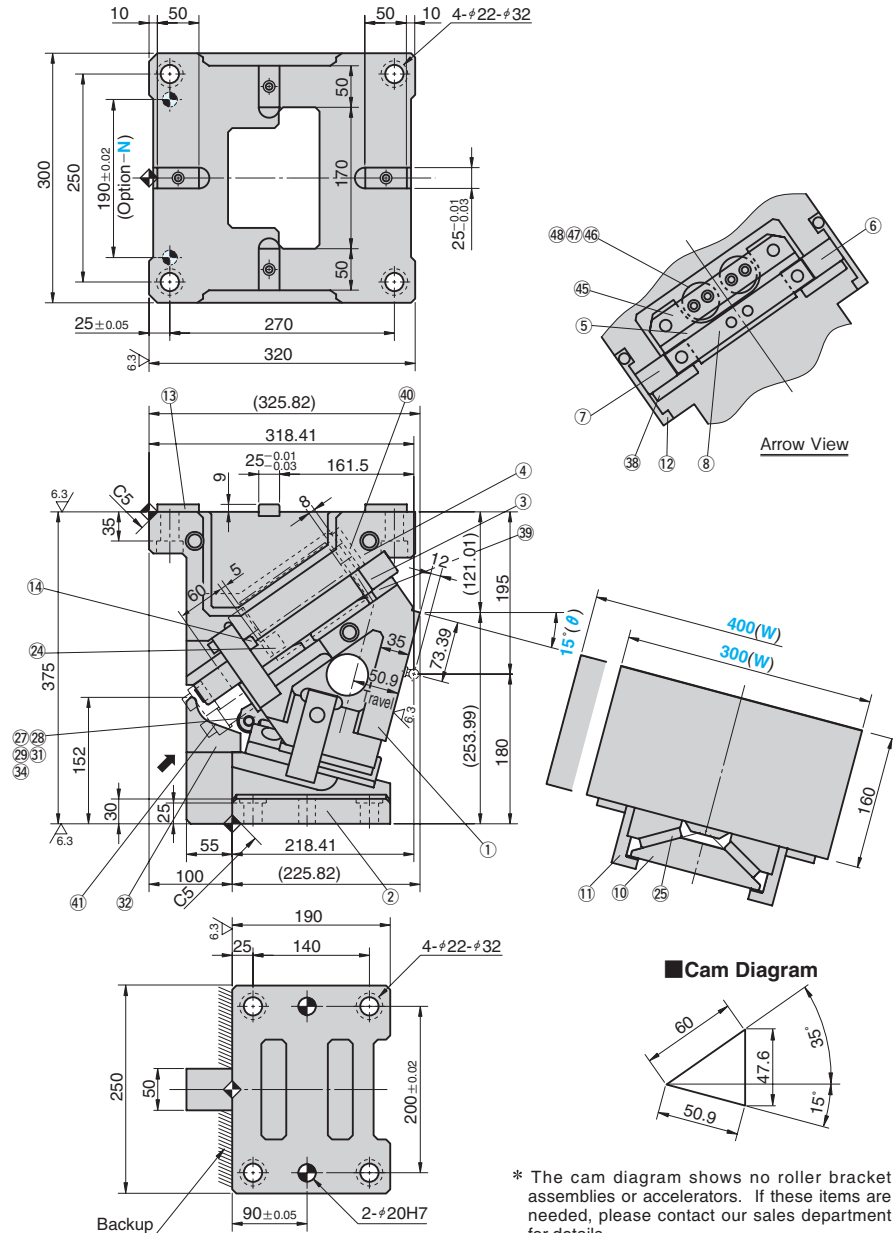
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-15
UCMSNR400-15



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
50.9	451.1 (46.0)	-	10668.0 (1087.8)	14389 (1468.2)	154.1 (54.8)	161.1 (59.2)	UCMSNR	300 400	15	GK *NGK
		-	10668.0 (1087.8)							GD *NGD
		-	13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	9198.0 (937.9)	ISO *NISO						

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	15	GK
UCMSNR	300	15	NGK
UCMSNR	300	15	NISO

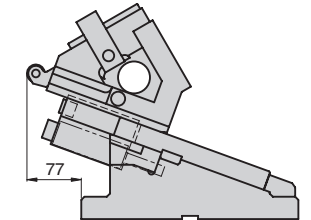
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 15 - GK - N
UCMSNR300 - 15 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



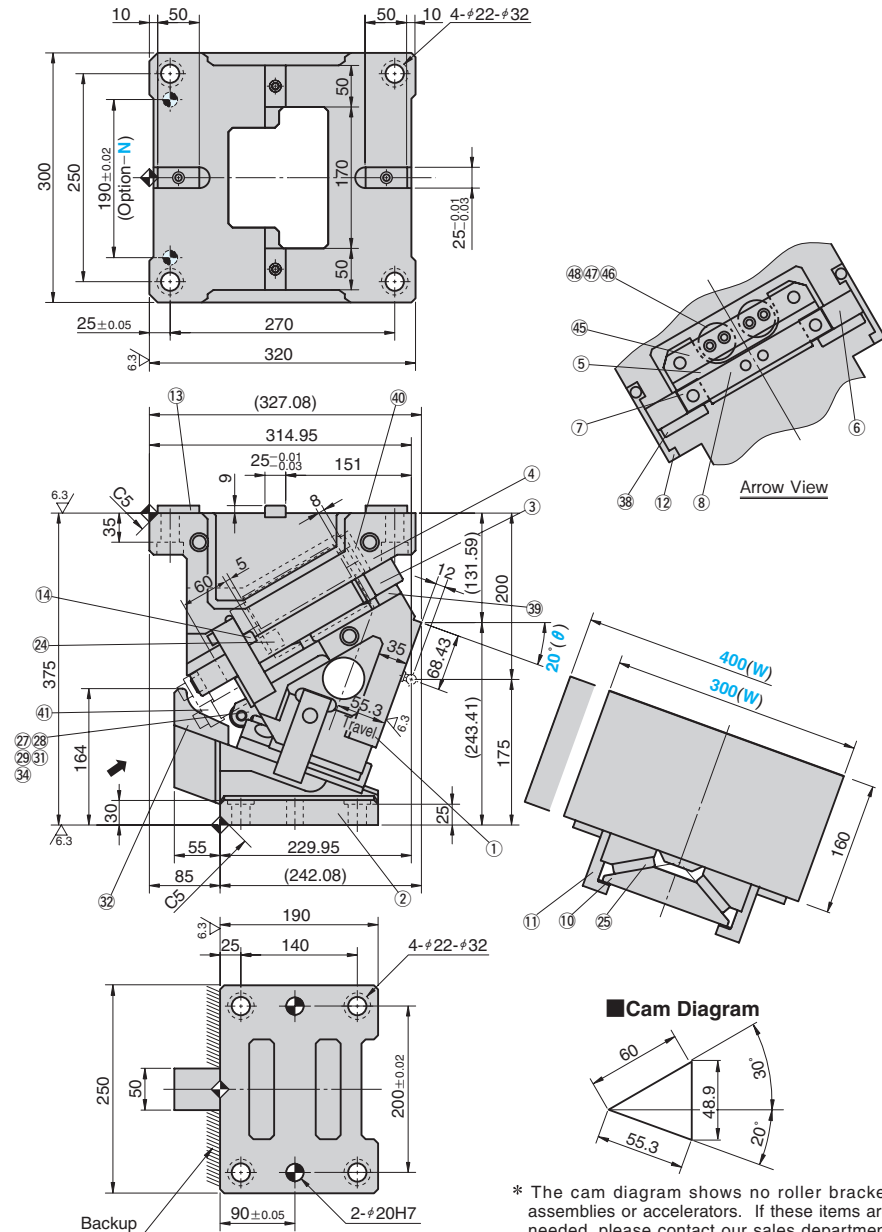
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD
FILE

UCMSNR300-20
UCMSNR400-20



* 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)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
55.3	451.1 (46.0)	-	10668.0 (1087.8)	14332 (1462.4)	148.2 (54.8)	155.2 (59.2)	UCMSNR	300 400	20	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	9198.0 (937.9)							ISO *NISO

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	20	GK
UCMSNR	300	20	NGK
UCMSNR	300	20	NISO

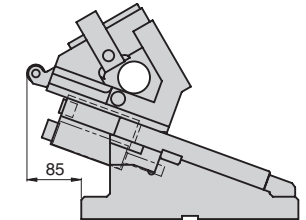
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 20 - GK - N
UCMSNR300 - 20 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



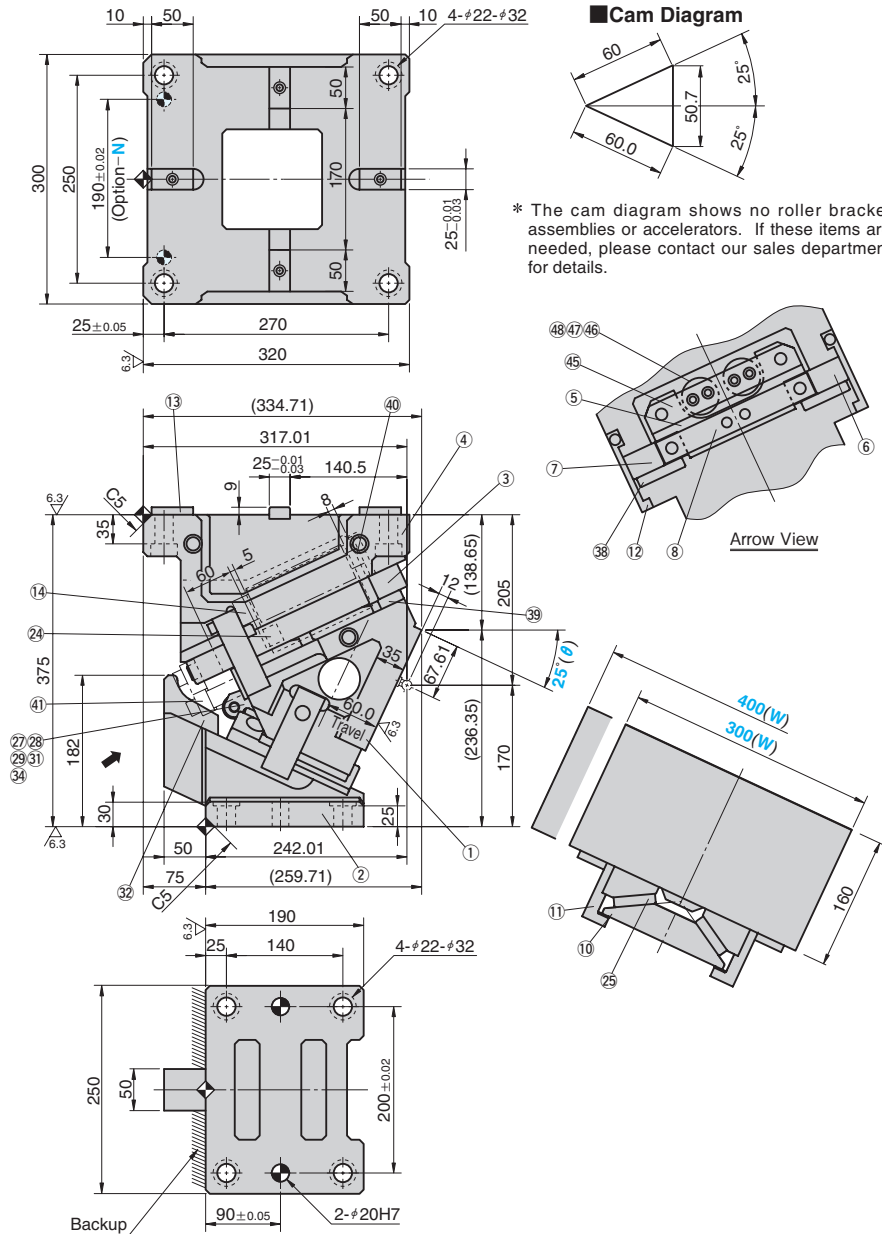
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-25
UCMSNR400-25



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
60.0	451.1 (46.0)	-	10668.0 (1087.8)	14273 (1456.4)	150.2 (54.8)	157.3 (59.2)	UCMSNR	300 400	25	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			9198.0 (937.9)							ISO *NISO
		1314.1 (134.0)	9198.0 (937.9)							

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hard ware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	25	GK
UCMSNR	300	25	NGK
UCMSNR	300	25	NISO

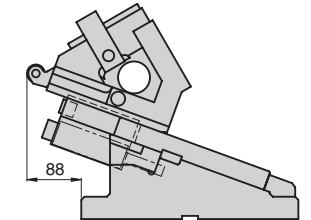
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ 16mm dowel hole provided in holder.
N20	φ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 25 - GK - N
UCMSNR300 - 25 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)

No.	Description	Qty	Material and Remark
27	Roller	1	S45C(1045)
28	Roller Pin	1	S45C(1045)
29	Bushing	1	Bronze with Graphite SOB12-18-16
31	Roller Bracket	1	SS400(1020)
32	Roller Driver	1	S45C(1045)
34	Snap Ring E type	2	φ9
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



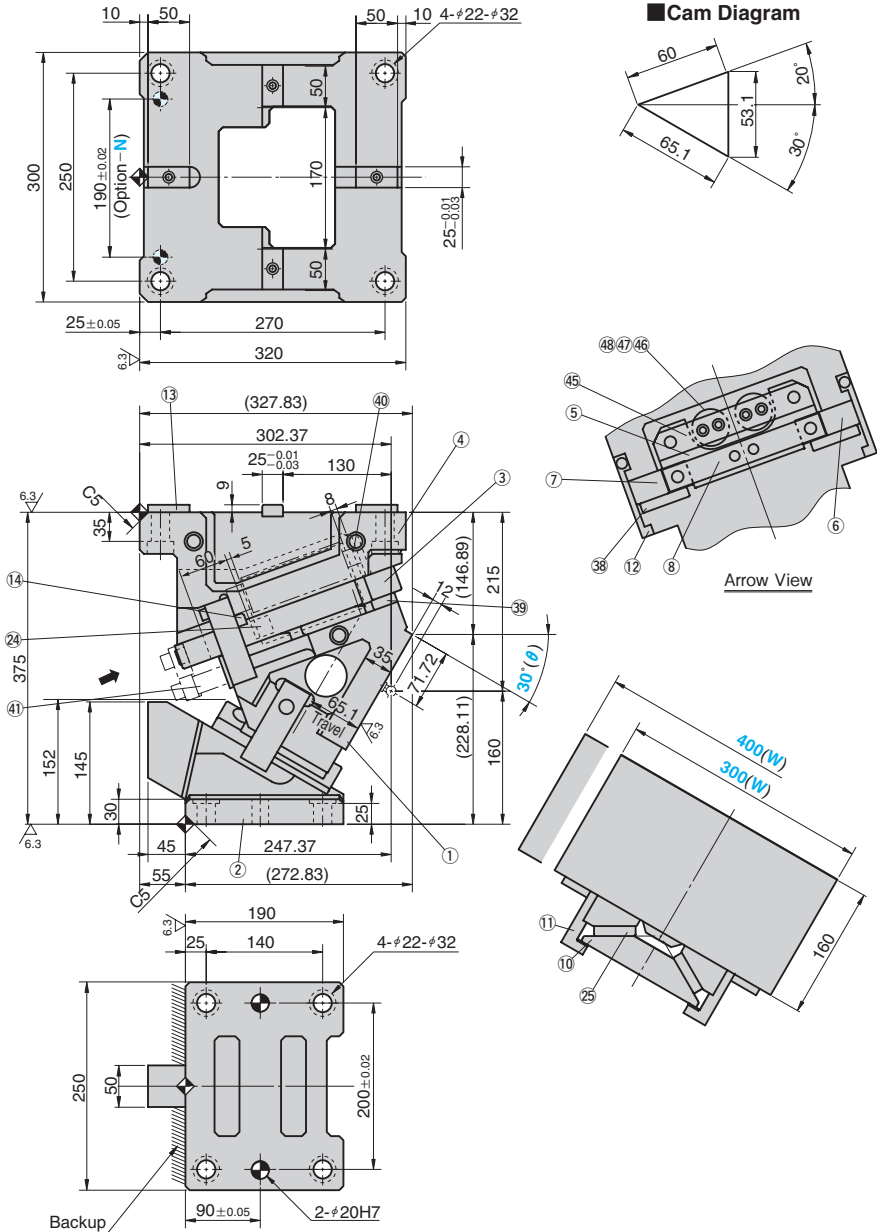
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-30
UCMSNR400-30



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
65.1	451.1 (46.0)	-	10668.0 (1087.8)	14211 (1450.1)	147.3 (54.8)	154.3 (59.2)	UCMSNR	300 400	30	GK *NGK
		-	10668.0 (1087.8)							GD *NGD
		-	13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	9198.0 (937.9)	ISO *NISO						

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	30	GK
UCMSNR	300	30	NGK
UCMSNR	300	30	NISO

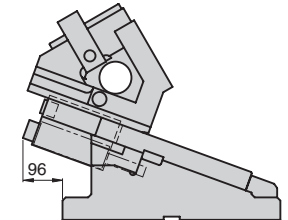
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ 16mm dowel hole provided in holder.
N20	φ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 30 - GK - N
UCMSNR300 - 30 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



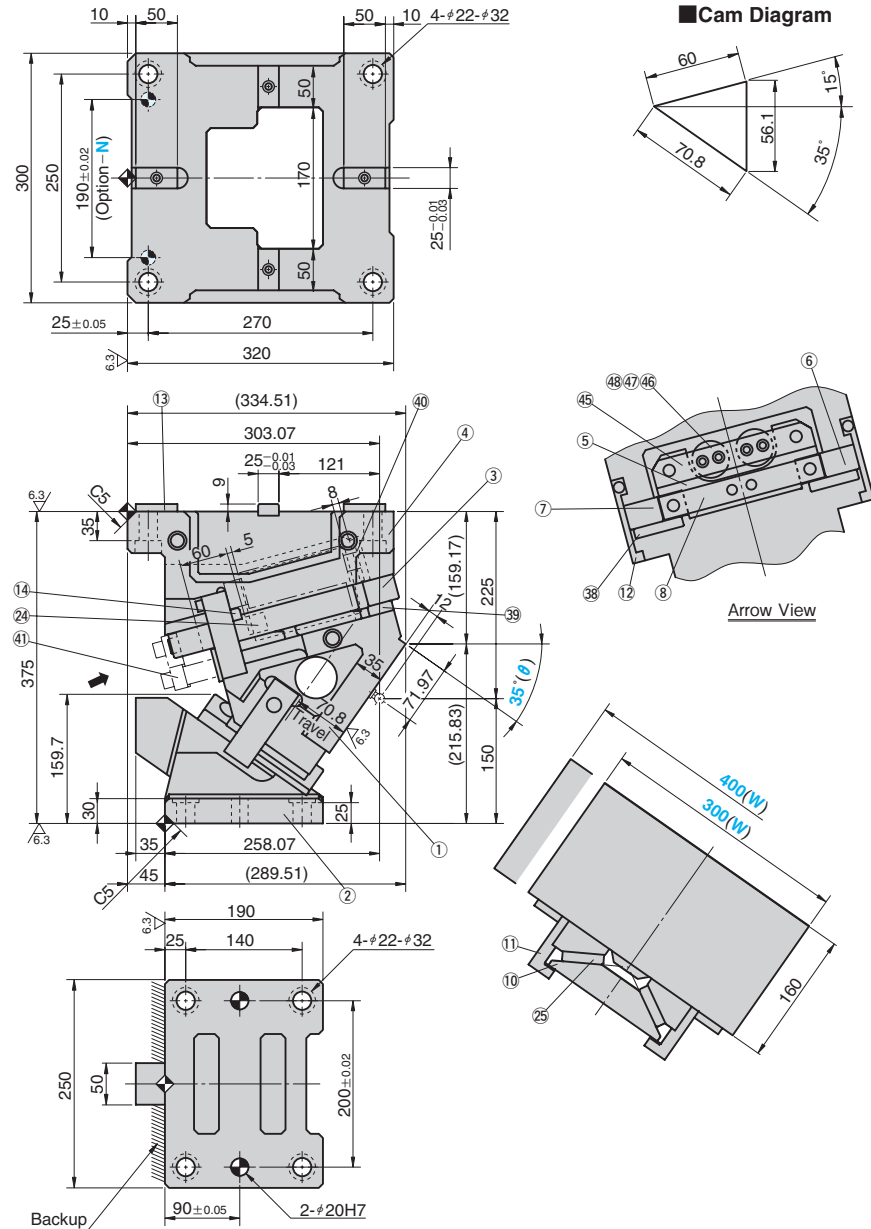
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-35
UCMSNR400-35



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
70.8	451.1 (46.0)	-	10668.0 (1087.8)	14150 (1443.9)	148.0 (54.8)	155.0 (59.2)	UCMSNR	300 400	35	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	9198.0 (937.9)	ISO *NISO						

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
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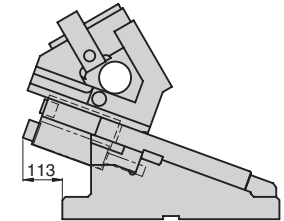
UCMSNR 400 - 35 - GK
UCMSNR 300 - 35 - NGKWithout gas spring
UCMSNR 300 - 35 - NISOWithout coil spring



Option

Option Code	Specification
N	φ 16mm dowel hole provided in holder.
N20	φ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 35 - GK - N
UCMSNR300 - 35 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	Bronze with Graphite
39	Wear Plate B	1	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



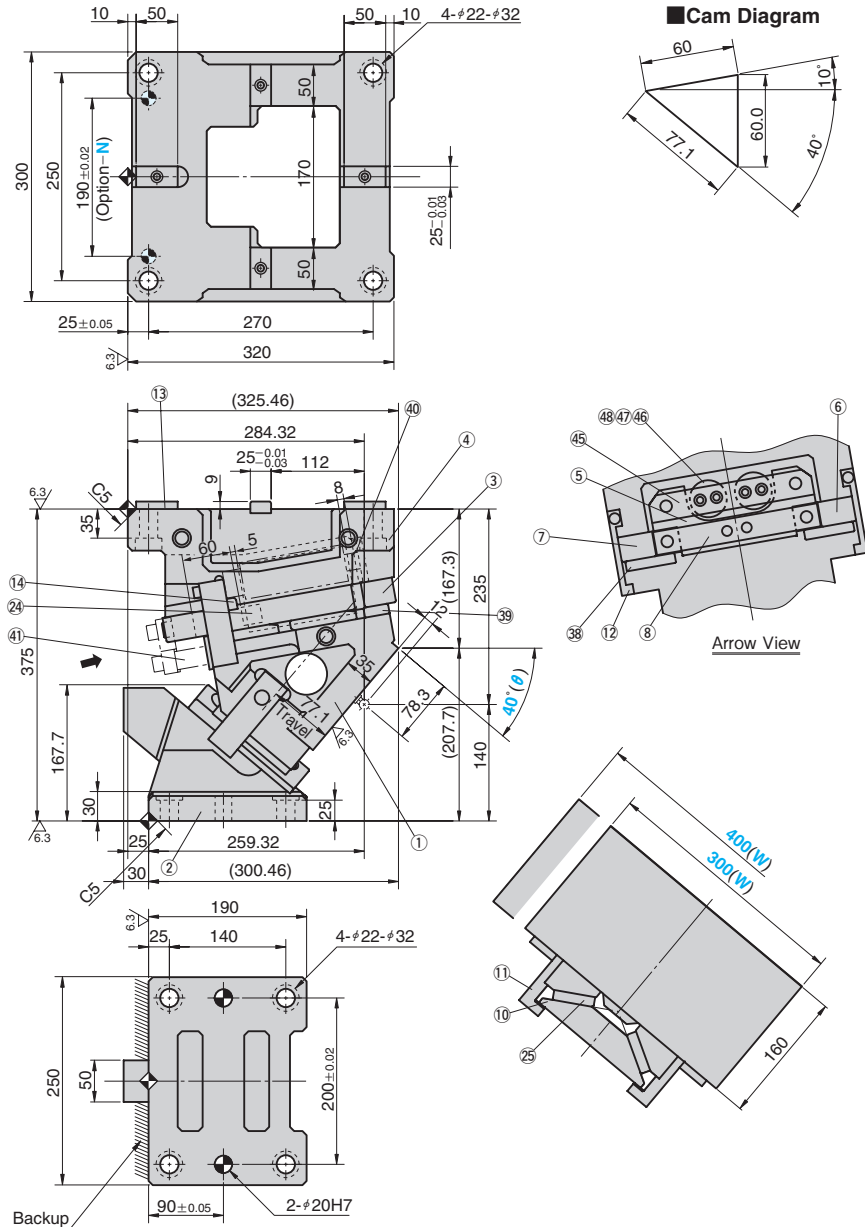
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-40
UCMSNR400-40



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
77.1	451.1 (46.0)	-	10668.0 (1087.8)	14088 (1437.5)	146.2 (54.8)	153.3 (59.2)	UCMSNR	300 400	40	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)	9198.0 (937.9)						ISO *NISO

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	40	GK
UCMSNR	300	40	NGK
UCMSNR	300	40	NISO

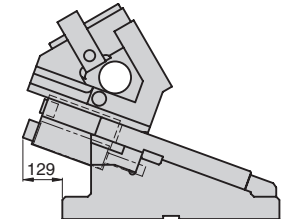
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ 16mm dowel hole provided in holder.
N20	φ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 40 - GK - N
UCMSNR300 - 40 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
④⑥	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
⑭	Key B	2	SS400(1020)
⑲	Stopper	3	Urethane
⑳	Slide Plate	R/L1	S45C(1045)
㉔	Wear Plate A	4	Bronze with Graphite
㉕	Wear Plate B	1	Bronze with Graphite
㉖	Spring Support	1	SS400(1020)
㉗	Slide Lock Plate	1	SS400(1020)
㉘	Spring Guide Plate	1	SS400(1020)
㉙	Spring	2	Refer to the Spring Specification Table.
㉚	Washer	2	S45C(1045) ISO specification only
㉛	Spring Guide Pin	2	S45C(1045) ISO specification only



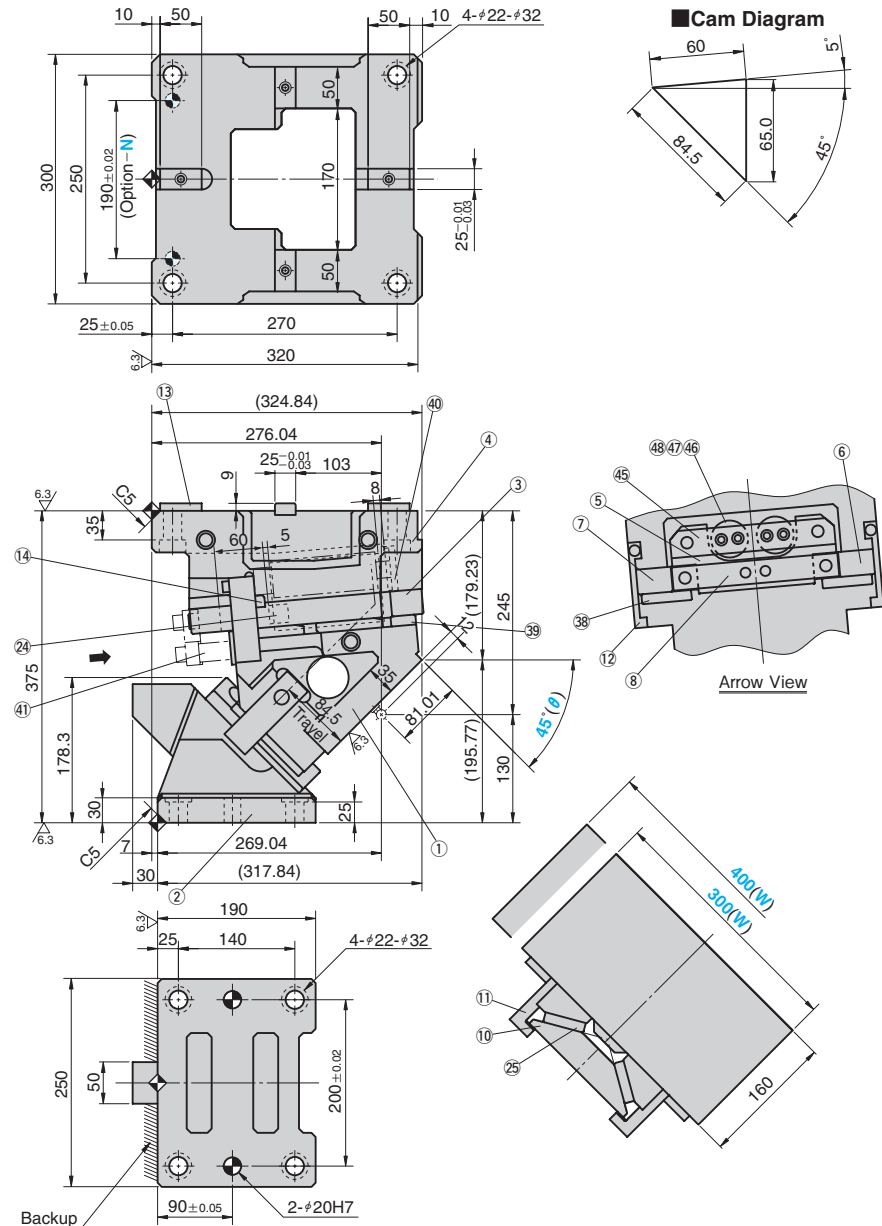
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-45
UCMSNR400-45



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
84.5	451.1 (46.0)	-	10668.0 (1087.8)	14026 (1431.2)	148.6 (54.8)	155.6 (59.2)	UCMSNR	300 400	45	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)	9198.0 (937.9)	ISO *NISO					

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
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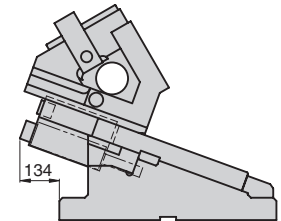
UCMSNR 400 - 45 - GK - N
UCMSNR 300 - 45 - NGKWithout gas spring
UCMSNR 300 - 45 - NISOWithout coil spring



Option

Option Code	Specification
N	φ 16mm dowel hole provided in holder.
N20	φ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 45 - GK - N
UCMSNR300 - 45 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
⑭	Key B	2	SS400(1020)
⑲	Stopper	3	Urethane
⑳	Slide Plate	R/L1	S45C(1045)
㉟	Wear Plate A	4	Bronze with Graphite
㊳	Wear Plate B	1	Bronze with Graphite
㊴	Spring Support	1	SS400(1020)
㊵	Slide Lock Plate	1	SS400(1020)
㊶	Spring Guide Plate	1	SS400(1020)
㊷	Spring	2	Refer to the Spring Specification Table.
㊸	Washer	2	S45C(1045) ISO specification only
㊹	Spring Guide Pin	2	S45C(1045) ISO specification only



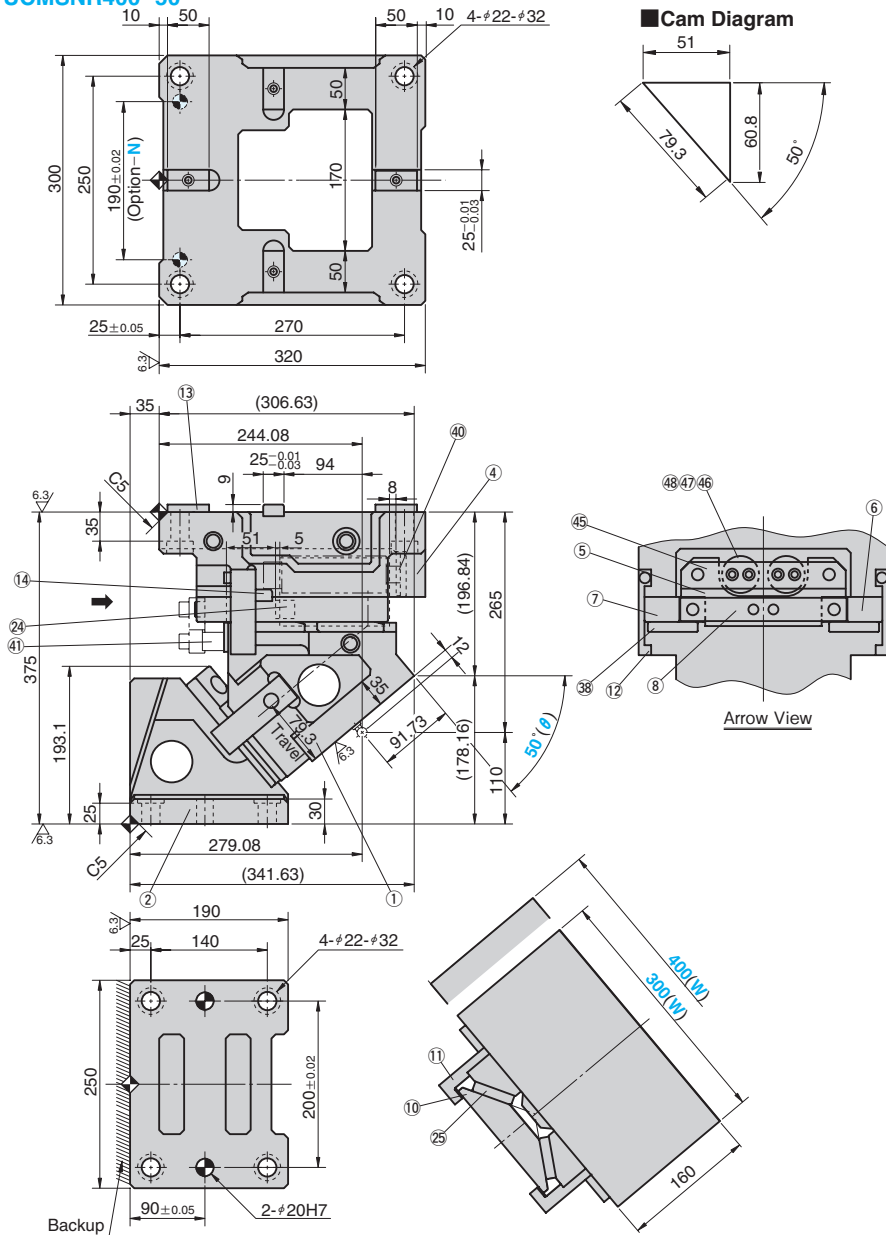
Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-50
UCMSNR400-50



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
79.3	451.1 (46.0)	-	10294.6 (1049.4)	13960 (1424.5)	122.5 (55.9)	127.7 (60.3)	UCMSNR	300 400	50	GK *NGK
			10294.6 (1049.4)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			8015.4 (817.9)							ISO *NISO
		1314.1 (134.0)	8015.4 (817.9)							

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	50	GK
UCMSNR	300	50	NGK
UCMSNR	300	50	NISO

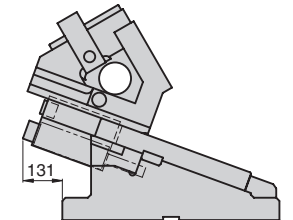
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 50 - GK - N
UCMSNR300 - 50 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only

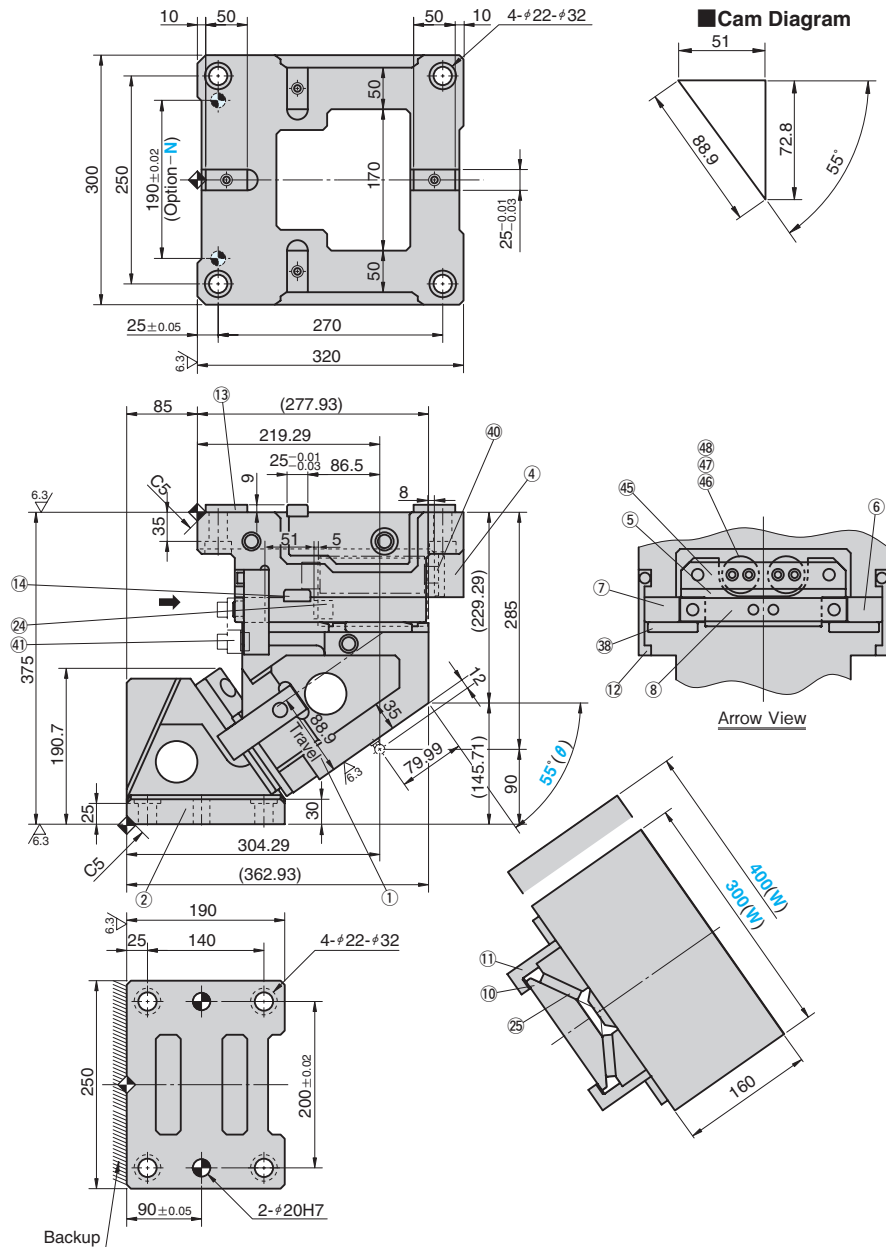
⚠ Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD FILE

UCMSNR300-55
UCMSNR400-55



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
88.9	451.1 (46.0)	-	10294.6 (1049.4)	15170 (1548.0)	130.9 (62.2)	135.9 (66.6)	UCMSNR	300 400	55	GK *NGK
			10294.6 (1049.4)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)							8015.4 (817.9)

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

Catalog No.	W	θ	PS
UCMSNR	400	55	GK
UCMSNR	300	55	NGK
UCMSNR	300	55	NISO

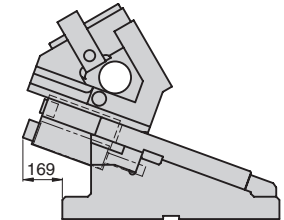
.....Without gas spring
.....Without coil spring



Option

Option Code	Specification
N	φ16mm dowel hole provided in holder.
N20	φ20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 55 - GK - N
UCMSNR300 - 55 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only

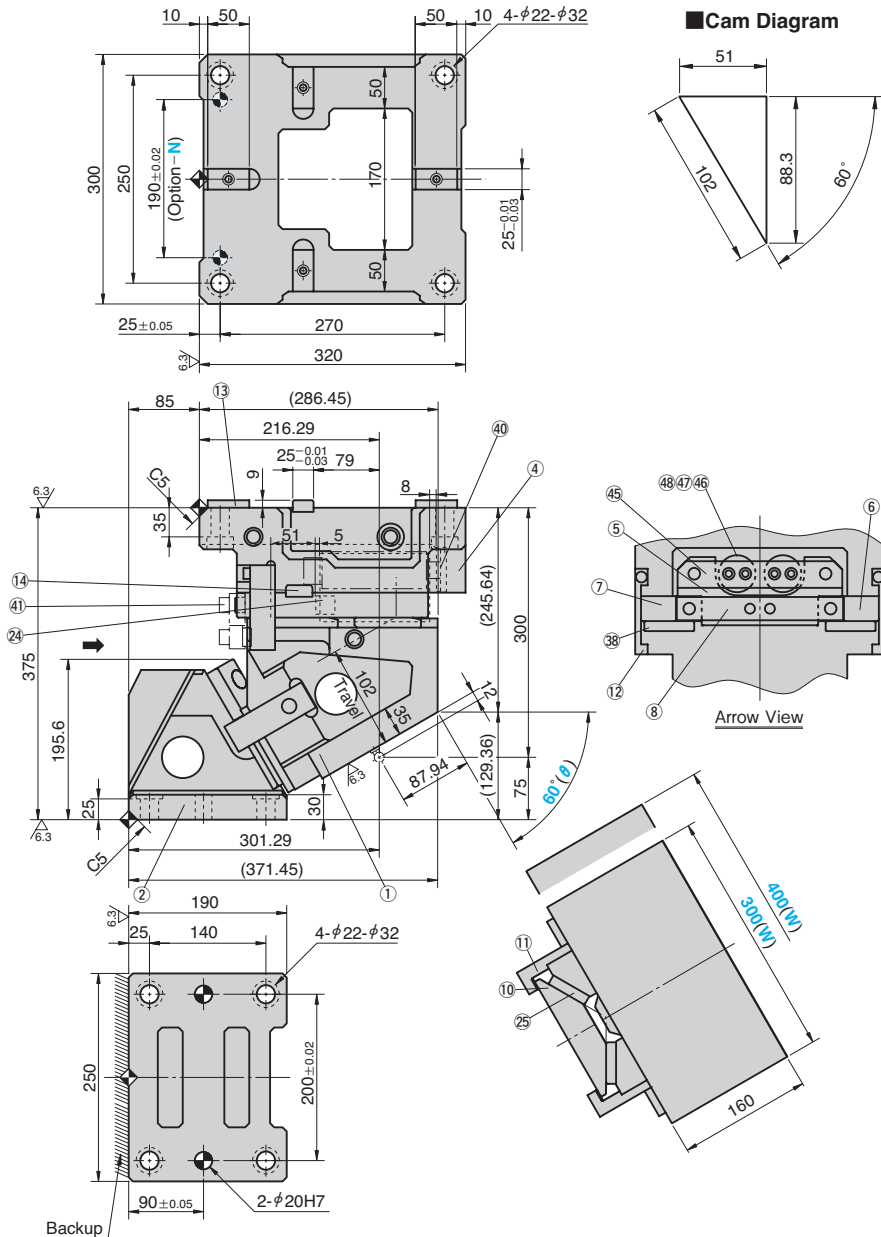
⚠ Bolts for assembly are not indicated.

Aerial Cam Unit

NAAMS STANDARD

CAD
FILE

UCMSNR300-60
UCMSNR400-60



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight (Slider Weight)kg		Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load		For W = 300	For W = 400				
102.0	451.1 (46.0)	-	10294.6 (1049.4)	16764 (1710.6)	135.3 (68.0)	140.4 (72.4)	UCMSNR	300 400	60	GK *NGK
			10294.6 (1049.4)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)							8015.4 (817.9)

* When supplying your own Nitrogen Spring, please add "N" at the beginning of your spring selection to ensure you are supplied the correct mounting hardware.



Order

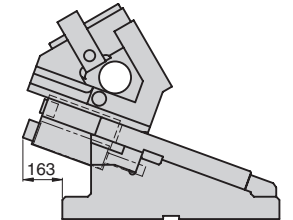
Catalog No.	W	θ	PS	
UCMSNR	400	60	GKWithout gas spring
UCMSNR	300	60	NGKWithout coil spring
UCMSNR	300	60	NISOWithout coil spring



Option

Option Code	Specification
N	ϕ 16mm dowel hole provided in holder.
N20	ϕ 20mm dowel hole provided in holder.
NF	Nitrogen gas not charged.

Space for removing



Order

UCMSNR300 - 60 - GK - N
UCMSNR300 - 60 - GK - NF

Spring Specification

No.	PS	Spring Model	Remark
46	GK	K500-80	Gas Spring (KALLER)
	GD	L500.075.138	Gas Spring (DADCO)
	GS	SM500.80	Gas Spring (SDT)
	ISO	TJM50-203	Coil Spring (constant = 65.7N/mm)

Guideline of spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2	S45C(1045)
12	Safety Plate	2	SS400(1020)
13	Key A	4	SS400(1020)

No.	Description	Qty	Material and Remark
14	Key B	2	SS400(1020)
24	Stopper	3	Urethane
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	Bronze with Graphite
40	Spring Support	1	SS400(1020)
41	Slide Lock Plate	1	SS400(1020)
45	Spring Guide Plate	1	SS400(1020)
46	Spring	2	Refer to the Spring Specification Table.
47	Washer	2	S45C(1045) ISO specification only
48	Spring Guide Pin	2	S45C(1045) ISO specification only



Bolts for assembly are not indicated.