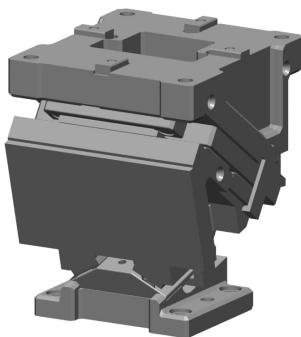


Aerial Cam Unit General Description of UCMSNR

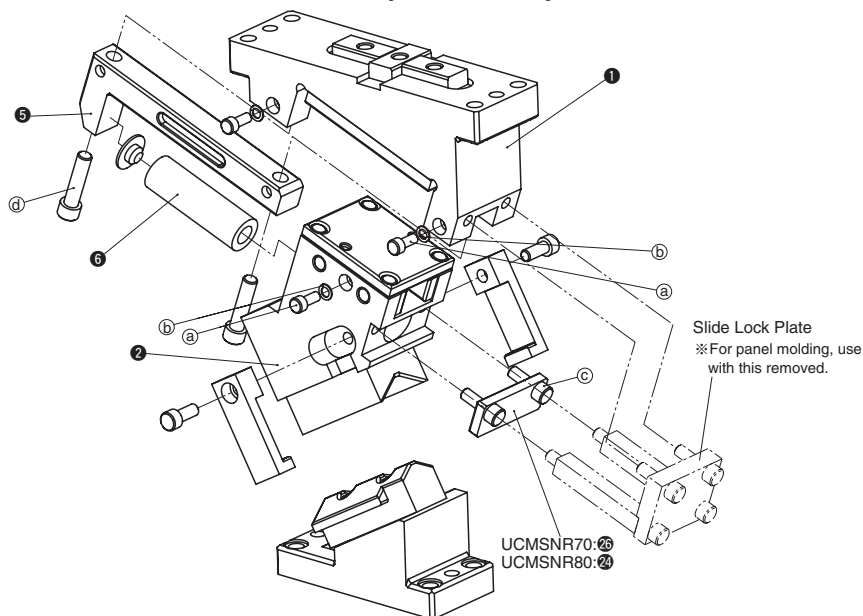
NAAMS STANDARD



- 70, 80, 165, 200, 300mm and 400mm are available for the mounting width.
- Standard angles from 0-60 degrees are available in 5 degree increments.
- Spring is removable from rear of cam to allow adjustment in closed home position.
- Highly rigid structure with double wear plates and S45C material.
- Product conforming to NAAMS standard.

65°/ 70°/ 75° are also available.
Please contact your sales representative.

■ UCMSNR70, 80 Structure and Assembly / Disassembly



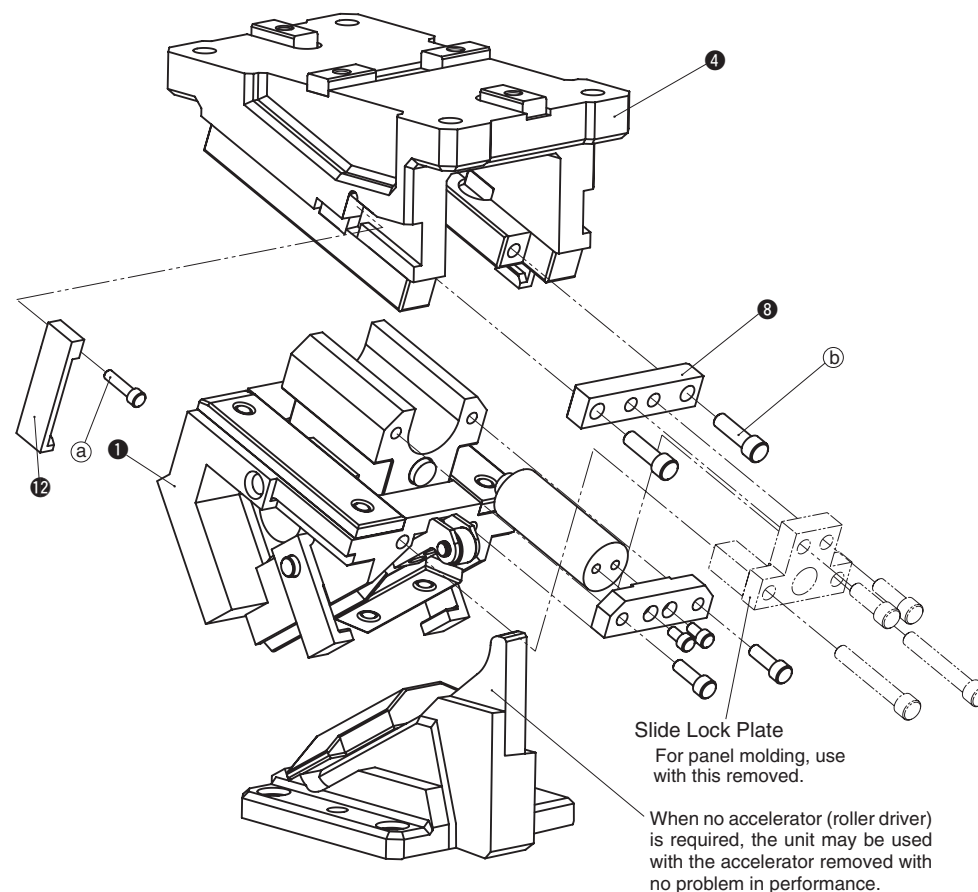
● Disassembly method of UCMSNR70, 80

- 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: 26 UCMSNR80: 24). 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 and remove the guide bar from the cam slider.

● Assembly method of UCMSNR70, 80

- 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 guide bar/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

■ Structure and Assembly/Disassembly of UCMSNR165, 200, 300 and 400



● Disassembly method of UCMSNR165, 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 and remove cam slider (1) from cam holder (4).

● Assembly method of UCMSNR165, 200, 300 and 400

- 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 guide bar/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

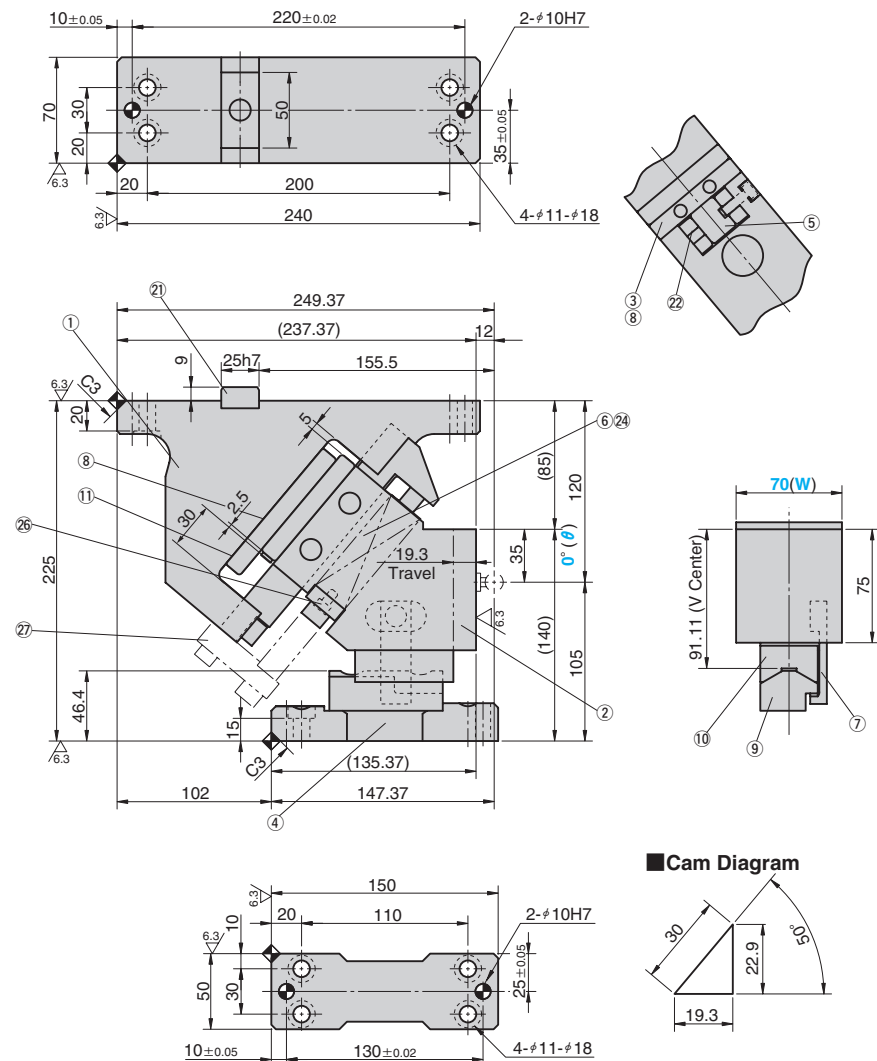
Aerial Cam Unit

NAAMS STANDARD

Addition

CAD
FILE

UCMSNR70-00



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
19.3	98.1 (10.0)	-	2350.0 (239.6)	3150 (321.4)	UCMSNR	70	00		GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	00	—	GK
UCMSNR	70	—	00	—	NGK
UCMSNR	70	—	00	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-00-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

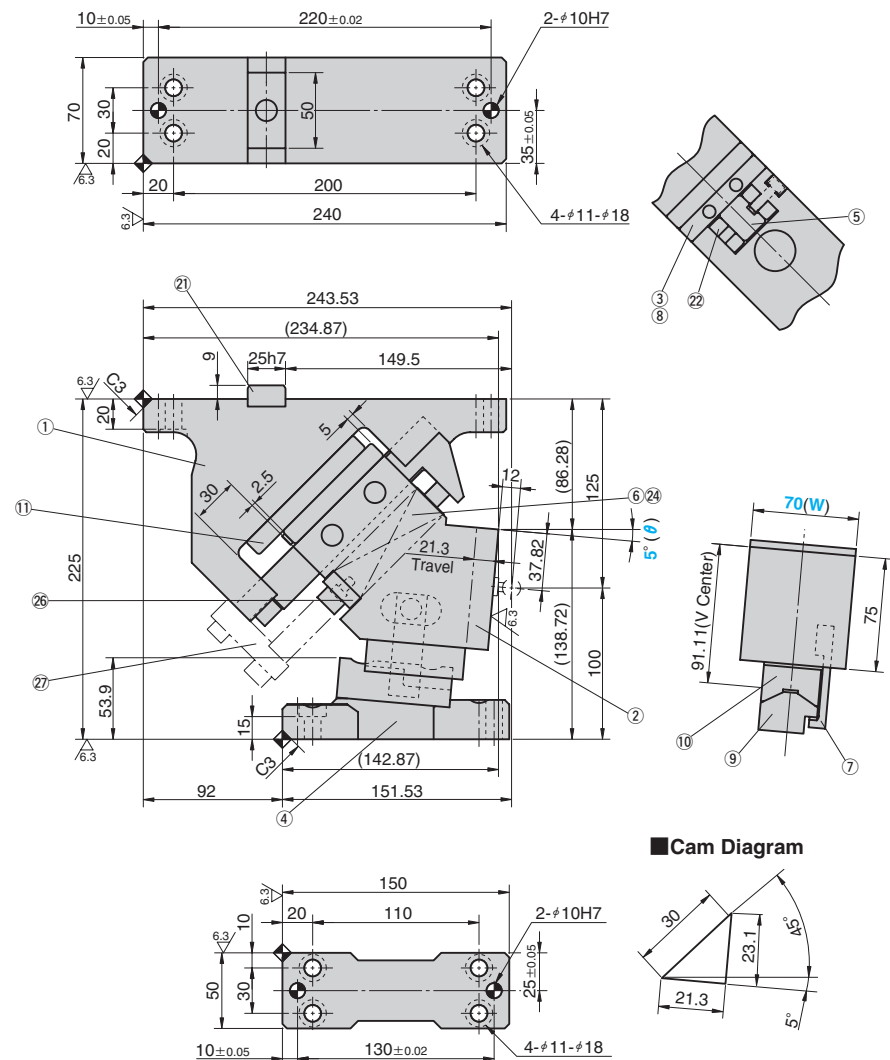
Aerial Cam Unit

NAAMS STANDARD

Addition

CAD
FILE

UCMSNR70-05



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
21.3	98.1 (10.0)	-	2350.0 (239.6)	3145 (320.9)	15.4	UCMSNR	70	05	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	05	—	GK
UCMSNR	70	—	05	—	NGK
UCMSNR	70	—	05	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order UCMSNR70-05-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

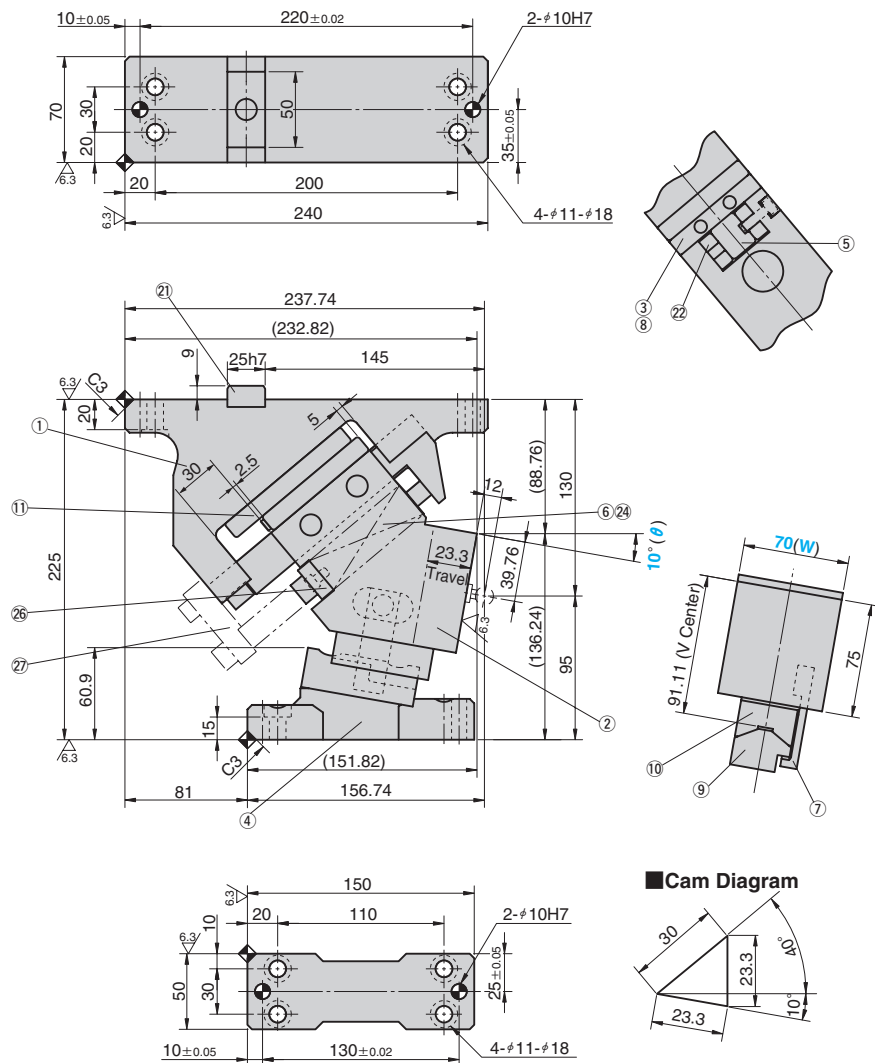
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

⚠ Bolts for assembly are not indicated.

UCMSNR70-10



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
23.3	98.1 (10.0)	-	2350.0 (239.6)	3139 (320.3)	14.8	UCMSNR	70	10	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	10	—	GK
UCMSNR	70	—	10	—	NGK
UCMSNR	70	—	10	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-10-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

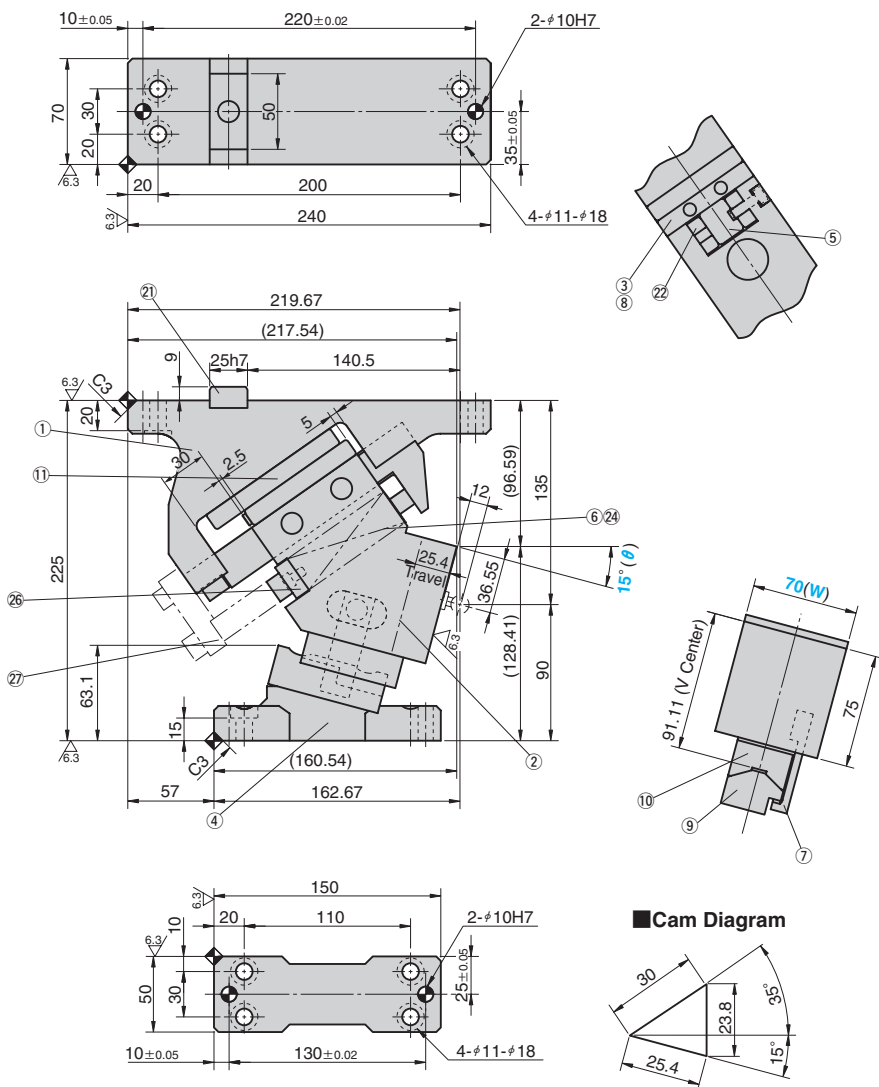
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

UCMSNR70-15



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
25.4	98.1 (10.0)	-	2350.0 (239.6)	3133 (319.7)	14.1	UCMSNR	70	15	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	15	—	GK
UCMSNR	70	—	15	—	NGK
UCMSNR	70	—	15	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-15-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

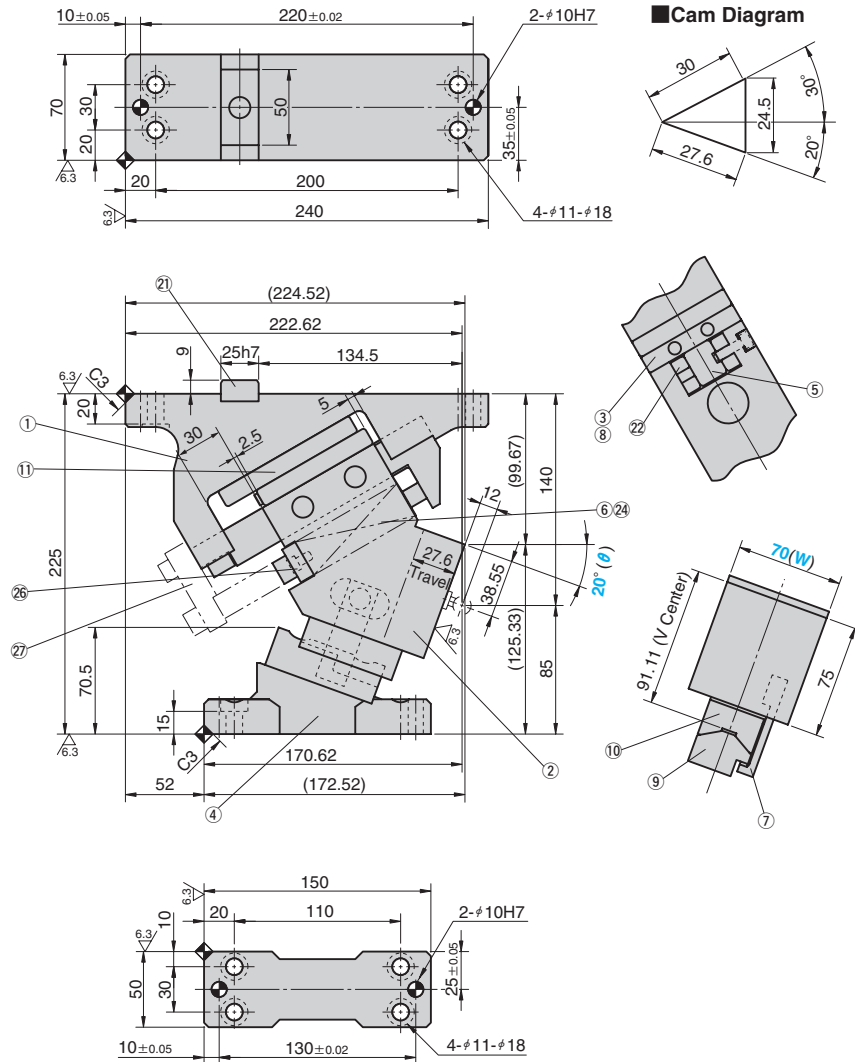
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

⚠ Bolts for assembly are not indicated.

UCMSNR70-20



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
27.6	98.1 (10.0)	-	2350.0 (239.6)	3127 (319.1)	14.1	UCMSNR	70	20	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	20	—	GK
UCMSNR	70	—	20	—	NGK
UCMSNR	70	—	20	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-20-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

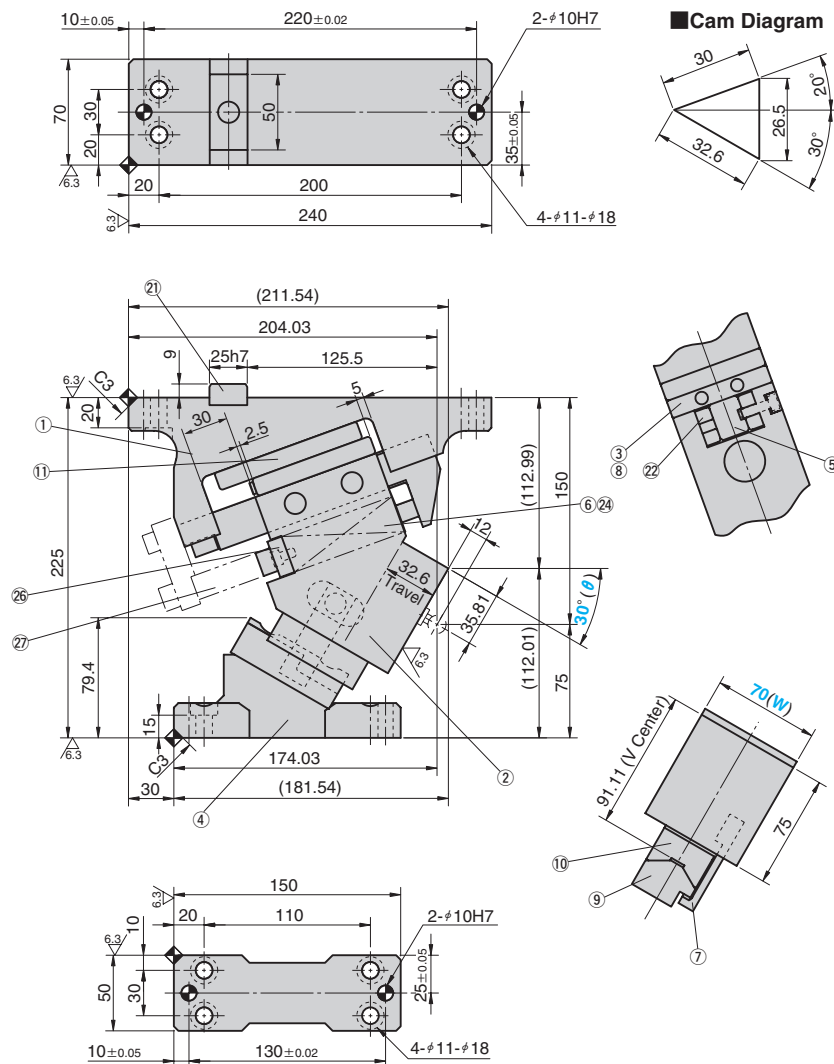
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

UCMSNR70-30



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
32.6	98.1 (10.0)	-	2350.0 (239.6)	3114 (317.8)	13.8	UCMSNR	70	30	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	30	—	GK
UCMSNR	70	—	30	—	NGK
UCMSNR	70	—	30	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-30-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

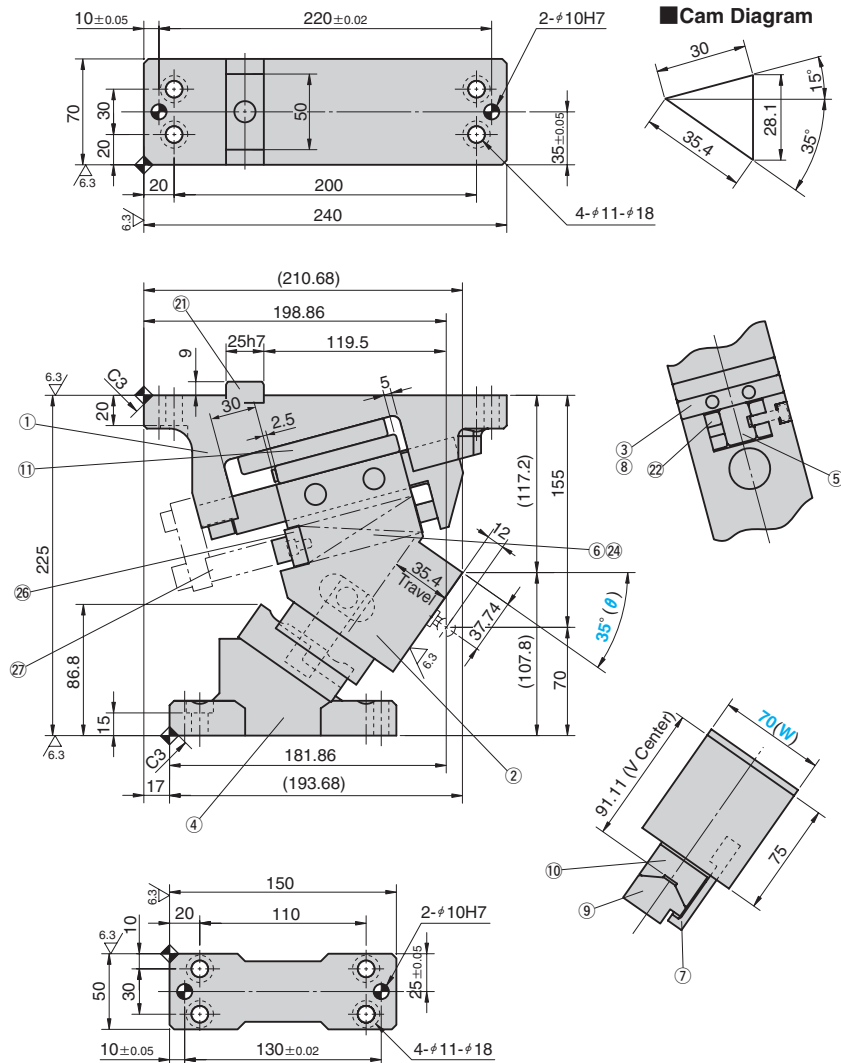
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

UCMSNR70-35



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
35.4	98.1 (10.0)	-	2350.0 (239.6)	3108 (317.1)	13.7	UCMSNR	70	35	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	35	—	GK
UCMSNR	70	—	35	—	NGK
UCMSNR	70	—	35	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-35-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

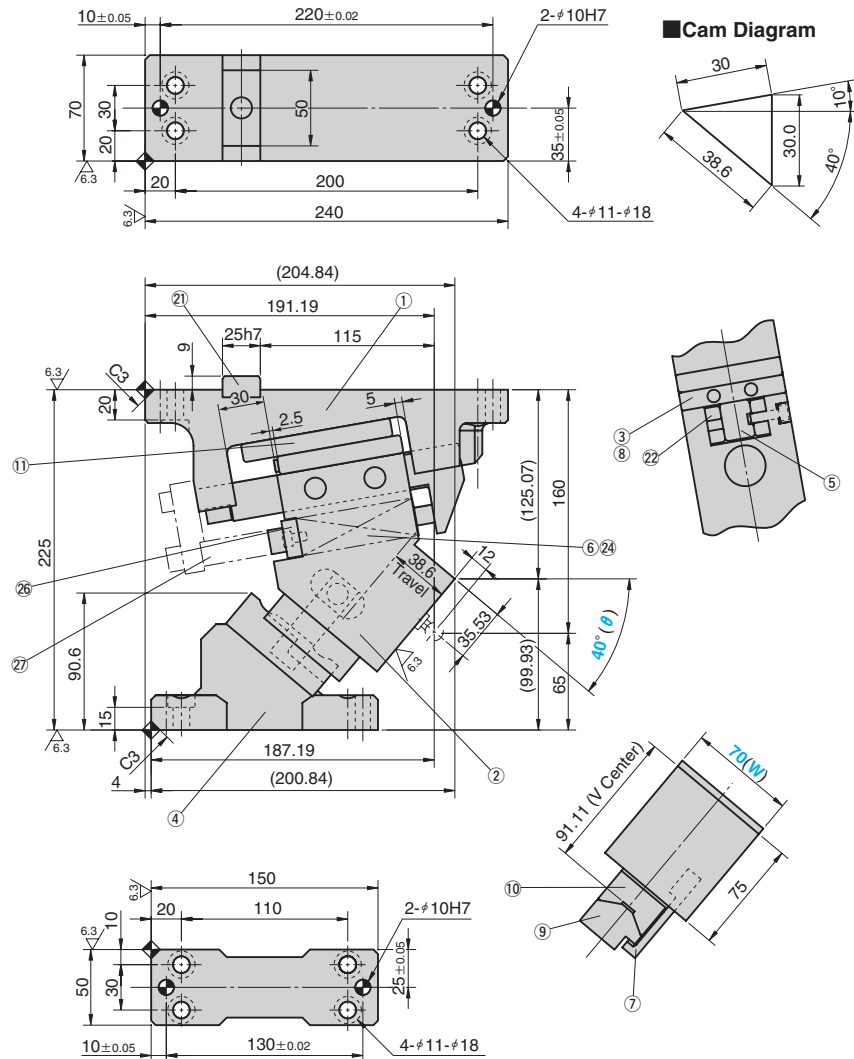
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

UCMSNR70-40



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
38.6	98.1 (10.0)	—	2350.0 (239.6)	3101 (316.4)	13.8	UCMSNR	70	40	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
			88.2 (9.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	40	—	GK
UCMSNR	70	—	40	—	NGK
UCMSNR	70	—	40	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-40-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

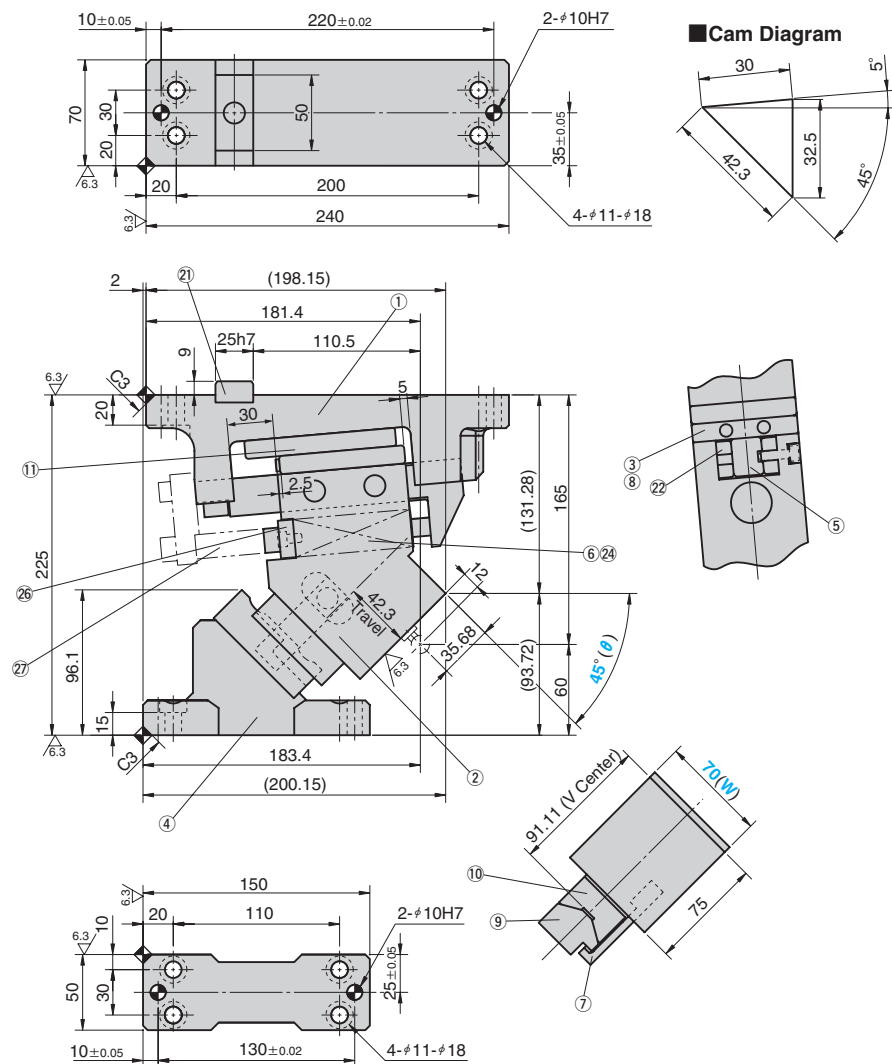
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

UCMSNR70-45



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
42.3	98.1 (10.0)	-	2350.0 (239.6)	3094 (315.7)	13.8	UCMSNR	70	45	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	45	—	GK
UCMSNR	70	—	45	—	NGK
UCMSNR	70	—	45	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

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



Order

UCMSNR70-45-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

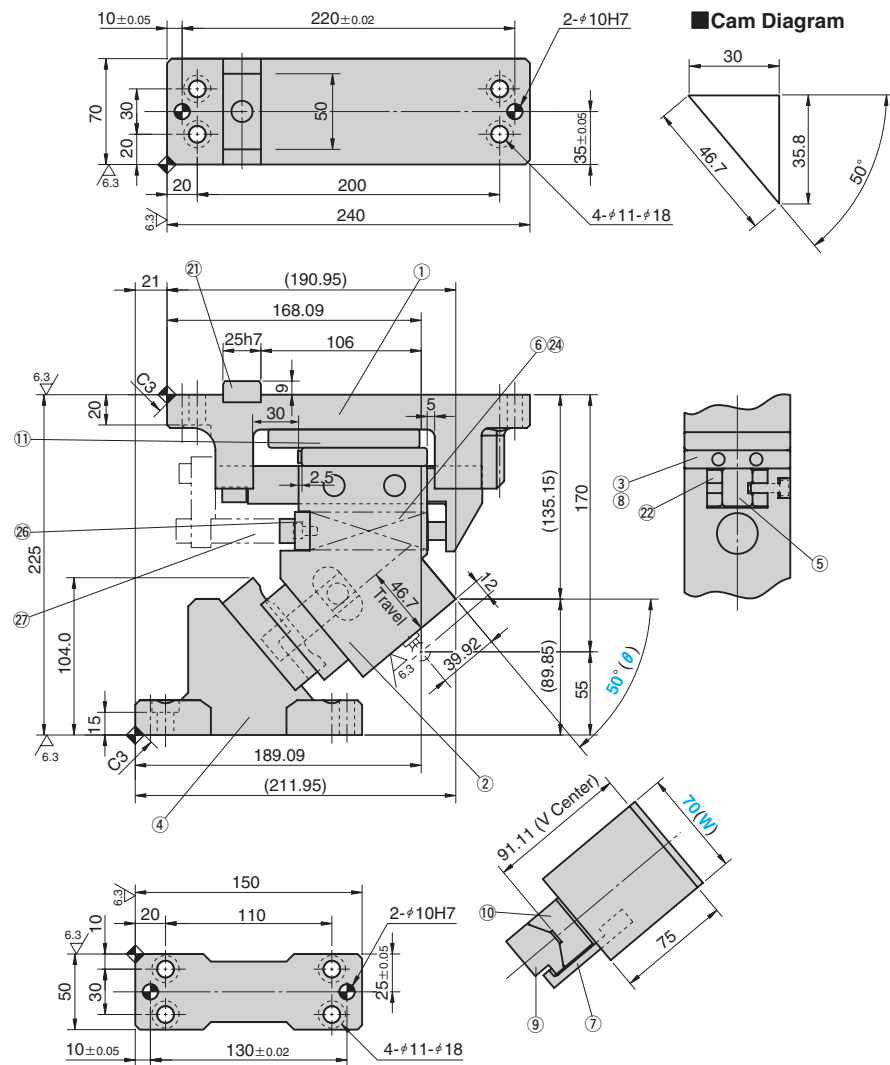
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

UCMSNR70-50



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
46.7	98.1 (10.0)	—	2350.0 (239.6)	3088 (315.1)	13.9	UCMSNR	70	50	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	676.2 (69.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	50	—	GK
UCMSNR	70	—	50	—	NGK
UCMSNR	70	—	50	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-50-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

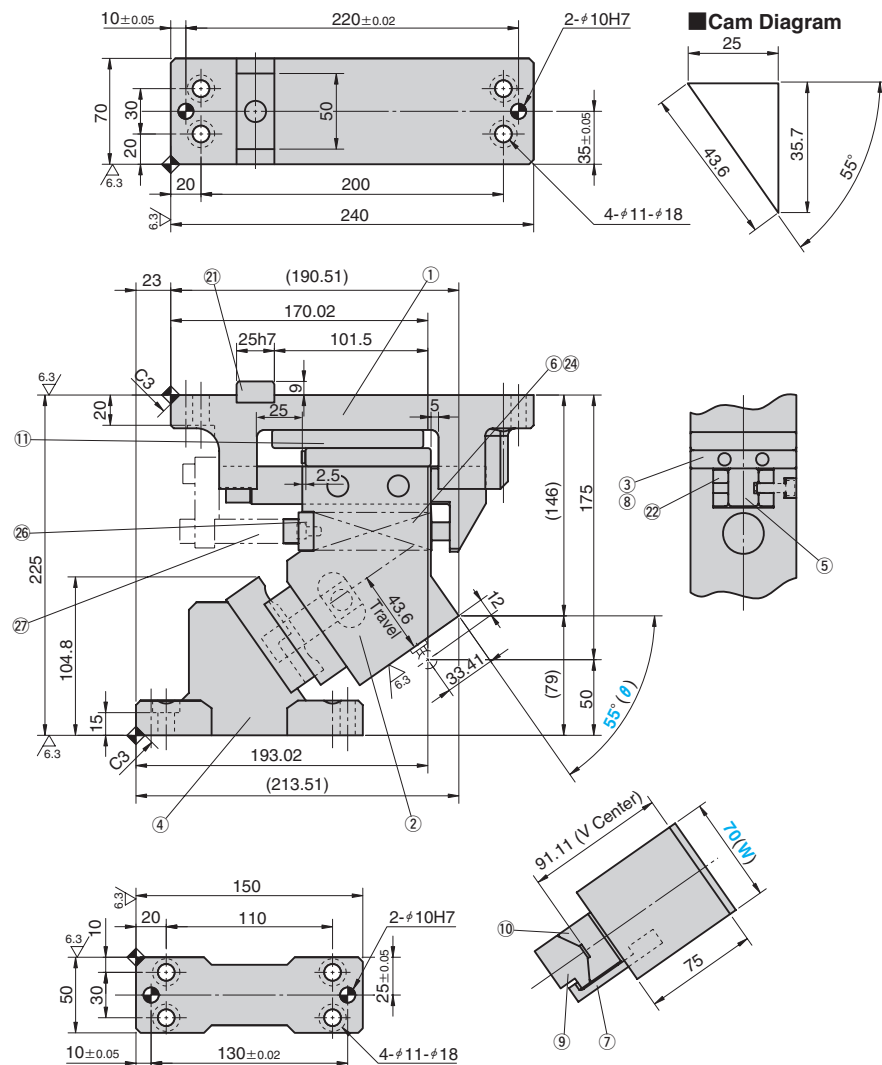
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

UCMSNR70-55



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
43.6	98.1 (10.0)	-	2350.0 (239.6)	3359 (342.7)	UCMSNR	70	55		GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	578.2 (59.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	55	—	GK
UCMSNR	70	—	55	—	NGK
UCMSNR	70	—	55	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR70-55-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

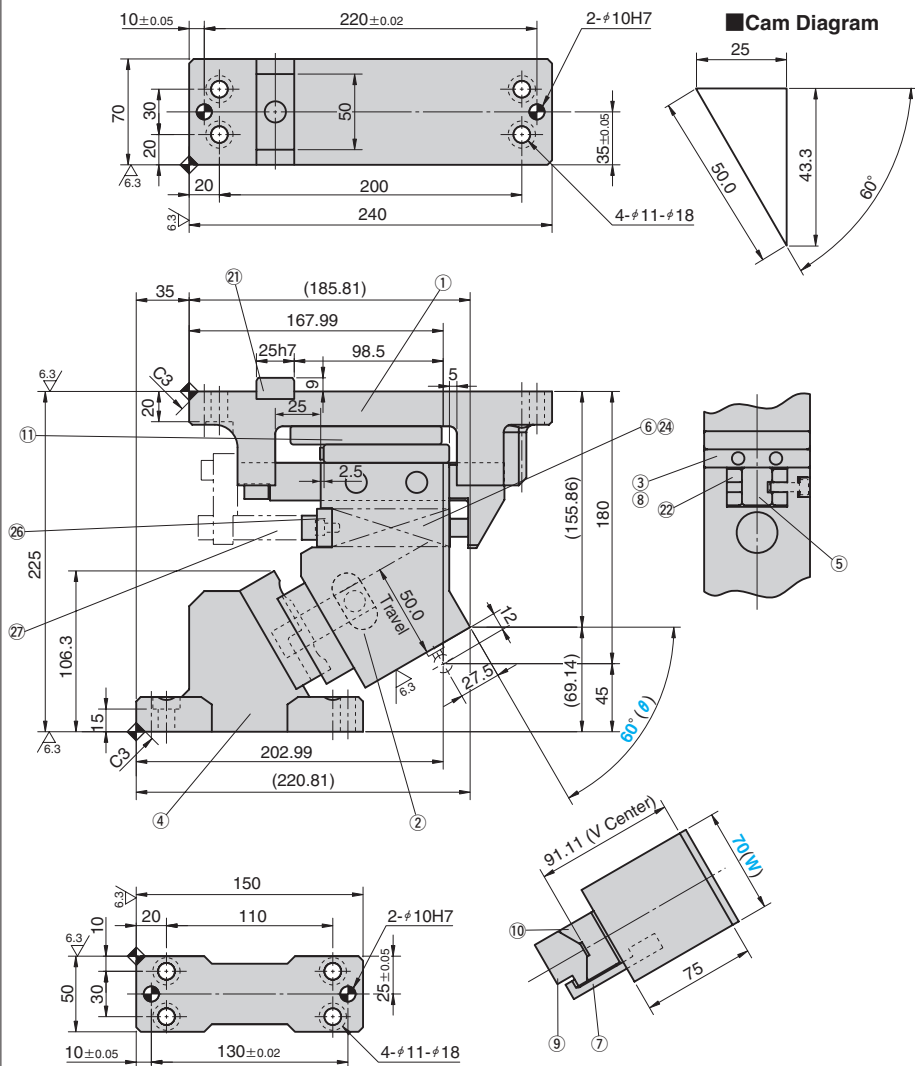
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

⚠ Bolts for assembly are not indicated.

UCMSNR70-60



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
50.0	98.1 (10.0)	-	2350.0 (239.6)	3713 (378.9)	14.5	UCMSNR	70	60	GK *NGK
			1333.8 (136.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		88.2 (9.0)	578.2 (59.0)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	70	—	60	—	GK
UCMSNR	70	—	60	—	NGK
UCMSNR	70	—	60	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR70-60-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-38.1	Gas Spring (KALLER)
	GD	C180-38	Gas Spring (DADCO)
	GS	SFND150.38	Gas Spring (SDT)
	ISO	TJL25-115	Coil Spring (constant = 19.6N/mm)

Guideline of spring durability 1,000,000 strokes

Table of Components

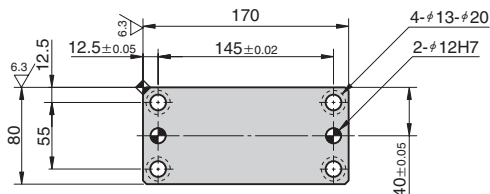
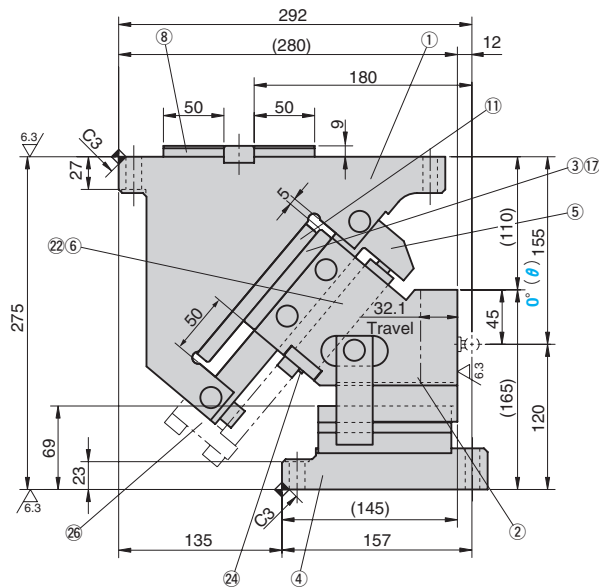
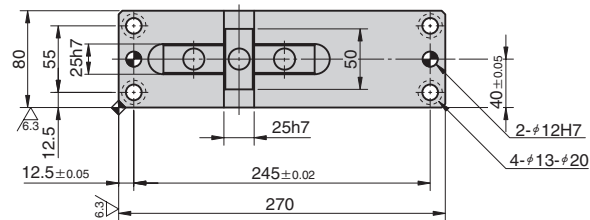
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD540
②	Cam Slider	1	FCD540
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	1	S45C(1045)
⑧	Stopper	2	Urethane
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Key A	1	SS400(1020)
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

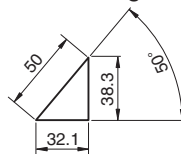


Bolts for assembly are not indicated.

UCMSNR80-00



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
19.3	166.7 (17.0)	-	2350.0 (239.6)	3177 (324.2)	27.9	UCMSNR	80	00	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	00	—	GK
UCMSNR	80	—	00	—	NGK
UCMSNR	80	—	00	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR80-00-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

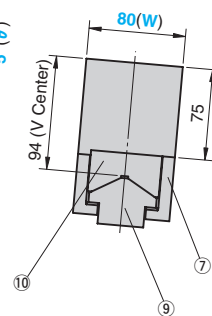
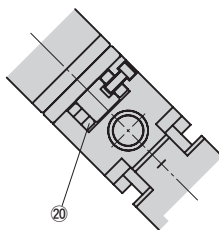
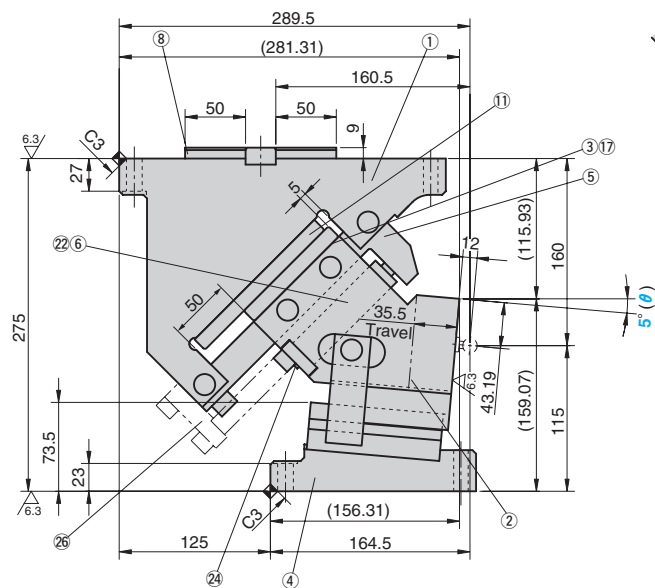
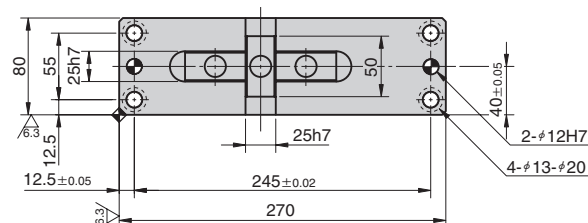
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉒	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉔	Spring Stopper Plate	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)

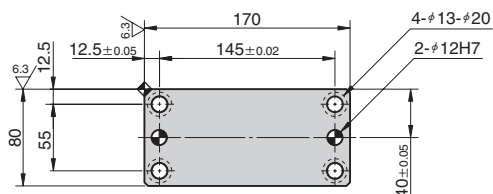
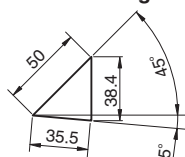


Bolts for assembly are not indicated.

UCMSNR80-05



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
35.5	166.7 (17.0)	-	2350.0 (239.6)	3169 (323.4)	27.5	UCMSNR	80	05	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	05	—	GK
UCMSNR	80	—	05	—	NGK
UCMSNR	80	—	05	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

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



Order

UCMSNR80-05-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

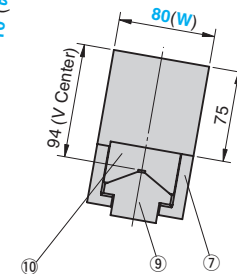
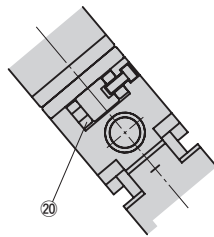
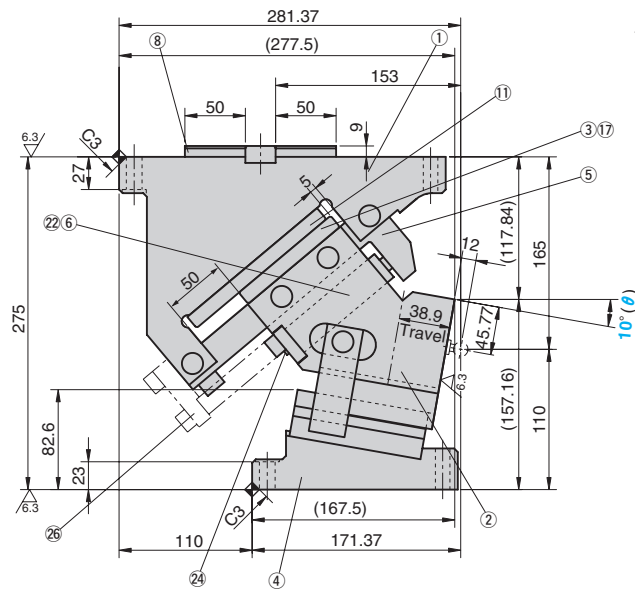
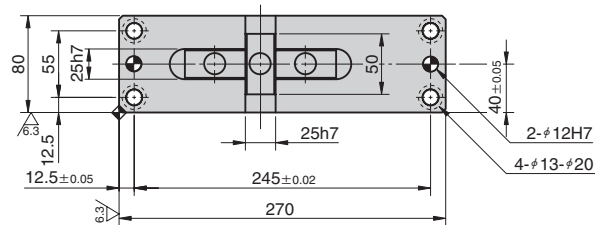
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉒	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉔	Spring Stopper Plate	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)

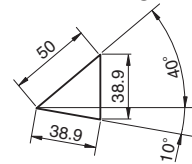


Bolts for assembly are not indicated.

UCMSNR80-10



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
38.9	166.7 (17.0)	-	2350.0 (239.6)	3161 (322.5)	26.9	UCMSNR	80	10	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	10	—	GK
UCMSNR	80	—	10	—	NGK
UCMSNR	80	—	10	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR80-10-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

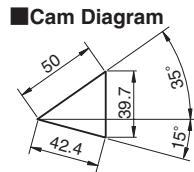
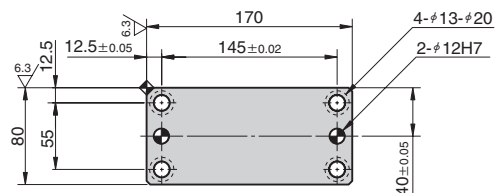
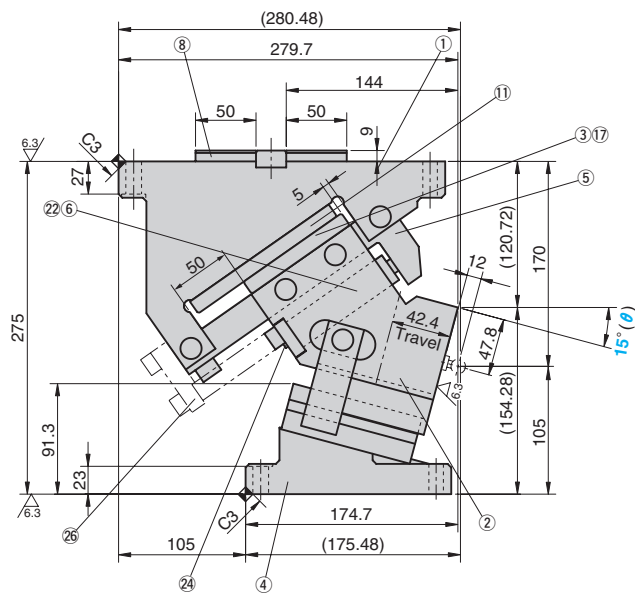
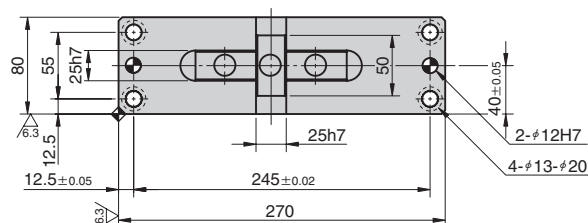
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Stopper	2	Urethane
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)



Bolts for assembly are not indicated.

UCMSNR80-15



Cam Diagram

Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
42.4	166.7 (17.0)	-	2350.0 (239.6)	3152 (321.6)	UCMSNR	80	15		GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	15	—	GK
UCMSNR	80	—	15	—	NGK
UCMSNR	80	—	15	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR80-15-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

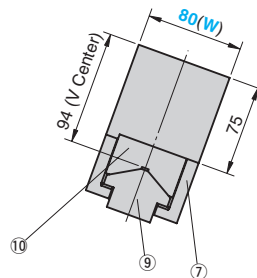
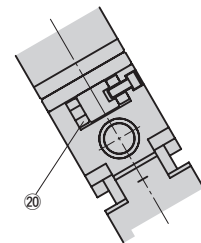
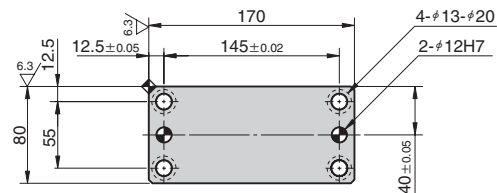
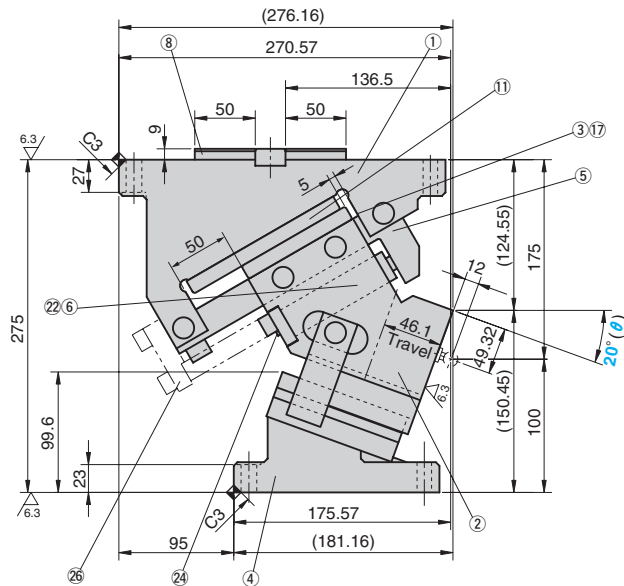
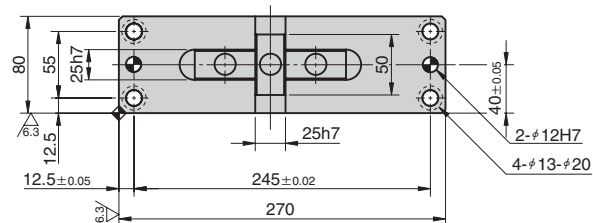
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉒	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉔	Spring Stopper Plate	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)

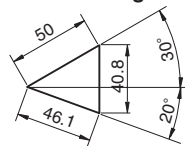


Bolts for assembly are not indicated.

UCMSNR80-20



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
46.1	166.7 (17.0)	-	2350.0 (239.6)	3142 (320.6)	26.0	UCMSNR	80	20	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	20	—	GK
UCMSNR	80	—	20	—	NGK
UCMSNR	80	—	20	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR80-20-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

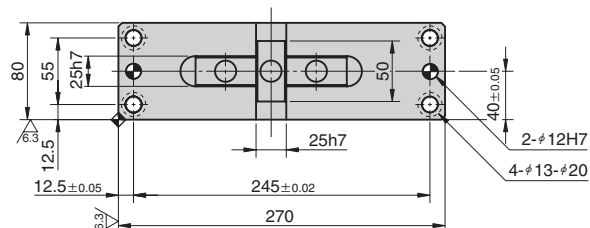
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



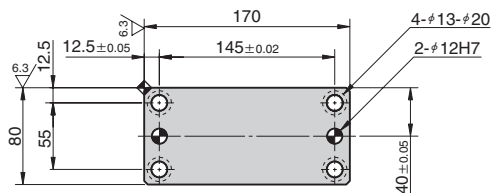
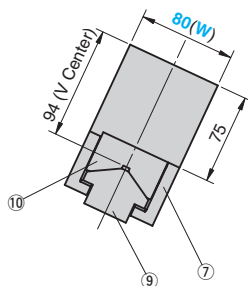
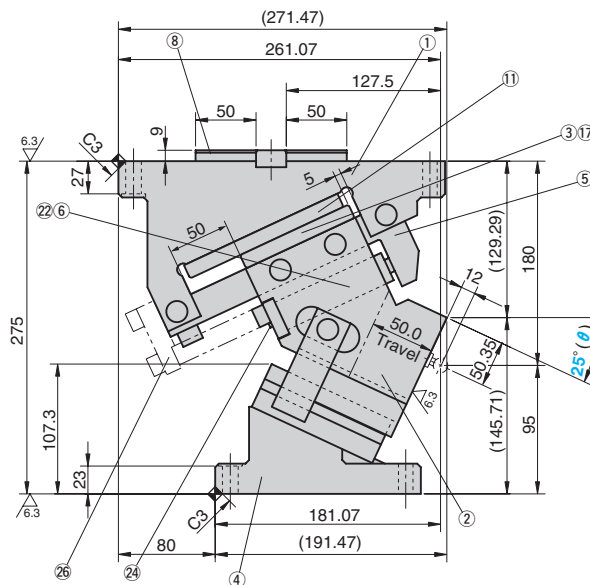
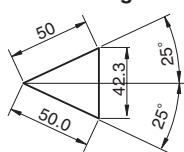
Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉑	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉒	Spring Stopper Plate	1	SS400(1020)
㉓	Slide Lock Plate	1	SS400(1020)

UCMSNR80-25



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
50.0	166.7 (17.0)	-	2350.0 (239.6)	3132 (319.6)	UCMSNR	80	25		GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	25	—	GK
UCMSNR	80	—	25	—	NGK
UCMSNR	80	—	25	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

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



Order

UCMSNR80-25-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

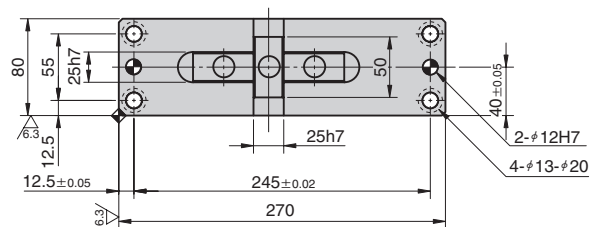
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



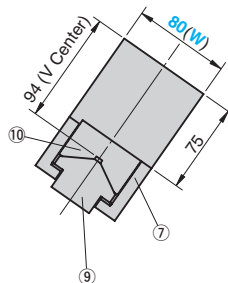
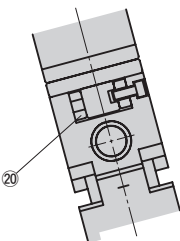
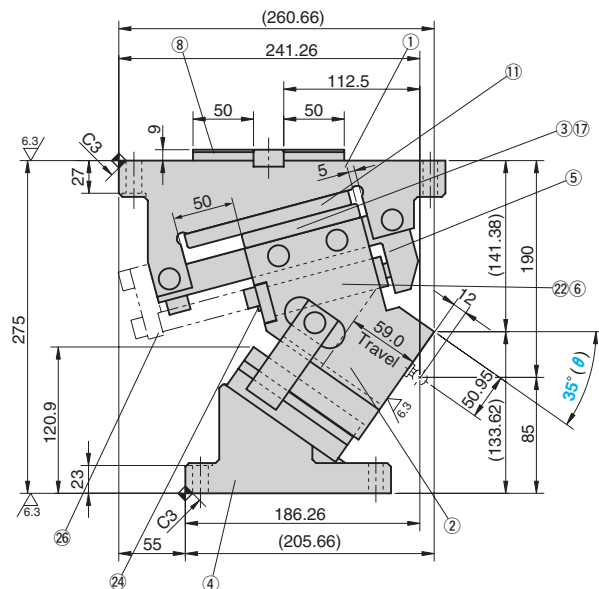
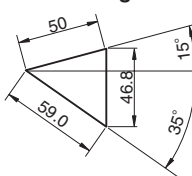
Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉒	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉔	Spring Stopper Plate	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)

UCMSNR80-35



Cam Diagram



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
59.0	166.7 (17.0)	-	2350.0 (239.6)	3112 (317.6)	UCMSNR	80	35		GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	35	—	GK
UCMSNR	80	—	35	—	NGK
UCMSNR	80	—	35	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR80-35-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

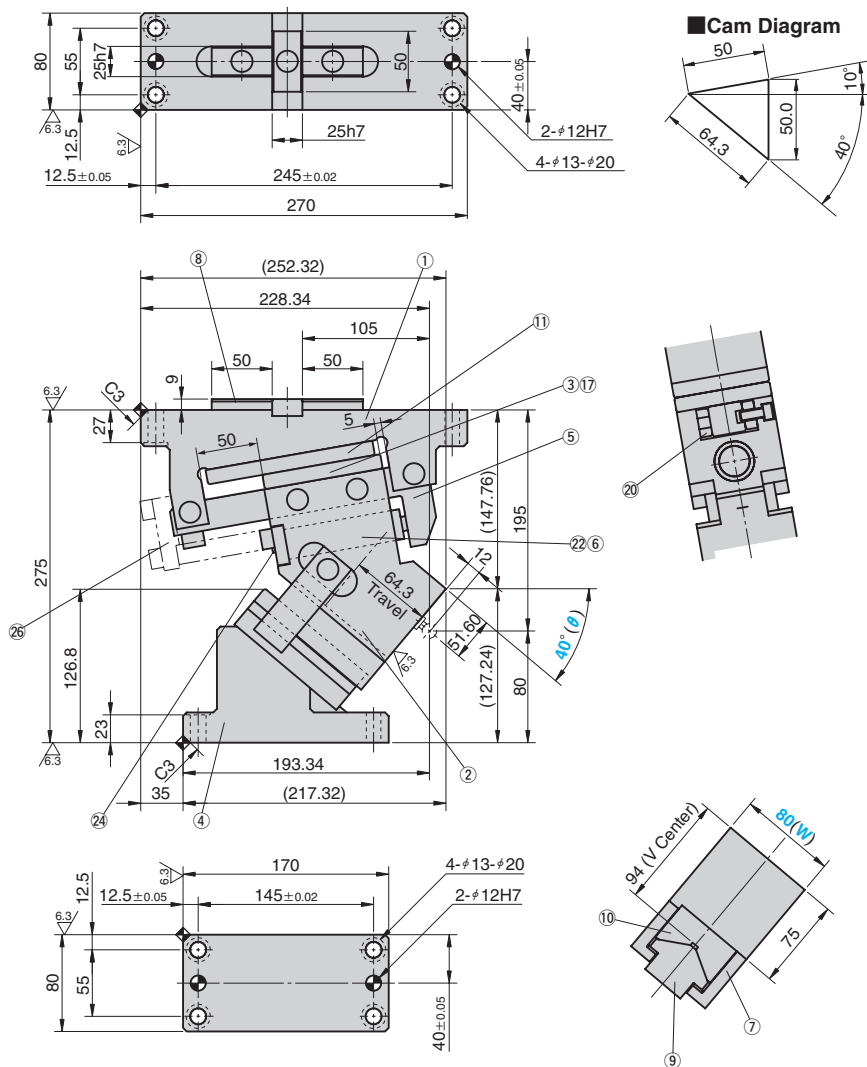
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉑	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉒	Spring Stopper Plate	1	SS400(1020)
㉓	Slide Lock Plate	1	SS400(1020)

UCMSNR80-40



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
64.3	166.7 (17.0)	-	2350.0 (239.6)	3102 (316.5)	24.7	UCMSNR	80	40	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
		73.5 (7.5)	1223.6 (124.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	40	—	GK
UCMSNR	80	—	40	—	NGK
UCMSNR	80	—	40	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

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



Order

UCMSNR80-40-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

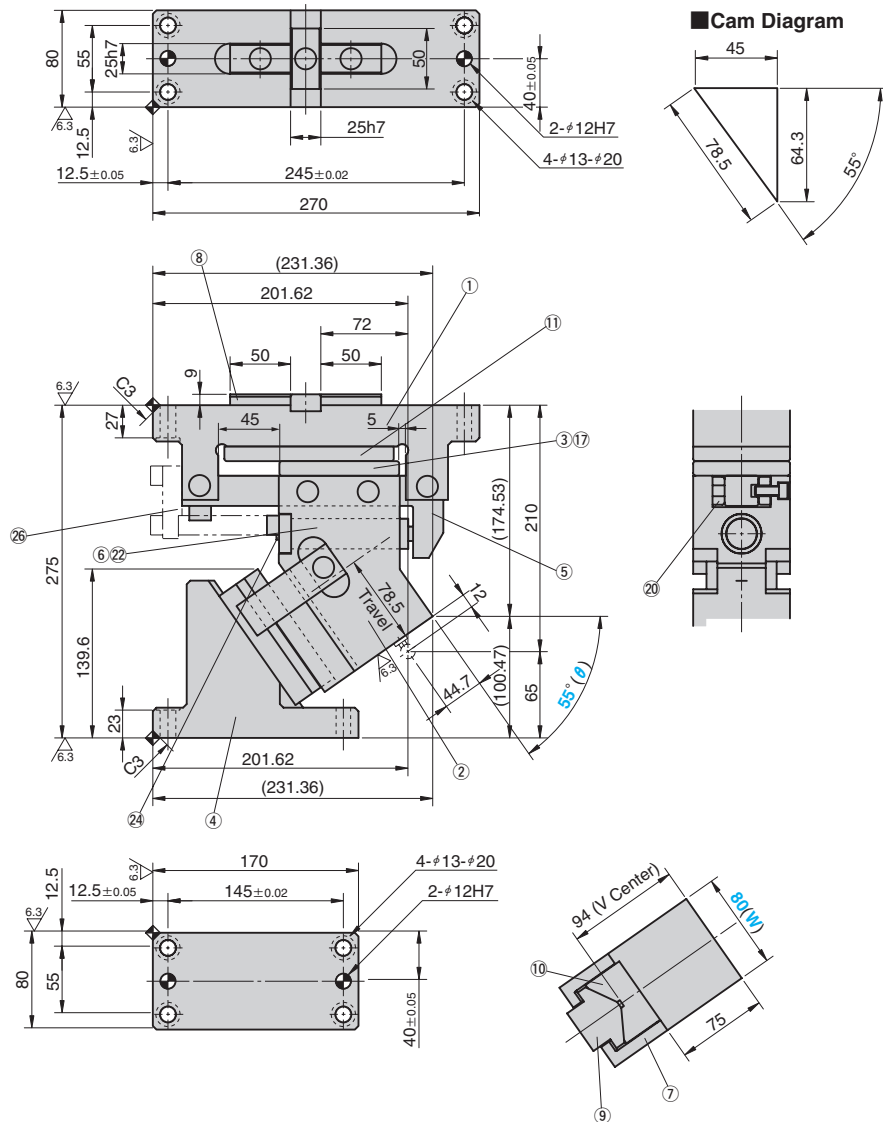
No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)



Bolts for assembly are not indicated.

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑫	Stopper	2	Urethane
⑬	Wear Plate	2	Bronze with Graphite
⑭	Spring Guide Pin	(1)	S45C(1045)ISO specification only
⑮	Spring Stopper Plate	1	SS400(1020)
⑯	Slide Lock Plate	1	SS400(1020)

UCMSNR80-55



Travel S	Working Force kN(tonf)	Spring Force N(kgf)		Return Force N(kgf)	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type G
		Initial Load	Final Load						
78.5	166.7 (17.0)	-	2350.0 (239.6)	3352 (342.0)	25.8	UCMSNR	80	55	GK *NGK
			1421.0 (145.0)						GD *NGD
			2280.0 (232.5)						GS *NGS
			73.6 (7.5)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	80	—	55	—	GK
UCMSNR	80	—	55	—	NGK
UCMSNR	80	—	55	—	NISO

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

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



Option

Option Code	Specification
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR80-55-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
⑥	GK	M150-50	Gas Spring (KALLER)
	GD	C180-50	Gas Spring (DADCO)
	GS	SFND.150.50	Gas Spring (SDT)
	ISO	TJL32-152	Coil Spring (constant = 23.0N/mm)

Guideline of spring durability 500,000 strokes

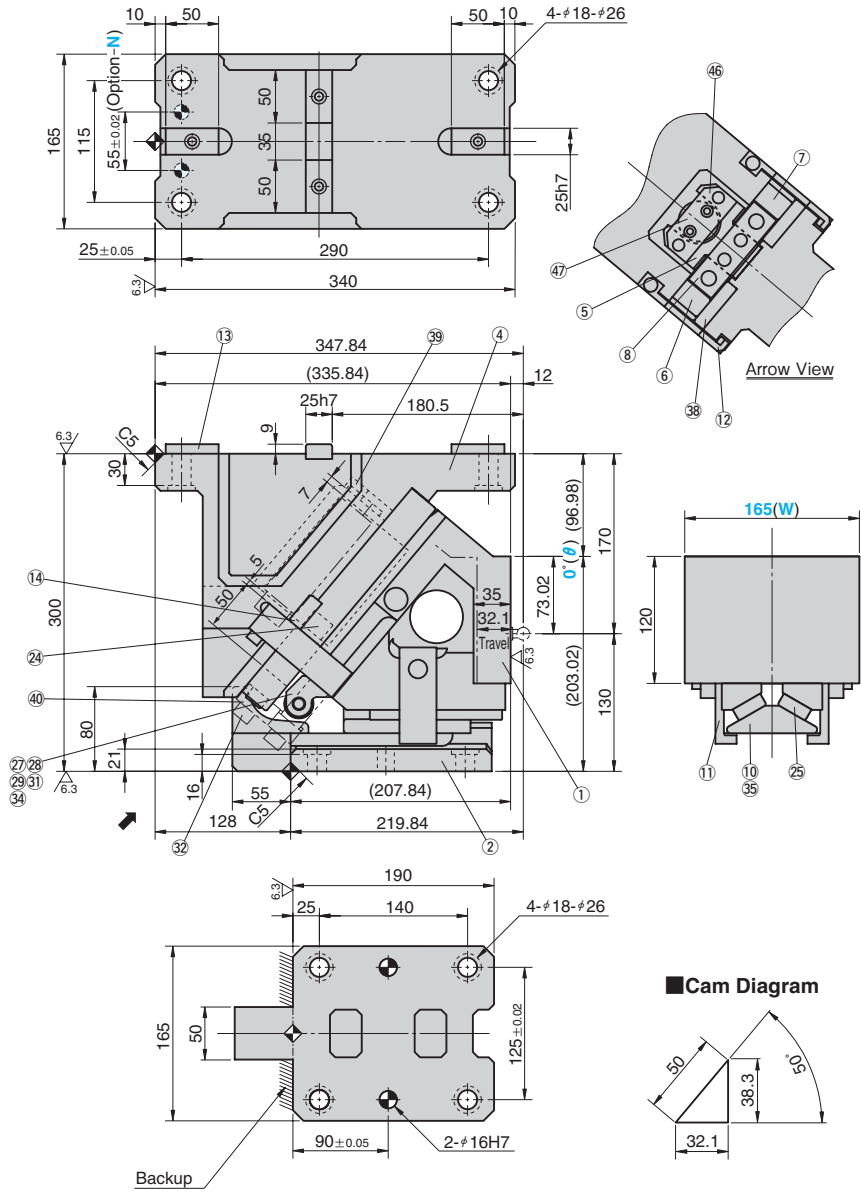
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	FC250
③	Wear Plate	1	Bronze with Graphite
④	Cam Driver	1	FC250
⑤	Guide Bar	1	S45C(1045)
⑥	Spring	1	Refer to the spring specification table.
⑦	Positive Return Follower	2	S45C(1045)
⑧	Key A	3	SS400(1020)
⑨	Cam Slide Guide	1	Bronze with Graphite
⑩	Cam Slide Guide	1	S45C(1045)

No.	Description	Qty	Material and Remark
⑪	Slide Plate	1	S45C(1045)
⑰	Stopper	2	Urethane
⑳	Wear Plate	2	Bronze with Graphite
㉑	Spring Guide Pin	(1)	S45C(1045)ISO specification only
㉒	Spring Stopper Plate	1	SS400(1020)
㉓	Slide Lock Plate	1	SS400(1020)

⚠ Bolts for assembly are not indicated.

UCMSNR165-00



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 G
		Initial Load	Final Load						
32.1	294.2 (30.0)	-	3430.0 (349.8)	4743 (484.0)	76.1 (25.2)	UCMSNR	165	00	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
		449.1 (45.8)	2694.0 (274.7)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	165	00	GK
UCMSNR	165	00	NGK
UCMSNR	165	00	NISO

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.



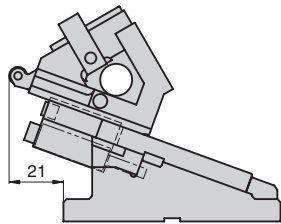
Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR165-00-GK-N
UCMSNR165-00-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

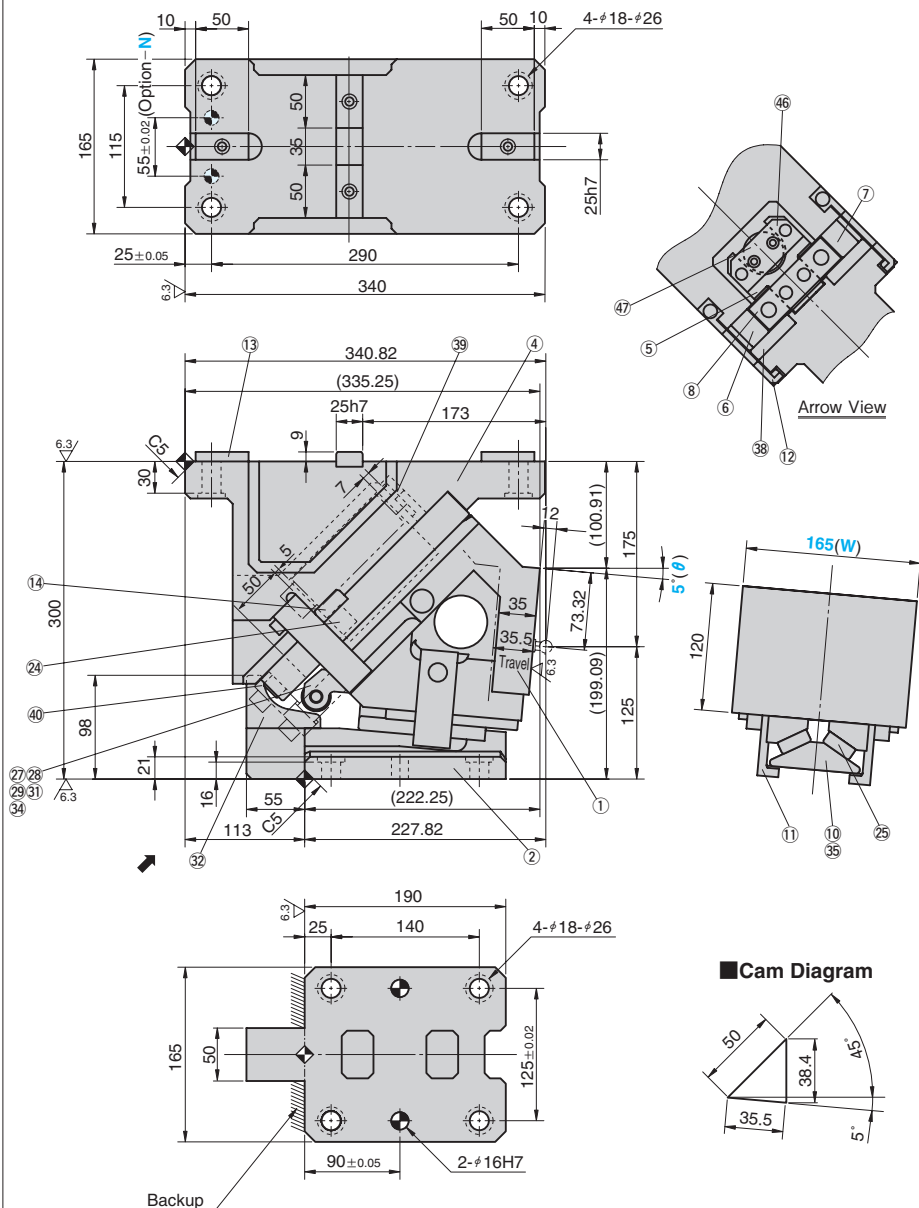
No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate D-R	1	S45C(1045)
7	Base Plate D-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2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

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

UCMSNR165-05



Cam Diagram

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 G
		Initial Load	Final Load						
35.5	294.2 (30.0)	—	3430.0 (349.8)	4721 (481.7)	74.2 (25.2)	UCMSNR	165	05	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
			2694.0 (274.7)						ISO *NISO
		449.1 (45.8)							



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	165	—	05	—	GK
UCMSNR	165	—	05	—	NGK
UCMSNR	165	—	05	—	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

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



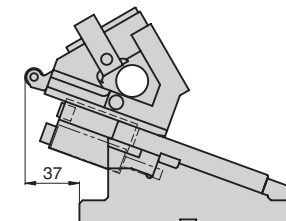
Order

UCMSNR165-05-GK-N
UCMSNR165-05-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes



Space for removing

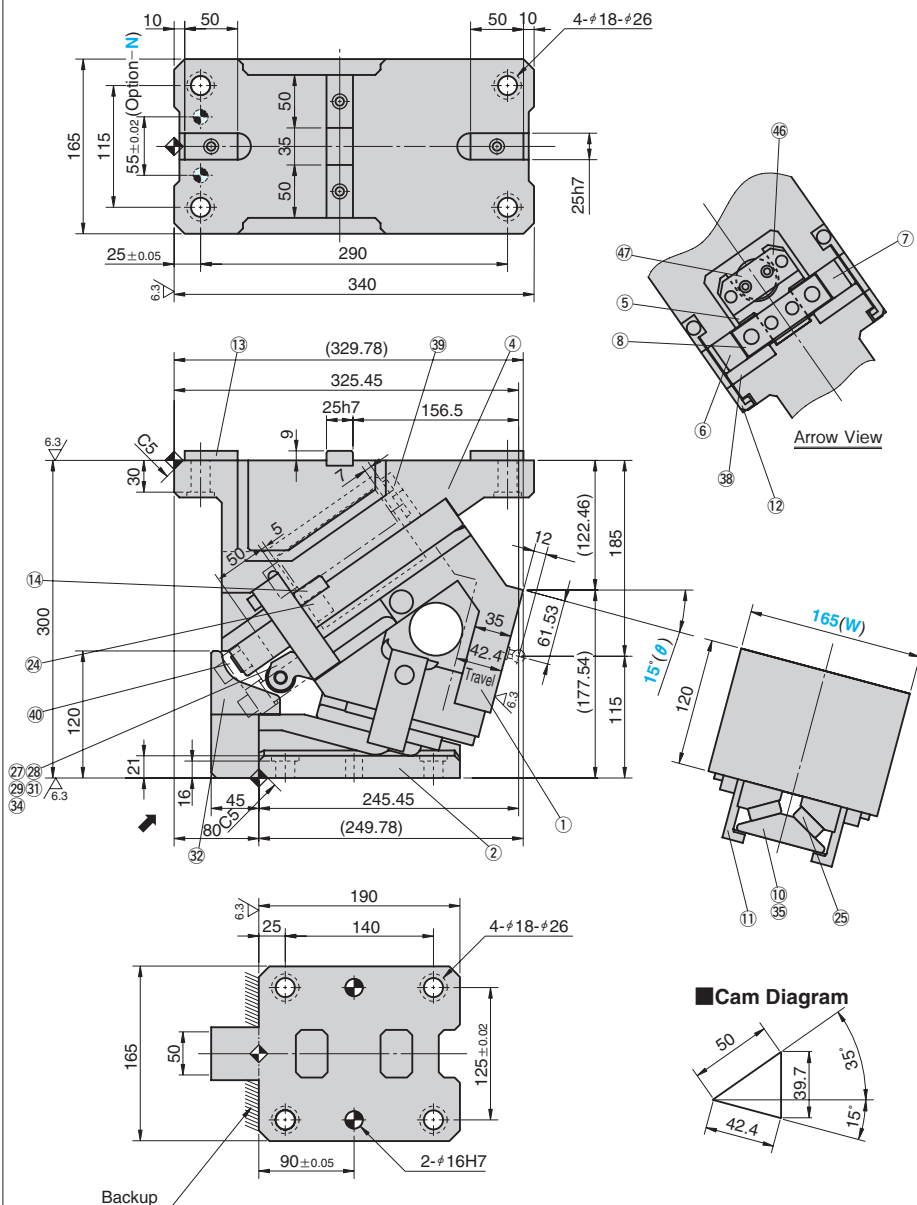
Table of Components

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

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.

Bolts for assembly are not indicated.

UCMSNR165-15



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 G
		Initial Load	Final Load						
42.4	294.2 (30.0)	-	3430.0 (349.8)	4671 (476.7)	73.1 (25.2)	UCMSNR	165	15	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
		449.1 (45.8)	2694.0 (274.7)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	165	—	15	—	GK
UCMSNR	165	—	15	—	NGK
UCMSNR	165	—	15	—	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

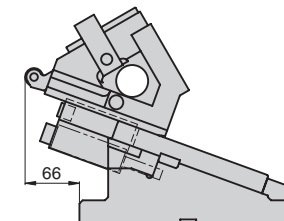
Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-15-GK-N
UCMSNR165-15-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

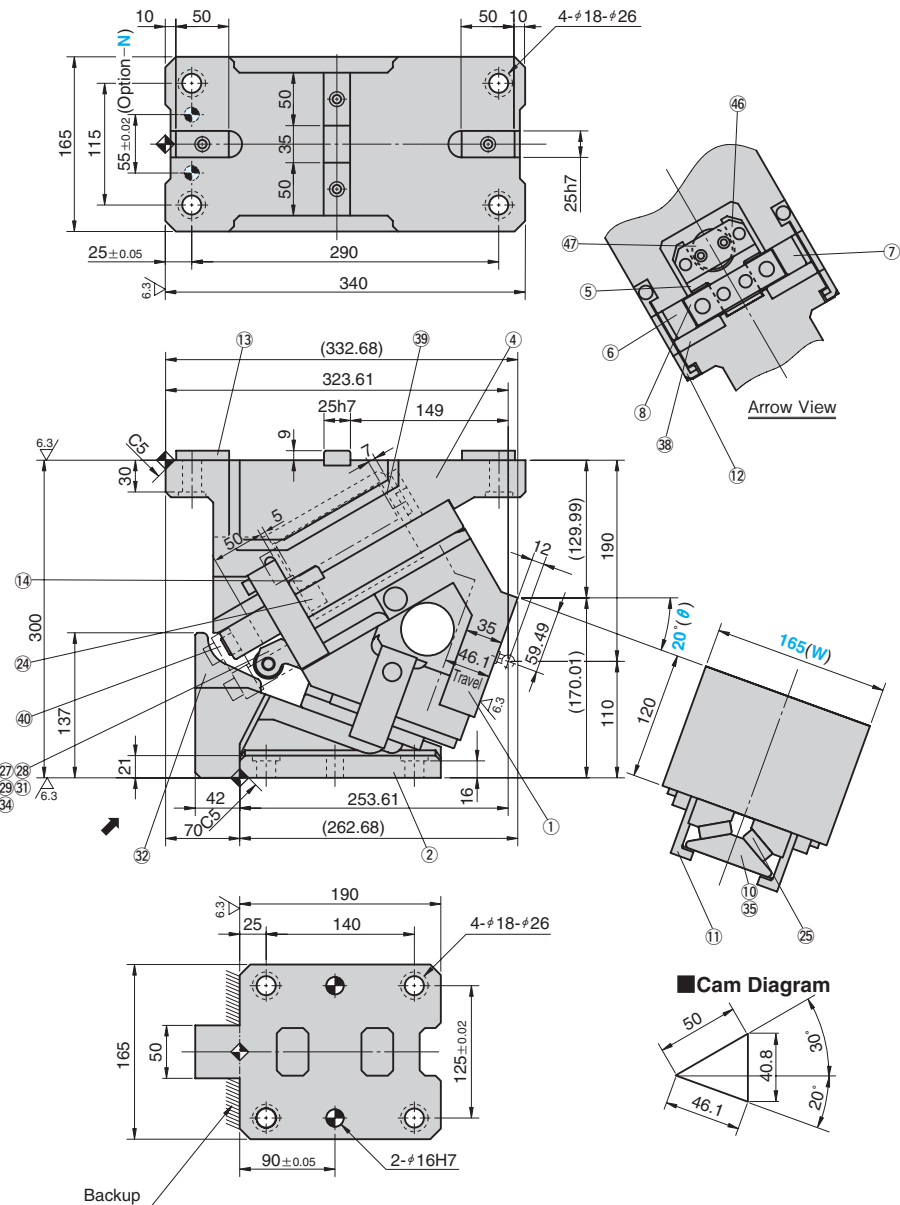
Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.

Bolts for assembly are not indicated.

UCMSNR165-20



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 G
		Initial Load	Final Load						
46.1	294.2 (30.0)	-	3430.0 (349.8)	4645 (474.0)	72.3 (25.2)	UCMSNR	165	20	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
		449.1 (45.8)	2694.0 (274.7)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	165	20	GK
UCMSNR	165	20	NGK
UCMSNR	165	20	NISO

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.



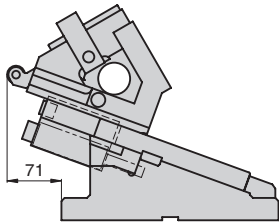
Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-20-GK-N
UCMSNR165-20-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

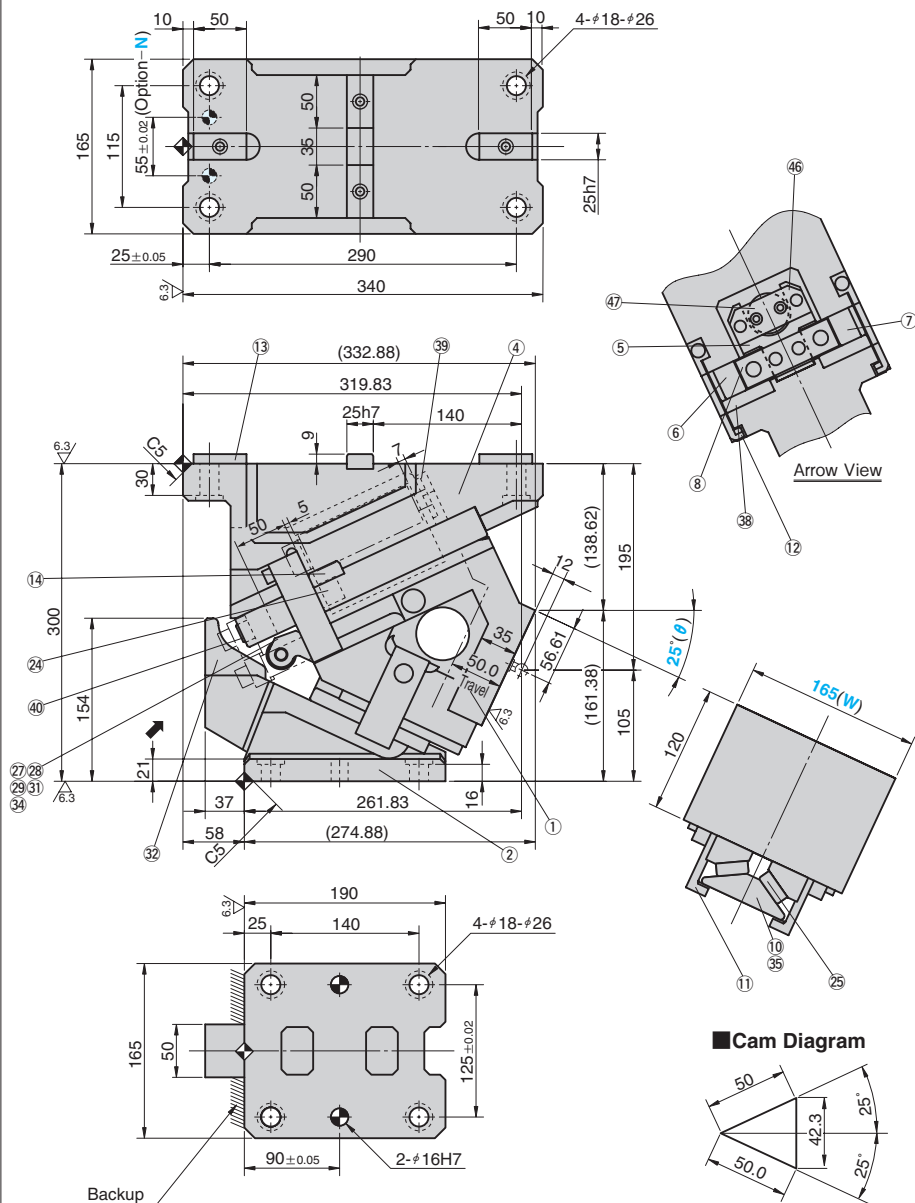
No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate D-R	1	S45C(1045)
7	Base Plate D-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11	Positive Return Follower	2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

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

UCMSNR165-25



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 G
		Initial Load	Final Load						
50.0	294.2 (30.0)	—	3430.0 (349.8)	4618 (471.2)	72.1 (25.2)	UCMSNR	165	25	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
			449.1 (45.8)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	165	—	25	—	GK
UCMSNR	165	—	25	—	NGK
UCMSNR	165	—	25	—	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

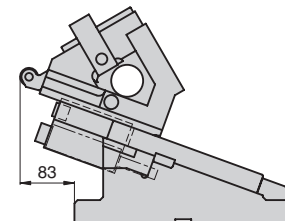
Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-25-GK-N
UCMSNR165-25-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

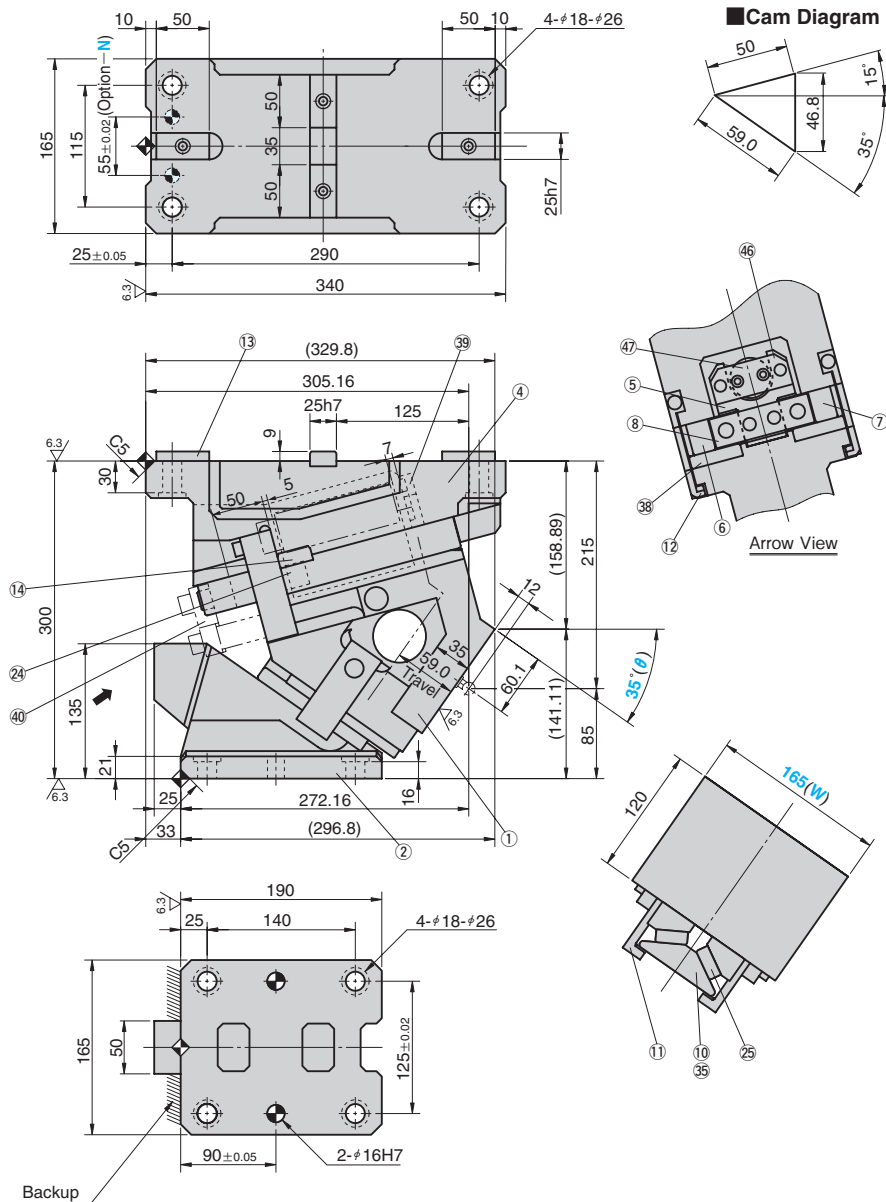
Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.

Bolts for assembly are not indicated.

UCMSNR165-35



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 G
		Initial Load	Final Load						
59.0	294.2 (30.0)	-	3430.0 (349.8)	4561 (465.4)	72.2 (25.2)	UCMSNR	165	35	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
		449.1 (45.8)	2694.0 (274.7)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	165	—	35	—	GK
UCMSNR	165	—	35	—	NGK
UCMSNR	165	—	35	—	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

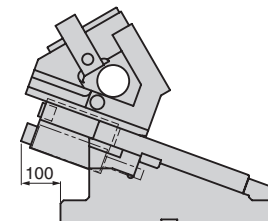
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-35-GK-N
UCMSNR165-35-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant=44.9N/mm)

Guideline of spring durability 500,000 strokes

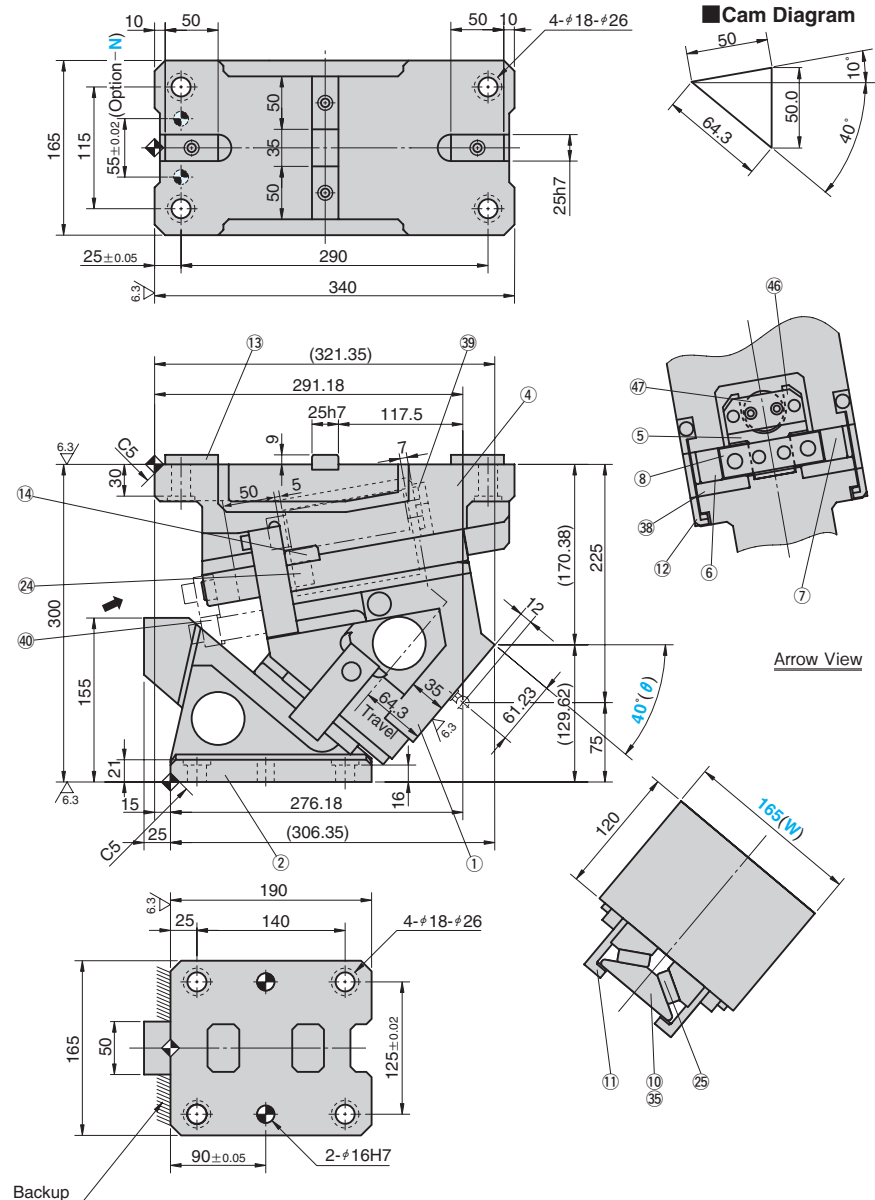
Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR165-40



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 G
		Initial Load	Final Load						
64.3	294.2 (30.0)	-	3430.0 (349.8)	4533 (462.5)	72.4 (25.2)	UCMSNR	165	40	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
			2694.0 (274.7)						ISO *NISO
		449.1 (45.8)	2694.0 (274.7)						



Order

Catalog No.	(W)	-	(θ)	-	G
UCMSNR	165	-	40	-	GK
UCMSNR	165	-	40	-	NGK
UCMSNR	165	-	40	-	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-40-GK-N
UCMSNR165-40-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

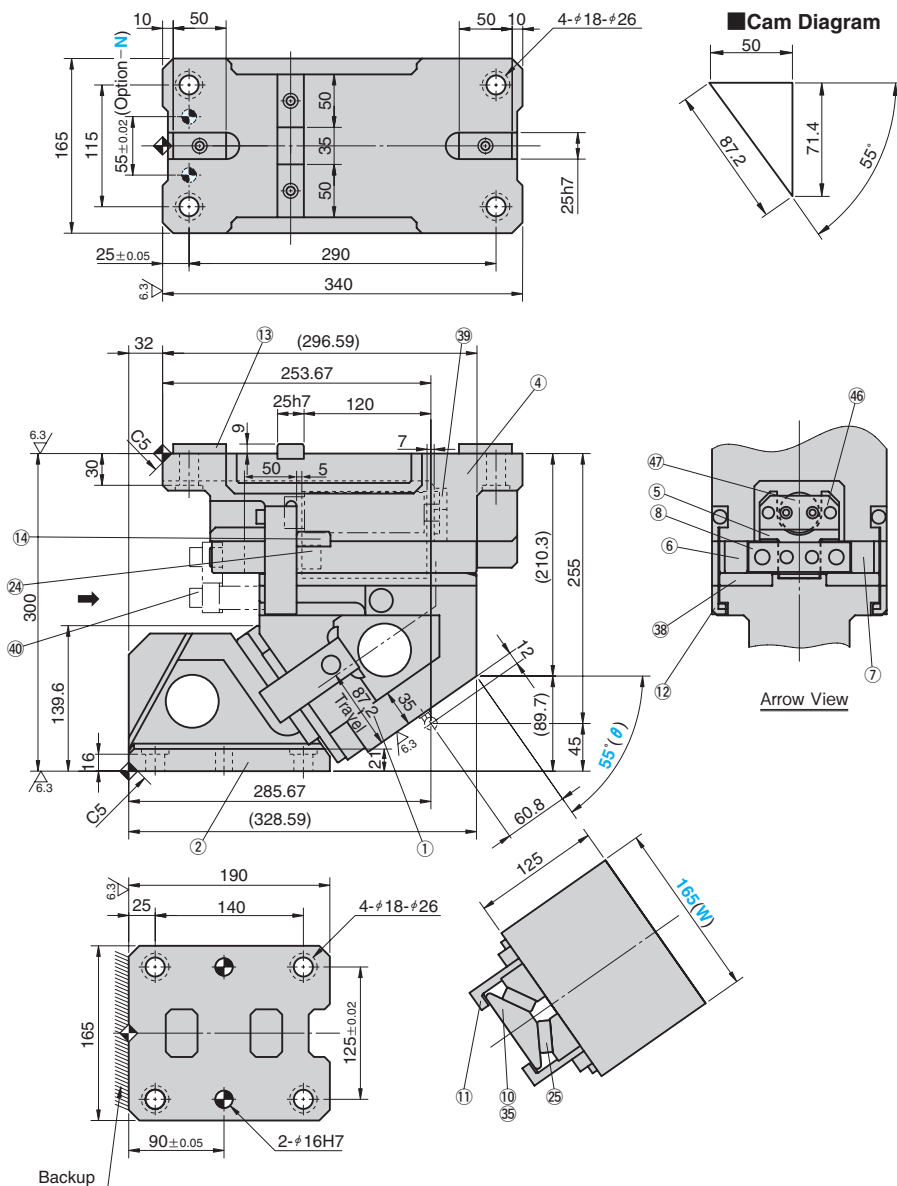
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate D-R	1	S45C(1045)
⑦	Base Plate D-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑲	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
⑲	Slide Plate	2	S45C(1045)
⑳	Key C	1	SS400(1020)
㉑	Wear Plate	2	VDI 50×200×12
㉒	Spring Support	1	SS400(1020)
㉓	Slide Lock Plate	1	SS400(1020)
㉔	Spring Guide Plate	1	SS400(1020)
㉕	Spring	1	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

UCMSNR165-55



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 G
		Initial Load	Final Load						
87.2	294.2 (30.0)	-	3430.0 (349.8)	4867 (496.6)	65.2 (26.4)	UCMSNR	165	55	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
			2694.0 (274.7)						ISO *NISO



Order

Catalog No.	(W)	-	(θ)	-	G
UCMSNR	165	-	55	-	GK
UCMSNR	165	-	55	-	NGK
UCMSNR	165	-	55	-	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-55-GK-N
UCMSNR165-55-GK-NF

Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

Space for removing

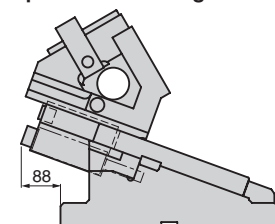


Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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)

No.	Description	Qty	Material and Remark
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	1	Urethane
25	Slide Plate	2	S45C(1045)
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table

⚠ Bolts for assembly are not indicated.

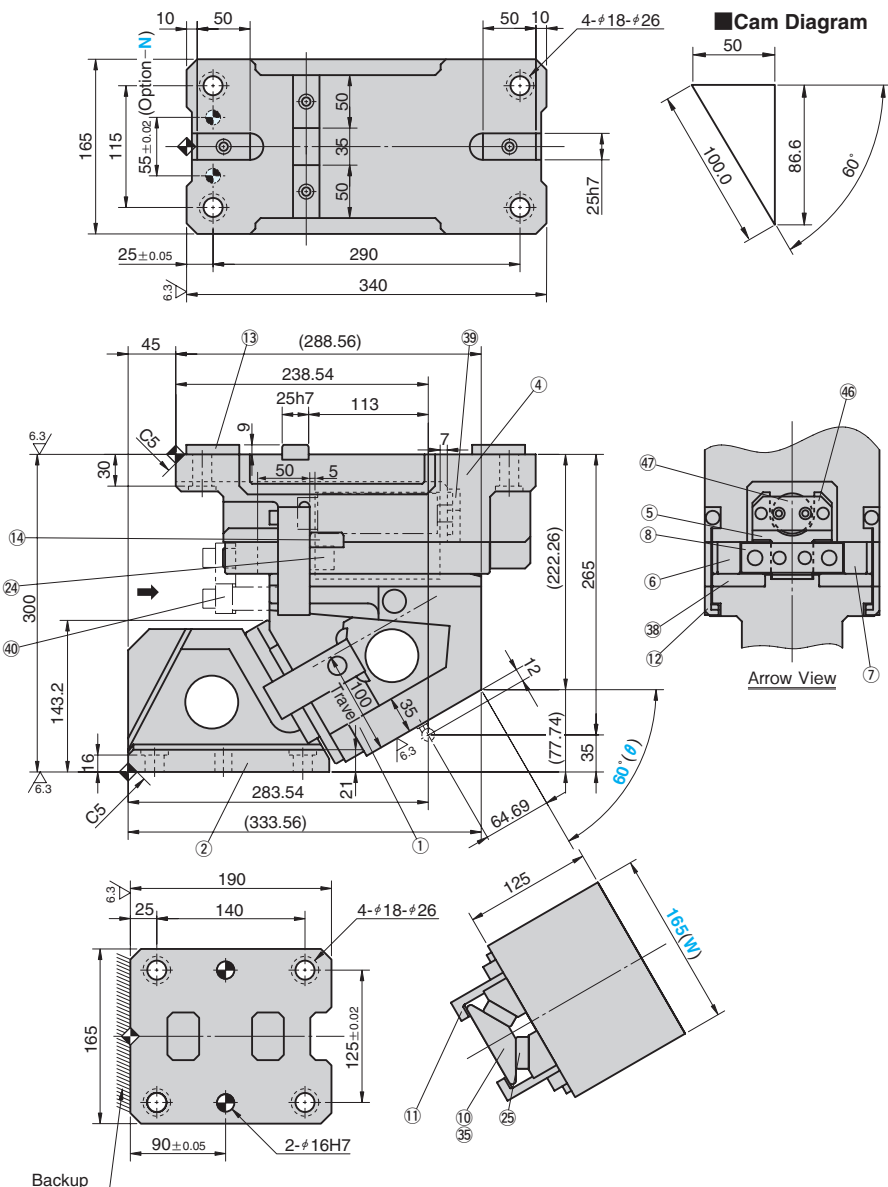
Aerial Cam Unit

NAAMS STANDARD

Addition

CAD
FILE

UCMSNR165-60



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 G
		Initial Load	Final Load						
100.0	294.2 (30.0)	-	3430.0 (349.8)	5380 (548.9)	66.6 (26.8)	UCMSNR	165	60	GK *NGK
			3518.0 (358.7)						GD *NGD
			3490.0 (355.9)						GS *NGS
			2694.0 (274.7)						ISO *NISO
		449.1 (45.8)	2694.0 (274.7)						



Order

Catalog No.	(W)	-	(θ)	-	G
UCMSNR	165	-	60	-	GK
UCMSNR	165	-	60	-	NGK
UCMSNR	165	-	60	-	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

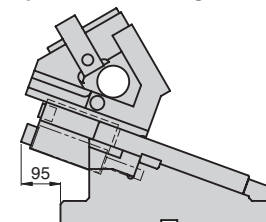
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR165-60-GK-N
UCMSNR165-60-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
47	GK	TU250-63.5	Gas Spring (KALLER)
	GD	L300.063.138	Gas Spring (DADCO)
	GS	SPF.250.63	Gas Spring (SDT)
	ISO	TJM40-178	Coil Spring (constant =44.9N/mm)

Guideline of spring durability 500,000 strokes

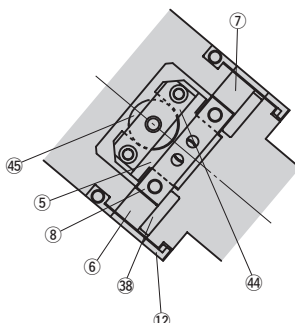
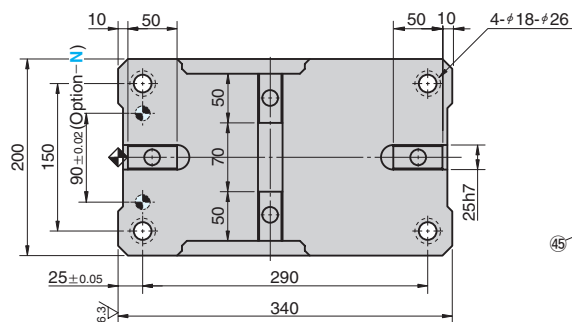
Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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)

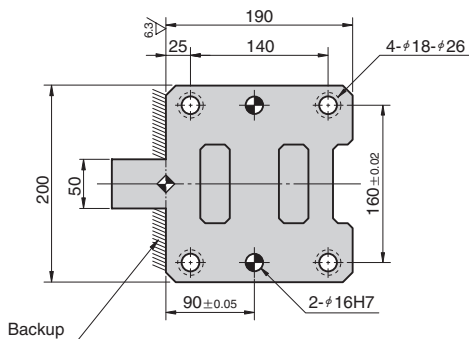
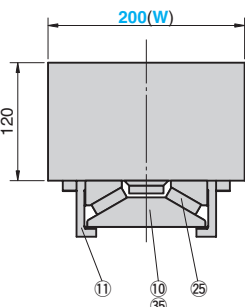
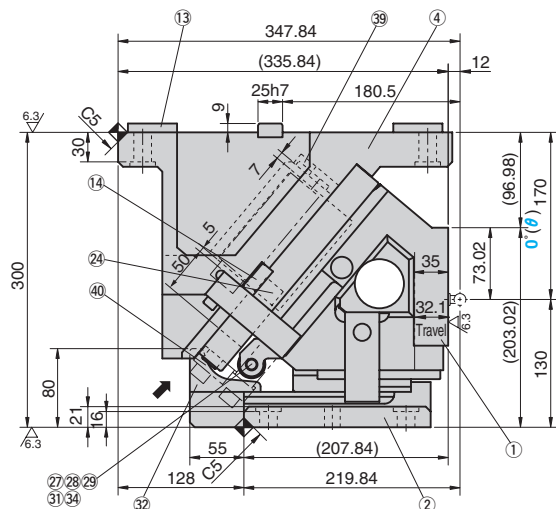
No.	Description	Qty	Material and Remark
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	1	Urethane
25	Slide Plate	2	S45C(1045)
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
46	Spring Guide Plate	1	SS400(1020)
47	Spring	1	Refer to the Spring Specification Table

⚠ Bolts for assembly are not indicated.

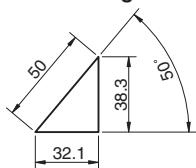
UCMSNR200-00



Arrow View



Cam Diagram



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 G
		Initial Load	Final Load						
32.1	353.0 (36.0)	-	6125.0 (624.6)	8363 (853.4)	90.3 (31.9)	UCMSNR	200	00	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
			749.2 (76.4)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	200	—	00	—	GK
UCMSNR	200	—	00	—	NGK
UCMSNR	200	—	00	—	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

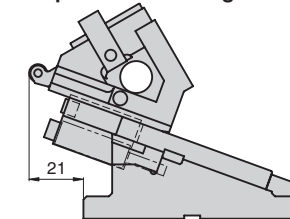
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR200-00-GK-N
UCMSNR200-00-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

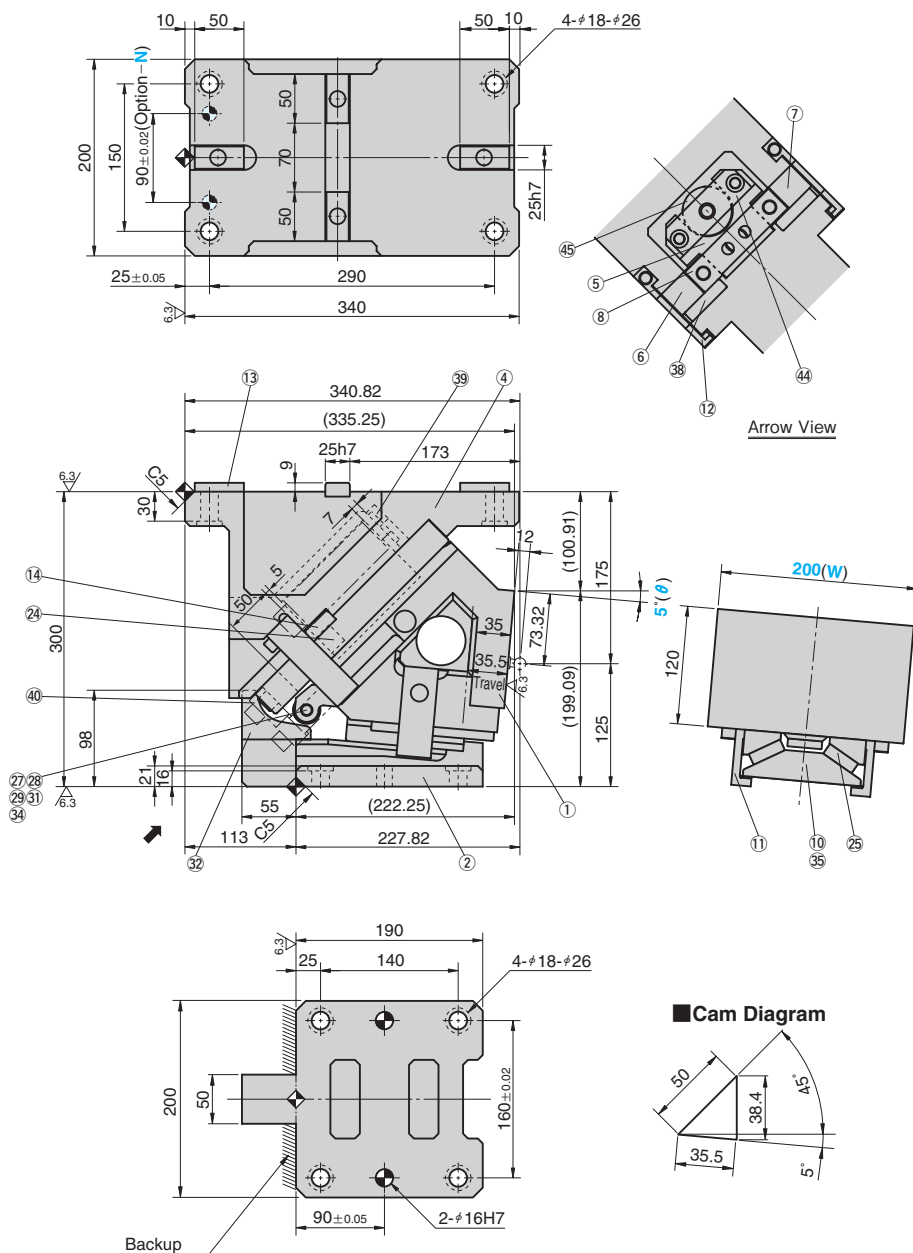
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑮	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
⑮	Slide Plate	2	S45C(1045)
⑰	Roller	1	S45C(1045)
⑱	Roller Pin	1	S45C(1045)
⑲	Bushing	1	Bronze with Graphite SOB12-18-16
⑳	Roller Bracket	1	SS400(1020)
㉑	Roller Driver	1	S45C(1045)
㉒	Snap Ring E type	2	φ9
㉓	Key C	1	SS400(1020)
㉔	Wear Plate	2	VDI 50×200×12
㉕	Spring Support	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)
㉗	Spring Guide Plate	1	SS400(1020)
㉘	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-05



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 G
		Initial Load	Final Load						
35.5	353.0 (36.0)	-	6125.0 (624.6)	8334 (850.4)	88.0 (31.9)	UCMSNR	200	05	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	05	GK
UCMSNR	200	05	GD
UCMSNR	200	05	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

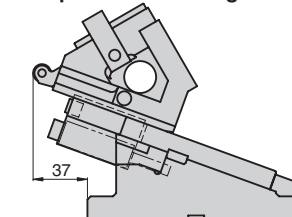
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR200-05-GK-N
UCMSNR200-05-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

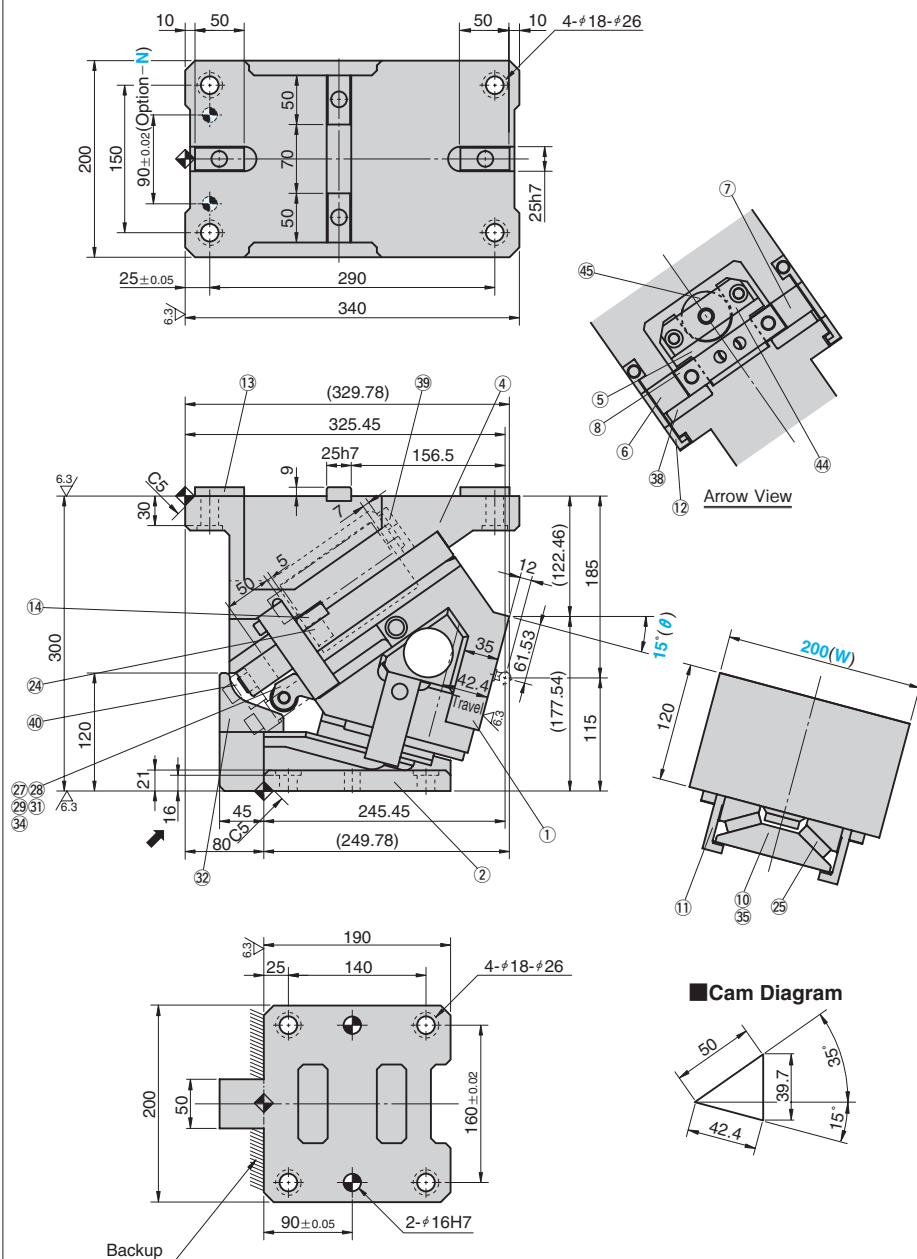
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑮	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
⑮	Slide Plate	2	S45C(1045)
⑰	Roller	1	S45C(1045)
⑱	Roller Pin	1	S45C(1045)
⑲	Bushing	1	Bronze with Graphite SOB12-18-16
⑳	Roller Bracket	1	SS400(1020)
㉑	Roller Driver	1	S45C(1045)
㉒	Snap Ring E type	2	#9
㉓	Key C	1	SS400(1020)
㉔	Wear Plate	2	VDI 50×200×12
㉕	Spring Support	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)
㉗	Spring Guide Plate	1	SS400(1020)
㉘	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-15



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 G
		Initial Load	Final Load						
42.4	353.0 (36.0)	—	6125.0 (624.6)	8270 (843.9)	87.0 (31.9)	UCMSNR	200	15	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	200	—	15	—	GK
UCMSNR	200	—	15	—	NGK
UCMSNR	200	—	15	—	NISO

Mark *

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only

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



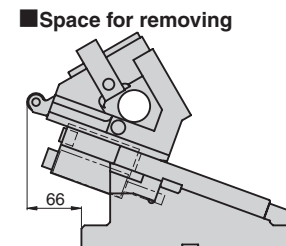
Order

UCMSNR200-15-GK-N
UCMSNR200-15-GK-NF

■ Spring Specification

No.	Spring Type	Model	Remark
(45)	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant = 74.9N/mm)

m) Guideline of spring durability	500,000 strokes
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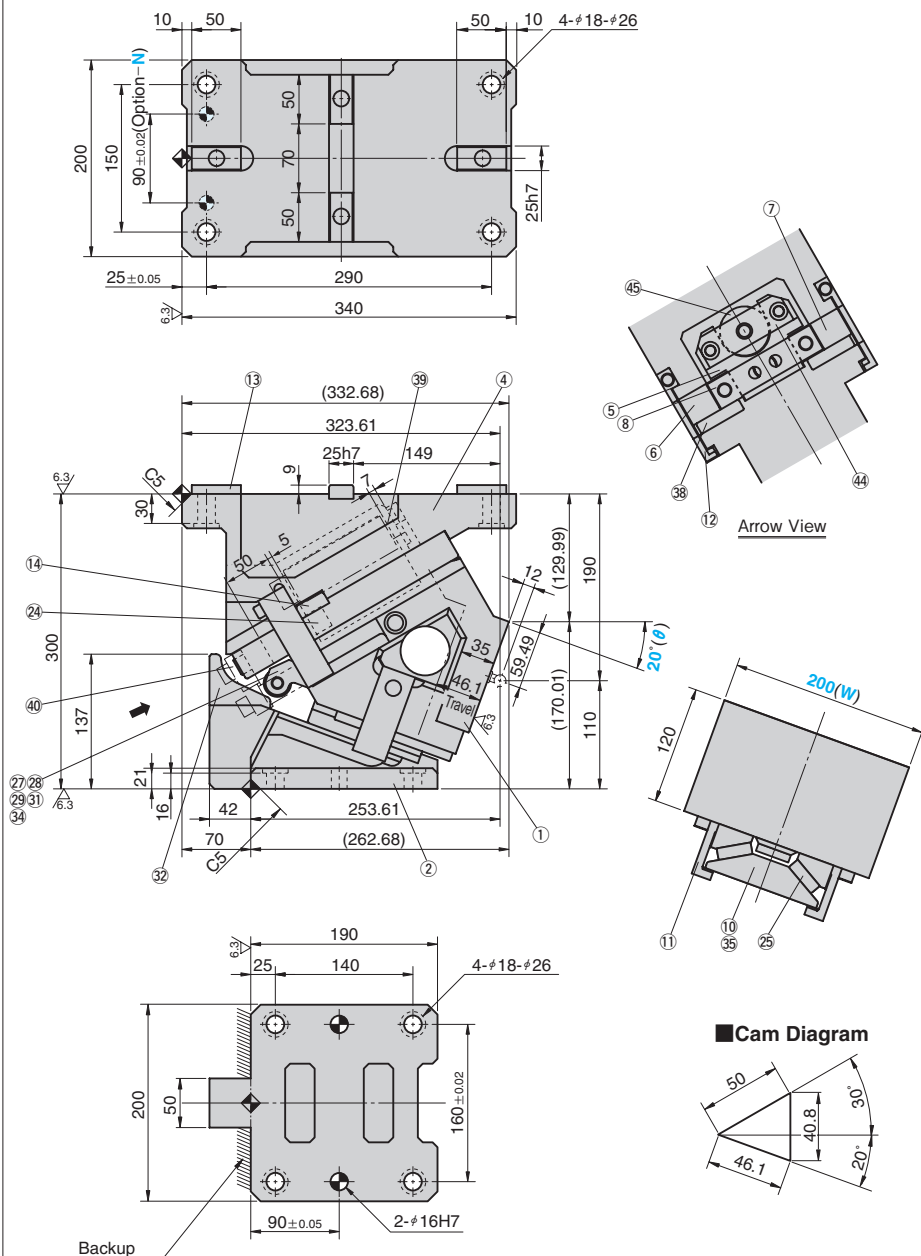
■ Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑮	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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	#9
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
44	Spring Guide Plate	1	SS400(1020)
45	Spring	1	Refer to the Spring Specification Table

 Bolts for assembly are not indicated.

UCMSNR200-20



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 G
		Initial Load	Final Load						
46.1	353.0 (36.0)	-	6125.0 (624.6)	8236 (840.4)	85.8 (31.9)	UCMSNR	200	20	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
			749.2 (76.4)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	20	GK
UCMSNR	200	20	NGK
UCMSNR	200	20	NISO

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

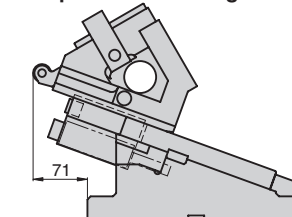
⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR200-20-GK-N
UCMSNR200-20-GK-NF

■ Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

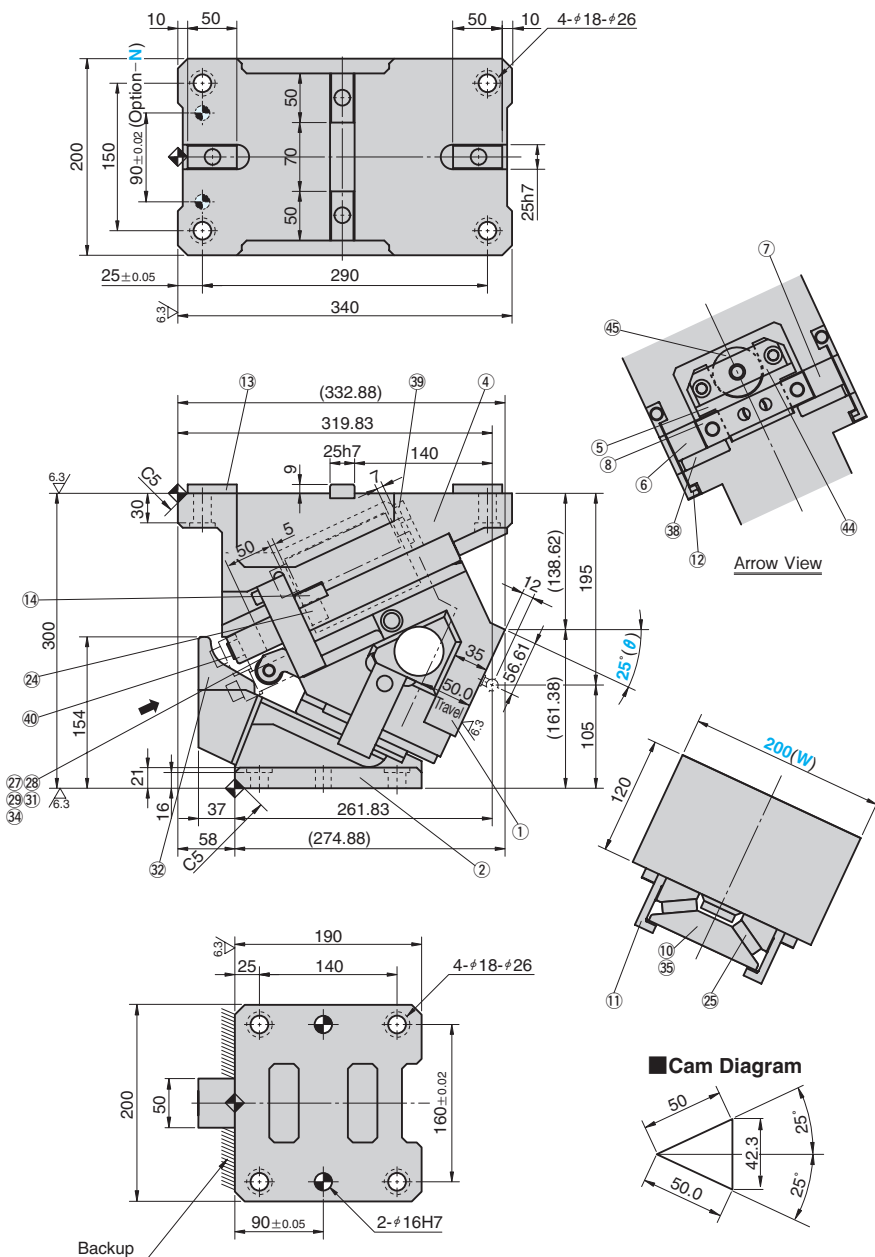
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑮	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
⑮	Slide Plate	2	S45C(1045)
⑰	Roller	1	S45C(1045)
⑱	Roller Pin	1	S45C(1045)
⑲	Bushing	1	Bronze with Graphite SOB12-18-16
⑳	Roller Bracket	1	SS400(1020)
㉑	Roller Driver	1	S45C(1045)
㉒	Snap Ring E type	2	#9
㉓	Key C	1	SS400(1020)
㉔	Wear Plate	2	VDI 50×200×12
㉕	Spring Support	1	SS400(1020)
㉖	Slide Lock Plate	1	SS400(1020)
㉗	Spring Guide Plate	1	SS400(1020)
㉘	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-25



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 G
		Initial Load	Final Load						
50.0	353.0 (36.0)	-	6125.0 (624.6)	8200 (836.8)	86.2 (31.9)	UCMSNR	200	25	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	25	GK
UCMSNR	200	25	NGK
UCMSNR	200	25	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

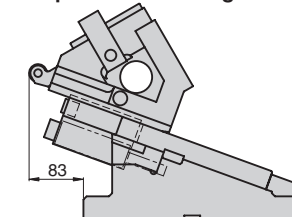
⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR200-25-GK-N
UCMSNR200-25-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

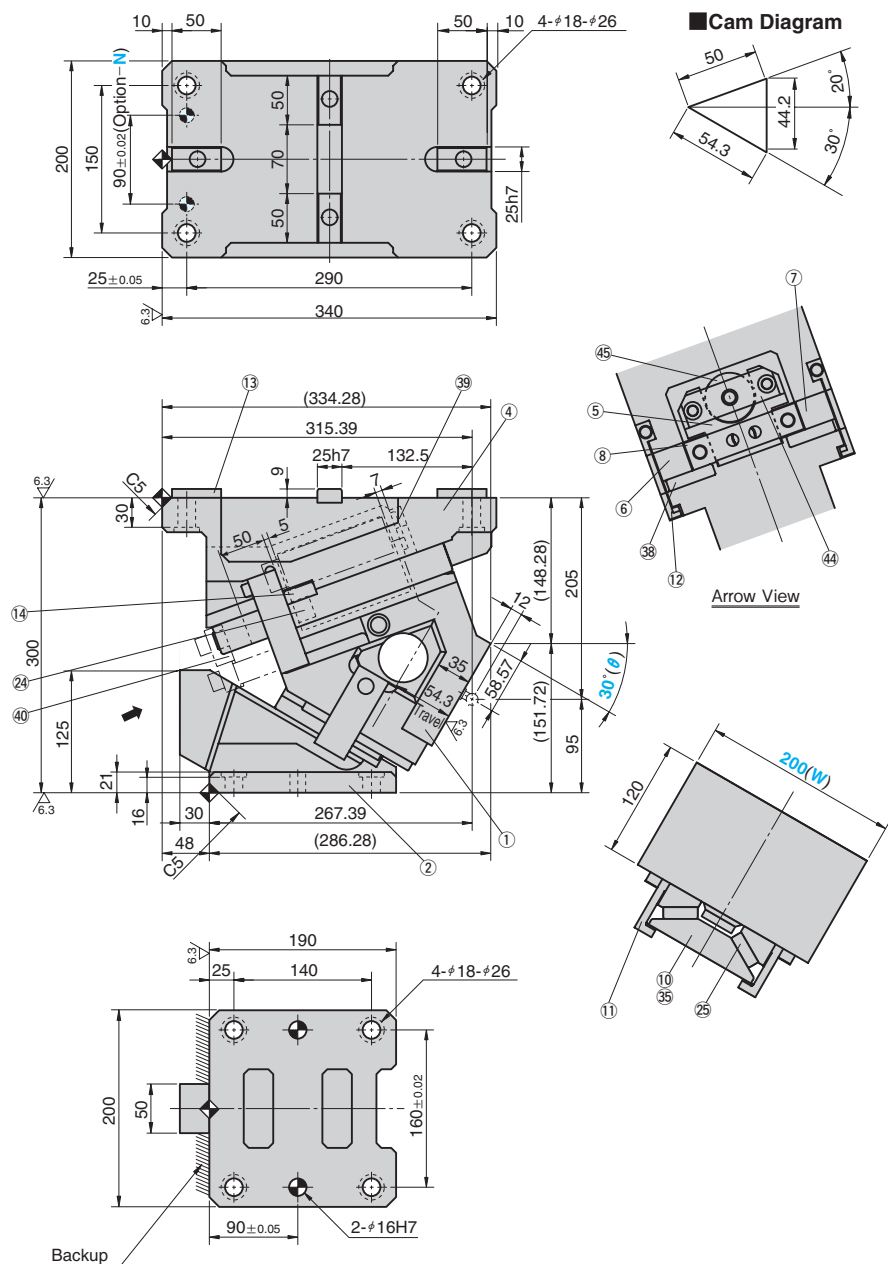
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑮	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
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
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
44	Spring Guide Plate	1	SS400(1020)
45	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-30



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 G
		Initial Load	Final Load						
54.3	353.0 (36.0)	-	6125.0 (624.6)	8163 (833.0)	85.6 (31.9)	UCMSNR	200	30	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	30	GK
UCMSNR	200	30	NGK
UCMSNR	200	30	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

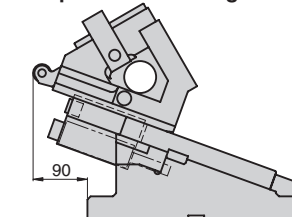
⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR200-30-GK-N
UCMSNR200-30-GK-NF

■Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

Table of Components

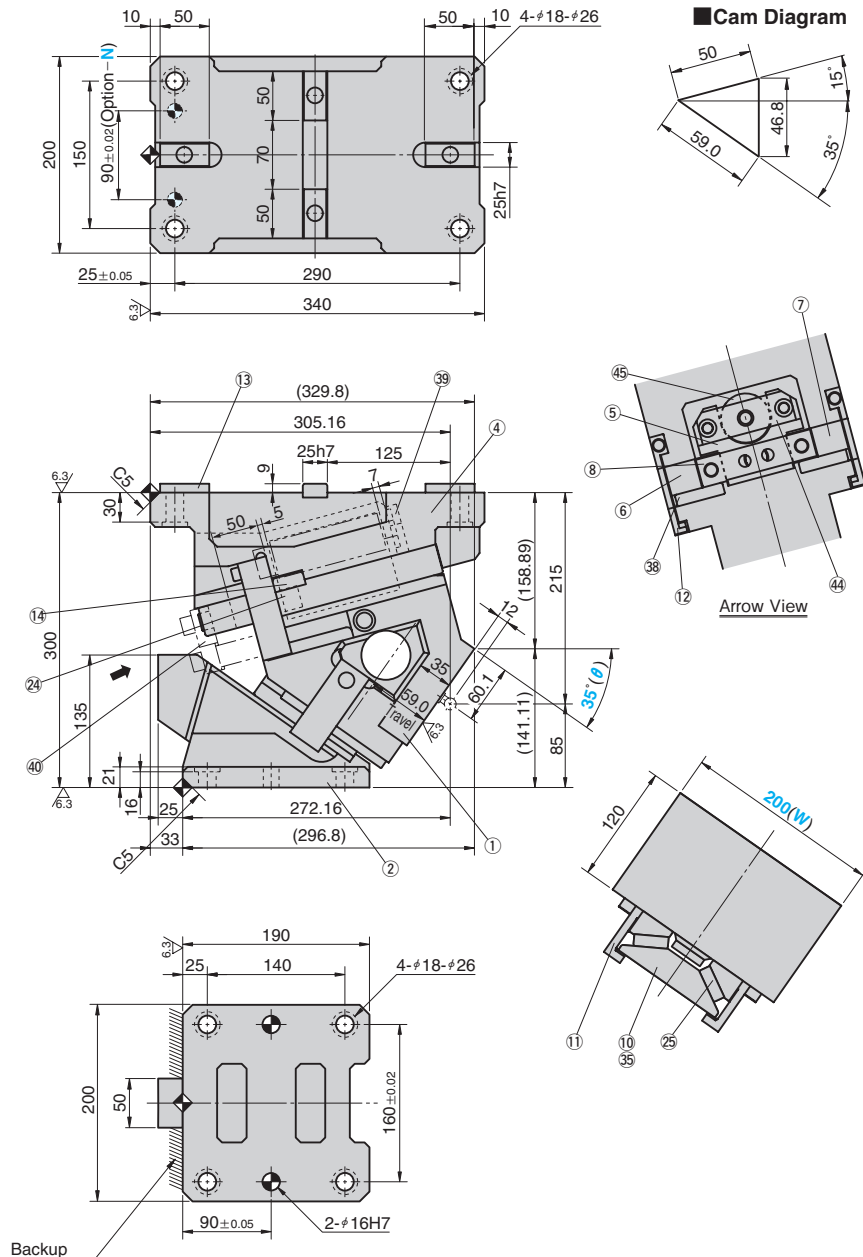
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate D-R	1	S45C(1045)
⑦	Base Plate D-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑳	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
㉕	Slide Plate	2	S45C(1045)
㉖	Key C	1	SS400(1020)
㉗	Wear Plate	2	VDI 50×200×12
㉘	Spring Support	1	SS400(1020)
㉙	Slide Lock Plate	1	SS400(1020)
㉚	Spring Guide Plate	1	SS400(1020)
㉛	Spring	1	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

UCMSNR200-35



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 G
		Initial Load	Final Load						
59.0	353.0 (36.0)	—	6125.0 (624.6)	8127 (829.2)	86.2 (31.9)	UCMSNR	200	35	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	200	—	35	—	GK
UCMSNR	200	—	35	—	NGK
UCMSNR	200	—	35	—	NISC

Mark *

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only

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



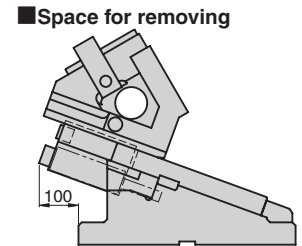
Order

UCMSNR200 - 35 - GK - N
UCMSNR200 - 35 - GK - NF

■ Spring Specification

No.	Spring Type	Model	Remark
(45)	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant = 74.9N/mm)

m) Guideline of spring durability 500,000 strokes



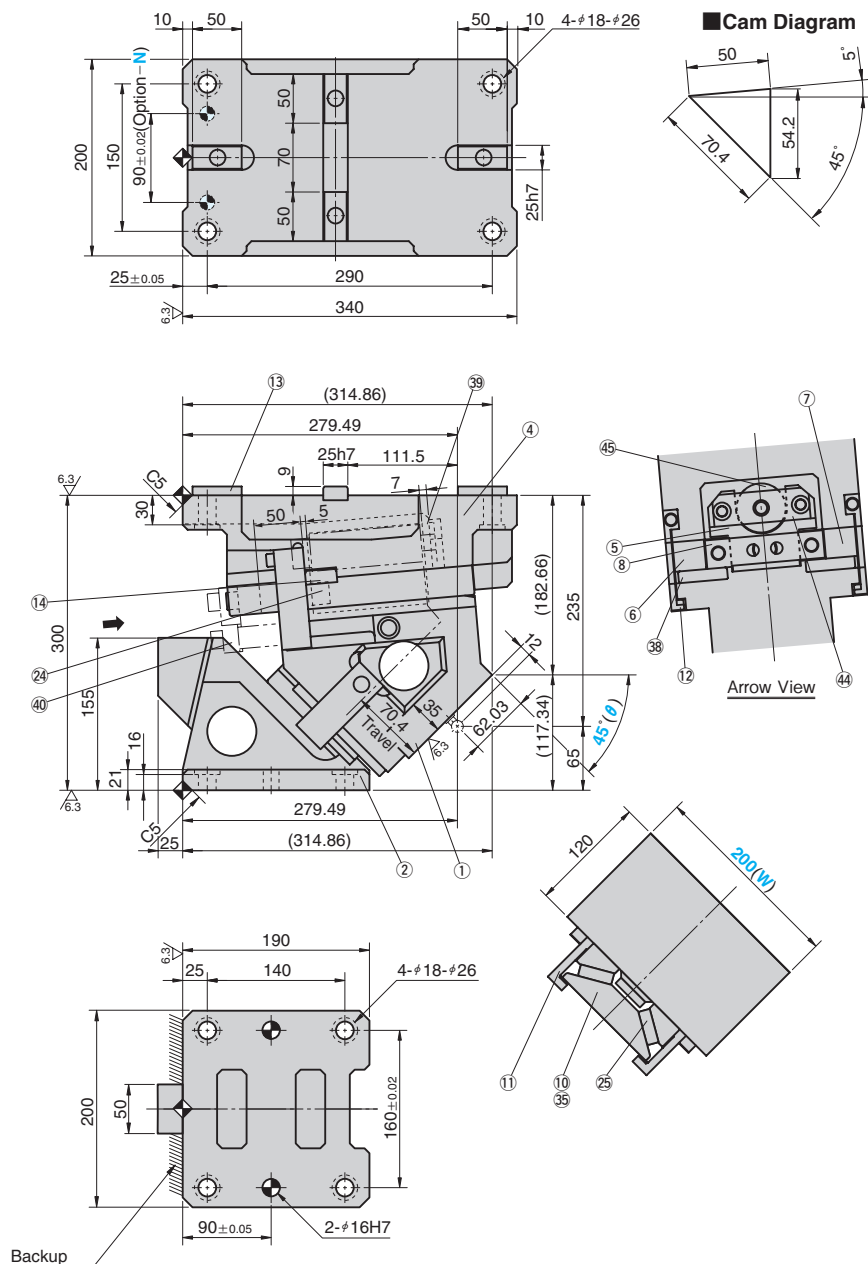
■ Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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	1	Urethane

No.	Description	Qty	Material and Remark
25	Slide Plate	2	S45C(1045)
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
44	Spring Guide Plate	1	SS400(1020)
45	Spring	1	Refer to the Spring Specification Table.

 Bolts for assembly are not indicated.

UCMSNR200-45



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 G
		Initial Load	Final Load						
70.4	353.0 (36.0)	-	6125.0 (624.6)	8052 (821.7)	88.0 (31.9)	UCMSNR	200	45	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	45	GK
UCMSNR	200	45	NGK
UCMSNR	200	45	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

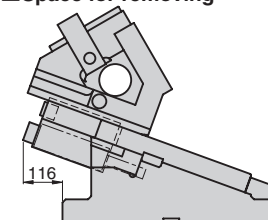
⚠ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

UCMSNR200-45-GK-N
UCMSNR200-45-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 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 D-R	1	S45C(1045)
⑦	Base Plate D-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)
⑳	Stopper	1	Urethane

No.	Description	Qty	Material and Remark
㉔	Slide Plate	2	S45C(1045)
㉕	Key C	1	SS400(1020)
㉖	Wear Plate	2	VDI 50×200×12
㉗	Spring Support	1	SS400(1020)
㉘	Slide Lock Plate	1	SS400(1020)
㉙	Spring Guide Plate	1	SS400(1020)
㉚	Spring	1	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

Aerial Cam Unit

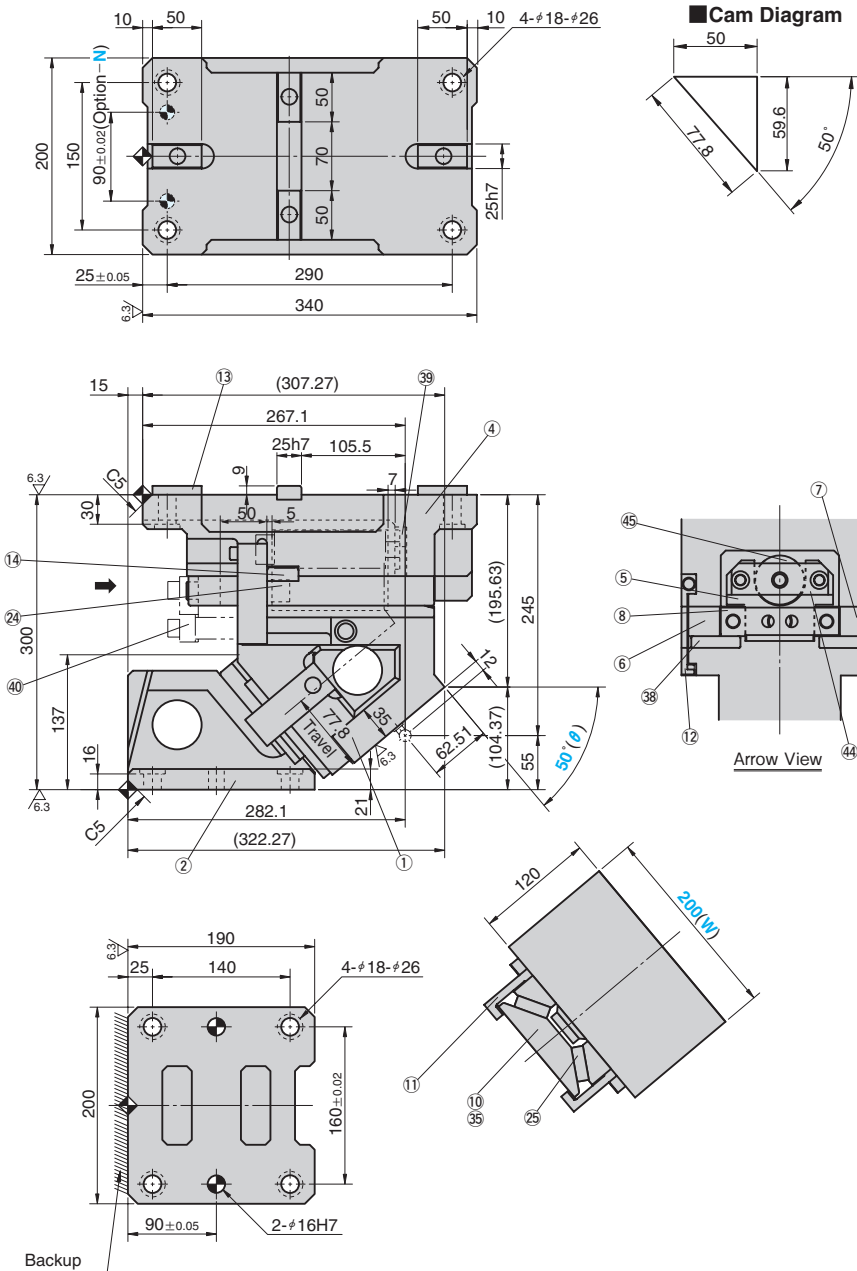
NAAMS STANDARD

Addition

CAD
FILE

Cam Unit

UCMSNR200-50



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 G
		Initial Load	Final Load						
77.8	353.0 (36.0)	-	6125.0 (624.6)	8015 (817.9)	78.2 (31.9)	UCMSNR	200	50	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
		749.2 (76.4)	4494.0 (458.3)						ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	50	GK
UCMSNR	200	50	NGK
UCMSNR	200	50	NISO

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

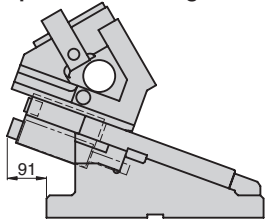
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR200-50-GK-N
UCMSNR200-50-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

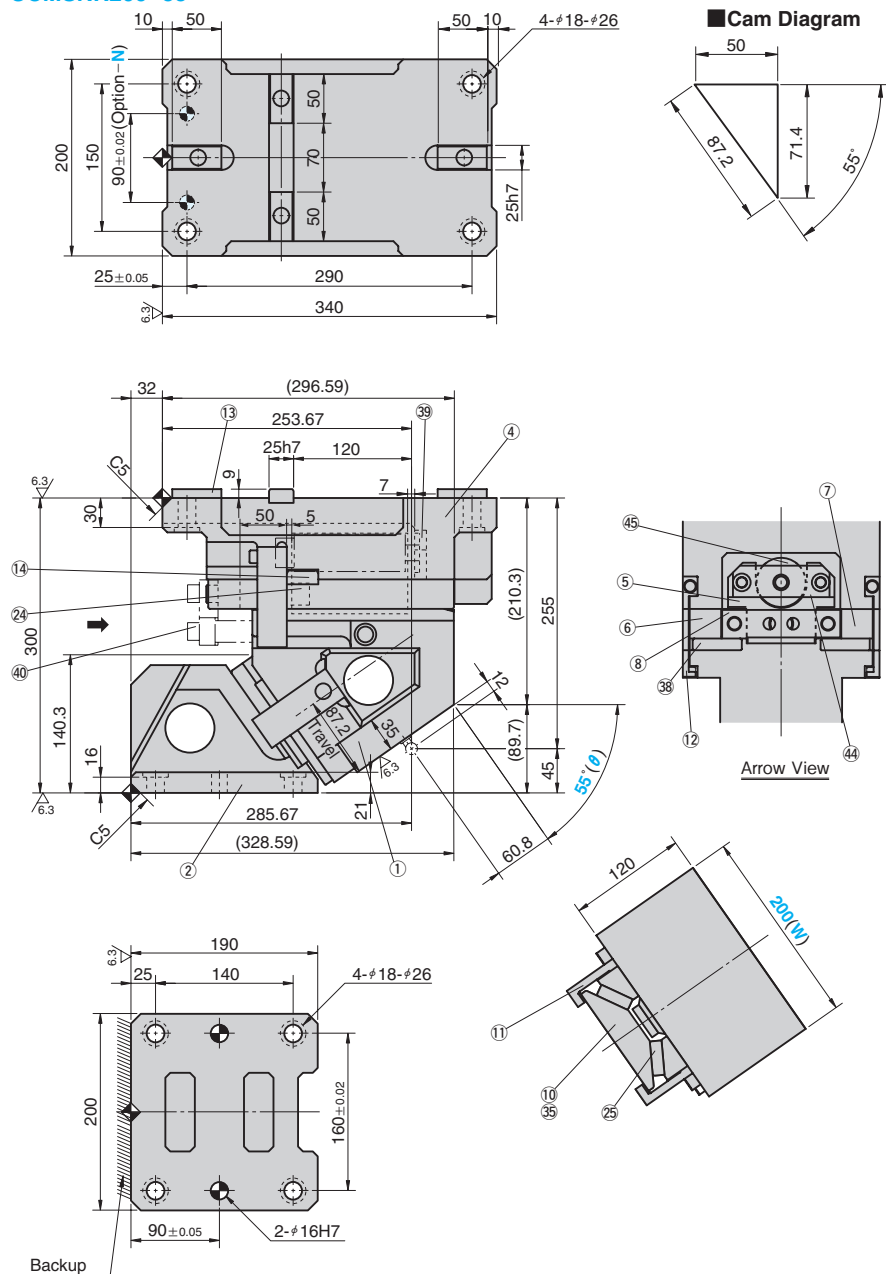
Table of Components

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 D-R	1	S45C(1045)
7	Base Plate D-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)

No.	Description	Qty	Material and Remark
13	Key A	4	SS400(1020)
14	Key B	2	SS400(1020)
24	Stopper	1	Urethane
25	Slide Plate	2	S45C(1045)
35	Key C	1	SS400(1020)
38	Wear Plate	2	VDI 50×200×12
39	Spring Support	1	SS400(1020)
40	Slide Lock Plate	1	SS400(1020)
44	Spring Guide Plate	1	SS400(1020)
45	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-55



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 G
		Initial Load	Final Load						
87.2	353.0 (36.0)	-	6125.0 (624.6)	8716 (889.4)	80.5 (33.3)	UCMSNR	200	55	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
			749.2 (76.4)	4494.0 (458.3)					ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	200	—	55	—	GK
UCMSNR	200	—	55	—	NGK
UCMSNR	200	—	55	—	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

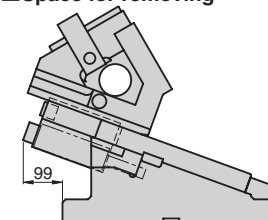
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR200-55-GK-N
UCMSNR200-55-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

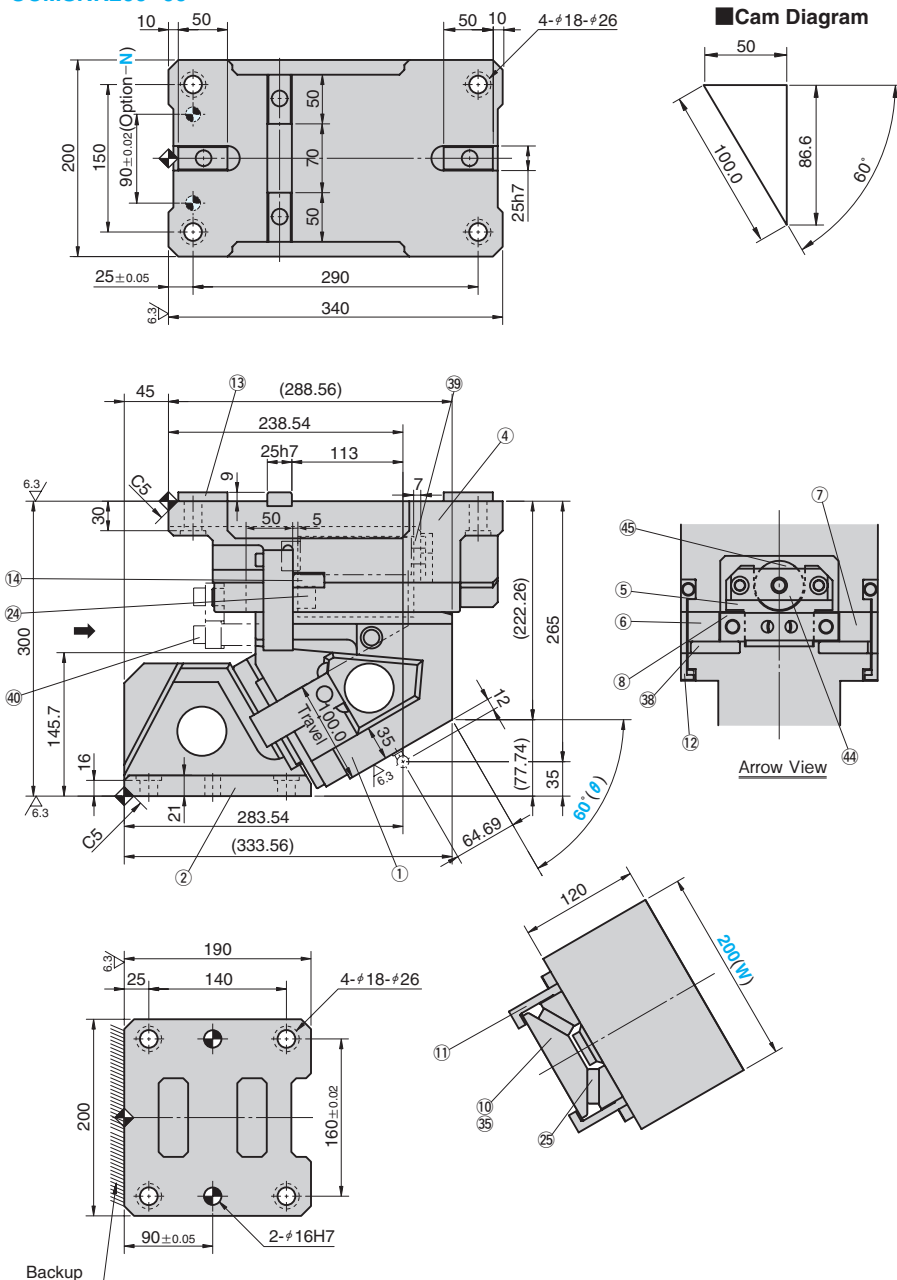
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)

No.	Description	Qty	Material and Remark
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑲	Stopper	1	Urethane
⑳	Slide Plate	2	S45C(1045)
㉑	Key C	1	SS400(1020)
㉒	Wear Plate	2	VDI 50×200×12
㉓	Spring Support	1	SS400(1020)
㉔	Slide Lock Plate	1	SS400(1020)
㉕	Spring Guide Plate	1	SS400(1020)
㉖	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR200-60



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 G
		Initial Load	Final Load						
100.0	353.0 (36.0)	-	6125.0 (624.6)	9636 (983.3)	82.4 (33.8)	UCMSNR	200	60	GK *NGK
			5334.0 (543.9)						GD *NGD
			6900.0 (703.6)						GS *NGS
			749.2 (76.4)	4494.0 (458.3)					ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	200	60	GK
UCMSNR	200	60	GD
UCMSNR	200	60	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

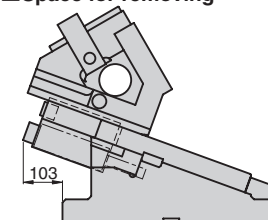
⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

UCMSNR200-60-GK-N
UCMSNR200-60-GK-NF

Space for removing



Spring Specification

No.	Spring Type	Model	Remark
45	GK	K500-63.5	Gas Spring (KALLER)
	GD	L500.063.138	Gas Spring (DADCO)
	DS	SM500.63	Gas Spring (SDT)
	ISO	TJM50-178	Coil Spring (constant=74.9N/mm)

Guideline of spring durability 500,000 strokes

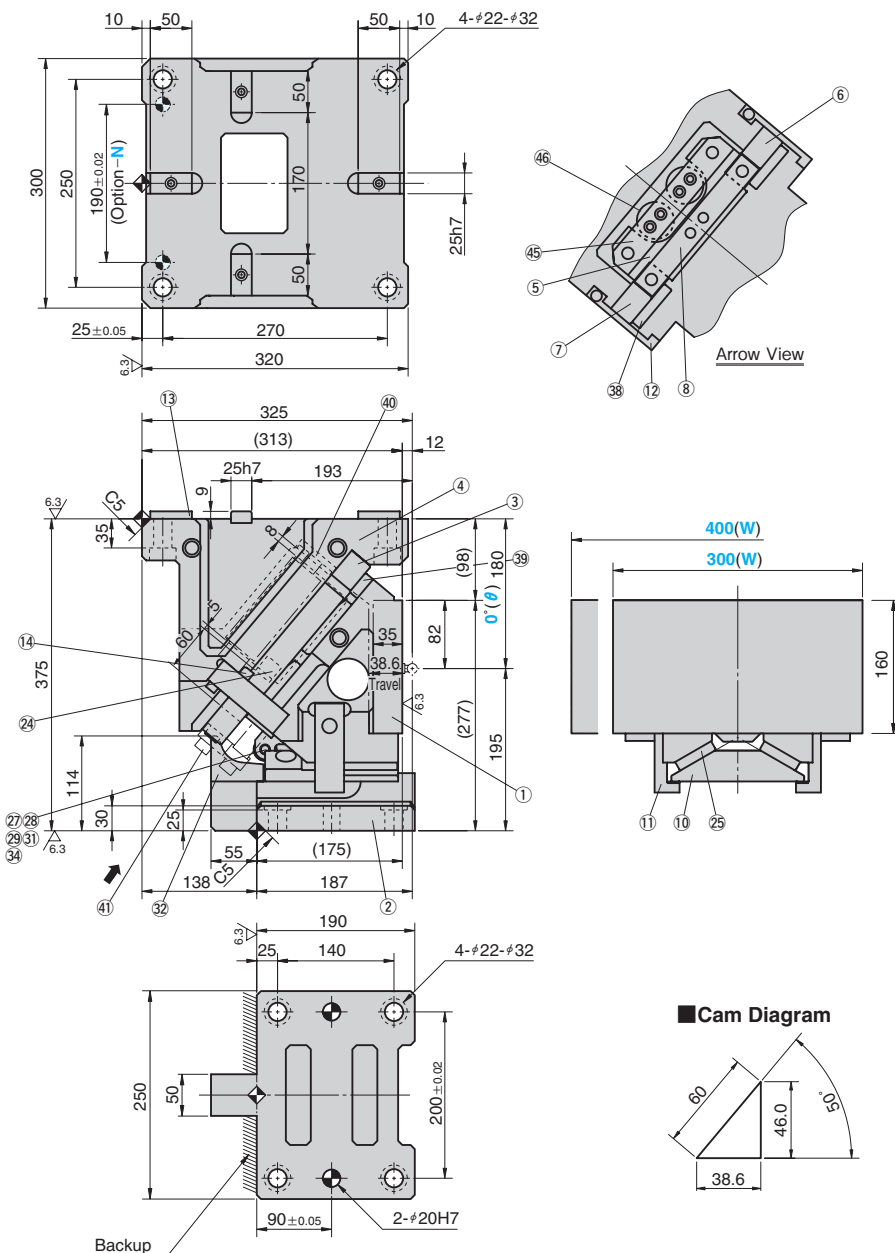
Table of Components

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 D-R	1	S45C(1045)
⑦	Base Plate D-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)

No.	Description	Qty	Material and Remark
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑲	Stopper	1	Urethane
⑳	Slide Plate	2	S45C(1045)
㉑	Key C	1	SS400(1020)
㉒	Wear Plate	2	VDI 50×200×12
㉓	Spring Support	1	SS400(1020)
㉔	Slide Lock Plate	1	SS400(1020)
㉕	Spring Guide Plate	1	SS400(1020)
㉖	Spring	1	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR300-00
UCMSNR400-00



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 G
		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)						ISO *NISO



Order

Catalog No.	(W)	-	(θ)	-	G
UCMSNR	400	-	00	-	GK
UCMSNR	300	-	00	-	NGK
UCMSNR	300	-	00	-	NISO

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

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

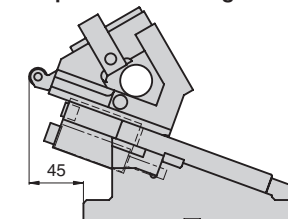


Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.

■Space for removing



Order

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

Spring Specification

No.	Spring Type	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

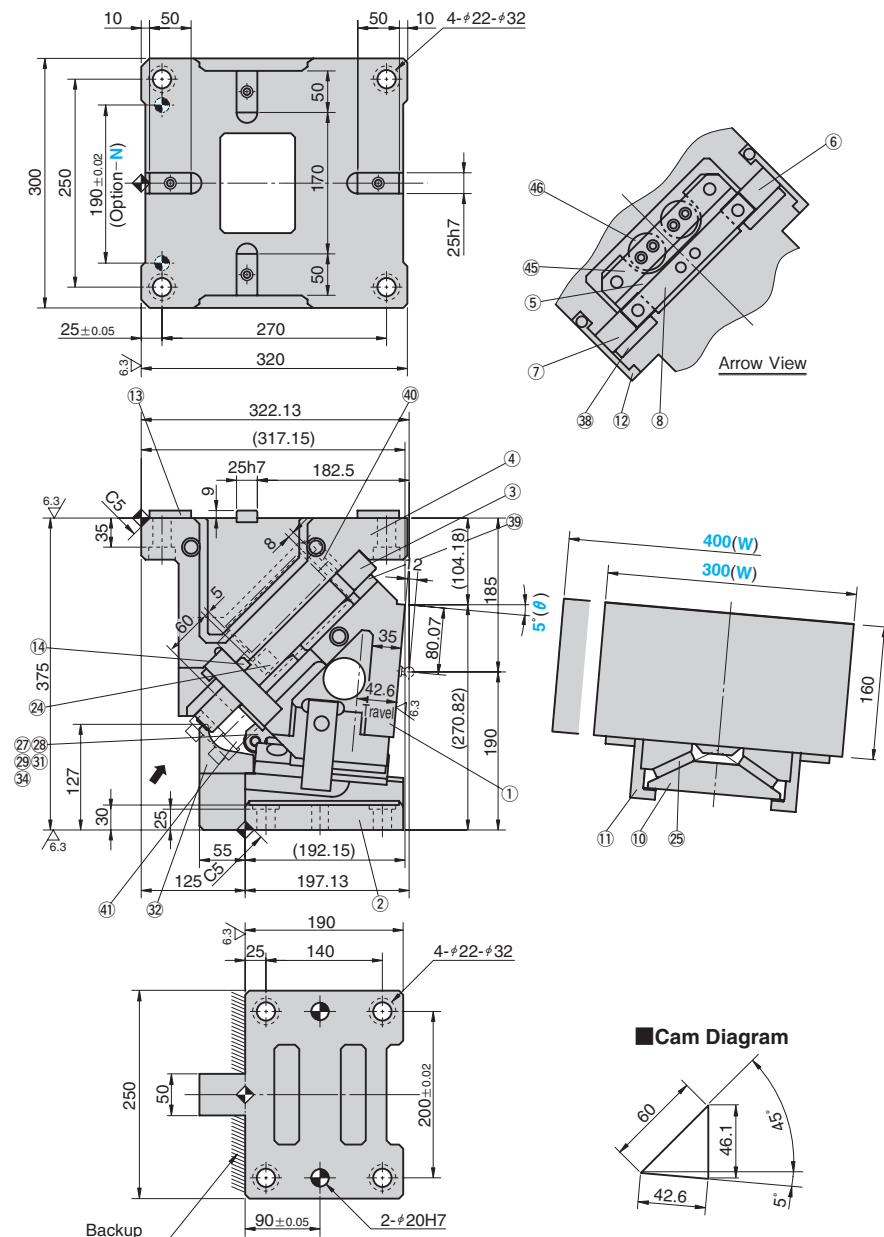
Table of Components

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)
⑭	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
②⑤	Slide Plate	R/L1	S45C(1045)
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 F type	2	φ9
③⑧	Wear Plate A	4	VDI 60×80×12
③⑨	Wear Plate B	1	VDI 30×160×12
④①	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.

A Bolts for assembly are not indicated.

UCMSNR300-05 UCMSNR400-05



Cam Diagram

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 G
		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
			1314.1 (134.0)							ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	05	GK
UCMSNR	300	05	NGK
UCMSNR	300	05	NISO

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

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

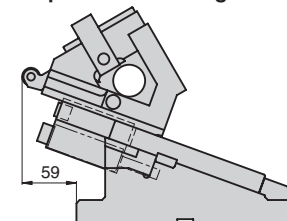


Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.

Space for removing



Order

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

Spring Specification

No.	Spring Type	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

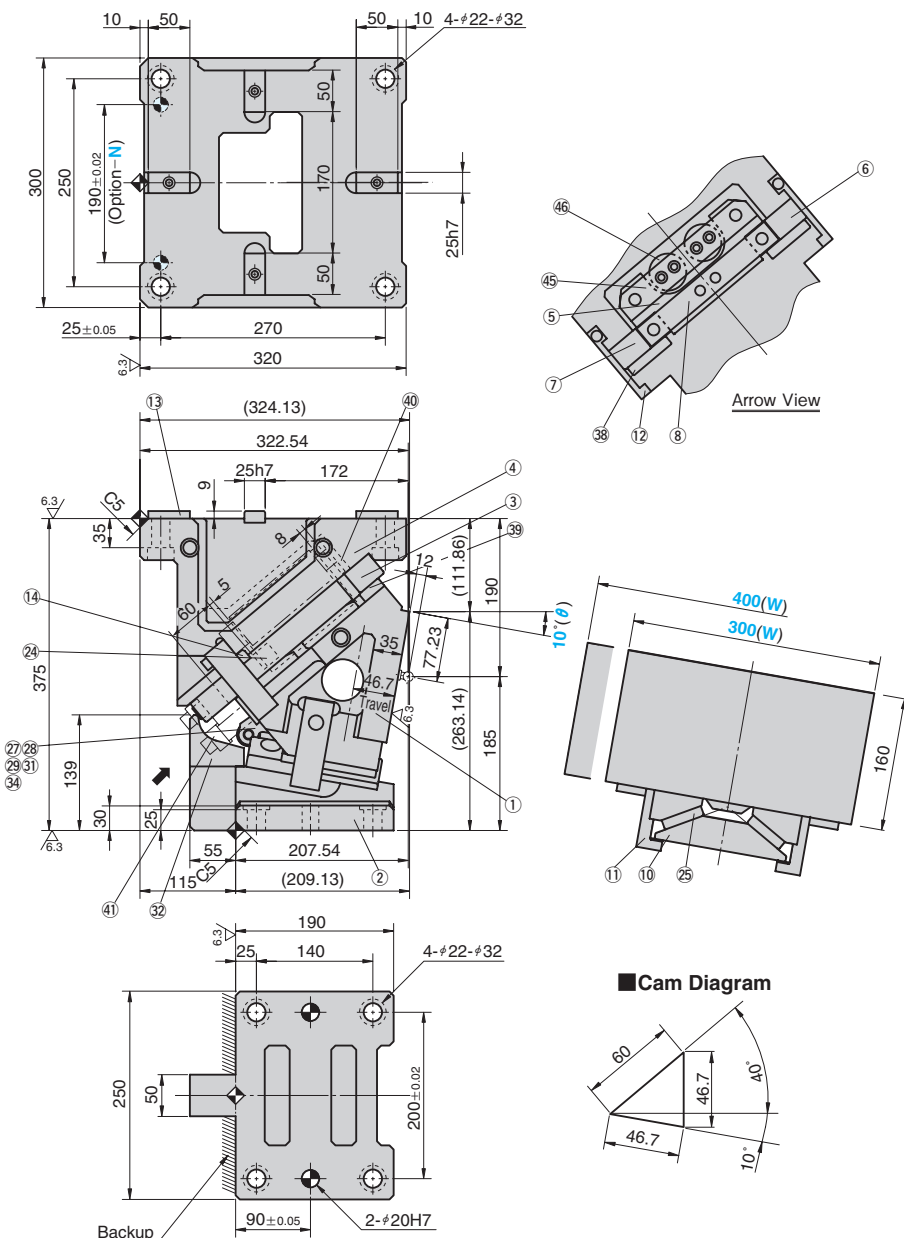
Table of Components

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)
⑲	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
⑲	Slide Plate	R/L	S45C(1045)
⑳	Roller	1	S45C(1045)
㉑	Roller Pin	1	S45C(1045)
㉒	Bushing	1	Bronze with Graphite SOB12-18-16
㉓	Roller Bracket	1	SS400(1020)
㉔	Roller Driver	1	S45C(1045)
㉕	Snap Ring F type	2	φ9
㉖	Wear Plate A	4	VDI 60×80×12
㉗	Wear Plate B	1	VDI 30×160×12
㉘	Spring Support	1	SS400(1020)
㉙	Slide Lock Plate	1	SS400(1020)
㉚	Spring Guide Plate	1	SS400(1020)
㉛	Spring	2	Refer to the Spring Specification Table.

⚠ Bolts for assembly are not indicated.

UCMSNR300-10 UCMSNR400-10



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 G
		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



Order

Catalog No.	(W)	-	(θ)	-	G
UCMSNR	400	-	10	-	GK
UCMSNR	300	-	10	-	NGK
UCMSNR	300	-	10	-	NISO

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

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

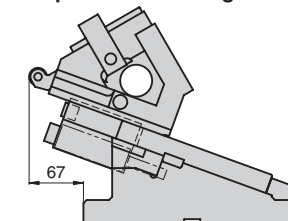


Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.

■Space for removing



Order

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

Spring Specification

No.	Spring Type	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

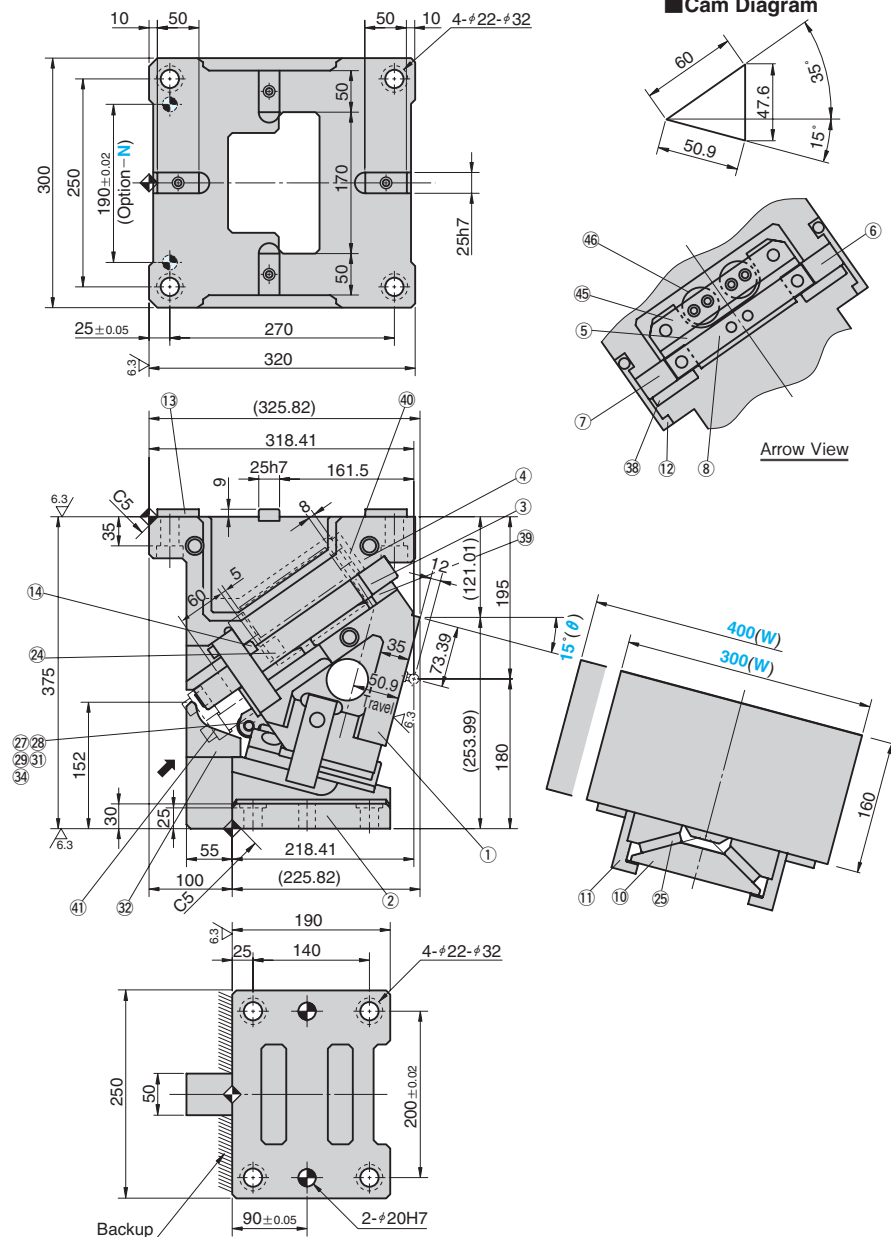
Table of Components

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)
⑭	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
②⑤	Slide Plate	R/L1	S45C(1045)
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 F type	2	φ9
③⑧	Wear Plate A	4	VDI 60×80×12
③⑨	Wear Plate B	1	VDI 30×160×12
④①	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.

A Bolts for assembly are not indicated.

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 G
		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
			9198.0 (937.9)							ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	15	GK
UCMSNR	300	15	NGK
UCMSNR	300	15	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

Space for removing

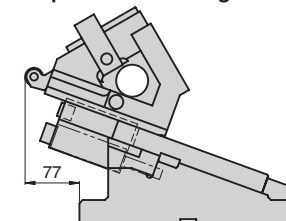


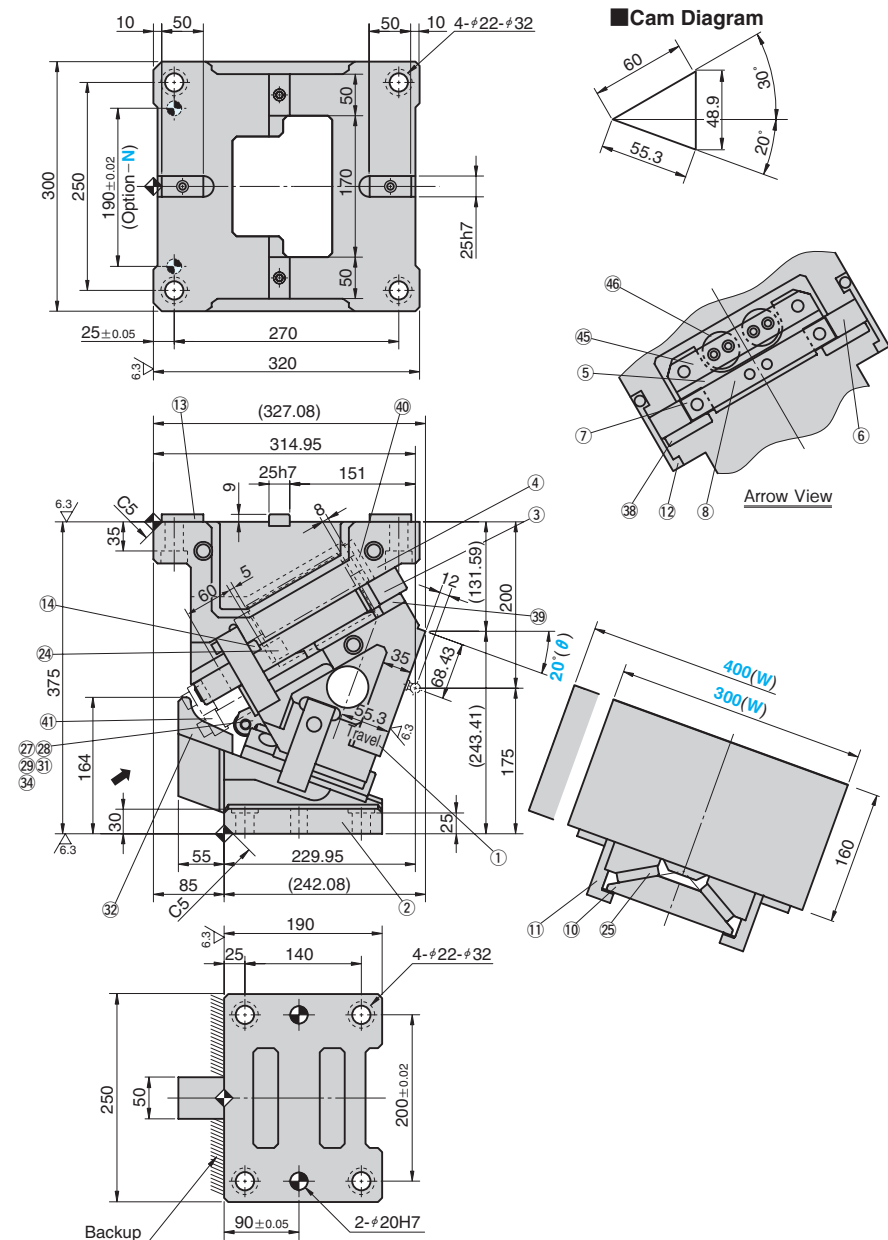
Table of Components

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)
⑭	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
②⑤	Slide Plate	R/L1	S45C(1045)
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 F type	2	φ9
③⑧	Wear Plate A	4	VDI 60×80×12
③⑨	Wear Plate B	1	VDI 30×160×12
④①	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.

A Bolts for assembly are not indicated.

UCMSNR300-20 UCMSNR400-20



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 G
		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
			9198.0 (937.9)							ISO *NISO
		1314.1 (134.0)	9198.0 (937.9)							



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	20	GK
UCMSNR	300	20	NGK
UCMSNR	300	20	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

Space for removing

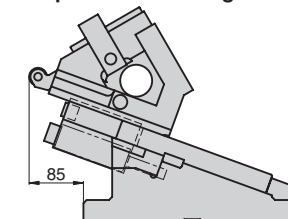


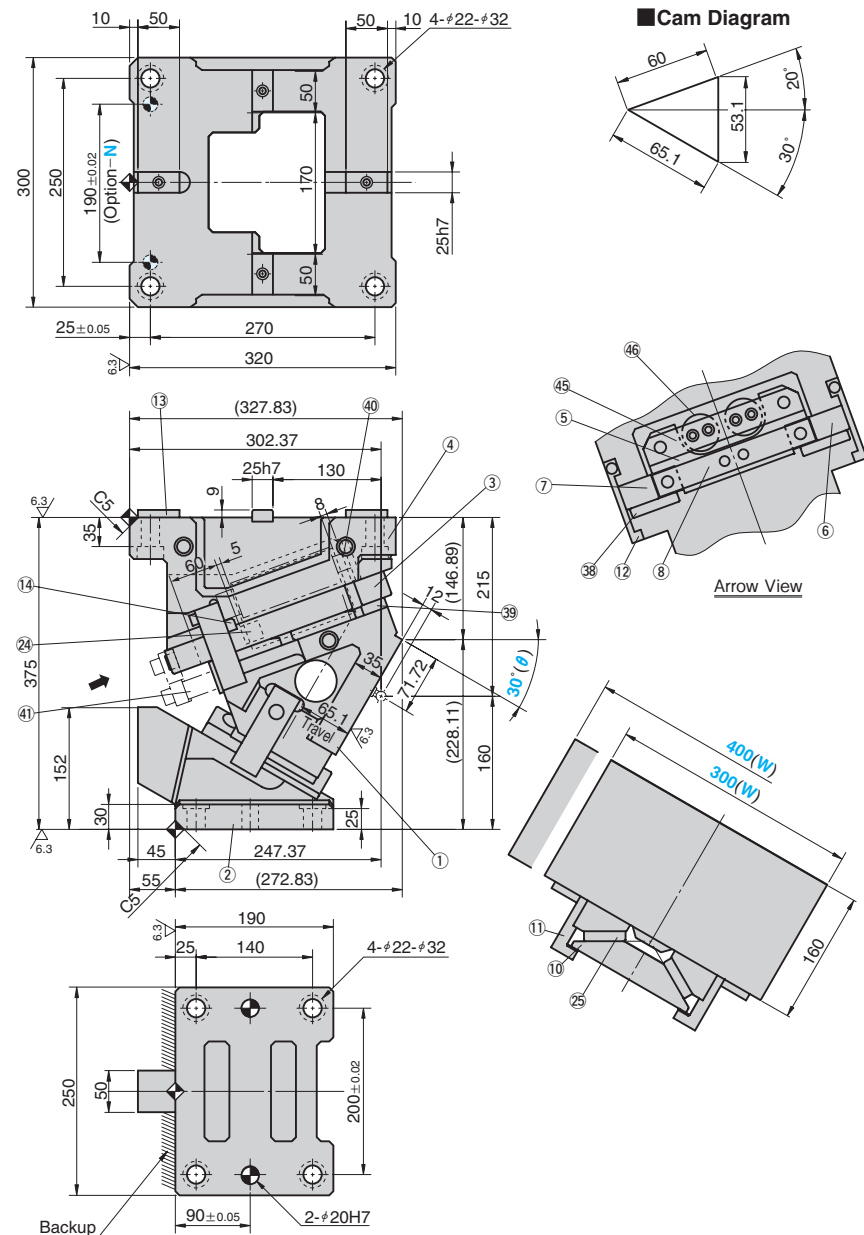
Table of Components

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)
⑭	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
②⑤	Slide Plate	R/L1	S45C(1045)
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 F type	2	φ9
③⑧	Wear Plate A	4	VDI 60×80×12
③⑨	Wear Plate B	1	VDI 30×160×12
④①	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.

A Bolts for assembly are not indicated.

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 G
		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



Order	Catalog No.	(W)	(θ)	G
	UCMSNR	400	30	GK
	UCMSNR	300	30	NGK
	UCMSNR	300	30	NISO

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

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



Option	Option Code	Specification
	N	φ16H7 dowel hole is drilled on the cam holder.
	N20	Dowel pin holes of cam holder are changed to φ20.
	NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.



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

Spring Specification

No.	Spring Type	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

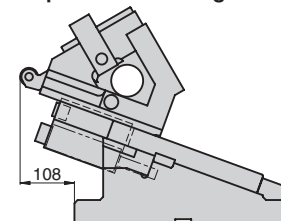
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑳	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
㉕	Slide Plate	R/L1	S45C(1045)
㉘	Wear Plate A	4	VDI 60×80×12
㉙	Wear Plate B	1	VDI 30×160×12
㉚	Spring Support	1	SS400(1020)
㉛	Slide Lock Plate	1	SS400(1020)
㉜	Spring Guide Plate	1	SS400(1020)
㉞	Spring	2	Refer to the Spring Specification Table.

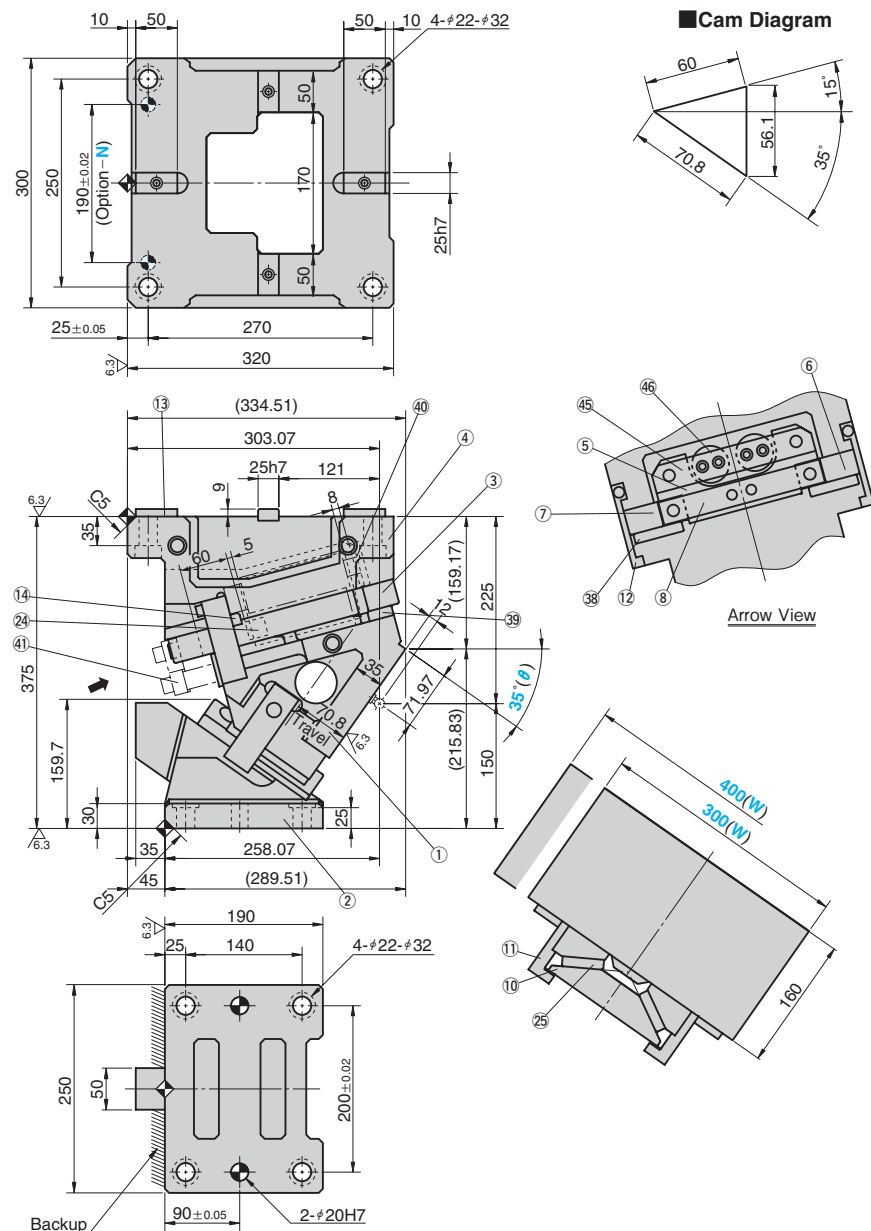


Bolts for assembly are not indicated.

Space for removing



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 G
		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



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	35	GK
UCMSNR	300	35	NGK
UCMSNR	300	35	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

▲ Gas Springs are not filled with nitrogen gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

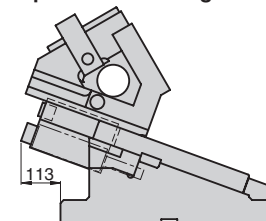
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑲	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
⑲	Slide Plate	R/L1	S45C(1045)
⑳	Wear Plate A	4	VDI 60×80×12
㉑	Wear Plate B	1	VDI 30×160×12
㉒	Spring Support	1	SS400(1020)
㉓	Slide Lock Plate	1	SS400(1020)
㉔	Spring Guide Plate	1	SS400(1020)
㉕	Spring	2	Refer to the Spring Specification Table.

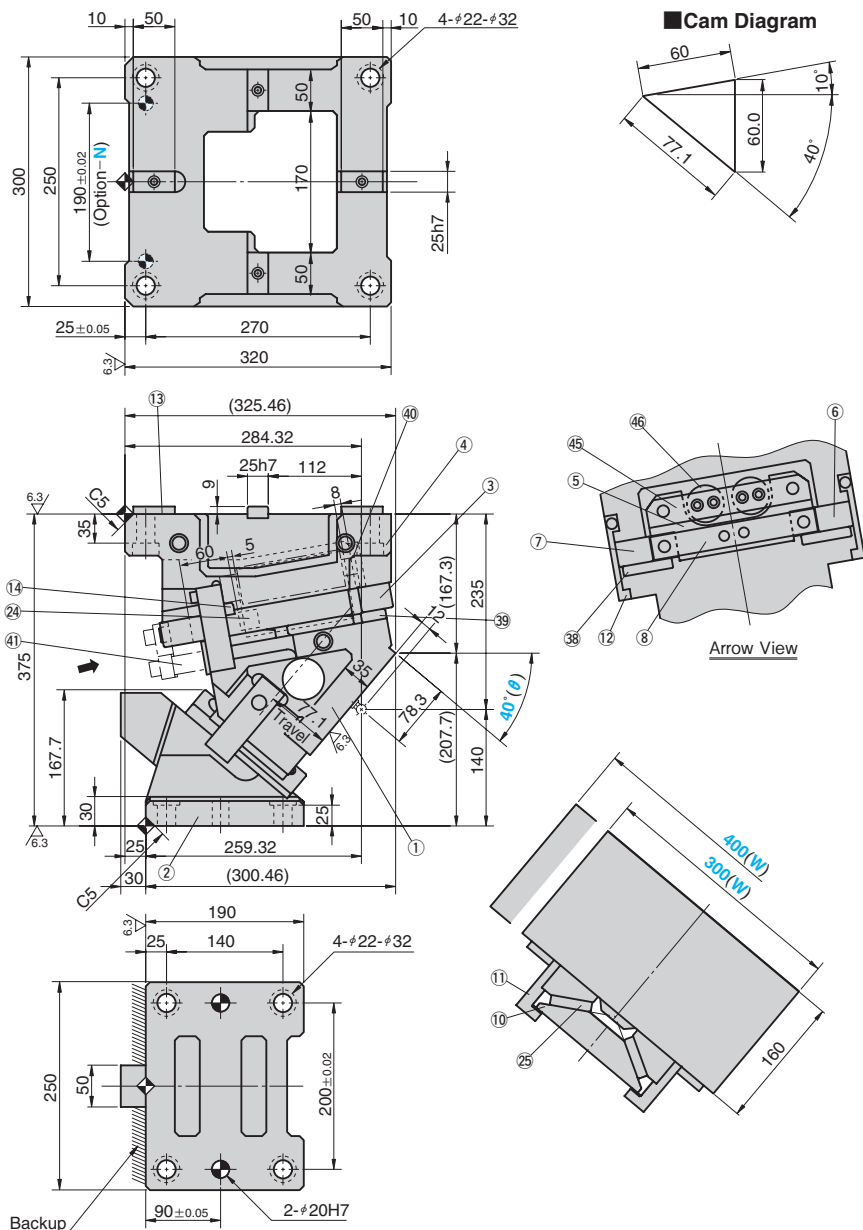


Bolts for assembly are not indicated.

Space for removing



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 G
		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



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	40	GK
UCMSNR	300	40	NGK
UCMSNR	300	40	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

Space for removing

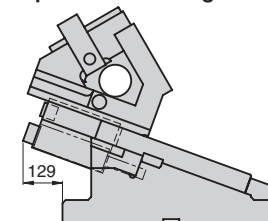


Table of Components

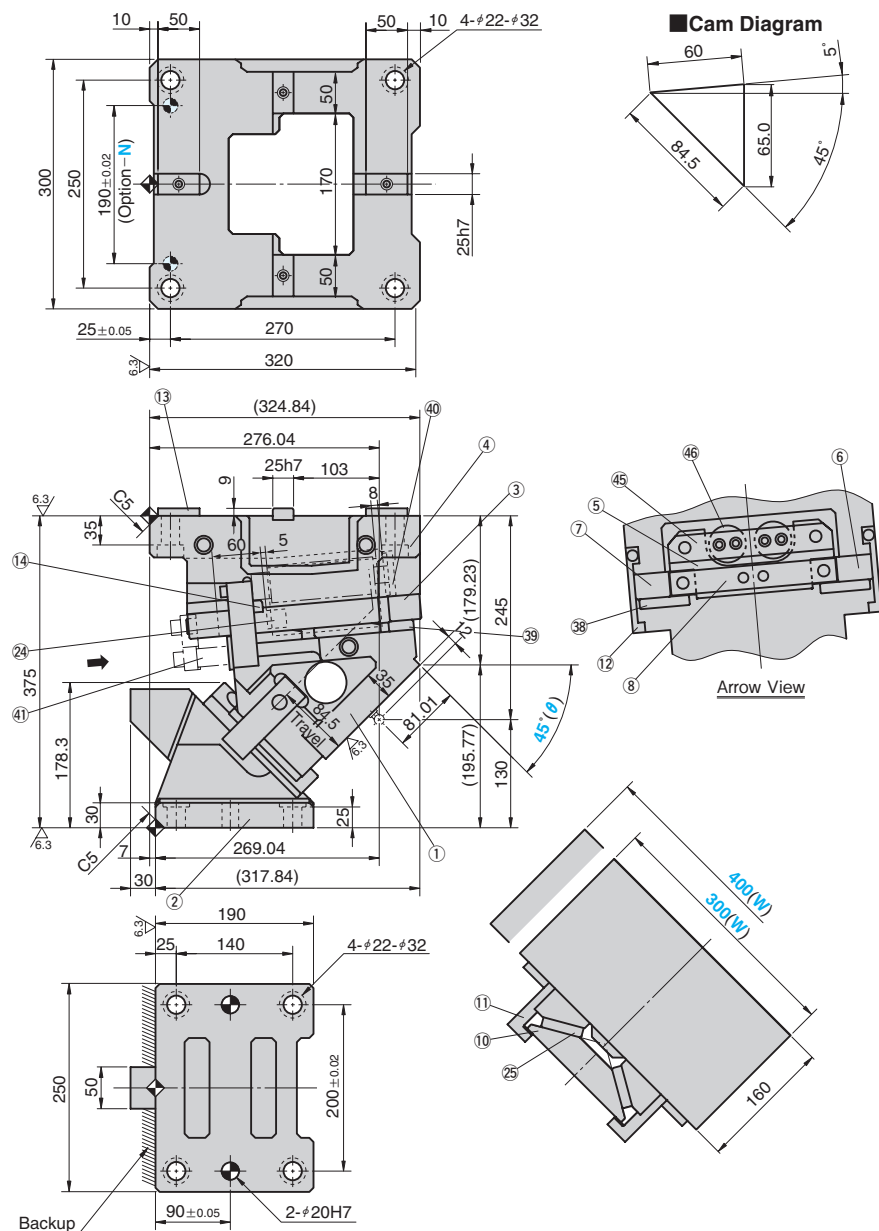
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑳	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
㉕	Slide Plate	R/L1	S45C(1045)
㉘	Wear Plate A	4	VDI 60×80×12
㉙	Wear Plate B	1	VDI 30×160×12
㉚	Spring Support	1	SS400(1020)
㉛	Slide Lock Plate	1	SS400(1020)
㉜	Spring Guide Plate	1	SS400(1020)
㉞	Spring	2	Refer to the Spring Specification Table.



Bolts for assembly are not indicated.

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 G
		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



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	45	GK
UCMSNR	300	45	NGK
UCMSNR	300	45	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

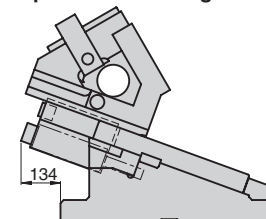
No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250
②	Cam Driver	1	FC250
③	Base Plate C	1	S45C(1045)
④	Cam Holder	1	FC250
⑤	Spring Guide	1	Bronze with Graphite
⑥	Base Plate F-R	1	S45C(1045)
⑦	Base Plate F-L	1	S45C(1045)
⑧	Stopper Plate	1	S45C(1045)
⑩	Cam Slide Guide	1	Bronze with Graphite
⑪	Positive Return Follower	2	S45C(1045)
⑫	Safety Plate	2	SS400(1020)
⑬	Key A	4	SS400(1020)
⑭	Key B	2	SS400(1020)
⑲	Stopper	3	Urethane

No.	Description	Qty	Material and Remark
⑳	Slide Plate	R/L1	S45C(1045)
㉑	Wear Plate A	4	VDI 60×80×12
㉒	Wear Plate B	1	VDI 30×160×12
㉓	Spring Support	1	SS400(1020)
㉔	Slide Lock Plate	1	SS400(1020)
㉕	Spring Guide Plate	1	SS400(1020)
㉖	Spring	2	Refer to the Spring Specification Table.

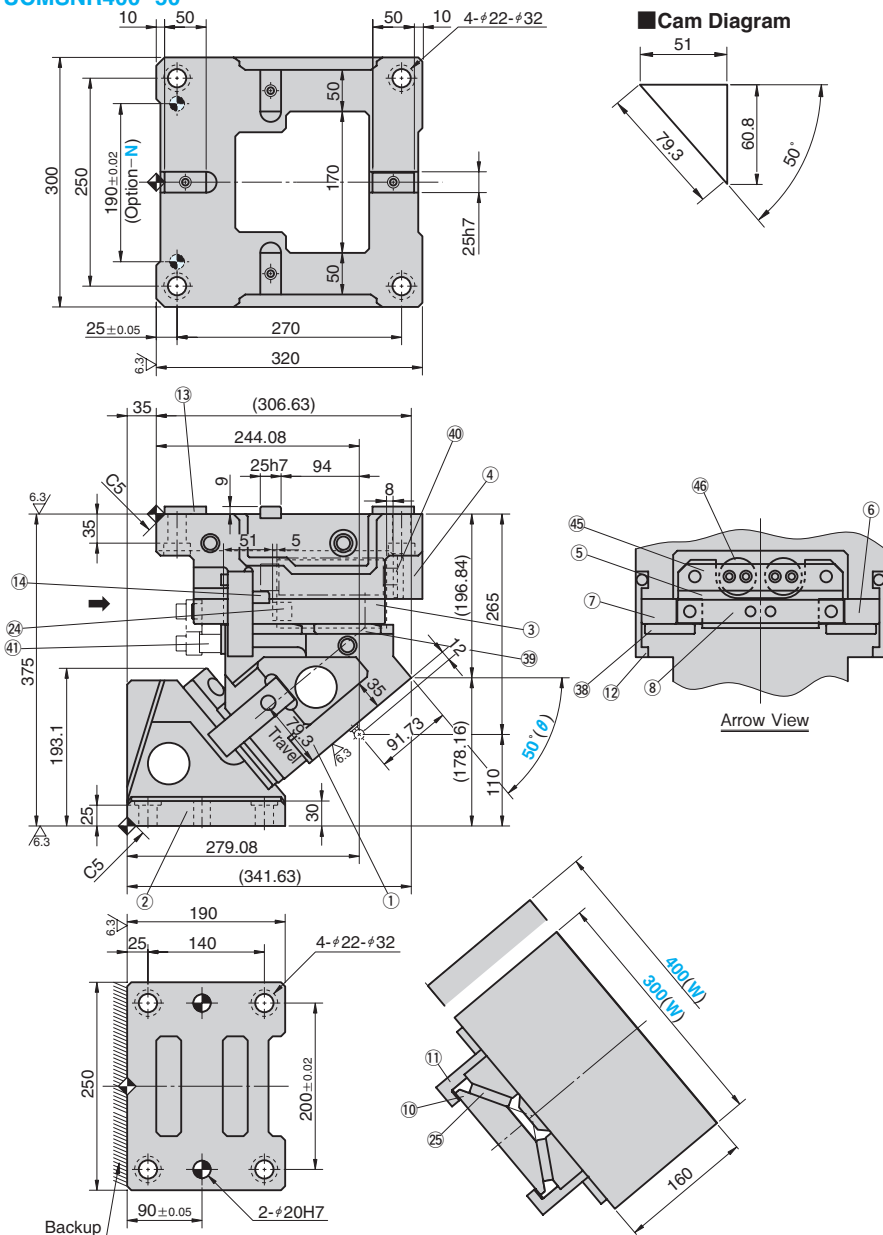


Bolts for assembly are not indicated.

Space for removing



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 G
		Initial Load	Final Load		For W = 300	For W = 400				
79.3	451.1 (46.0)	-	10668.0 (1087.8)	13960 (1424.5)	122.5 (55.9)	127.7 (60.3)	UCMSNR	300 400	50	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
			1314.1 (134.0)							ISO *NISO



Order

Catalog No.	(W)	—	(θ)	—	G
UCMSNR	400	—	50	—	GK
UCMSNR	300	—	50	—	NGK
UCMSNR	300	—	50	—	NISO

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

.....Without gas spring

.....Without coil spring



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

⚠ Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

Space for removing

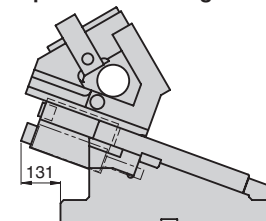


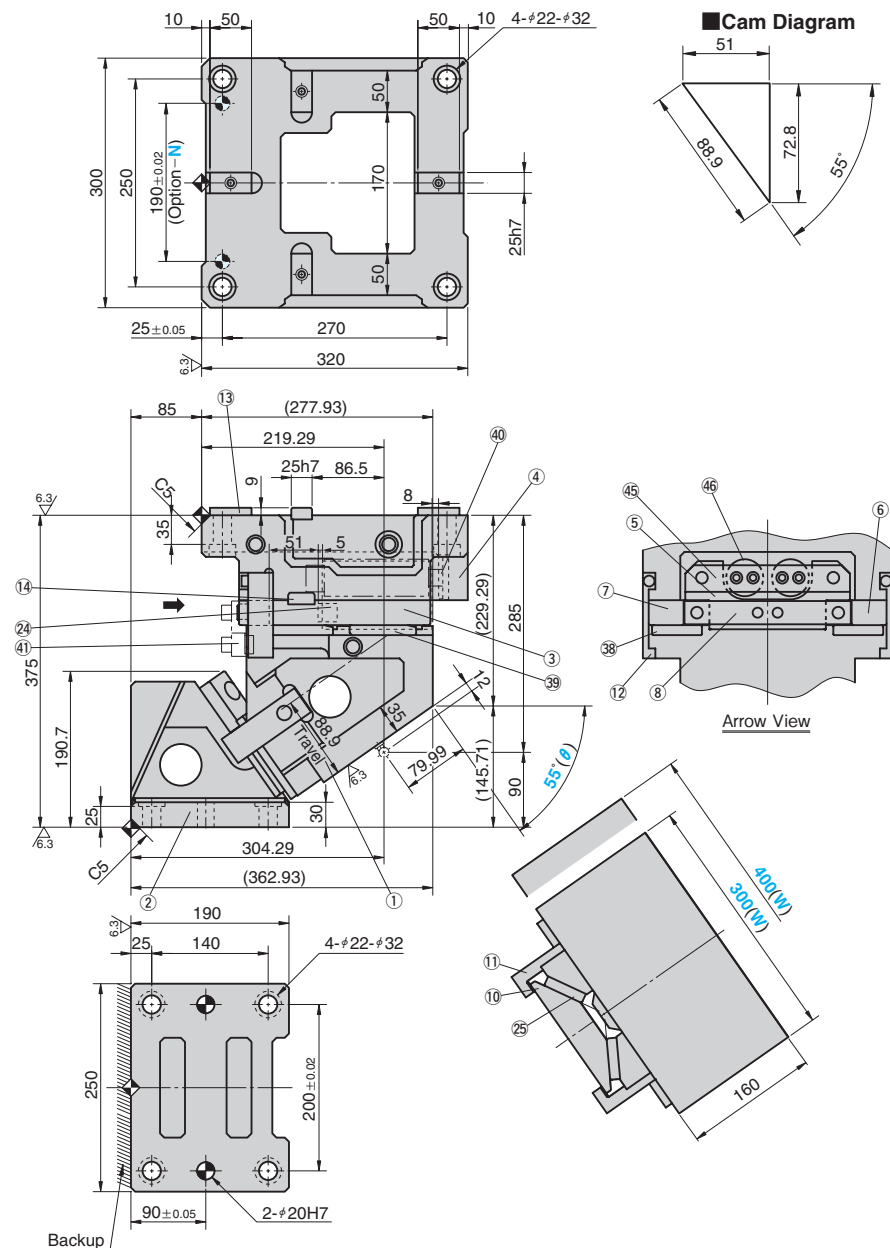
Table of Components

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

No.	Description	Qty	Material and Remark
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	VDI 60×80×12
39	Wear Plate B	1	VDI 30×160×12
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.

⚠ Bolts for assembly are not indicated.

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 G
		Initial Load	Final Load		For W = 300	For W = 400				
88.9	451.1 (46.0)	-	10668.0 (1087.8)	15170 (1548.0)	130.9 (62.2)	135.9 (66.6)	UCMSNR	300 400	55	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	8015.4 (817.9)							ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	55	GK
UCMSNR	300	55	NGK
UCMSNR	300	55	NISO

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

.....Without gas spring

.....Without coil spring

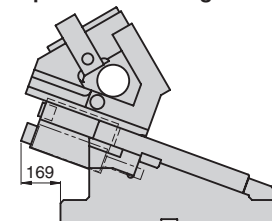


Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.

■Space for removing



Order

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

Spring Specification

No.	Spring Type	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

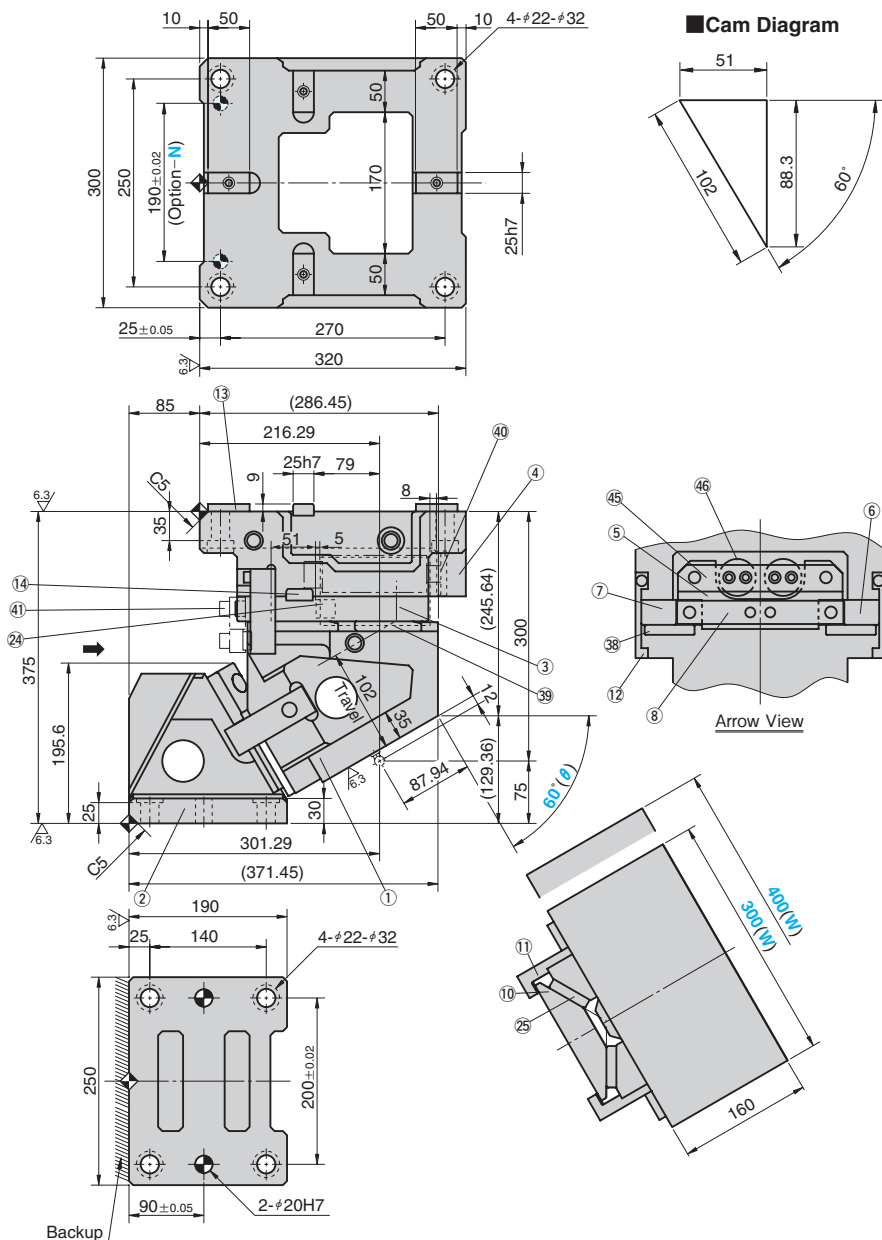
No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250
2	Cam Driver	1	FC250
3	Base Plate C	1	S45C(1045)
4	Cam Holder	1	FC250
5	Spring Guide	1	Bronze with Graphite
6	Base Plate F-R	1	S45C(1045)
7	Base Plate F-L	1	S45C(1045)
8	Stopper Plate	1	S45C(1045)
10	Cam Slide Guide	1	Bronze with Graphite
11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

No.	Description	Qty	Material and Remark
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	VDI 60×80×12
39	Wear Plate B	1	VDI 30×160×12
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



Bolts for assembly are not indicated.

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 G
		Initial Load	Final Load		For W=300	For W=400				
102.0	451.1 (46.0)	-	10668.0 (1087.8)	16764 (1710.6)	135.3 (68.0)	140.4 (72.4)	UCMSNR	300 400	60	GK *NGK
			10668.0 (1087.8)							GD *NGD
			13800.0 (1407.2)							GS *NGS
		1314.1 (134.0)	8015.4 (817.9)							ISO *NISO



Order

Catalog No.	(W)	(θ)	G
UCMSNR	400	60	GK
UCMSNR	300	60	NGK
UCMSNR	300	60	NISO

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

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



Option

Option Code	Specification
N	φ16H7 dowel hole is drilled on the cam holder.
N20	Dowel pin holes of cam holder are changed to φ20.
NF	Nitrogen gas is not charged. - Applicable to GK, GD and GS only.

A Gas Springs are not filled with nitrogen
gas if delivery is by air freight.



Order

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

Spring Specification

No.	Spring Type	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

Space for removing

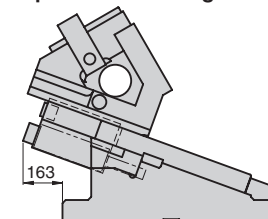


Table of Components

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

No.	Description	Qty	Material and Remark
25	Slide Plate	R/L1	S45C(1045)
38	Wear Plate A	4	VDI 60×80×12
39	Wear Plate B	1	VDI 30×160×12
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



Bolts for assembly are not indicated.