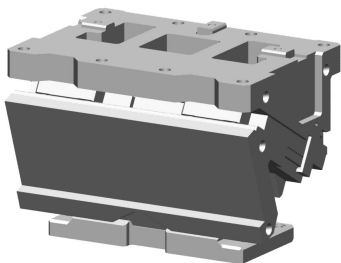


Wide Type For Pierce and Flange

Aerial Cam Unit General Description of SUWB

OUTLINE OF SUWB



- 200, 300, 400, 500mm and 600mm are available for the mounting width.
- V-shaped guide.
- It is easy to lock at bottom or adjust without removing cam slide if you remove spring guide plate and spring.
- Angles from 0° to 60° are available in increments of 5°.
- ⚠ 25°, 35°, 45°, 55° is made to order.

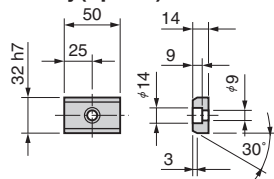
※ Please contact your sales representative before using any gas spring other than those we recommend.

■SUWB Specifications

Mounting Surface	W	H	Working Angle	Travel	Working Force kN(tonf)		Spring Force N(kgf)
					Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	
200	180		00	38.6			
			05	42.6			
			10	46.7			
			15	50.9			
			20	55.3			
			25	60.0	117.6 (12.0)	235.2 (24.0)	4900.3 (499.7)
			30	65.1			
			35	70.8			
			40	77.1			
			45	84.5			
			50	93.3			
			55	104.6			
			60	120.0			
300	180		00	38.6			
			05	42.6			
			10	46.7			
			15	50.9			
			20	55.3			
			25	60.0	196.0 (20.0)	392.0 (40.0)	9800.6 (999.4)
			30	65.1			
			35	70.8			
			40	77.1			
			45	84.5			
			50	93.3			
			55	104.6			
			60	120.0			
400	180		00	38.6			
			05	42.6			
			10	46.7			
			15	50.9			
			20	55.3			
			25	60.0	245.0 (25.0)	490.0 (50.0)	9800.6 (999.4)
			30	65.1			
			35	70.8			
			40	77.1			
			45	84.5			
			50	93.3			
			55	104.6			
			60	120.0			

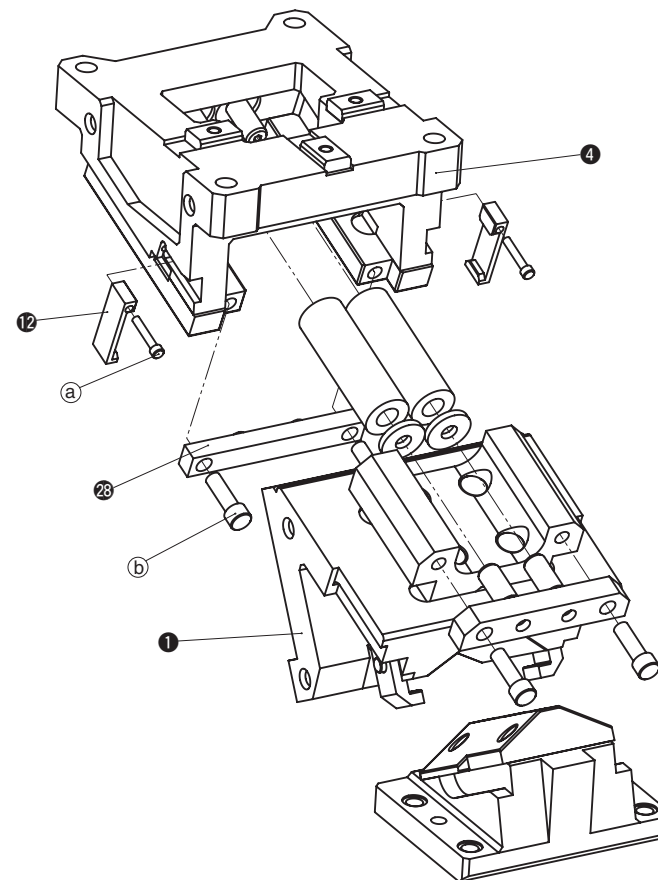
Mounting Surface	W	H	Working Angle	Travel	Working Force kN(tonf)		Spring Force N(kgf)
					Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	
500	180		00	38.6			
			05	42.6			
			10	46.7			
			15	50.9			
			20	55.3			
			25	60.0	313.6 (32.0)	627.2 (64.0)	14701.0 (1499.1)
			30	65.1			
			35	70.8			
			40	77.1			
			45	84.5			
			50	93.3			
			55	104.6			
			60	120.0			
600	180		00	38.6			
			05	42.6			
			10	46.7			
			15	50.9			
			20	55.3			
			25	60.0	392.0 (40.0)	784.0 (79.9)	19601.3 (1998.8)
			30	65.1			
			35	70.8			
			40	77.1			
			45	84.5			
			50	93.3			
			55	104.6			
			60	120.0			

■For detailed specification of the key(option)



●M8 × 15 bolt(1 bolt) is attached.

■SUWB Structure and Assembly / Disassembly



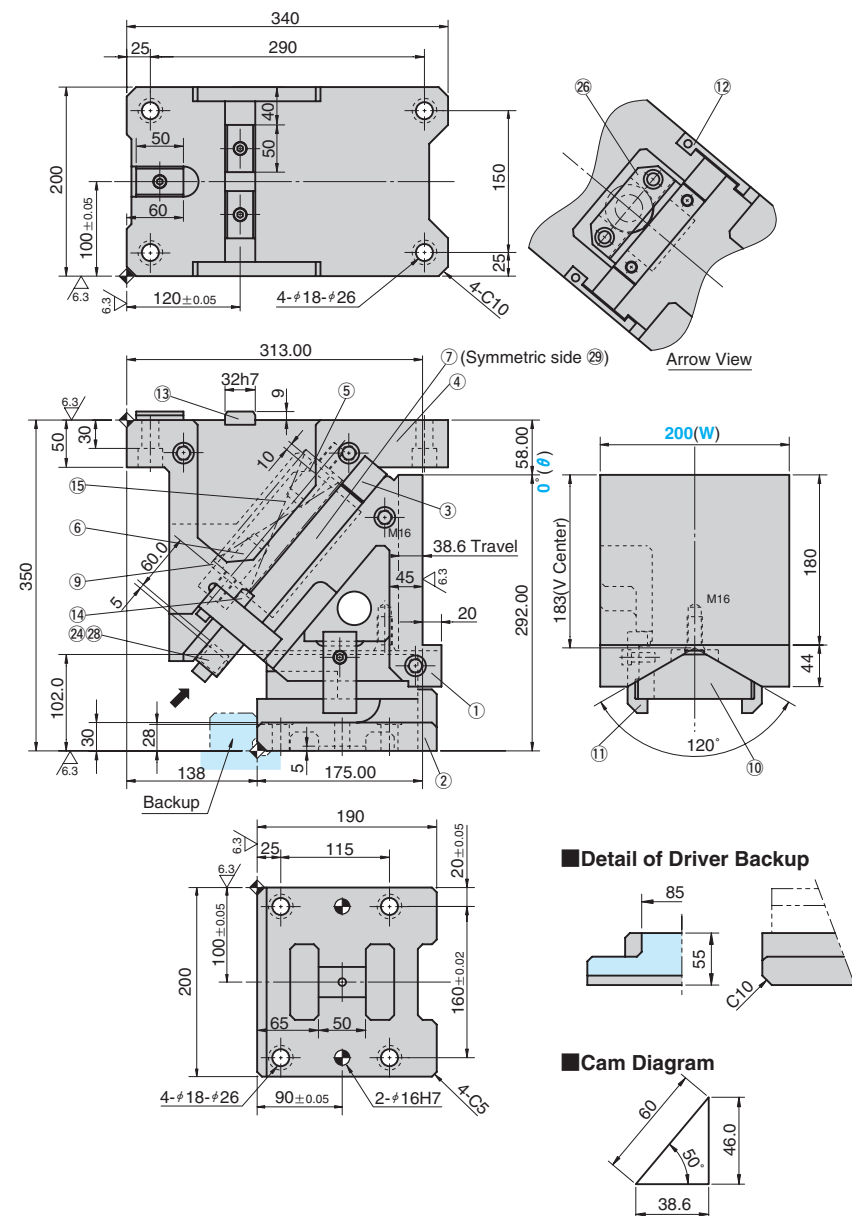
●Disassembly method of SUWB

- 1) Loosen hexagon socket head bolt (Ⓐ) and remove safety plate (12).
- 2) Loosen hexagon socket head bolt (Ⓑ) and remove stopper plate (28).
- 3) Pull and remove cam slider (1) from cam holder (4) to the rear.

●Assembly method of SUWB

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

SUWB200 – 00



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			817.2 (83.3)	4903.2 (499.7)	6776 (691.4)						No code (coil spring)
38.6	117.6 (12.0)	235.2 (24.0)		6689.4 (682.6)		36.1	95.0	SUWB	200	00	GK * NGK
			—	6655.0 (679.1)	9141 (932.8)						GD * NGD
				6709.2 (684.6)							GS * NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	200	—	00	—	GK
SUWB	200	—	00	—	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

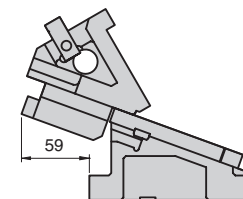
.....Without gas spring



Options

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

■ Space for removing




Order

SUWB200 - 00 - GK - N
SUWB200 - 00 - GK - NF

■ Option part of N and FK.

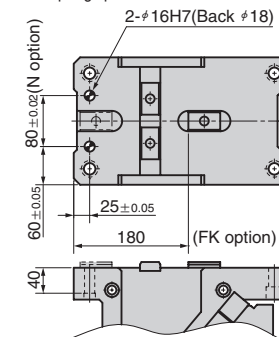
※Gas spring specifications cannot do FK setting.

 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■ Spring Specification

No.	Spring type	Model	Remark
⑮	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil 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 A	1	Bronze with Graphite
④	Cam Holder	1	FC250
⑤	Spring Guide Block	1	FCD500 with Graphite
⑥	Spring Guide Pin	2	S45C
⑦	Base Plate C-L	1	Bronze with Graphite
⑧	Washer	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered

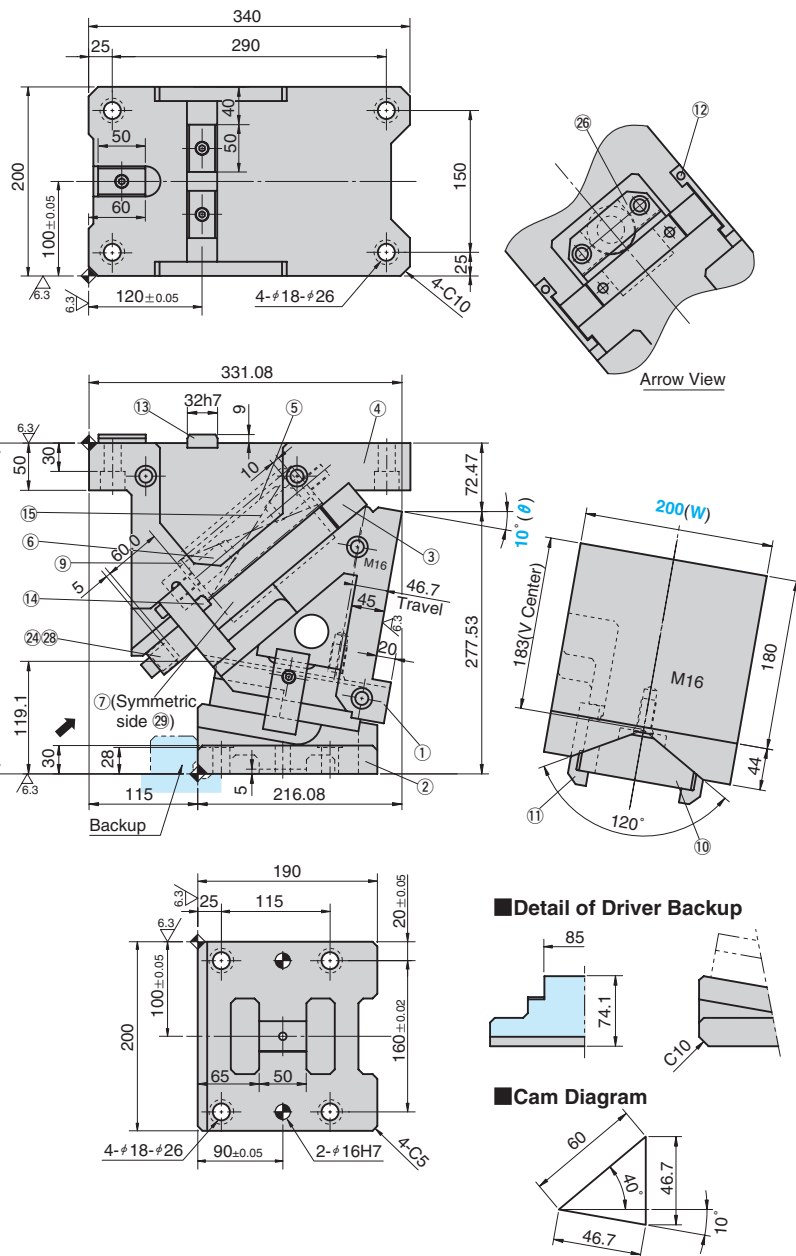
No.	Description	Qty	Material and Remark
⑪	Positive Return Follower	2	S45C
⑫	Safety Plate	2	SS400
⑬	Key A	3	SS400
⑭	Key B	2	SS400
⑮	Spring	1	Refer to the Spring Specification table.
⑳	Stopper	2	Urethane
㉑	Spring Guide Plate	1	SS400
㉒	Stopper Plate	1	S45C
㉓	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

1132

SUWB200 - 10



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			817.2 (83.3)	4903.2 (499.7)	6710 (684.7)						No code (coil spring)
46.7	117.6 (12.0)	235.2 (24.0)	—	6689.4 (682.6)	9075 (926.0)	36.1	94.6	SUWB	200	10	GK *NGK GD *NGD GS *NGS
				6655.0 (679.1)							
				6709.2 (684.6)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	10	GK
SUWB	200	10	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 10 - GK - N
SUWB200 - 10 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

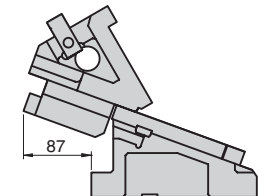
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



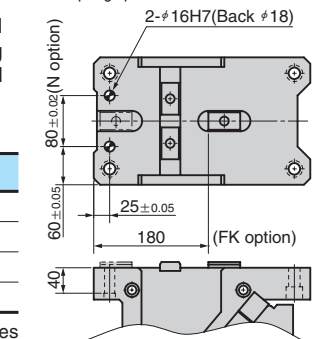
Bolts for assembly are not indicated.

Space for removing

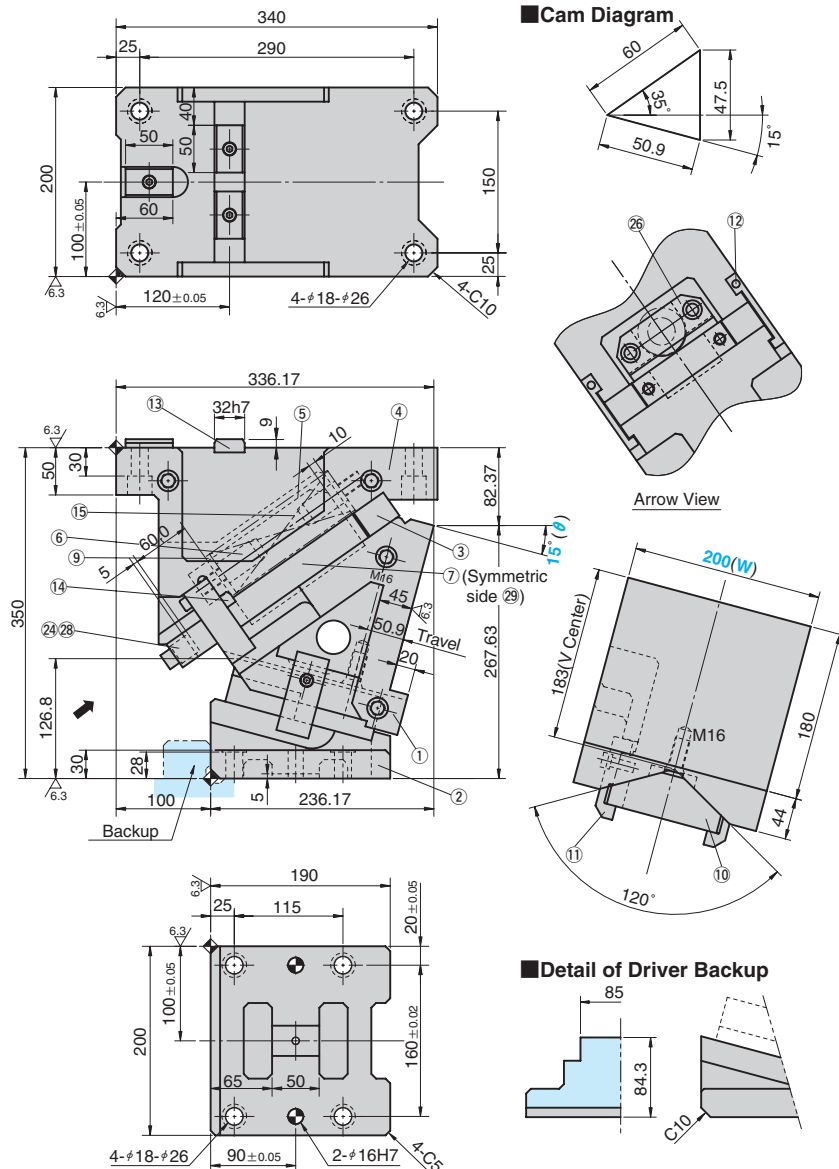


Option part of N and FK.

※Gas spring specifications cannot do FK setting.



SUWB200 - 15



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
50.9	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6674 (681.0)	36.1	93.3	SUWB	200	15	No code (coil spring)
			—	6689.4 (682.6)	9039 (922.4)						GK *NGK
				6655.0 (679.1)							GD *NGD
				6709.2 (684.6)							GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	15	GK
SUWB	200	15	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 15 - GK - N
SUWB200 - 15 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

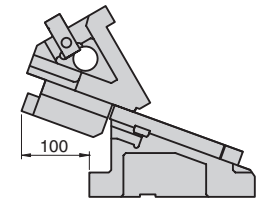
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



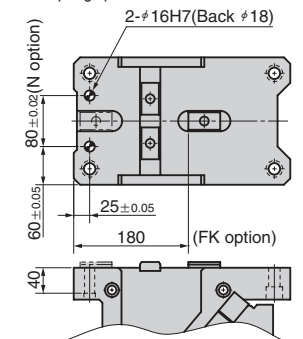
Bolts for assembly are not indicated.

Space for removing



Option part of N and FK.

※Gas spring specifications cannot do FK setting.



2-#16H7(Back #18)

80 ± 0.02 (N option)

60 ± 0.05

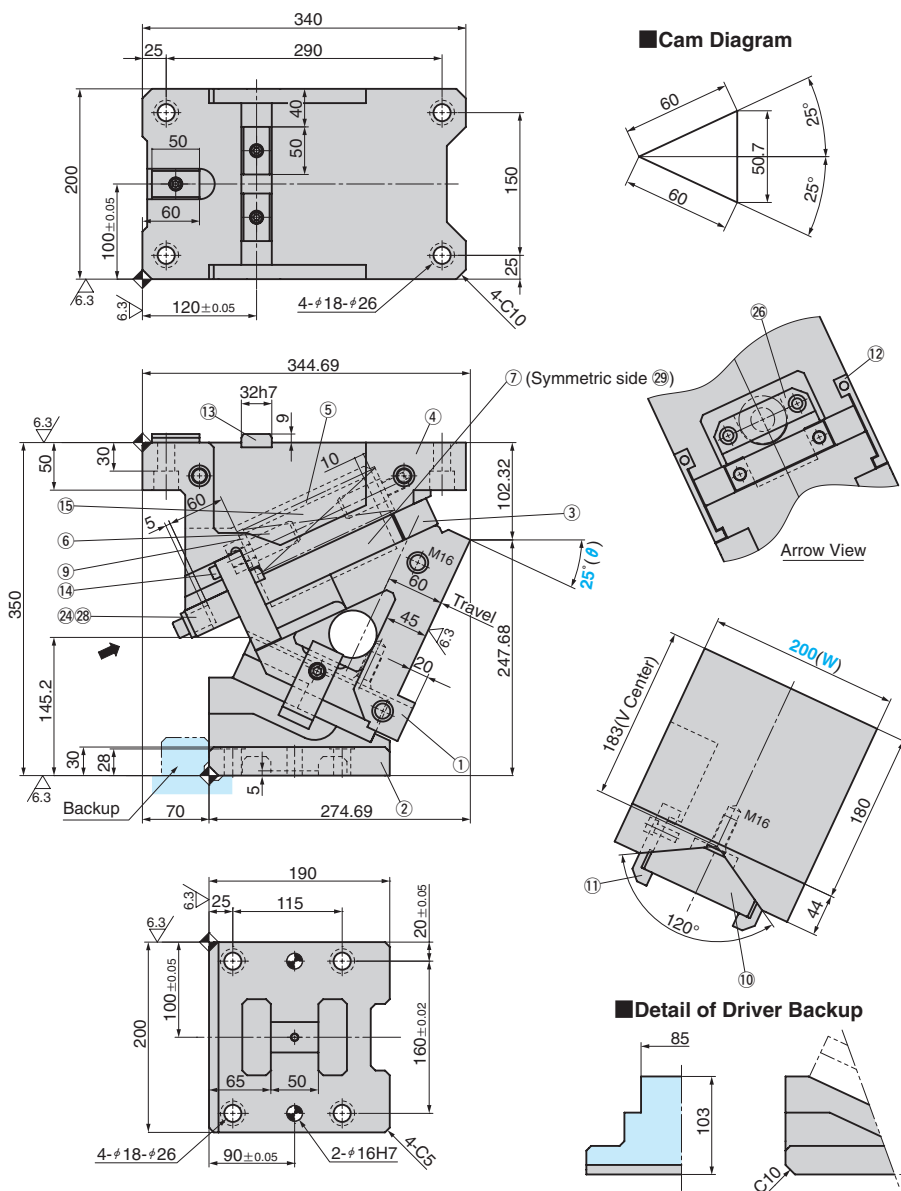
25 ± 0.05

180

40

(FK option)

SUWB200 - 25



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
60.0	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6597 (673.2)	36.1	94.1	SUWB	200	25	No code (coil spring)
			—	6689.4 (682.6)	—						GK *NGK
			—	6655.0 (679.1)	8963 (914.5)						GD *NGD
			—	6709.2 (684.6)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	25	GK
SUWB	200	25	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 25 - GK - N
SUWB200 - 25 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

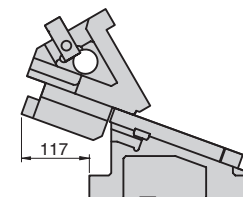
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	1	Refer to the Spring Specification table.
⑥	Spring Guide Pin	2	S45C	⑯	Stopper	2	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	1	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate C-R	1	Bronze with Graphite



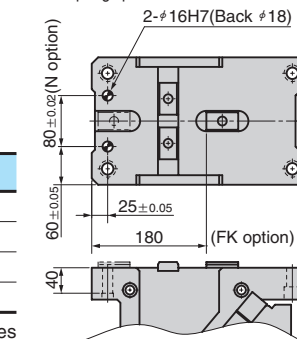
Bolts for assembly are not indicated.

Space for removing

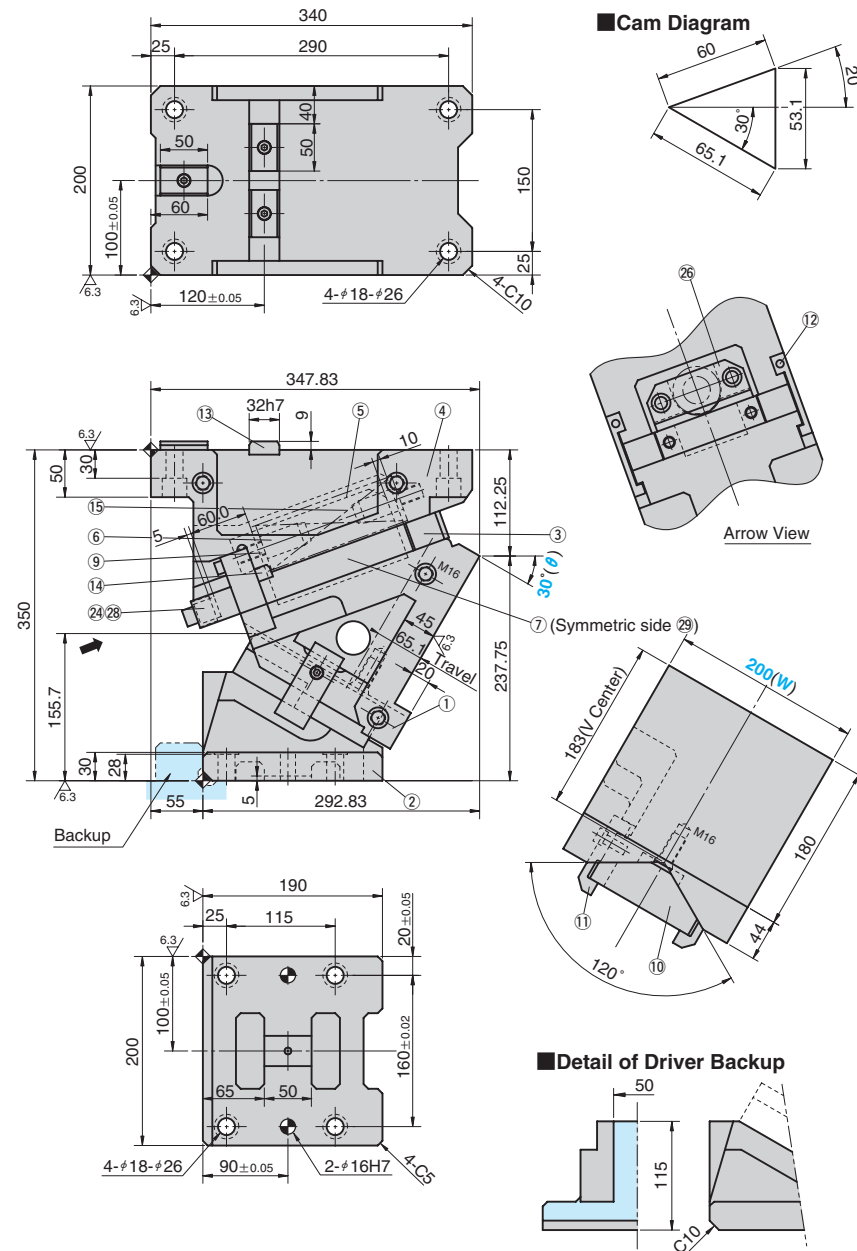


Option part of N and FK.

※Gas spring specifications cannot do FK setting.



SUWB200 - 30



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
65.1	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6557 (669.1)	36.1	92.7	SUWB	200	30	No code (coil spring)
			—	6689.4 (682.6)	8923 (910.5)						GK *NGK
				6655.0 (679.1)							GD *NGD
				6709.2 (684.6)							GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	30	GK
SUWB	200	30	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 30 - GK - N
SUWB200 - 30 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

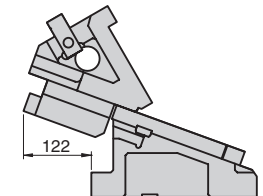
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



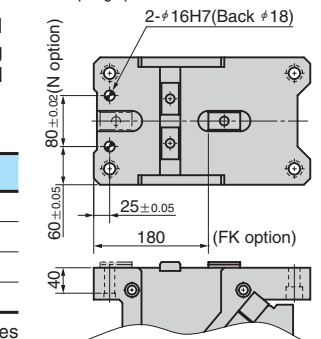
Bolts for assembly are not indicated.

Space for removing

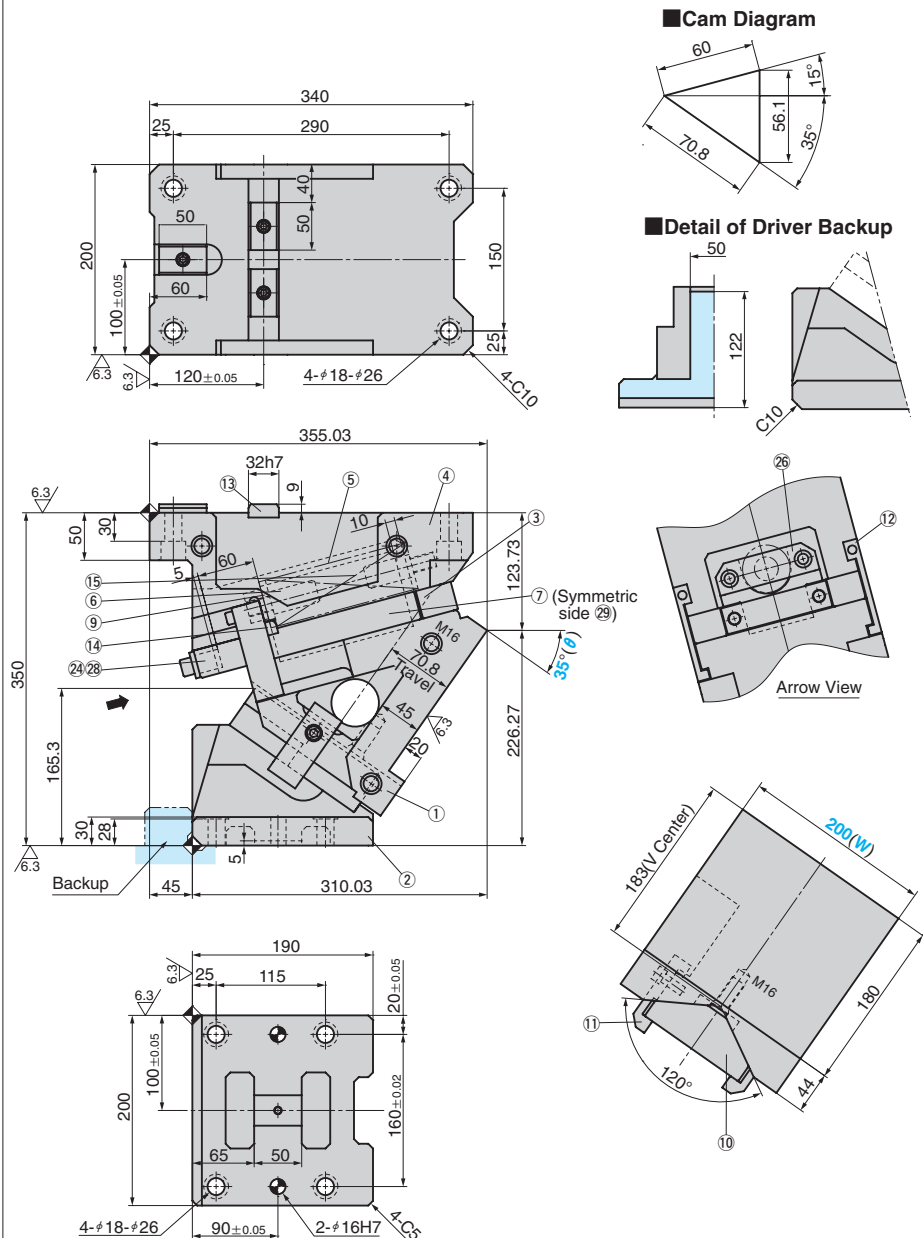


Option part of N and FK.

※Gas spring specifications cannot do FK setting.



SUWB200 - 35



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
70.8	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6516 (664.9)	36.1	94.8	SUWB	200	35	No code (coil spring)
			—	6689.4 (682.6)	—						GK *NGK
			—	6655.0 (679.1)	8882 (906.3)						GD *NGD
			—	6709.2 (684.6)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	35	GK
SUWB	200	35	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 35 - GK - N
SUWB200 - 35 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

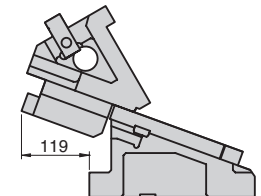
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



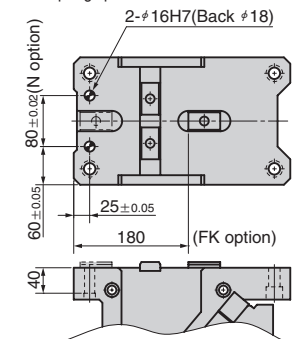
Bolts for assembly are not indicated.

Space for removing



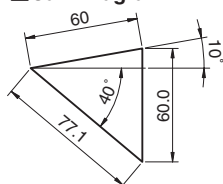
Option part of N and FK.

※Gas spring specifications cannot do FK setting.

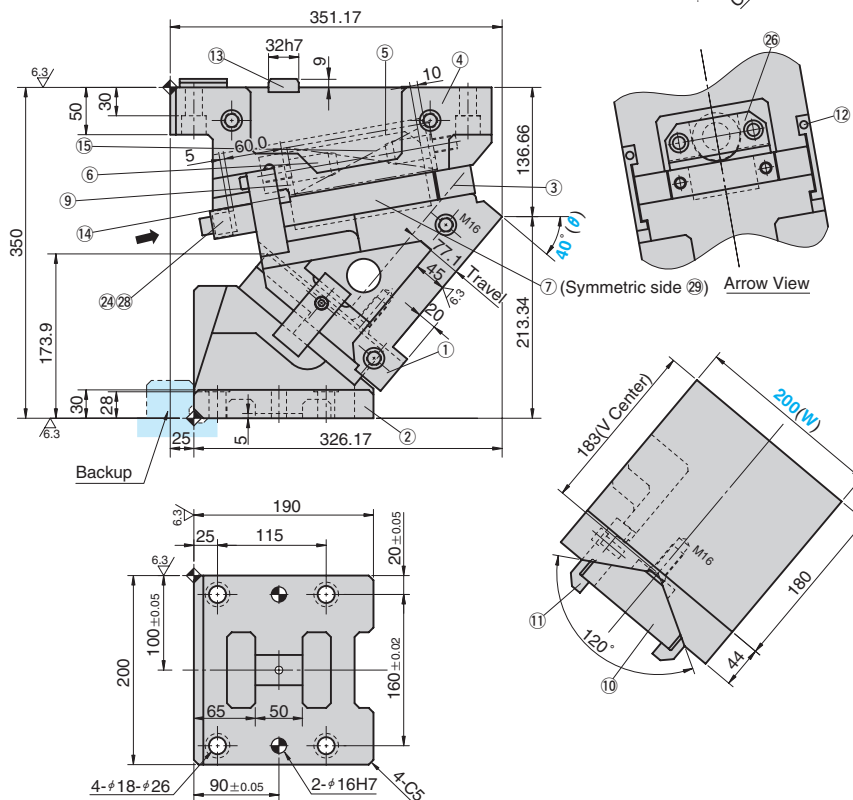
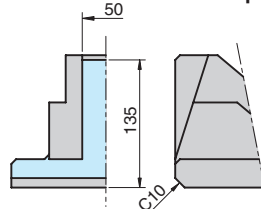


SUWB200 - 40

Cam Diagram



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
77.1	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6475 (660.7)	36.1	94.2	SUWB	200	40	No code (coil spring)
			—	6689.4 (682.6)	—						GK *NGK
			—	6655.0 (679.1)	8841 (902.1)						GD *NGD
			—	6709.2 (684.6)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	40	GK
SUWB	200	40	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

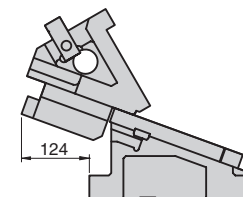
.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB200 - 40 - GK - N
SUWB200 - 40 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

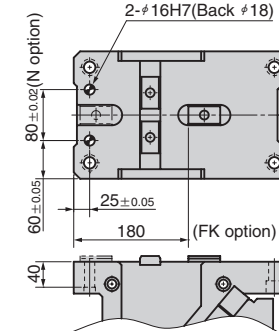


Table of Components

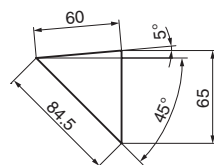
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



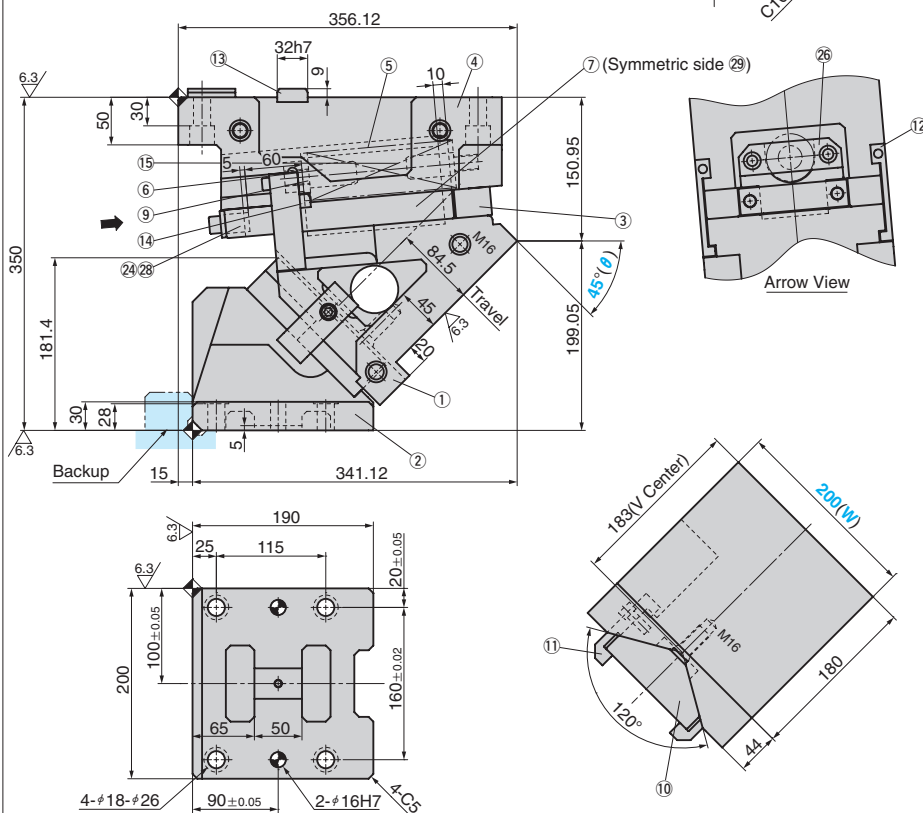
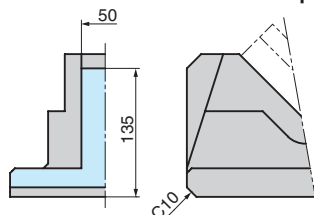
Bolts for assembly are not indicated.

SUWB200 - 45

Cam Diagram



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
84.5	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6434 (656.5)	36.1	96.3	SUWB	200	45	No code (coil spring)
			—	6689.4 (682.6)	—						GK *NGK
			—	6655.0 (679.1)	8800 (897.9)						GD *NGD
			—	6709.2 (684.6)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	45	GK
SUWB	200	45	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 45 - GK - N
SUWB200 - 45 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

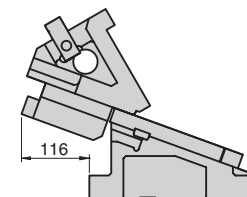
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	1	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	2	SS400
5	Spring Guide Block	1	FCD500 with Graphite	15	Spring	1	Refer to the Spring Specification table.
6	Spring Guide Pin	2	S45C	24	Stopper	2	Urethane
7	Base Plate C-L	1	Bronze with Graphite	26	Spring Guide Plate	1	SS400
9	Washer	1	S45C	28	Stopper Plate	1	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



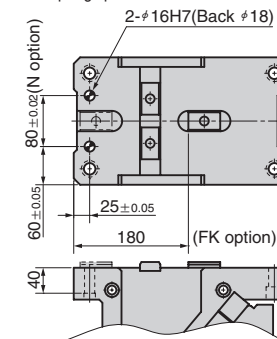
Bolts for assembly are not indicated.

Space for removing



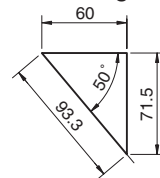
Option part of N and FK.

※Gas spring specifications cannot do FK setting.

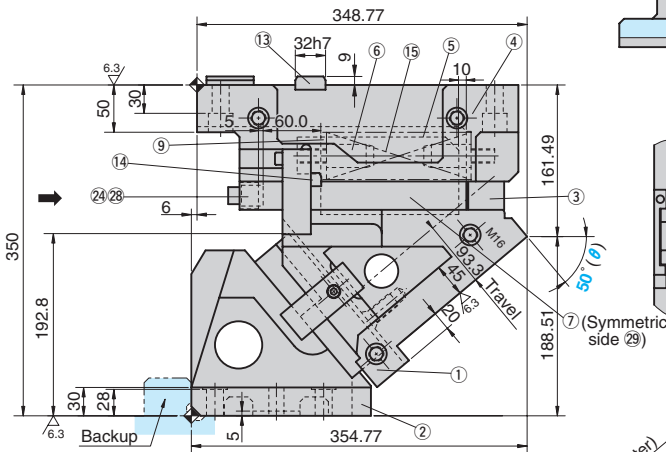
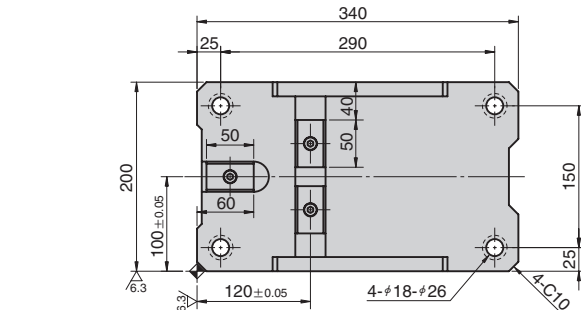
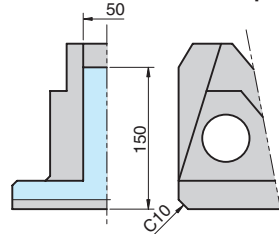


SUWB200 - 50

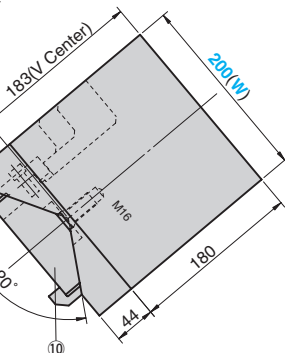
Cam Diagram



Detail of Driver Backup



Arrow View



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
93.3	117.6 (12.0)	235.2 (24.0)	817.2 (83.3)	4903.2 (499.7)	6393 (652.4)	36.1	93.7	SUWB	200	50	No code (coil spring)
			—	6689.4 (682.6)	—						GK *NGK
			—	6655.0 (679.1)	8759 (893.7)						GD *NGD
			—	6709.2 (684.6)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	50	GK
SUWB	200	50	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB200 - 50 - GK - N
SUWB200 - 50 - GK - NF

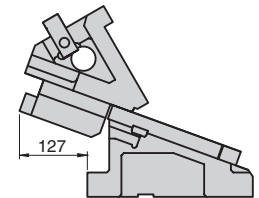
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

Space for removing



Option part of N and FK.

※Gas spring specifications cannot do FK setting.

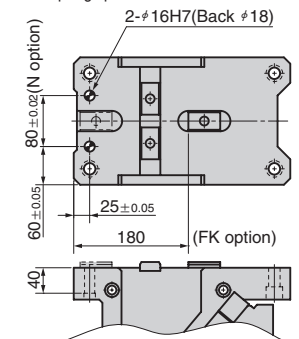


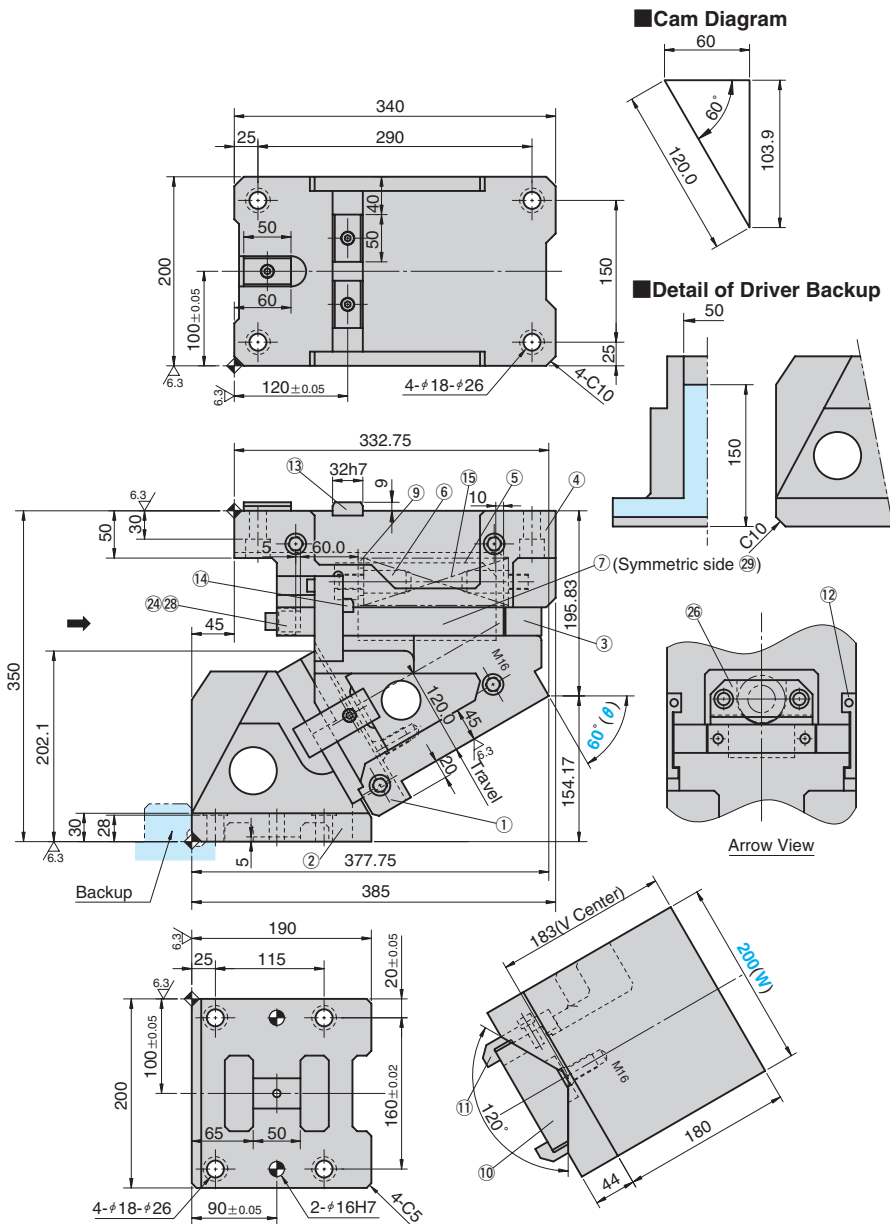
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	1	Refer to the Spring Specification table.
⑥	Spring Guide Pin	2	S45C	⑯	Stopper	2	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	1	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB200 - 60



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			817.2 (83.3)	4903.2 (499.7)	7684 (784.1)						No code (coil spring)
120.0	117.6 (12.0)	235.2 (24.0)		6689.4 (682.6)		38.7	97.3	SUWB	200	60	GK *NGK
			—	6655.0 (679.1)	10530 (1074.4)						GD *NGD
				6709.2 (684.6)							GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	200	60	GK
SUWB	200	60	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

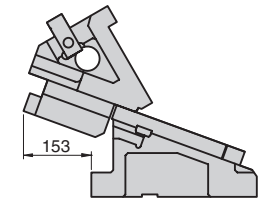
.....Without gas spring



Option

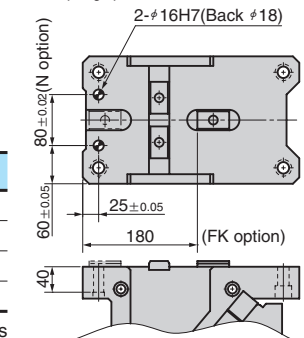
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB200 - 60 - GK - N
SUWB200 - 60 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

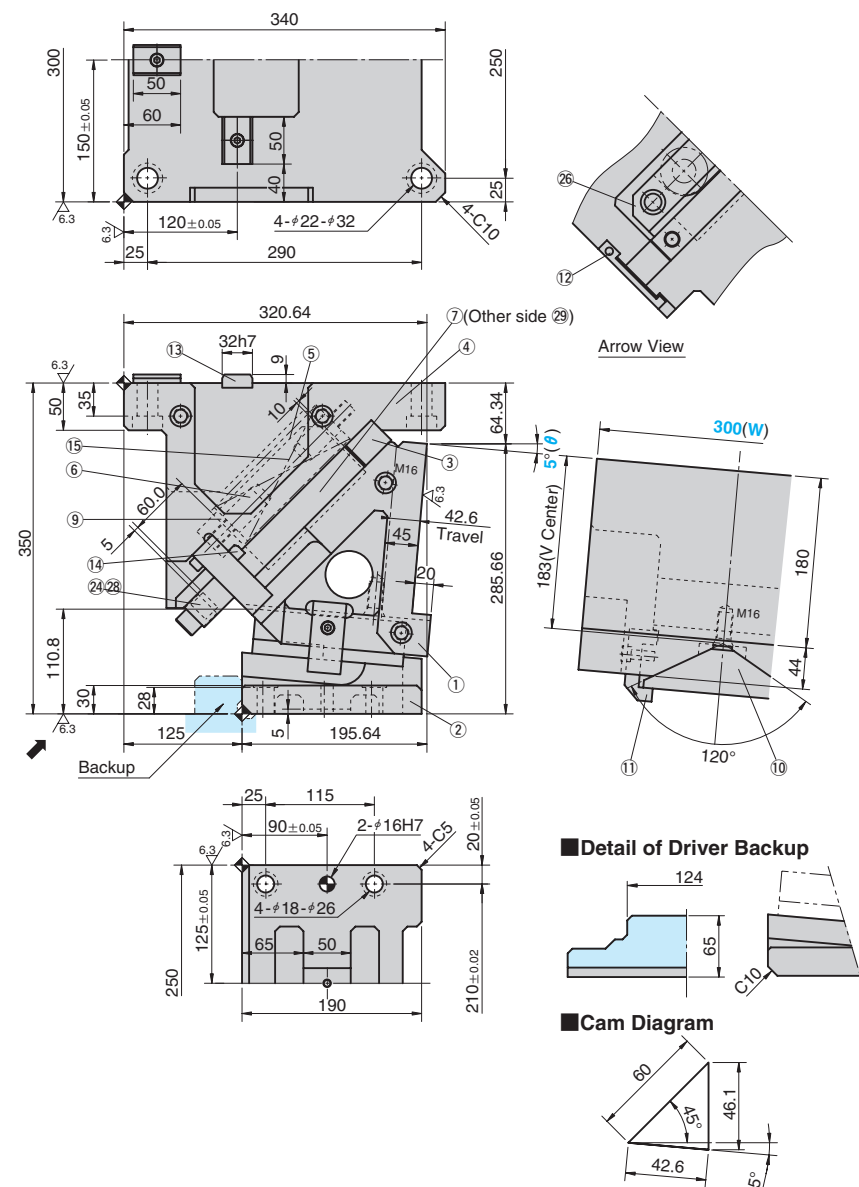
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	1	Refer to the Spring Specification table.
⑥	Spring Guide Pin	2	S45C	⑯	Stopper	2	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	1	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 – 05



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
42.6	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	13390 (1366.3)	59.6	135.9	SUWB	300	05	No code (coil spring)
				13378.8 (1365.2)							GK * NGK
			—	13310.0 (1358.2)	18121 (1849.1)						GD * NGD
				13418.4 (1369.2)							GS * NGS



Order

Catalog No.

(W)

—

9) -

PS

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

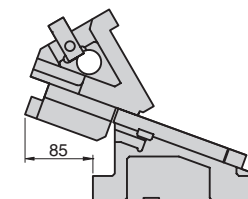
.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ 16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.


■ Space for removing



Order

SUWB300 - 05 - GK - N
SUWB300 - 05 - GK - NF



 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■ Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

■ Table of Components

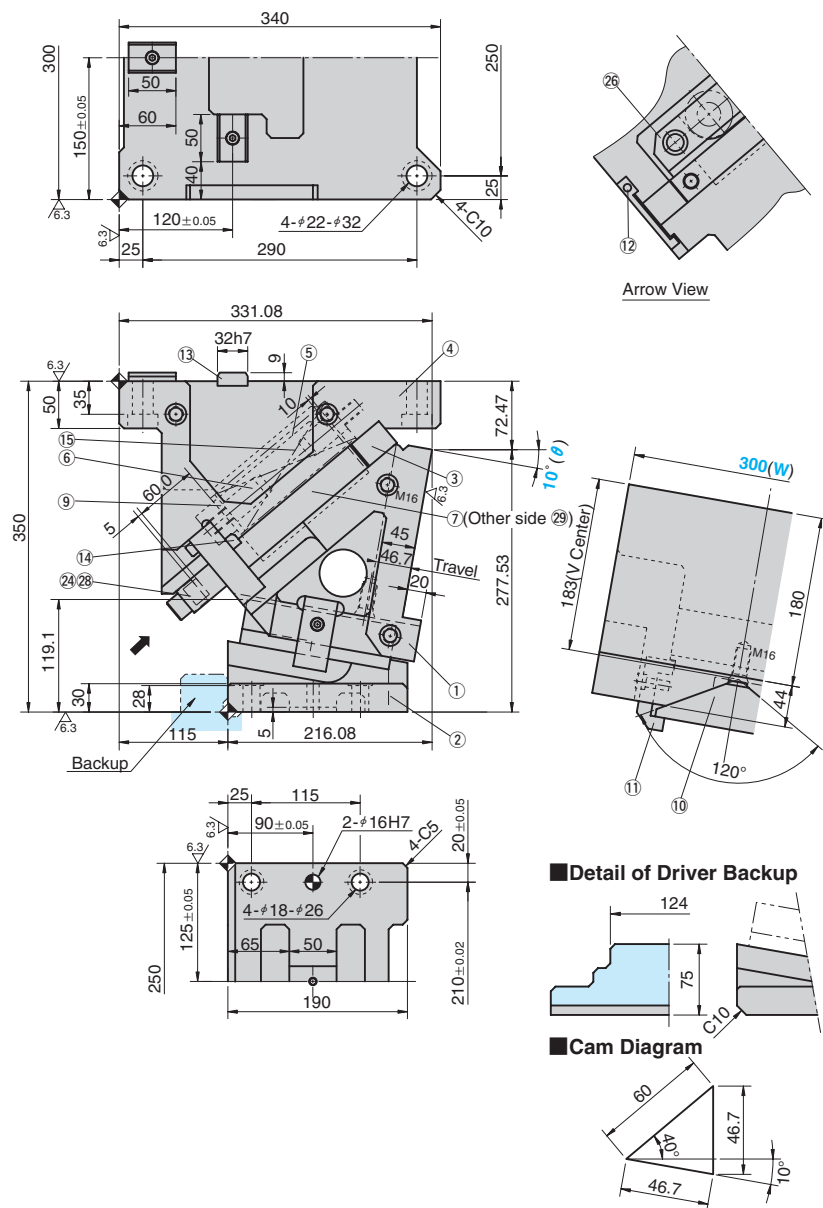
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table
⑥	Spring Guide Pin	4	S45C	⑰	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑱	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑳	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉑	Base Plate D-R	1	Bronze with Graphite



 Bolts for assembly are not indicated.

SUWB
300

SUWB300 - 10



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13333 (1360.5)						No code (coil spring)
46.7	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	18064 (1843.3)	59.6	135.7	SUWB	300	10	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	10	GK
SUWB	300	10	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

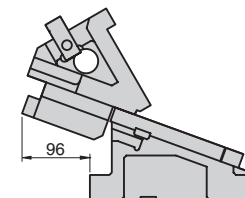


Order

SUWB300 - 10 - GK - N
SUWB300 - 10 - GK - NF

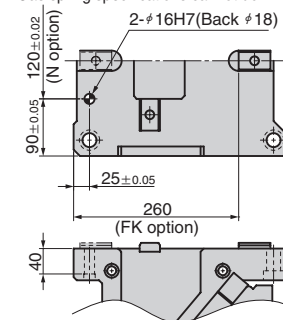
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

Table of Components

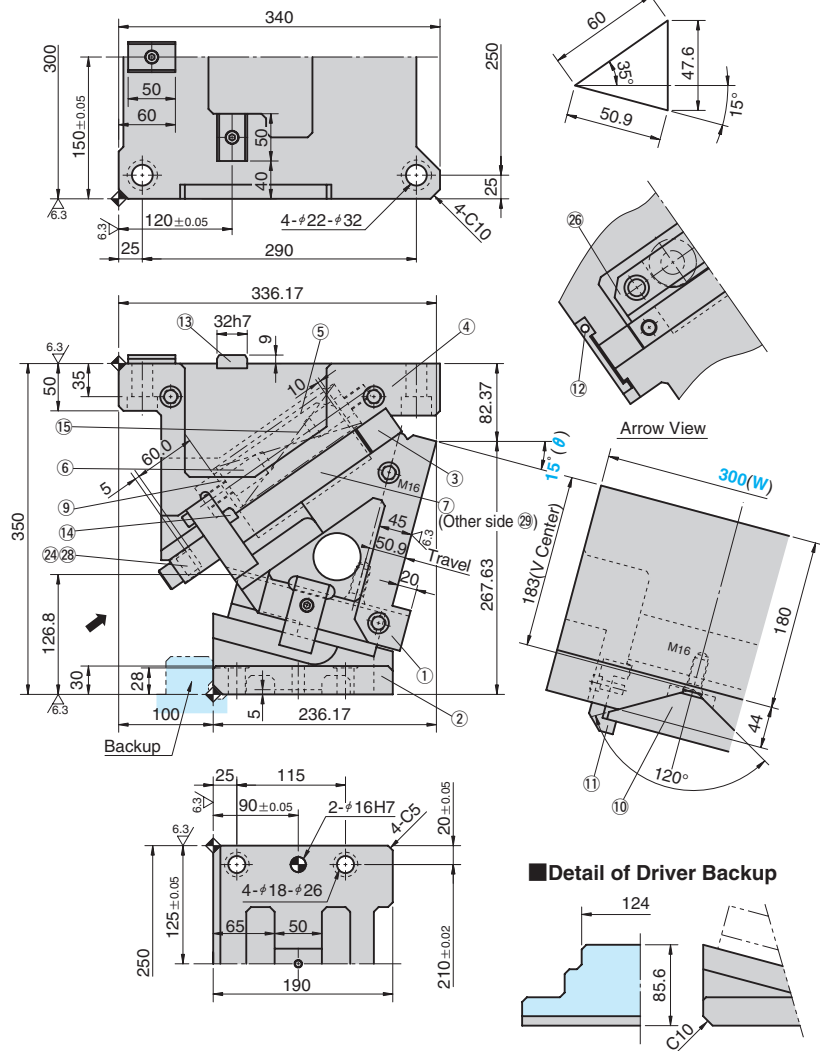
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 - 15

■Cam Diagram



■Detail of Driver Backup

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13274 (1354.5)						No code (coil spring)
50.9	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	18005 (1837.2)	59.6	133.0	SUWB	300	15	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	15	GK
SUWB	300	15	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

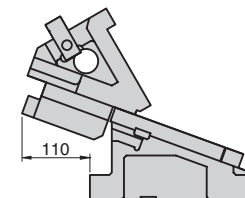
.....Without gas spring



Option

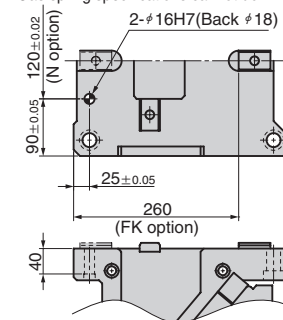
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

■Space for removing



■Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB300 - 15 - GK - N
SUWB300 - 15 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

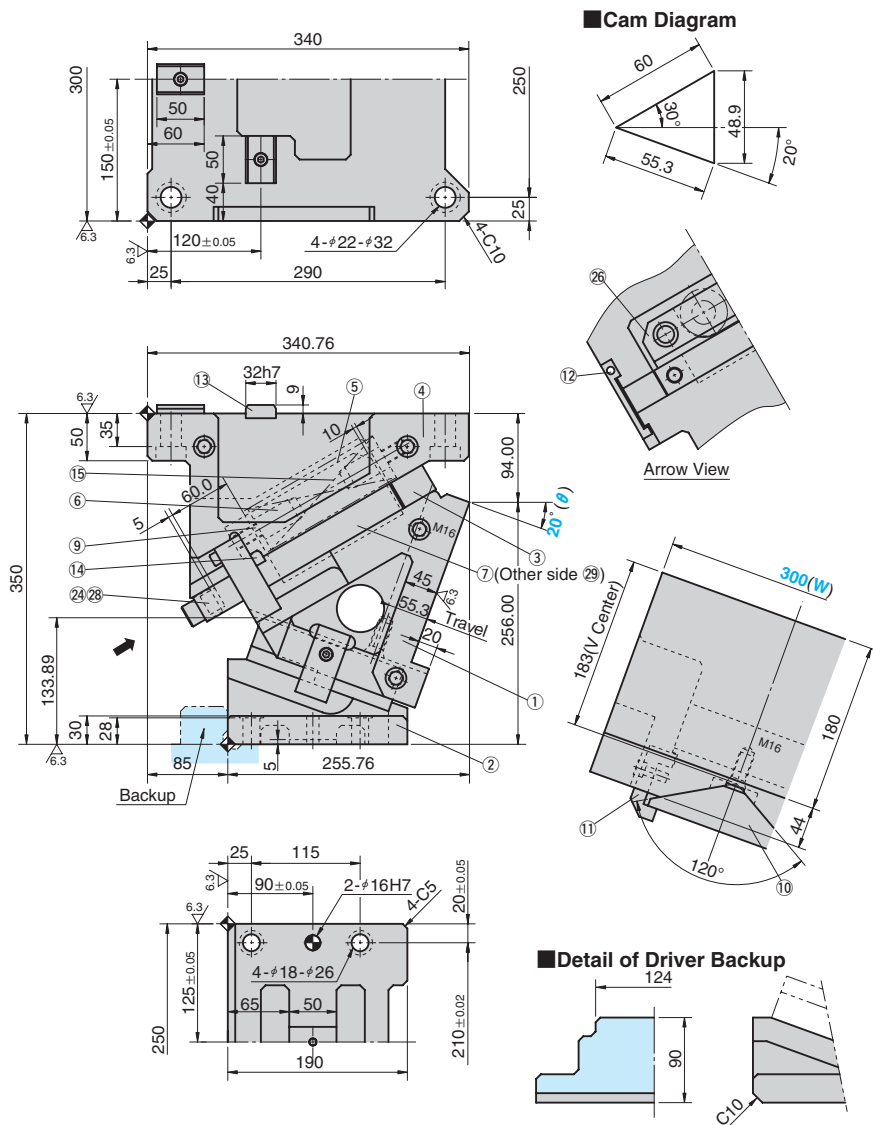
■Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 - 20



■Cam Diagram

Arrow View

■Detail of Driver Backup

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PSG
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13212 (1348.1)						No code (coil spring)
55.3	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	17943 (1830.9)	59.6	131.5	SUWB	300	20	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.

(W)

—

(θ)

—

PS

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

SUWB
SUWB

300
300

—
—

20
20

—
—

GK
NGK

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

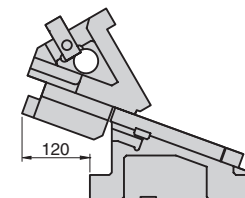


Order

SUWB300 - 20 - GK - N
SUWB300 - 20 - GK - NF

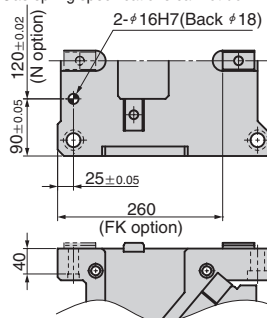

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■Space for removing



■Option part of N and FK.

*Gas spring specifications cannot do FK setting.



■Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

■Table of Components

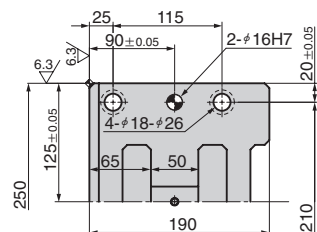
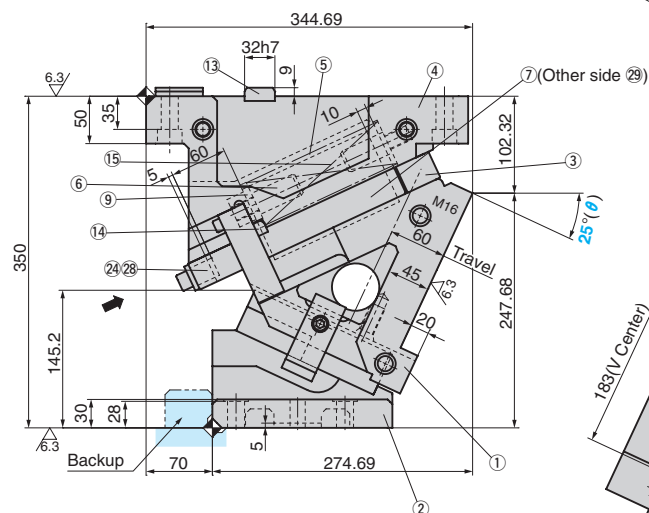
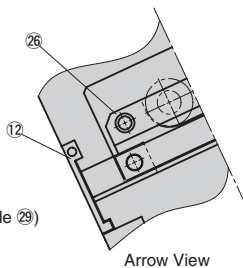
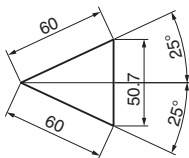
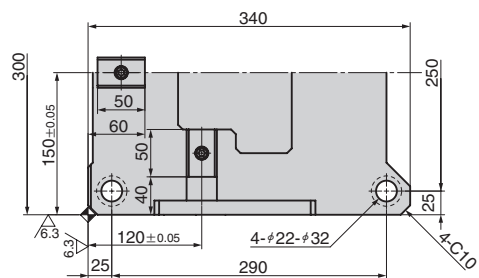
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑲	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑳	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	㉑	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉒	Base Plate D-R	1	Bronze with Graphite



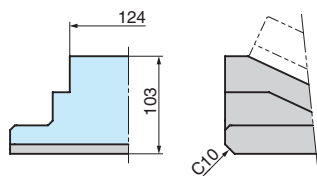
Bolts for assembly are not indicated.

SUWB300 - 25

Cam Diagram



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
60.0	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	13147 (1341.6)	59.6	131.0	SUWB	300	25	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	17878 (1824.3)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	25	GK
SUWB	300	25	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

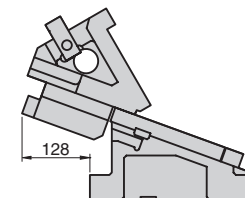
.....Without gas spring



Option

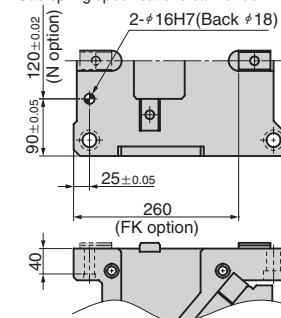
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

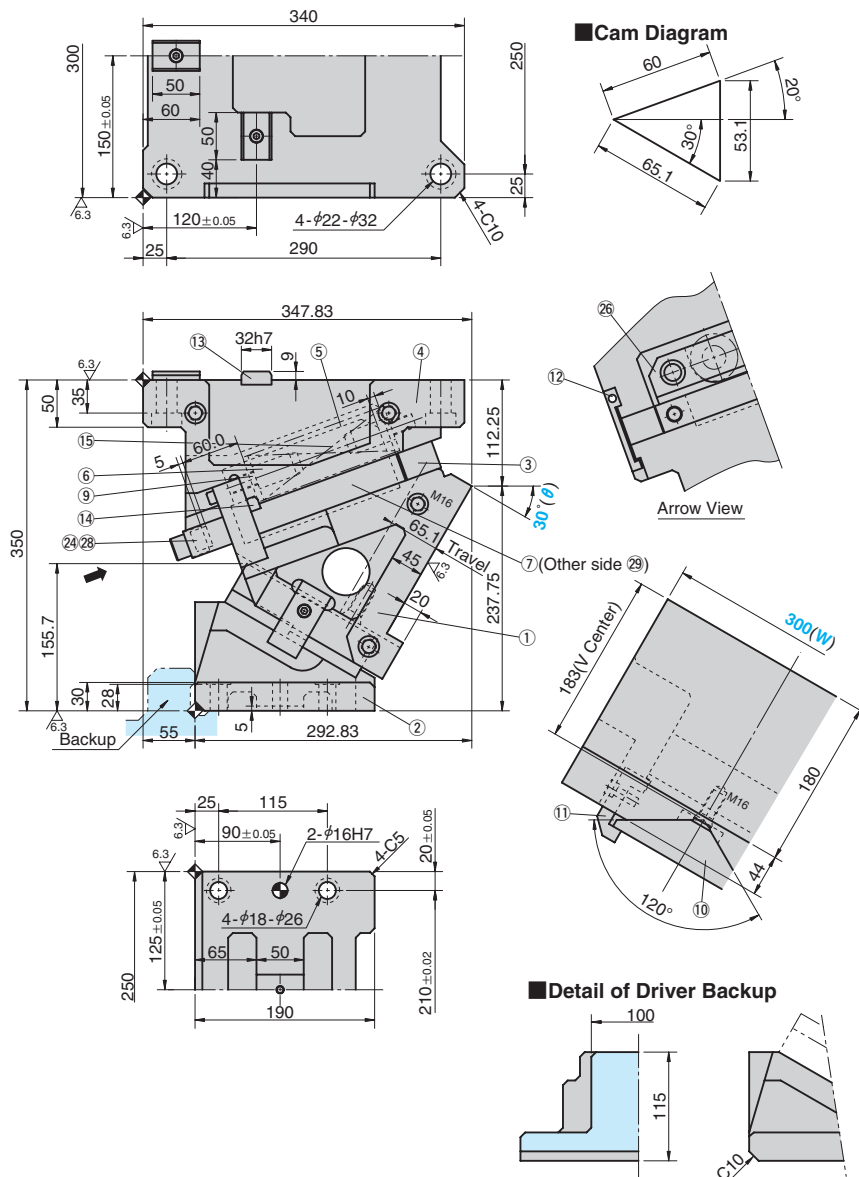
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 - 30



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
65.1	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	13081 (1334.8)	59.6	131.0	SUWB	300	30	No code (coil spring)
			—	13378.8 (1365.2)	17812 (1817.6)						GK *NGK
				13310.0 (1358.2)							GD *NGD
				13418.4 (1369.2)							GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	30	GK
SUWB	300	30	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB300 - 30 - GK - N
SUWB300 - 30 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

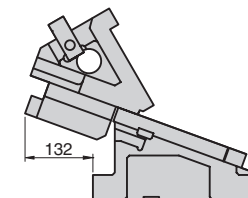
*Guideline of coil spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite

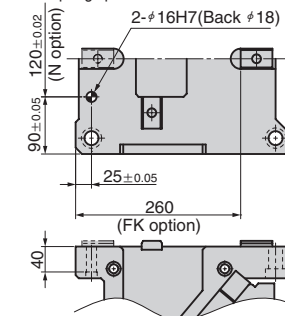
Bolts for assembly are not indicated.

Space for removing

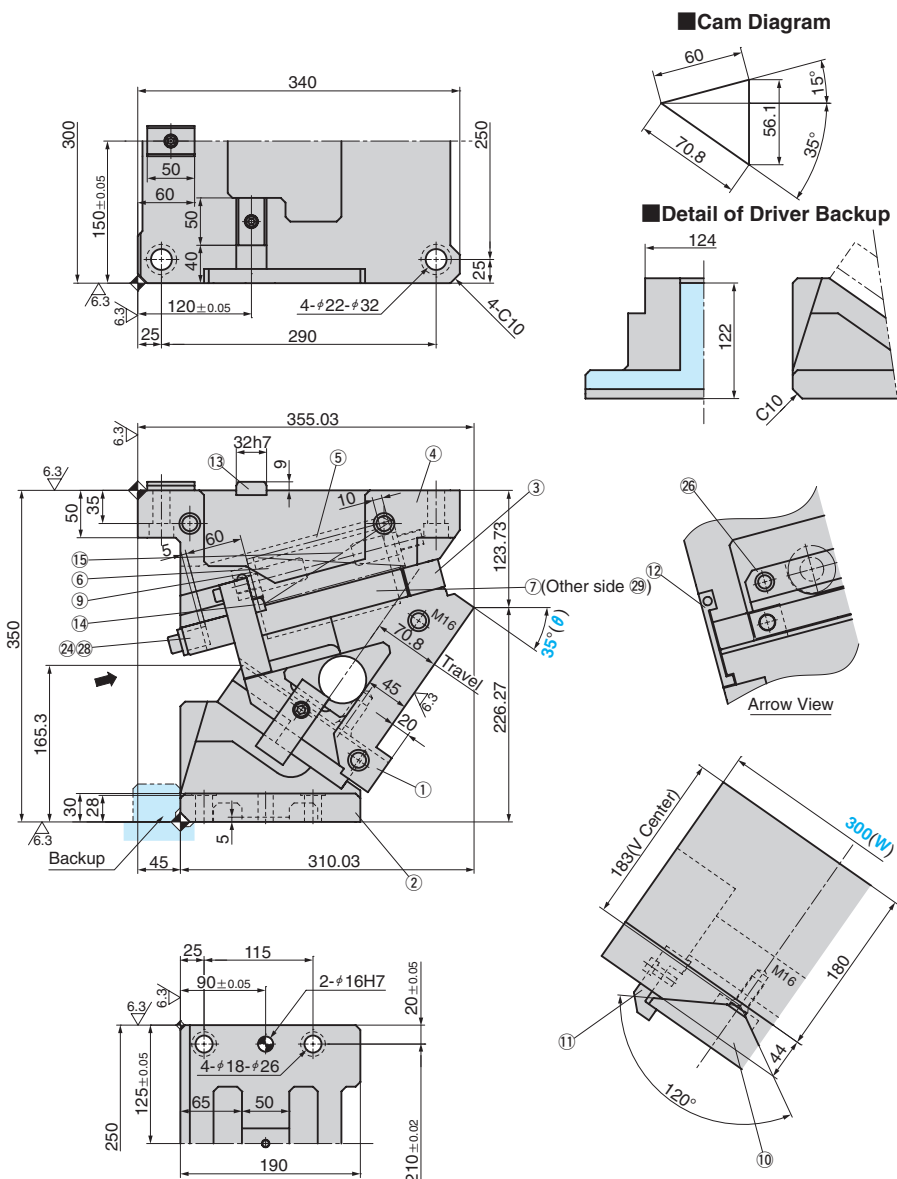


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB300 - 35



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13014 (1328.0)						No code (coil spring)
70.8	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	17745 (1810.7)	59.6	131.8	SUWB	300	35	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	35	GK
SUWB	300	35	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

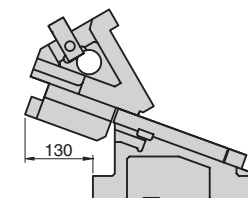
.....Without gas spring



Option

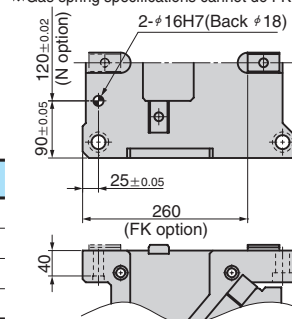
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

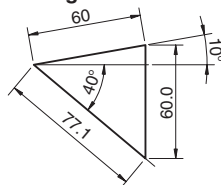
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite

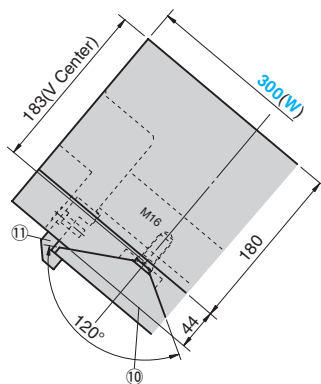
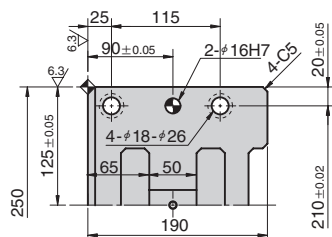
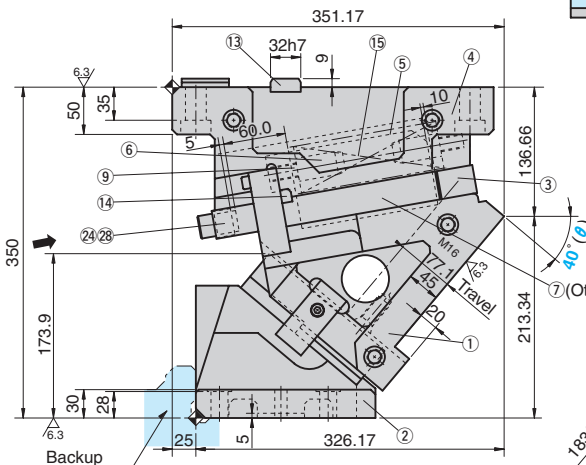
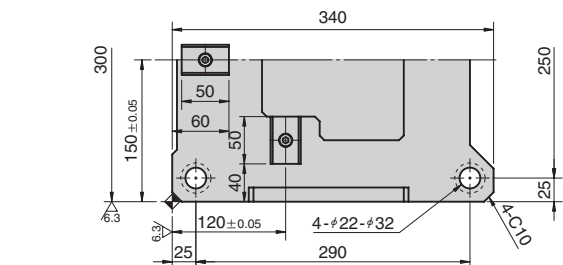
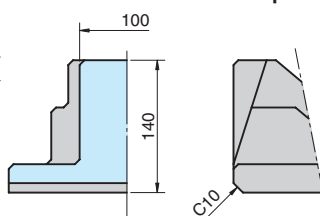
⚠ Bolts for assembly are not indicated.

SUWB300 - 40

■Cam Diagram



■Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	12946 (1321.0)						No code (coil spring)
77.1	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	17677 (1803.8)	59.6	133.3	SUWB	300	40	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	40	GK
SUWB	300	40	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

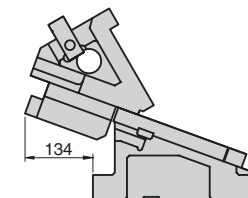
.....Without gas spring



Option

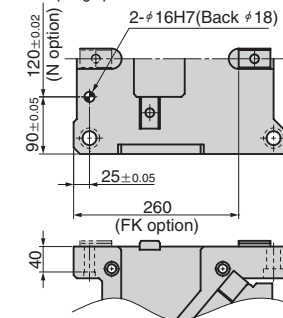
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

■Space for removing



■Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB300 - 40 - GK - N
SUWB300 - 40 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

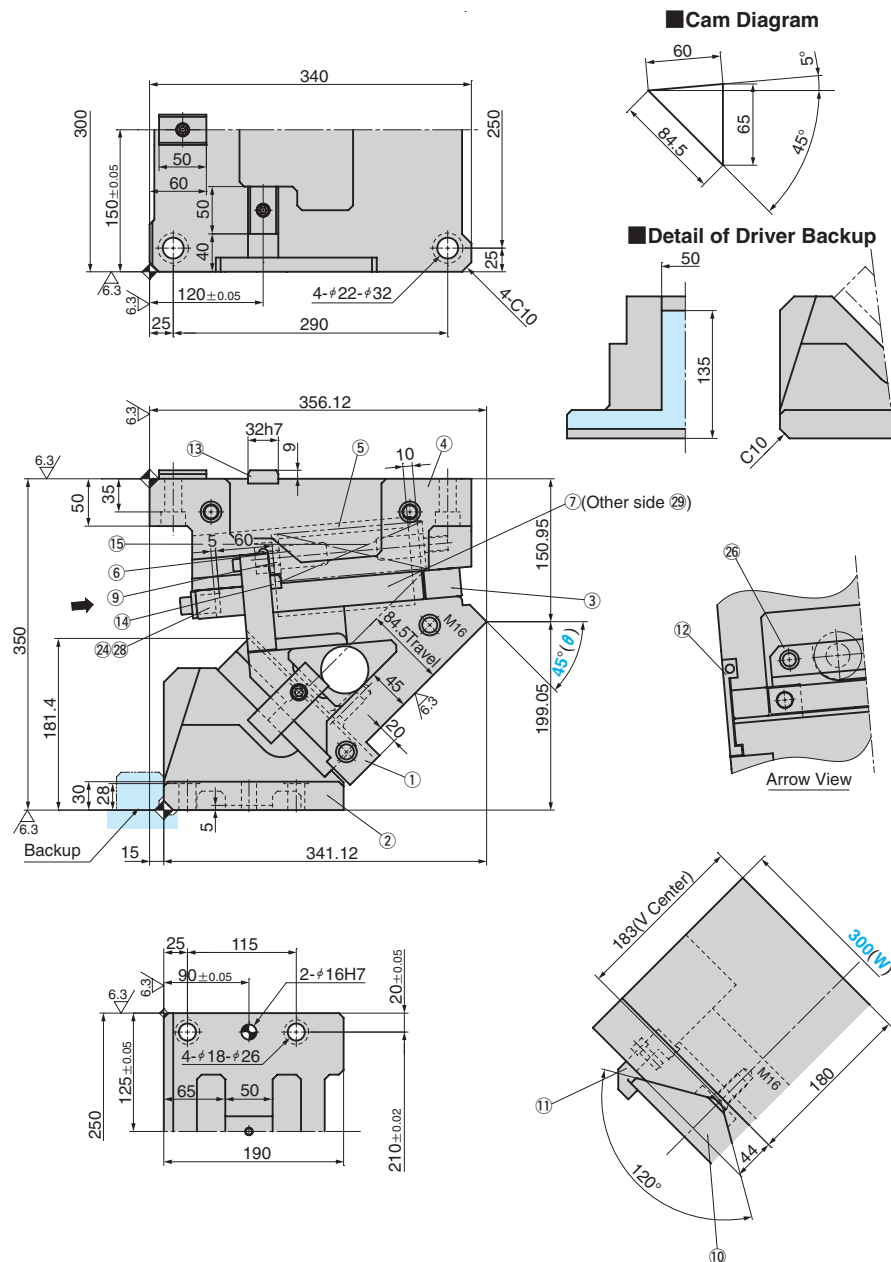
■Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 - 45



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
84.5	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	12878 (1314.1)	59.6	134.8	SUWB	300	45	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	17609 (1796.9)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	45	GK
SUWB	300	45	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

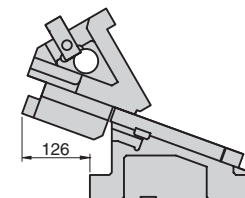


Order

SUWB300 - 45 - GK - N
SUWB300 - 45 - GK - NF

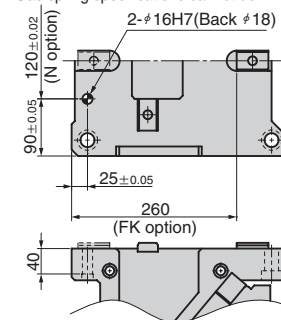
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

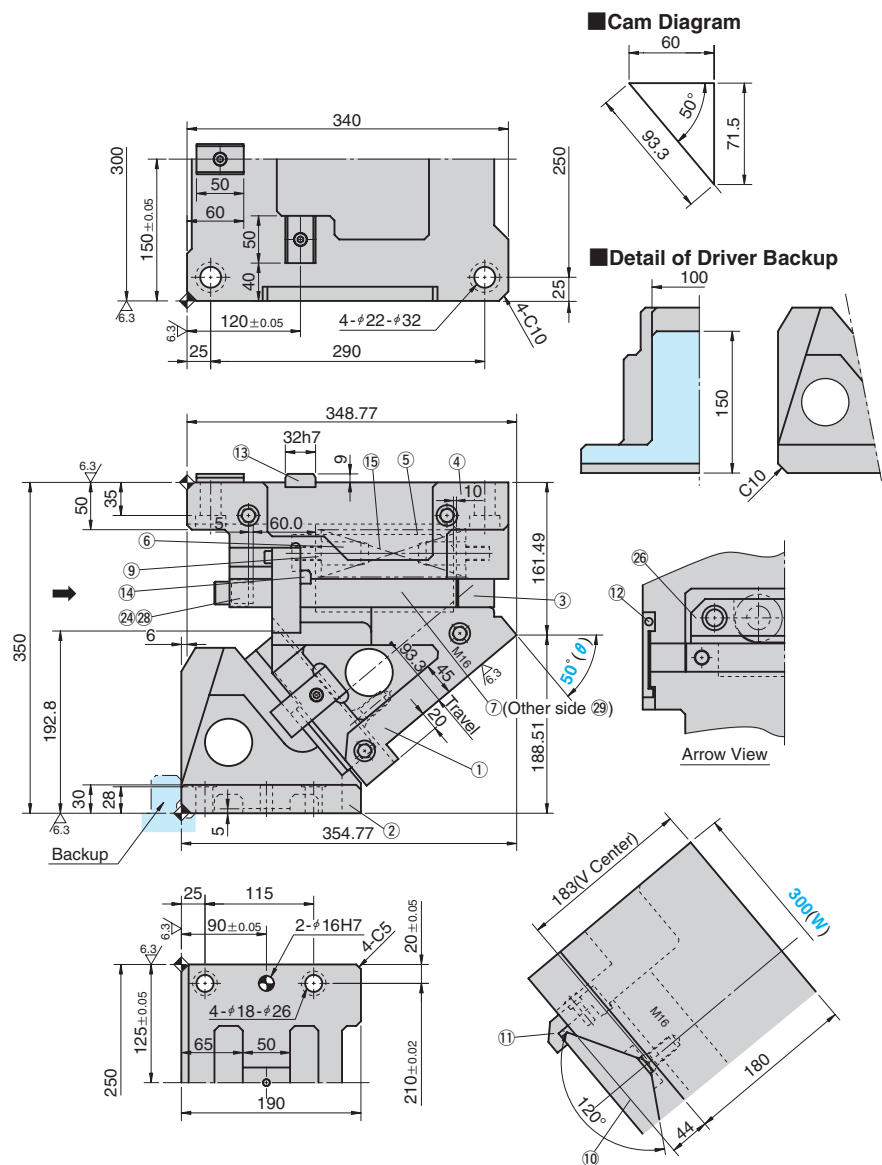
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB300 - 50



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
93.3	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	12811 (1307.2)	59.6	130.9	SUWB	300	50	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	17542 (1790.0)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	50	GK
SUWB	300	50	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

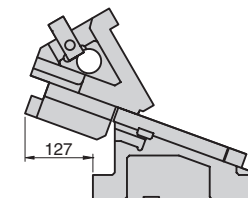
.....Without gas spring



Option

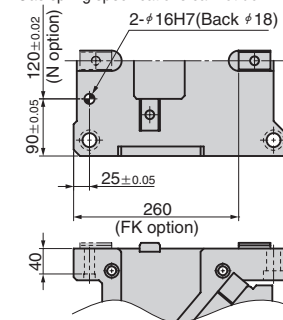
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Order

SUWB300 - 50 - GK - N
SUWB300 - 50 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

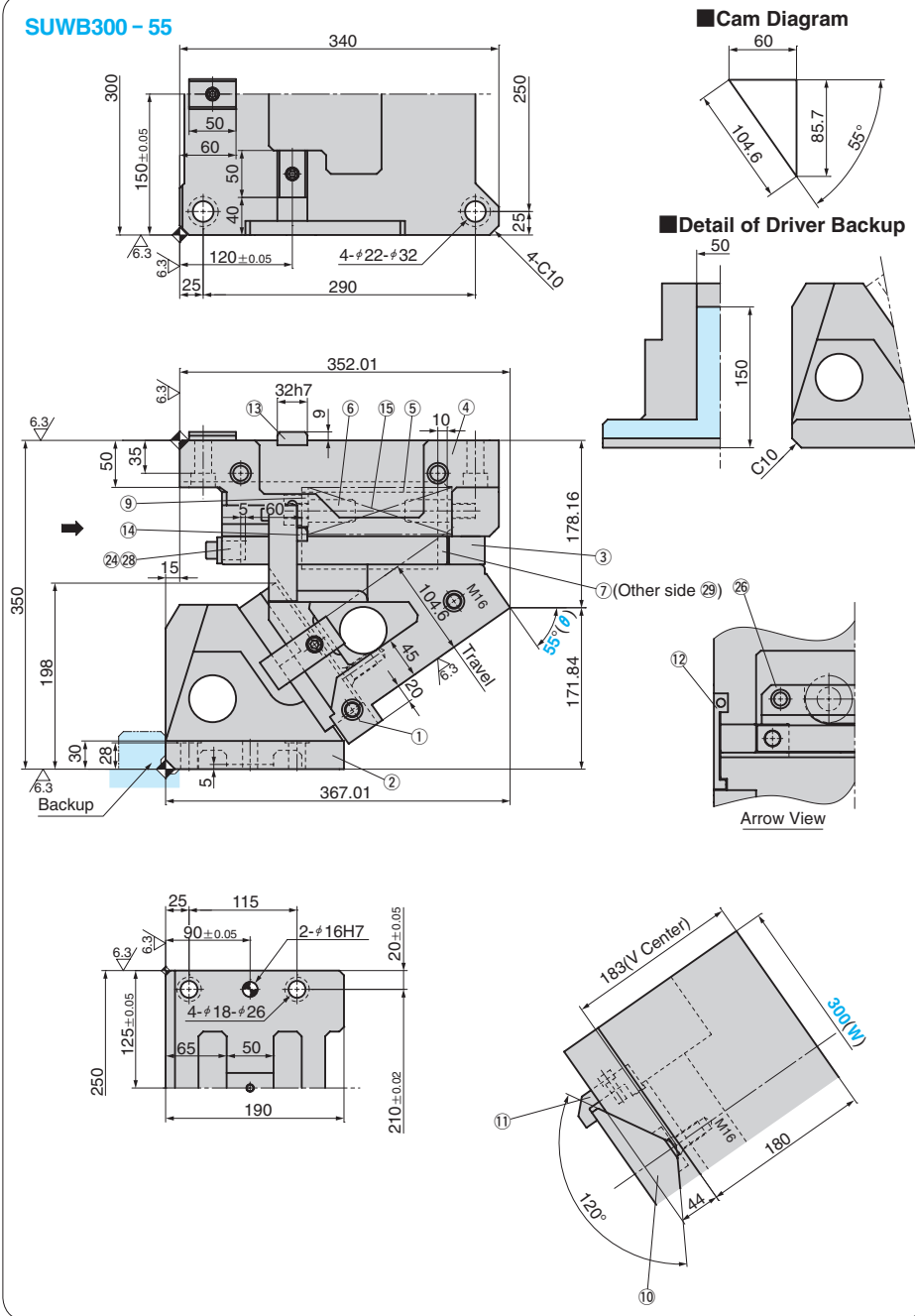
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite

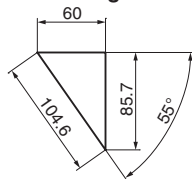


Bolts for assembly are not indicated.

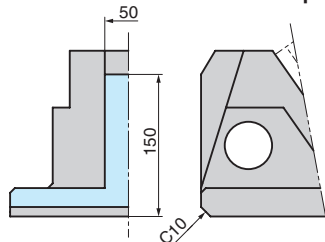
SUWB300 - 55



Cam Diagram



Detail of Driver Backup



Arrow View

Travel S	Working Force kN(tonf) Standard (one million strokes)	Working Force kN(tonf) Allowable (300,000 strokes)	Spring Force N(kgf) Initial Load	Spring Force N(kgf) Final Load	Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
			1634.4 (166.6)	9806.4 (999.4)	13934 (1421.9)						No code (coil spring)
104.6	196.0 (20.0)	392.0 (40.0)	—	13378.8 (1365.2)	19081 (1947.1)	61.0	133.0	SUWB	300	55	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	55	GK
SUWB	300	55	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

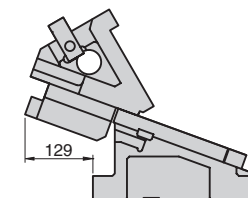
.....Without gas spring



Option

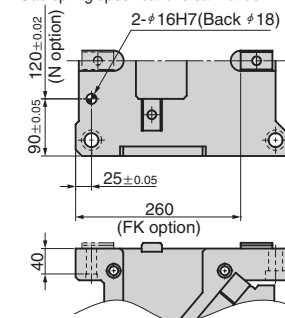
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB300 - 55 - GK - N
SUWB300 - 55 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

Table of Components

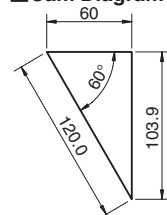
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑰	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	⑱	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑲	Base Plate D-R	1	Bronze with Graphite



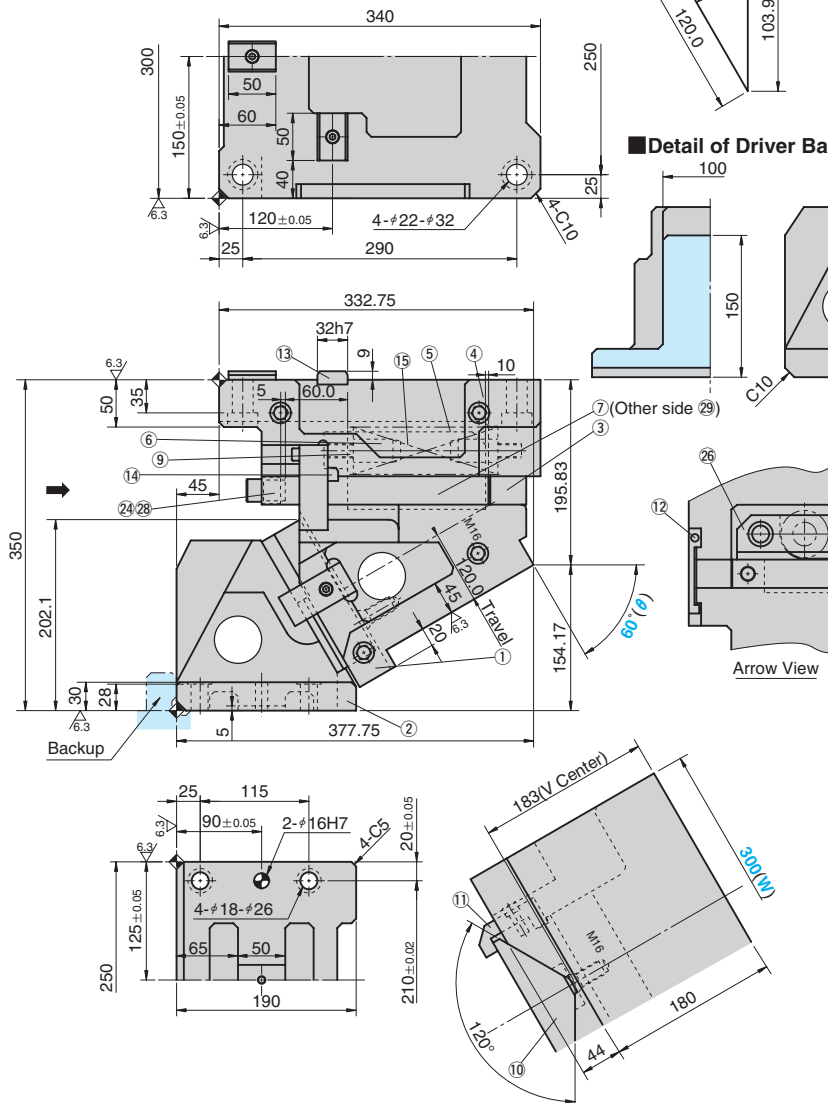
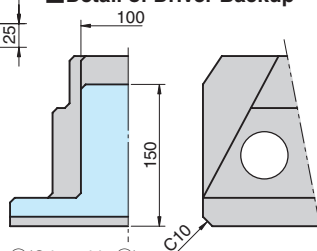
Bolts for assembly are not indicated.

SUWB300 - 60

■Cam Diagram



■Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
120.0	196.0 (20.0)	392.0 (40.0)	1634.4 (166.6)	9806.4 (999.4)	15401 (1571.5)	63.2	136.1	SUWB	300	60	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	21092 (2152.3)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	300	60	GK
SUWB	300	60	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

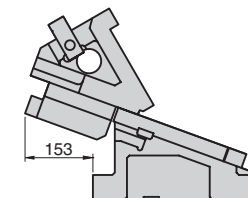
.....Without gas spring



Option

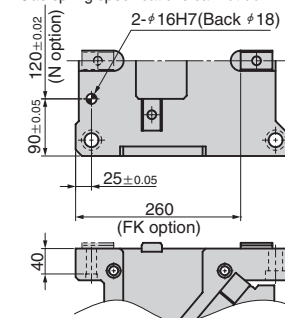
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

■Space for removing



■Option part of N and FK.

※Gas spring specifications cannot do FK setting.



Order

SUWB300 - 60 - GK - N
SUWB300 - 60 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

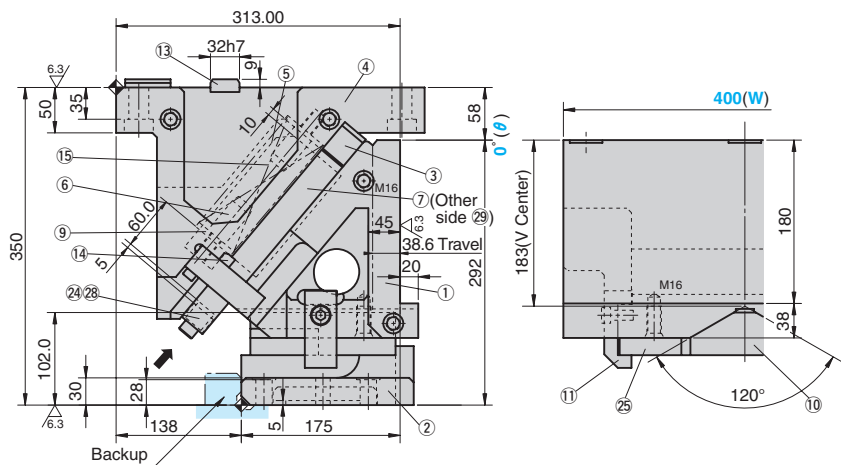
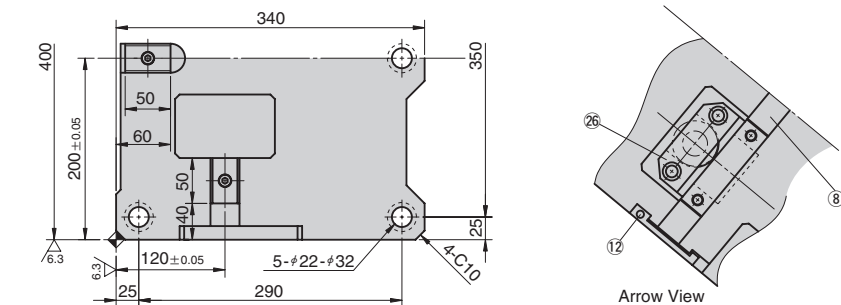
■Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	1	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	2	SS400
⑤	Spring Guide Block	1	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑲	Stopper	3	Urethane
⑦	Base Plate D-L	1	Bronze with Graphite	⑳	Spring Guide Plate	1	SS400
⑧	Washer	2	S45C	㉑	Stopper Plate	1	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉒	Base Plate D-R	1	Bronze with Graphite

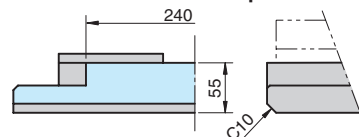


Bolts for assembly are not indicated.

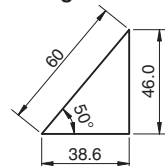
SUWB400-00



Detail of Driver Backup



Cam Diagram



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
38.6	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	13599 (1387.7)	77.7	191.1	SUWB	400	00	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	18330 (1870.5)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	00	—	GK
SUWB	400	—	00	—	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB400-00-GK-N
SUWB400-00-GK-NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

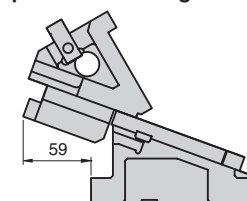
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	12	Safety Plate	2	SS400
13	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
14	Cam Holder	1	FC250	14	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	15	Spring	2	Refer to the Spring Specification table.
16	Spring Guide Pin	4	S45C	16	Stopper	4	Urethane
17	Base Plate C-L	1	Bronze with Graphite	17	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate E	1	Bronze with Graphite	18	Spring Guide Plate	2	SS400
19	Washer	2	S45C	19	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	20	Base Plate C-R	1	Bronze with Graphite



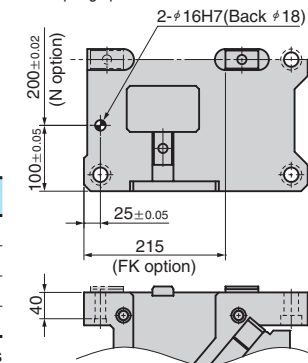
Bolts for assembly are not indicated.

Space for removing

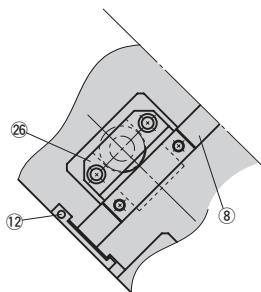
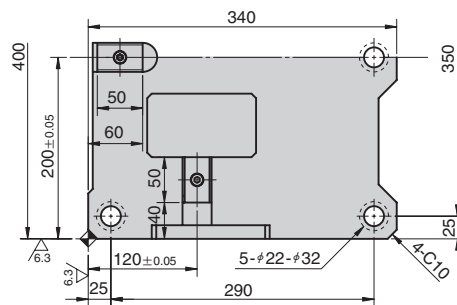


Option part of N and FK.

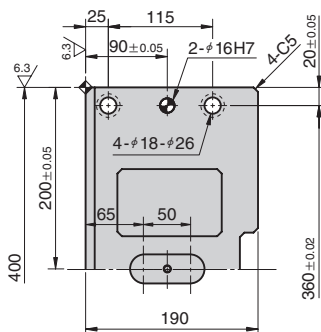
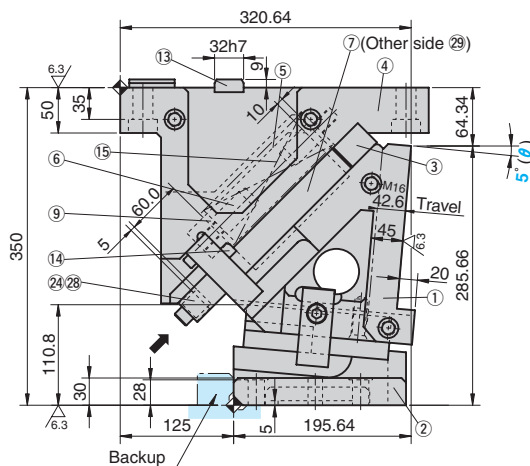
*Gas spring specifications cannot do FK setting.



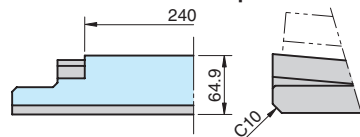
SUWB400 - 05



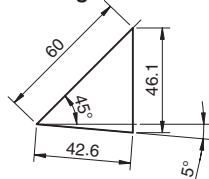
Arrow View



Detail of Driver Backup



Cam Diagram



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13531 (1380.7)						No code (coil spring)
42.6	245.0 (25.0)	490.0 (50.0)	—	13378.8 (1365.2)	18262 (1863.5)	77.8	189.3	SUWB	400	05	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	(θ)	PS
SUWB	400	05	GK
SUWB	400	05	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB400 - 05 - GK - N
SUWB400 - 05 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

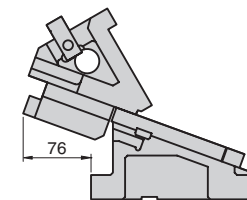
*Guideline of coil spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	12	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	13	Safety Plate	2	SS400
13	Base Plate A	2	Bronze with Graphite	14	Key A	3	SS400
14	Cam Holder	1	FC250	15	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	16	Spring	2	Refer to the Spring Specification table.
16	Spring Guide Pin	4	S45C	17	Stopper	4	Urethane
17	Base Plate C-L	1	Bronze with Graphite	18	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate E	1	Bronze with Graphite	19	Spring Guide Plate	2	SS400
19	Washer	2	S45C	20	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	21	Base Plate C-R	1	Bronze with Graphite

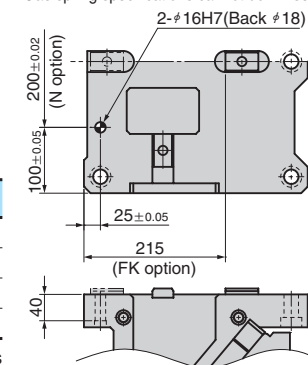
Bolts for assembly are not indicated.

Space for removing

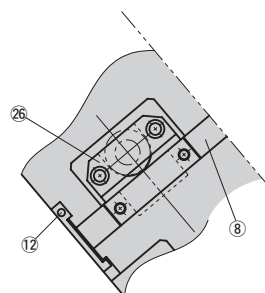
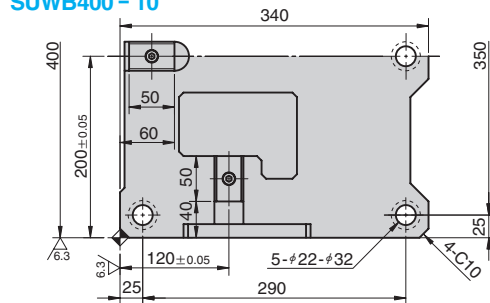


Option part of N and FK.

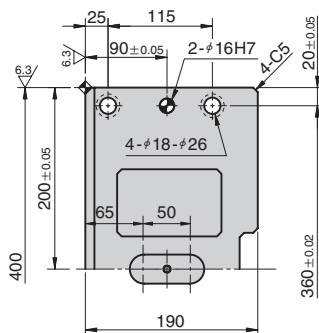
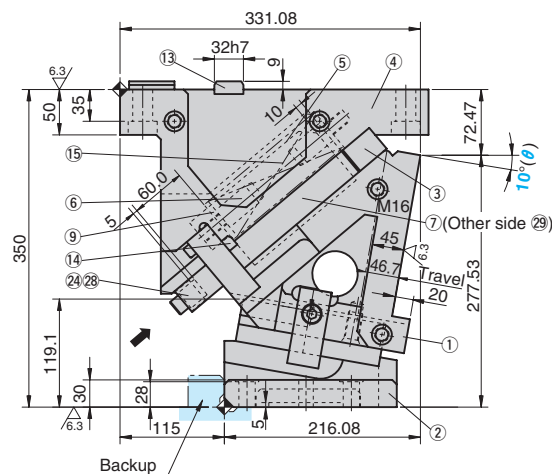
*Gas spring specifications cannot do FK setting.



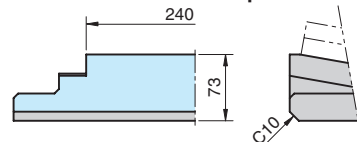
SUWB400 - 10



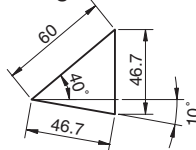
Arrow View



Detail of Driver Backup



Cam Diagram



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13457 (1373.2)						No code (coil spring)
46.7	245.0 (25.0)	490.0 (50.0)	—	13378.8 (1365.2)	18189 (1856.0)	77.8	188.0	SUWB	400	10	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	10	—	GK
SUWB	400	—	10	—	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB400 - 10 - GK - N
SUWB400 - 10 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring (constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

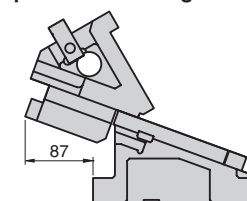
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	12	Safety Plate	2	SS400
13	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
14	Cam Holder	1	FC250	14	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	15	Spring	2	Refer to the Spring Specification table.
16	Spring Guide Pin	4	S45C	24	Stopper	4	Urethane
17	Base Plate C-L	1	Bronze with Graphite	25	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate E	1	Bronze with Graphite	26	Spring Guide Plate	2	SS400
19	Washer	2	S45C	28	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



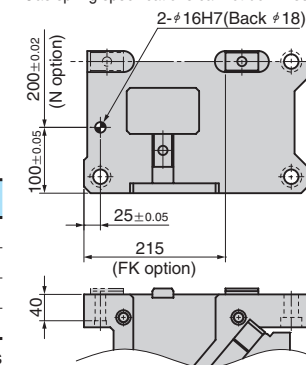
Bolts for assembly are not indicated.

Space for removing



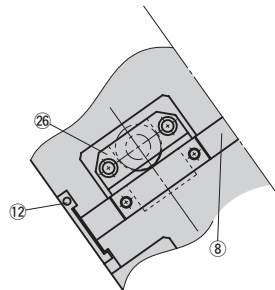
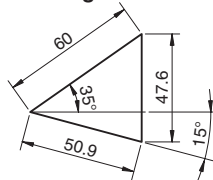
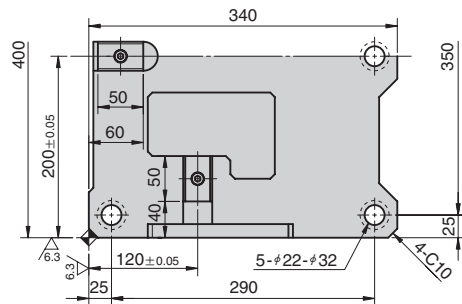
Option part of N and FK.

*Gas spring specifications cannot do FK setting.

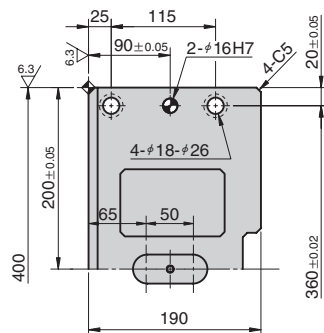
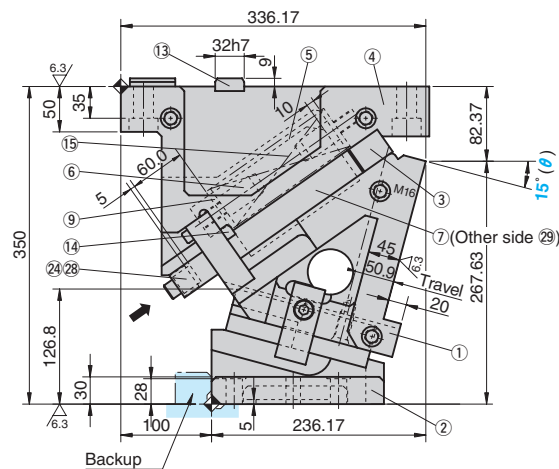


SUWB400 - 15

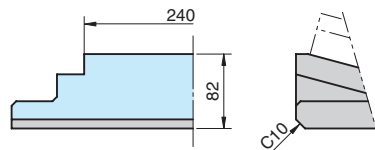
Cam Diagram



Arrow View



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
50.9	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	13380 (1365.3)	77.8	186.1	SUWB	400	15	No code (coil spring)
				13378.8 (1365.2)							GK *NGK
				13310.0 (1358.2)	18111 (1848.1)						GD *NGD
				13418.4 (1369.2)							GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	400	15	GK
SUWB	400	15	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB400 - 15 - GK - N
SUWB400 - 15 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	-	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

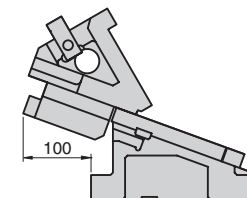
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	3	SS400
5	Spring Guide Block	2	FCD500 with Graphite	15	Spring	2	Refer to the Spring Specification table.
6	Spring Guide Pin	4	S45C	24	Stopper	4	Urethane
7	Base Plate C-L	1	Bronze with Graphite	25	Plate	R/L1	SS400 Copper powder sintered
8	Base Plate E	1	Bronze with Graphite	26	Spring Guide Plate	2	SS400
9	Washer	2	S45C	28	Stopper Plate	2	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite



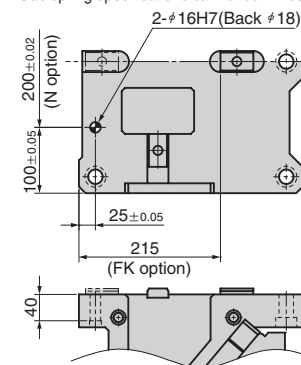
Bolts for assembly are not indicated.

Space for removing

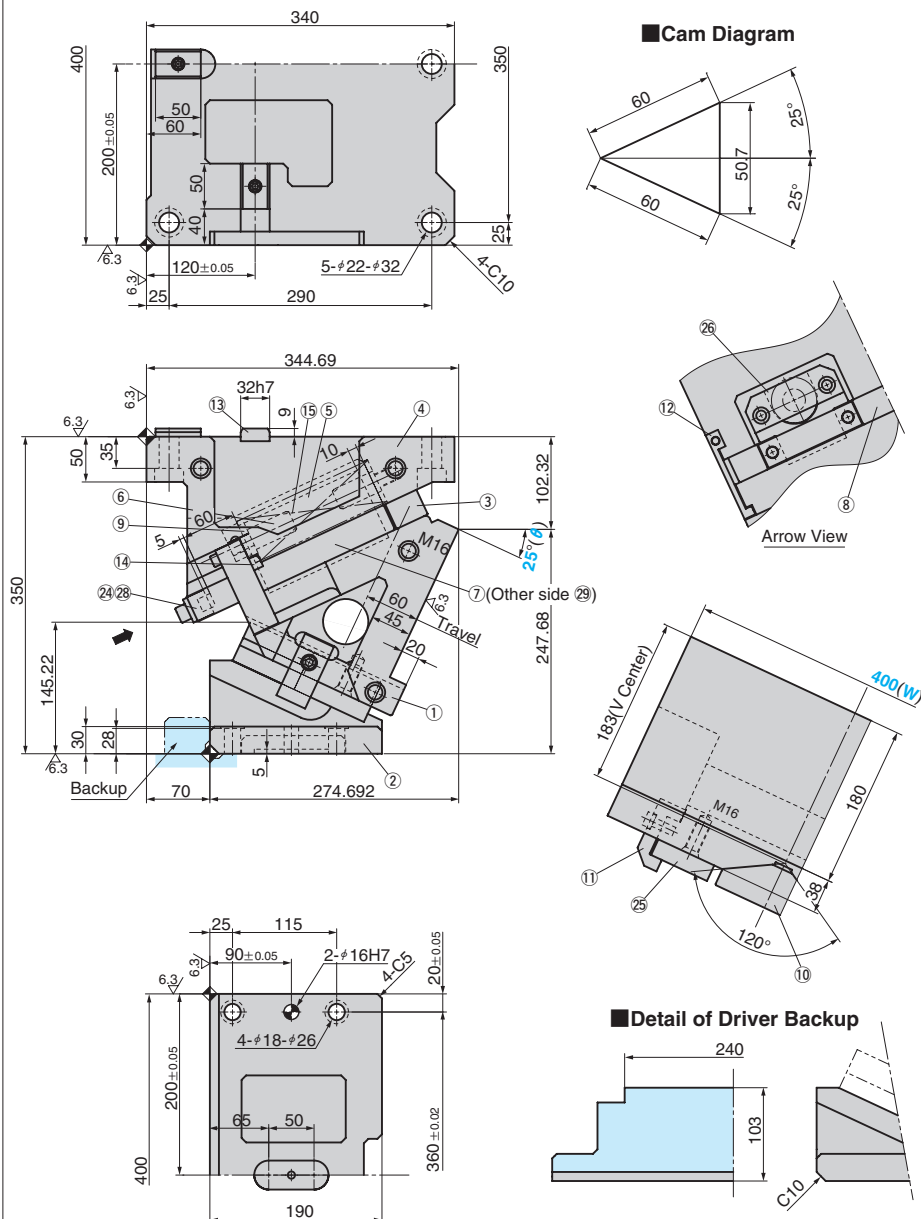


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB400 – 25



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
60.0	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	13215 (1348.4)	77.8	188.1	SUWB	400	25	No code (coil spring)
				13378.8 (1365.2)							GK * NGK
			—	13310.0 (1358.2)	17946 (1831.2)						GD * NGD
				13418.4 (1369.2)							GS * NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	25	—	GK
SUWB	400	—	25	—	NGK

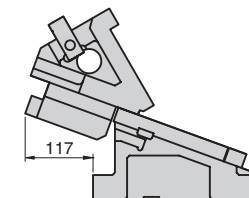
*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type.
The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



■ Space for removing

■ Option part of N and FK.


※Gas spring specifications cannot do FK setting.



Order

SUWB400-25-GK-N
SUWB400-25-GK-NF

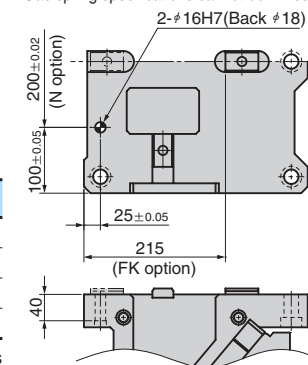


 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■ Spring Specification

No.	Spring type	Model	Remark
(15)	–	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil 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 A	2	Bronze with Graphite
④	Cam Holder	1	FC250
⑤	Spring Guide Block	2	FCD500 with Graphite
⑥	Spring Guide Pin	4	S45C
⑦	Base Plate C-L	1	Bronze with Graphite
⑧	Base Plate E	1	Bronze with Graphite
⑨	Washer	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered

No.	Description	Qty	Material and Remark
⑪	Positive Return Follower	2	S45C
⑫	Safety Plate	2	SS400
⑬	Key A	3	SS400
⑭	Key B	3	SS400
⑮	Spring	2	Refer to the Spring Specification table.
⑯	Stopper	4	Urethane
⑰	Plate	R/L1	SS400 Copper powder sintered
⑱	Spring Guide Plate	2	SS400
⑲	Stopper Plate	2	S45C
⑳	Base Plate C-R	1	Bronze with Graphite

 Bolts for assembly are not indicated.

SUWB
400

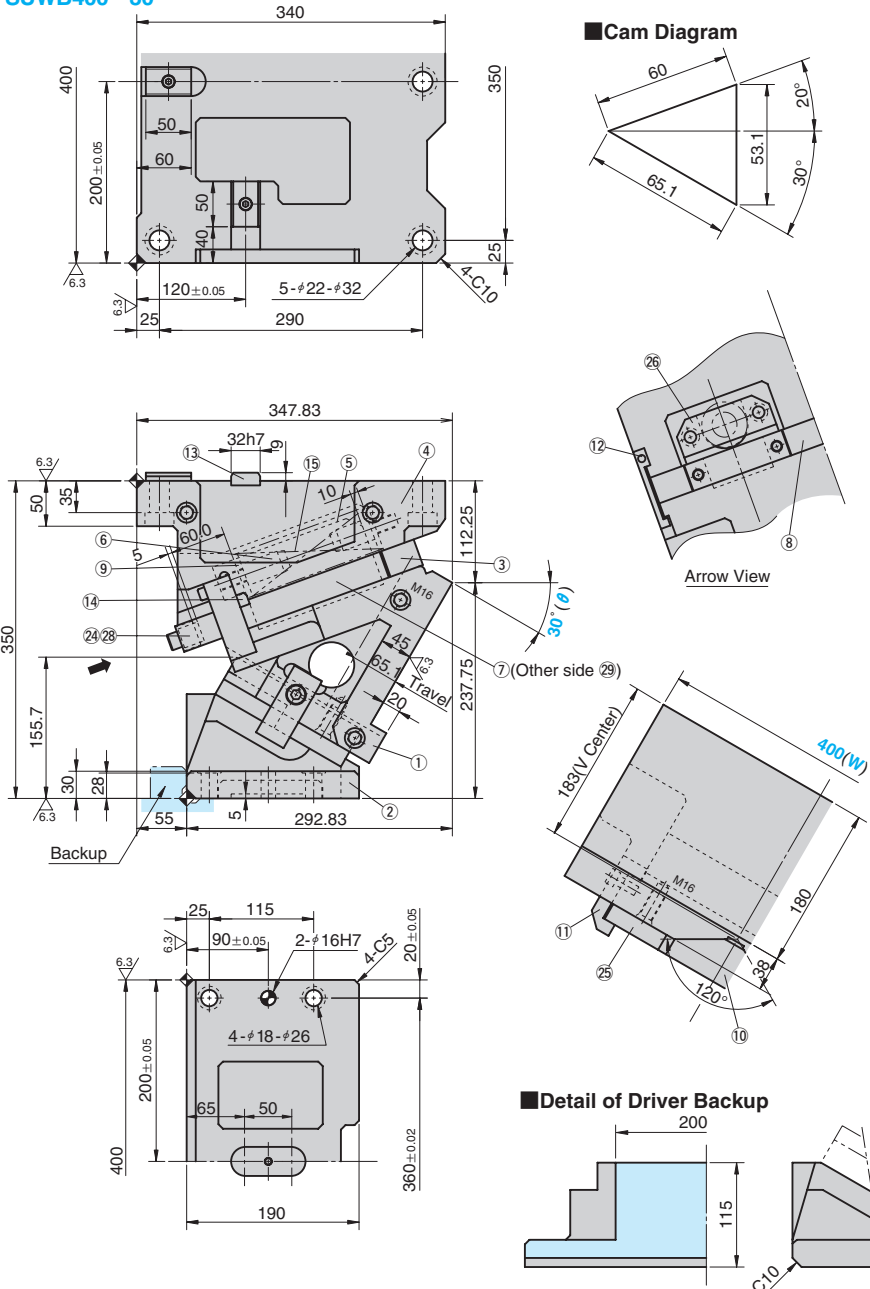
Aerial Cam Unit

WIDE TYPE FOR PIERCE AND FLANGE

Addition

CAD
FILE

SUWB400-30



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	13129 (1339.6)						No code (coil spring)
65.1	245.0 (25.0)	490.0 (50.0)		13378.8 (1365.2)		77.8	185.8	SUWB	400	30	GK *NGK
			—	13310.0 (1358.2)	17860 (1822.4)						GD *NGD
				13418.4 (1369.2)							GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	30	—	GK
SUWB	400	—	30	—	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

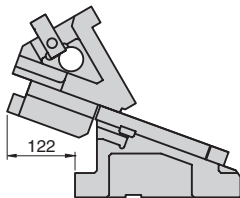
.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

■Space for removing



■Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Order

SUWB400-30-GK-N
SUWB400-30-GK-NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

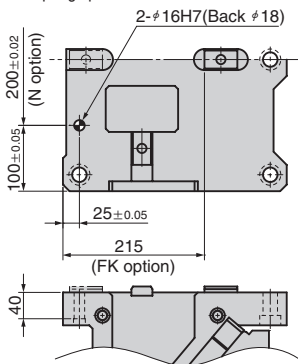


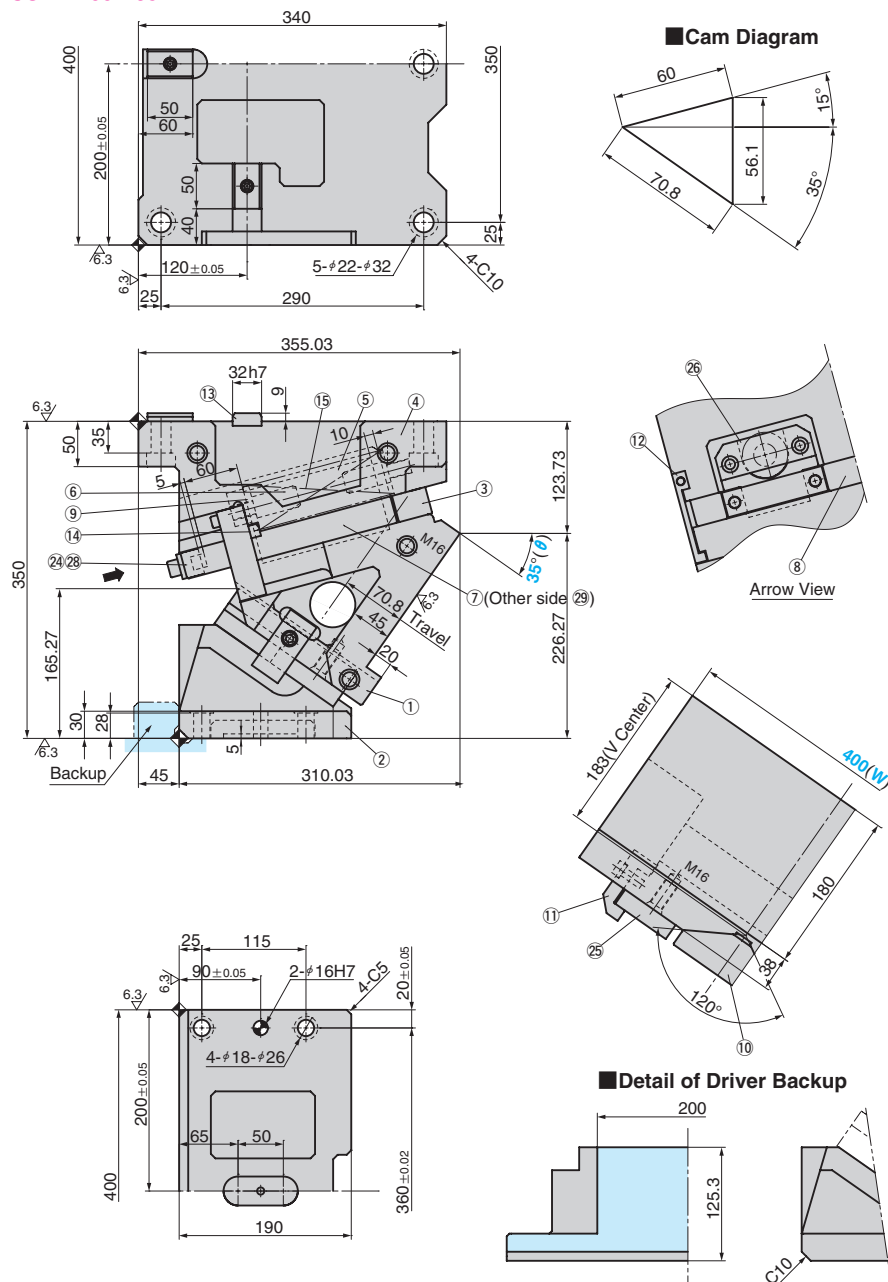
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	4	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate E	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	2	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB400 - 35



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard (one million strokes)	Allowable (300,000 strokes)	Initial Load	Final Load							
70.8	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	13041 (1330.7)	77.8	192.4	SUWB	400	35	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	17772 (1813.5)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	35	—	GK
SUWB	400	—	35	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

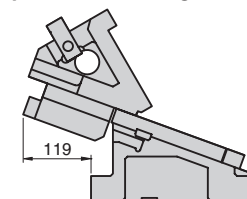
.....Without gas spring



Option

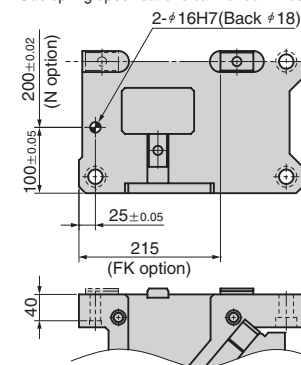
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Order

SUWB400 - 35 - GK - N
SUWB400 - 35 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

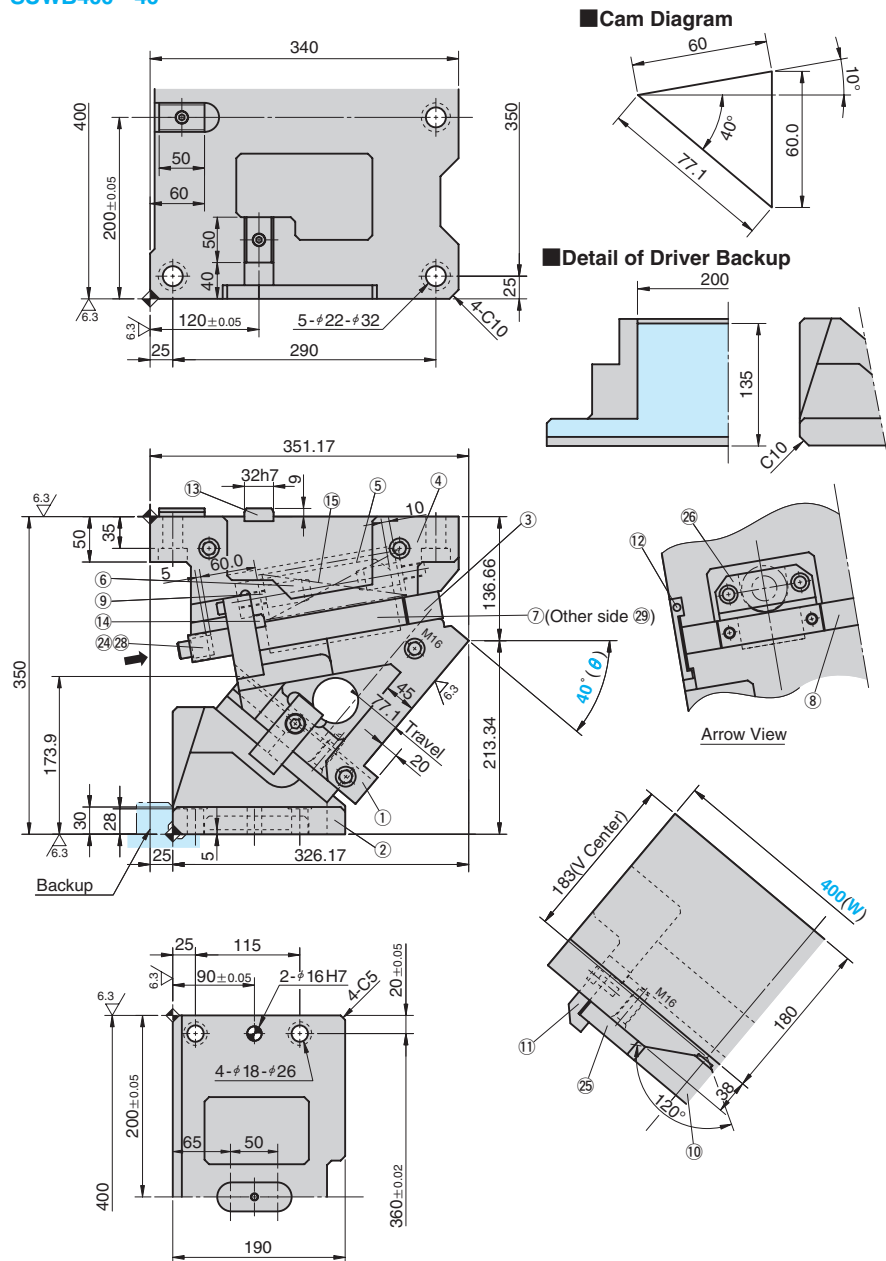
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	4	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate E	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	2	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB400 - 40



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			1634.4 (166.6)	9806.4 (999.4)	12952 (1321.7)						No code (coil spring)
77.1	245.0 (25.0)	490.0 (50.0)	—	13378.8 (1365.2)	17684 (1804.4)	77.8	191.9	SUWB	400	40	GK *NGK GD *NGD GS *NGS
				13310.0 (1358.2)							
				13418.4 (1369.2)							



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	40	—	GK
SUWB	400	—	40	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



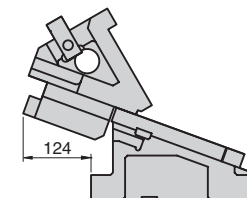
Order

SUWB400 - 40 - GK - N
SUWB400 - 40 - GK - NF



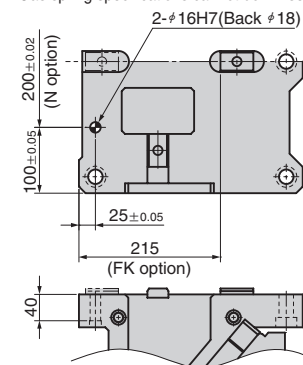
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring(constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

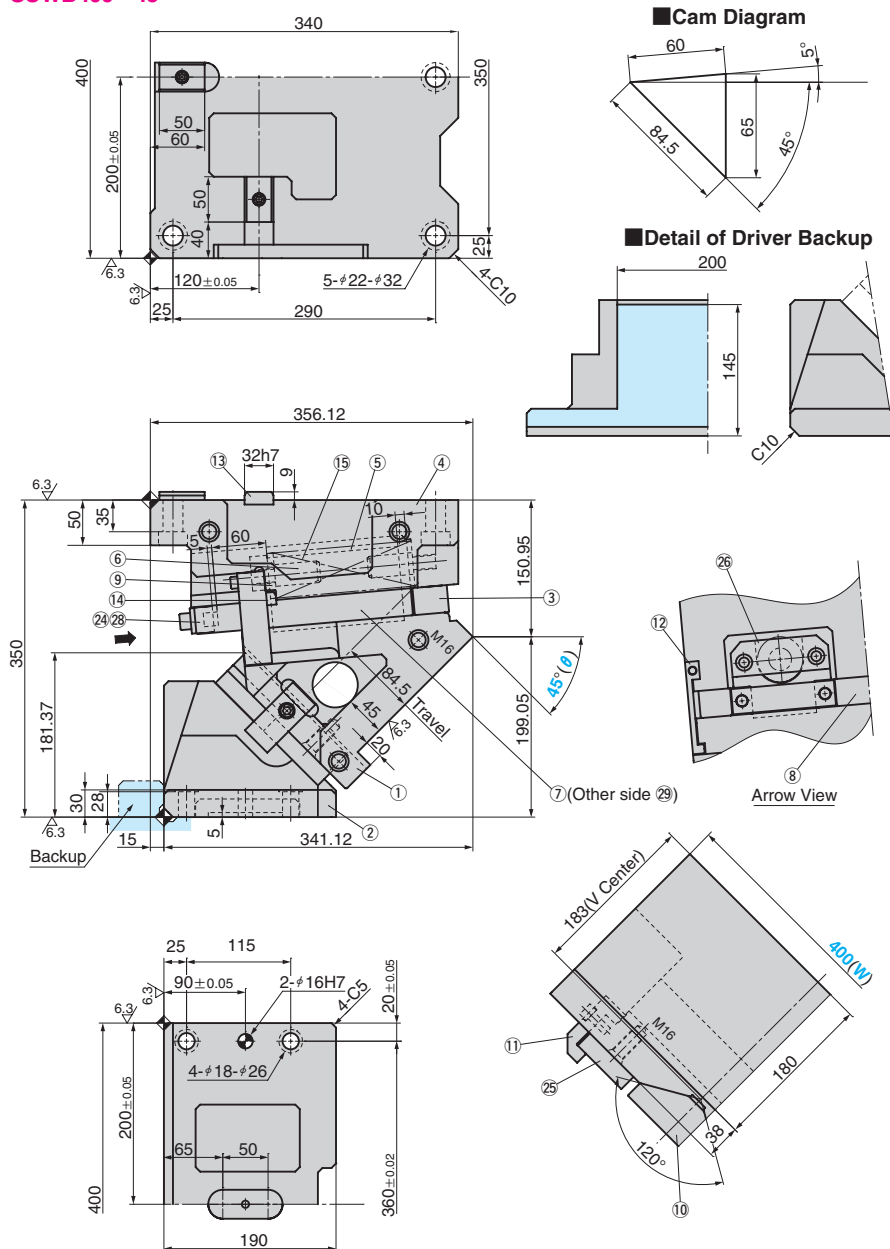
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	2	Refer to the Spring Specification table.
⑥	Spring Guide Pin	4	S45C	⑯	Stopper	4	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate E	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	2	S45C	⑳	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉑	Base Plate C-R	1	Bronze with Graphite



Bolts for assembly are not indicated.

SUWB400 – 45



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
84.5	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	12864 (1312.6)	77.8	195.9	SUWB	400	45	No code (coil spring)
				13378.8 (1365.2)							GK * NGK
			—	13310.0 (1358.2)	17595 (1795.4)						GD * NGD
				13418.4 (1369.2)							GS * NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	45	—	GK
SUWB	400	—	45	—	NGK

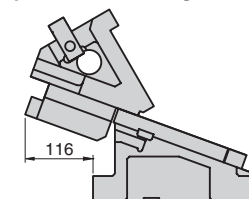
*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type.
The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



■ Space for removing

■ Option part of N and FK.


※Gas spring specifications cannot do FK setting.



Order

SUWB400-45-GK-N
SUWB400-45-GK-NF

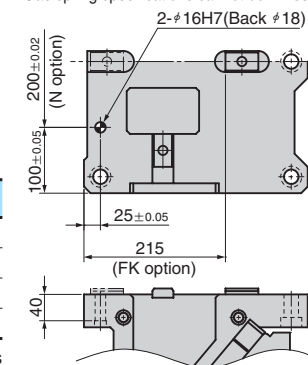


 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■ Spring Specification

No.	Spring type	Model	Remark
⑮	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil 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 A	2	Bronze with Graphite
④	Cam Holder	1	FC250
⑤	Spring Guide Block	2	FCD500 with Graphite
⑥	Spring Guide Pin	4	S45C
⑦	Base Plate C-L	1	Bronze with Graphite
⑧	Base Plate E	1	Bronze with Graphite
⑨	Washer	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered

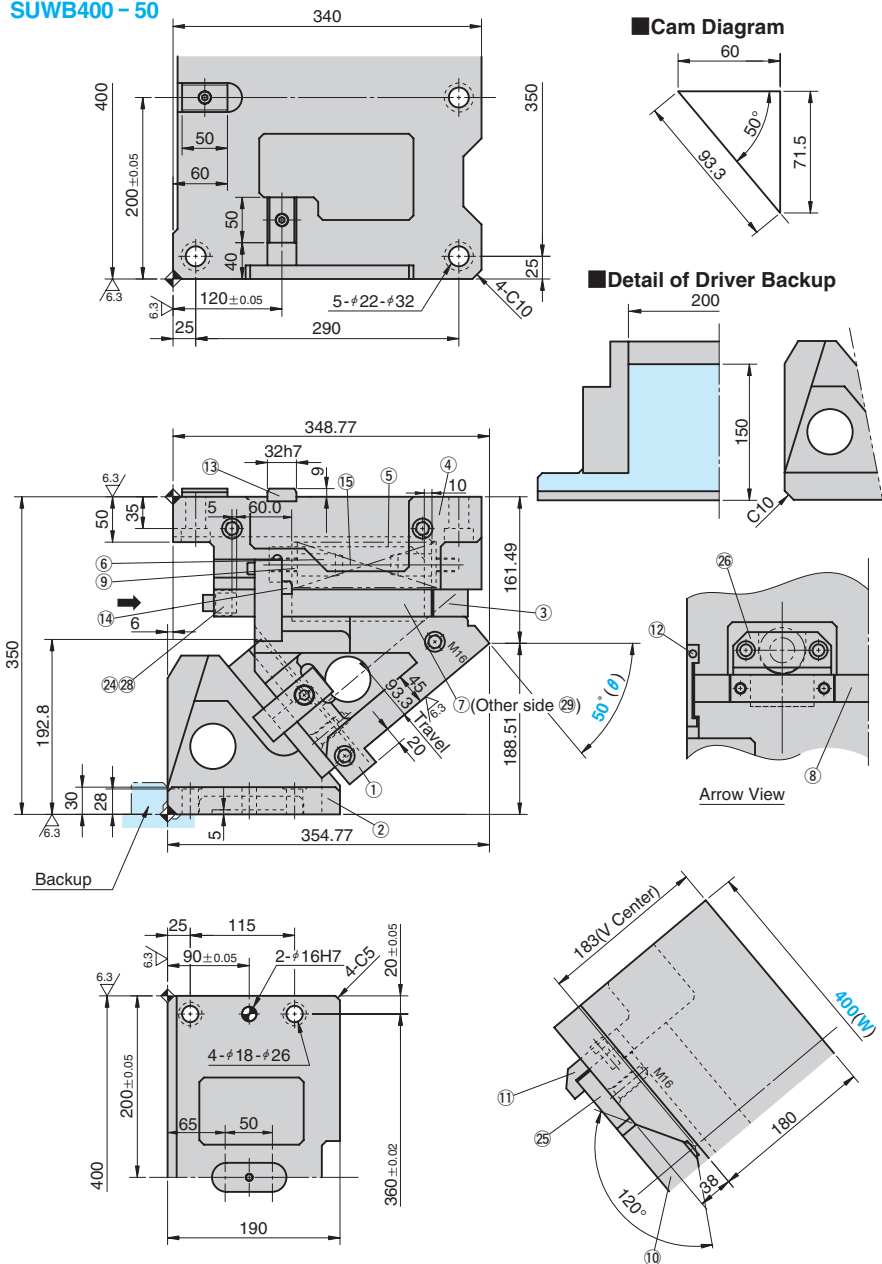
No.	Description	Qty	Material and Remark
⑪	Positive Return Follower	2	S45C
⑫	Safety Plate	2	SS400
⑬	Key A	2	SS400
⑭	Key B	3	SS400
⑮	Spring	2	Refer to the Spring Specification table.
⑯	Stopper	4	Urethane
⑰	Plate	R/L1	SS400 Copper powder sintered
⑱	Spring Guide Plate	2	SS400
⑲	Stopper Plate	2	S45C
⑳	Base Plate C-R	1	Bronze with Graphite



 Bolts for assembly are not indicated.

SUWB
400

SUWB400 - 50



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
93.3	245.0 (25.0)	490.0 (50.0)	1634.4 (166.6)	9806.4 (999.4)	12775 (1303.6)	77.8	191.8	SUWB	400	50	No code (coil spring)
			—	13378.8 (1365.2)	—						GK *NGK
			—	13310.0 (1358.2)	17507 (1786.4)						GD *NGD
			—	13418.4 (1369.2)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	400	—	50	—	GK
SUWB	400	—	50	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



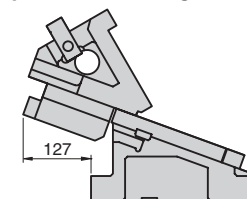
Order

SUWB400 - 50 - GK - N
SUWB400 - 50 - GK - NF



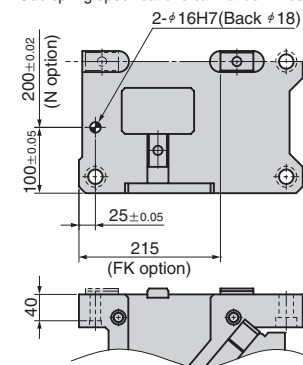
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

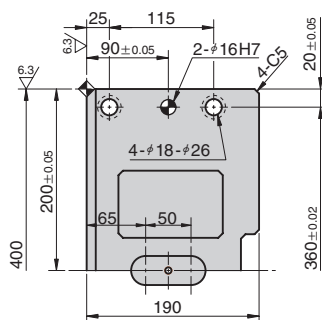
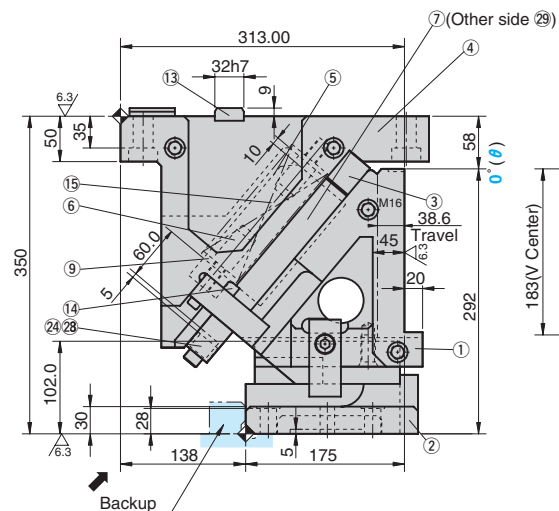
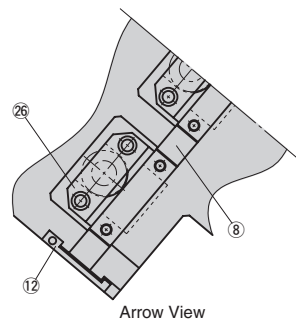
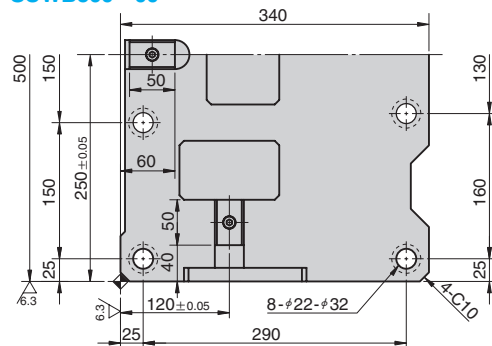
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	3	SS400
5	Spring Guide Block	2	FCD500 with Graphite	15	Spring	2	Refer to the Spring Specification table.
6	Spring Guide Pin	4	S45C	24	Stopper	4	Urethane
7	Base Plate C-L	1	Bronze with Graphite	25	Plate	R/L1	SS400 Copper powder sintered
8	Base Plate E	1	Bronze with Graphite	26	Spring Guide Plate	2	SS400
9	Washer	2	S45C	28	Stopper Plate	2	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite

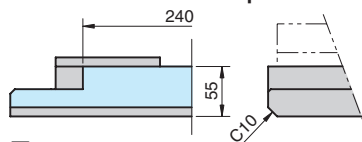


Bolts for assembly are not indicated.

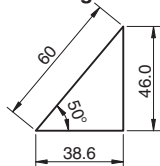
SUWB500 - 00



Detail of Driver Backup



Cam Diagram



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
			2451.6 (249.8)	14709.8 (1499.0)	20242 (2065.5)						No code (coil spring)
38.6	313.6 (32.0)	627.2 (64.0)	—	20068.2 (2047.8)	27340 (2789.8)	98.6	222.3	SUWB	500	00	GK *NGK GD *NGD GS *NGS
				19965.0 (2037.2)							
				20127.6 (2053.8)							



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	00	—	GK
SUWB	500	—	00	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB500 - 00 - GK - N
SUWB500 - 00 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
	—	TM50-225	Coil spring (constant = 68.1N/mm)
15	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

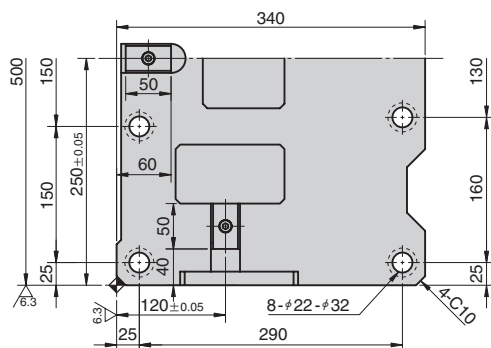
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
1	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
2	Cam Driver	1	FC250	12	Safety Plate	2	SS400
3	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
4	Cam Holder	1	FC250	14	Key B	4	SS400
5	Spring Guide Block	3	FCD500 with Graphite	15	Spring	3	Refer to the Spring Specification table.
6	Spring Guide Pin	6	S45C	24	Stopper	6	Urethane
7	Base Plate C-L	1	Bronze with Graphite	25	Plate	R/L1	SS400 Copper powder sintered
8	Base Plate F	2	Bronze with Graphite	26	Spring Guide Plate	3	SS400
9	Washer	3	S45C	28	Stopper Plate	3	S45C
10	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite

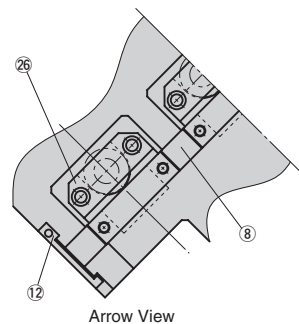
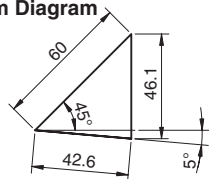


Bolts for assembly are not indicated.

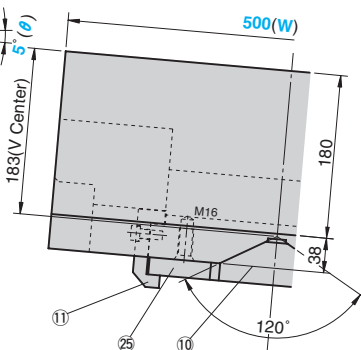
SUWB500 - 05



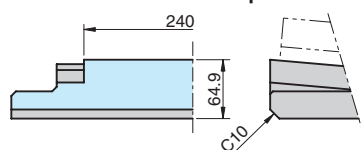
Cam Diagram



Arrow View



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
42.6	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	20155 (2056.6)	98.6	220.4	SUWB	500	05	No code (coil spring)
			—	20068.2 (2047.8)	—						GK *NGK
			—	19965.0 (2037.2)	27253 (2780.9)						GD *NGD
			—	20127.6 (2053.8)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	05	—	GK
SUWB	500	—	05	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



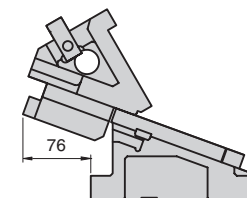
Order

SUWB500 - 05 - GK - N
SUWB500 - 05 - GK - NF



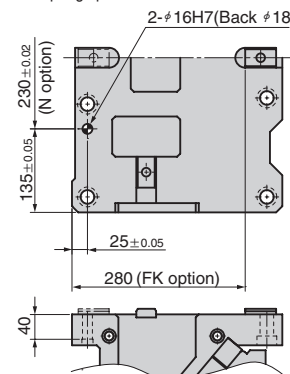
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

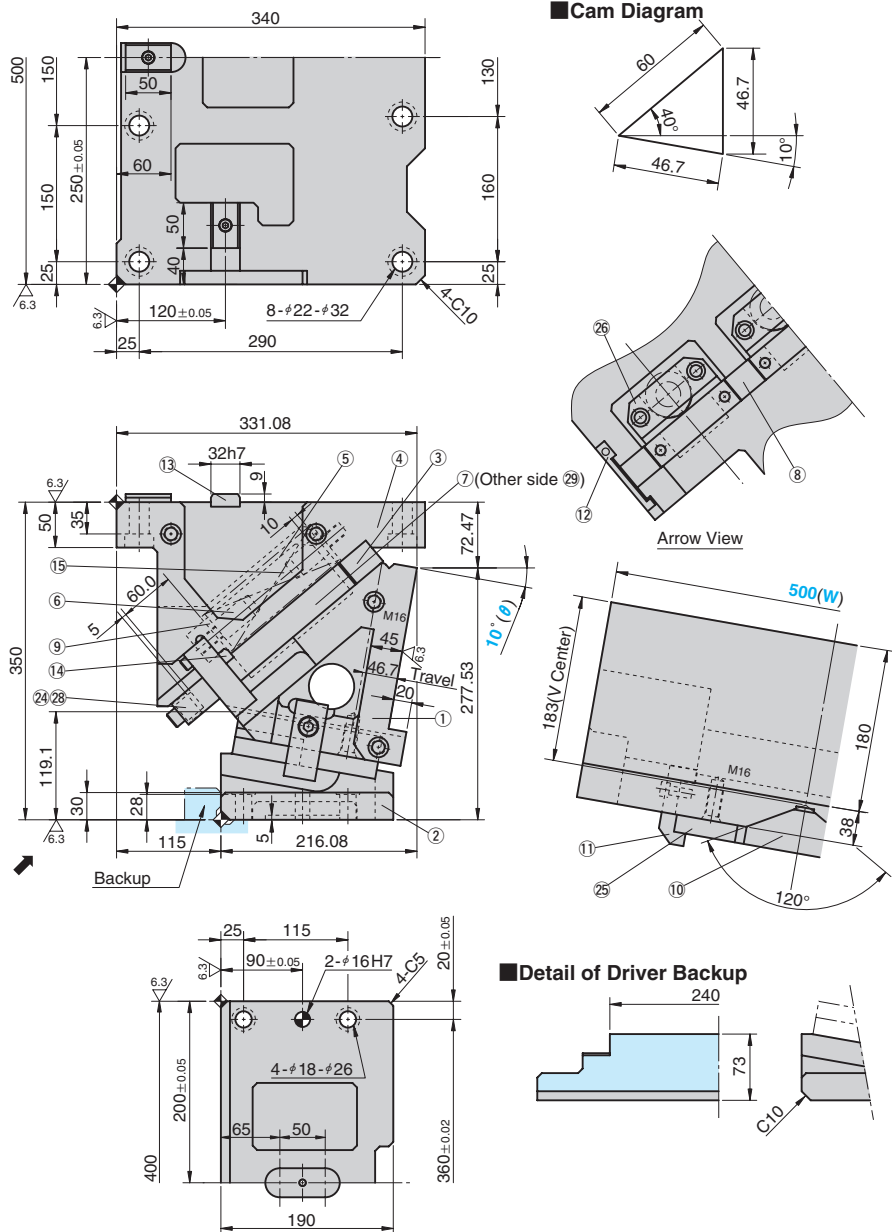
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	4	SS400
⑤	Spring Guide Block	3	FCD500 with Graphite	⑮	Spring	3	Refer to the Spring Specification table.
⑥	Spring Guide Pin	6	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate F	2	Bronze with Graphite	⑱	Spring Guide Plate	3	SS400
⑨	Washer	3	S45C	⑲	Stopper Plate	3	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite

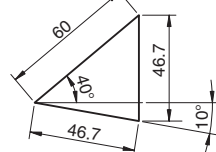


Bolts for assembly are not indicated.

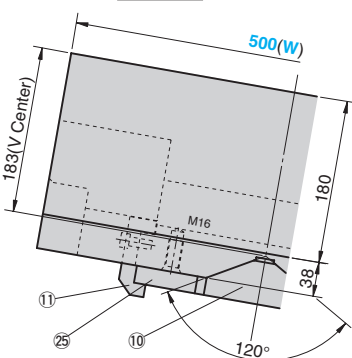
SUWB500 - 10



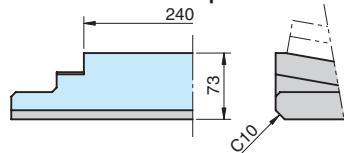
Cam Diagram



Arrow View



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
46.7	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	20061 (2047.1)	98.6	218.8	SUWB	500	10	No code (coil spring)
			—	20068.2 (2047.8)	—						GK *NGK
			—	19965.0 (2037.2)	27159 (2771.4)						GD *NGD
			—	20127.6 (2053.8)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	10	—	GK
SUWB	500	—	10	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB500 - 10 - GK - N
SUWB500 - 10 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

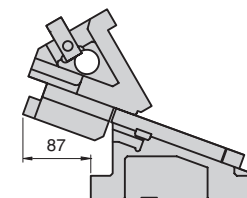
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	4	SS400
⑤	Spring Guide Block	3	FCD500 with Graphite	⑮	Spring	3	Refer to the Spring Specification table.
⑥	Spring Guide Pin	6	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate F	2	Bronze with Graphite	⑱	Spring Guide Plate	3	SS400
⑨	Washer	3	S45C	⑲	Stopper Plate	3	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite



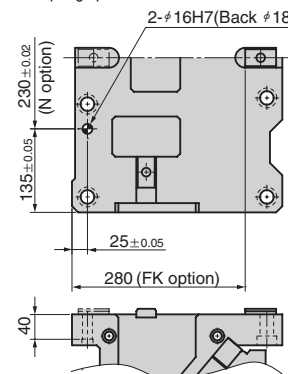
Bolts for assembly are not indicated.

Space for removing

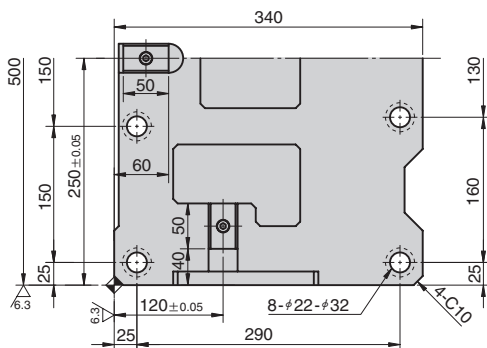


Option part of N and FK.

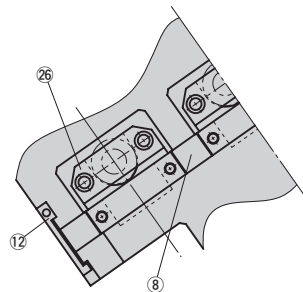
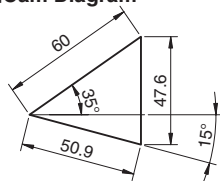
*Gas spring specifications cannot do FK setting.



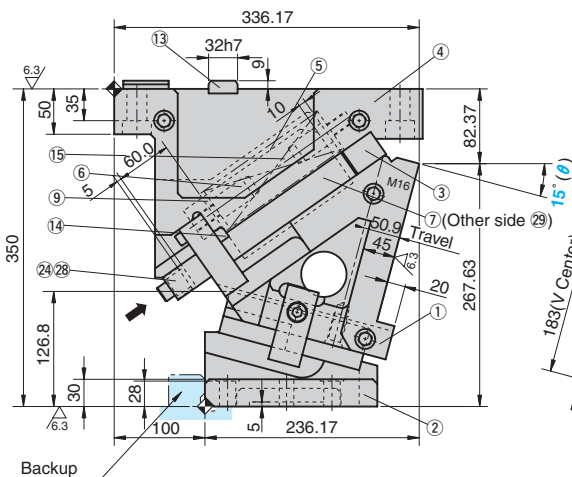
SUWB500 - 15



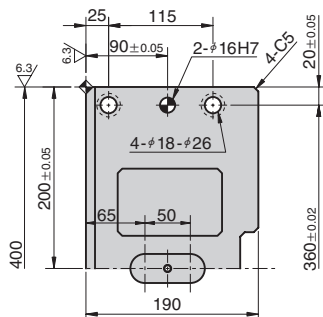
Cam Diagram



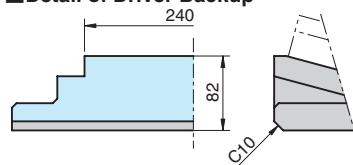
Arrow View



Backup



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
50.9	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	19963 (2037.0)	98.6	216.3	SUWB	500	15	No code (coil spring)
			—	20068.2 (2047.8)	—						GK *NGK
			—	19965.0 (2037.2)	27061 (2761.3)						GD *NGD
			—	20127.6 (2053.8)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	500	15	GK
SUWB	500	15	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB500 - 15 - GK - N
SUWB500 - 15 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

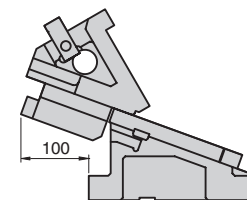
*Guideline of coil spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	12	Safety Plate	2	SS400
13	Base Plate A	2	Bronze with Graphite	13	Key A	3	SS400
14	Cam Holder	1	FC250	14	Key B	4	SS400
15	Spring Guide Block	3	FCD500 with Graphite	15	Spring	3	Refer to the Spring Specification table.
16	Spring Guide Pin	6	S45C	24	Stopper	6	Urethane
17	Base Plate C-L	1	Bronze with Graphite	25	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate F	2	Bronze with Graphite	26	Spring Guide Plate	3	SS400
19	Washer	3	S45C	28	Stopper Plate	3	S45C
20	Slide Guide	1	SS400 Copper powder sintered	29	Base Plate C-R	1	Bronze with Graphite

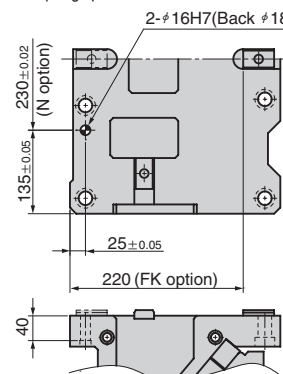
Bolts for assembly are not indicated.

Space for removing

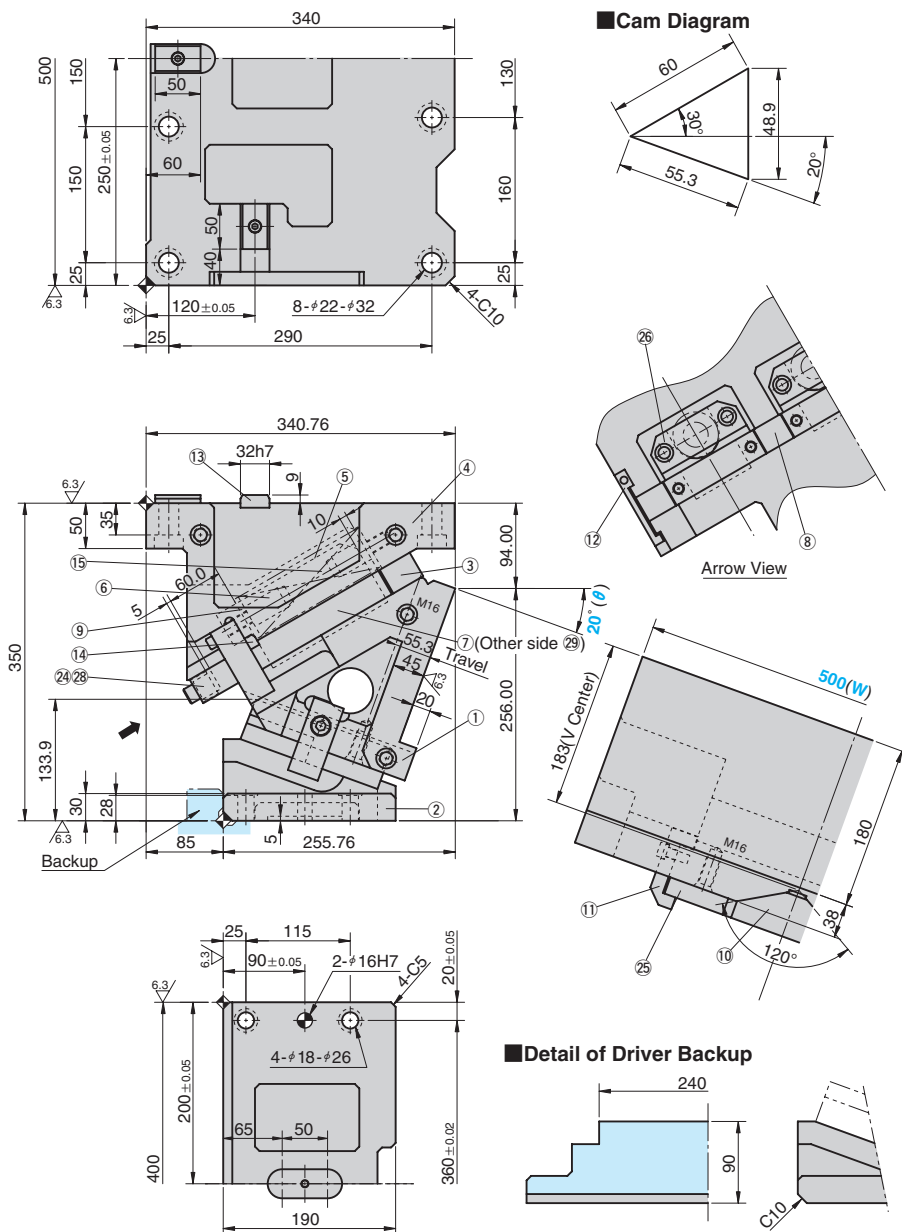


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB500 - 20



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
55.3	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	19860 (2026.5)	98.6	215.1	SUWB	500	20	No code (coil spring)
			—	20068.2 (2047.8)	—						GK *NGK
			—	19965.0 (2037.2)	26958 (2750.8)						GD *NGD
			—	20127.6 (2053.8)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	20	—	GK
SUWB	500	—	20	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB500 - 20 - GK - N
SUWB500 - 20 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

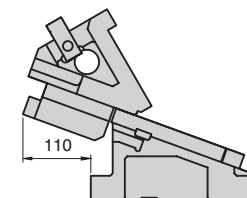
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	4	SS400
⑤	Spring Guide Block	3	FCD500 with Graphite	⑮	Spring	3	Refer to the Spring Specification table.
⑥	Spring Guide Pin	6	S45C	⑲	Stopper	6	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑳	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate F	2	Bronze with Graphite	㉑	Spring Guide Plate	3	SS400
⑨	Washer	3	S45C	㉒	Stopper Plate	3	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉓	Base Plate C-R	1	Bronze with Graphite



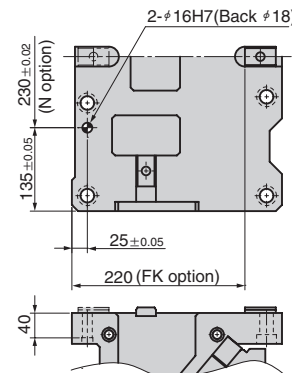
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Space for removing

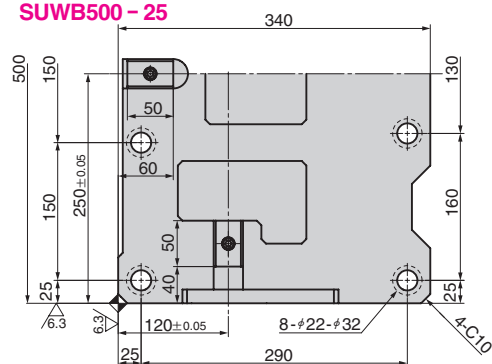


Option part of N and FK.

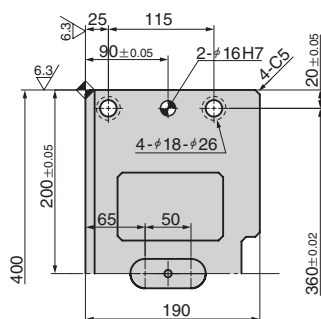
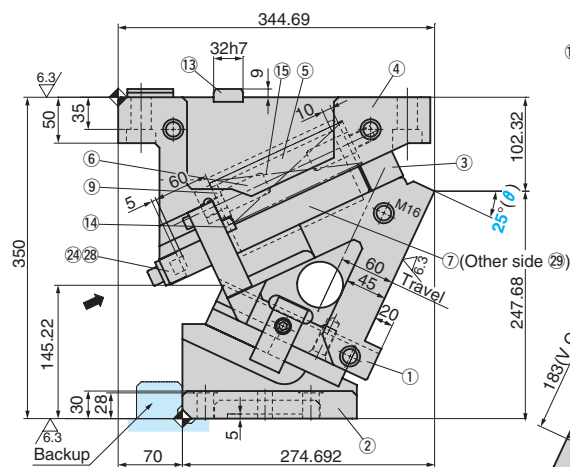
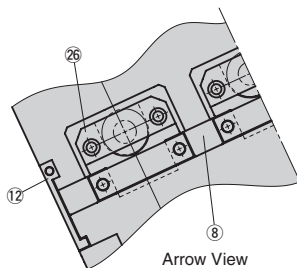
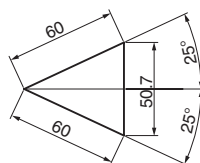
*Gas spring specifications cannot do FK setting.



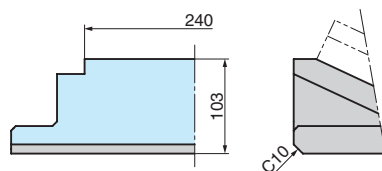
SUWB500 - 25



Cam Diagram



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
60.0	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	19754 (2015.7)	98.6	217.1	SUWB	500	25	No code (coil spring)
			—	20068.2 (2047.8)	—						GK *NGK
			—	19965.0 (2037.2)	26852 (2740.0)						GD *NGD
			—	20127.6 (2053.8)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	25	—	GK
SUWB	500	—	25	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB500 - 25 - GK - N
SUWB500 - 25 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

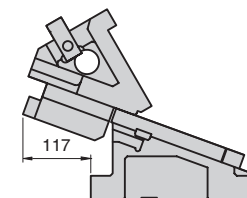
*Guideline of coil spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	4	SS400
⑤	Spring Guide Block	3	FCD500 with Graphite	⑮	Spring	3	Refer to the Spring Specification table.
⑥	Spring Guide Pin	6	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate F	2	Bronze with Graphite	⑱	Spring Guide Plate	3	SS400
⑨	Washer	3	S45C	⑲	Stopper Plate	3	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite

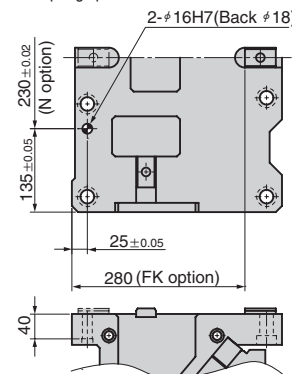
Bolts for assembly are not indicated.

Space for removing



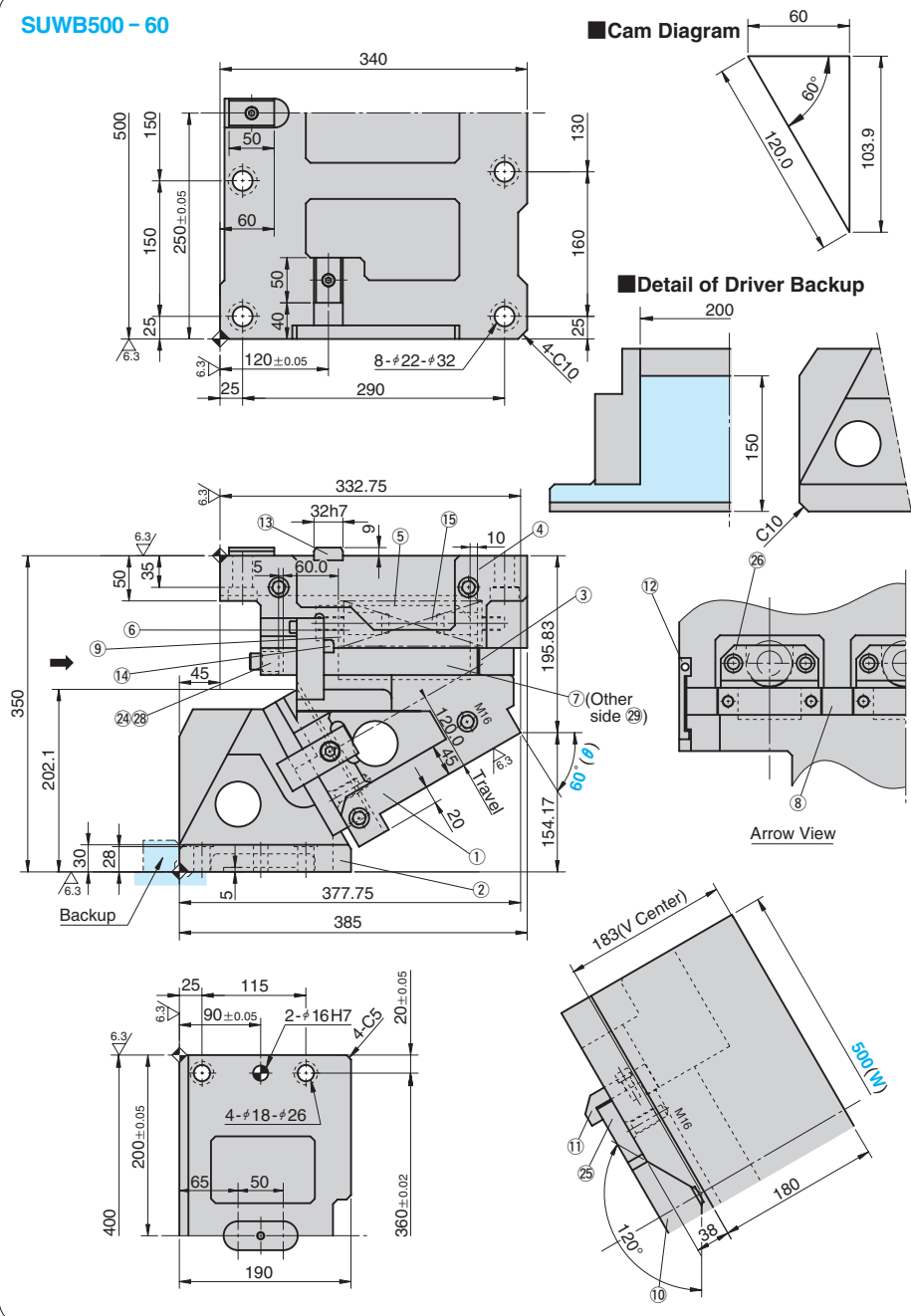
Option part of N and FK.

*Gas spring specifications cannot do FK setting.



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SUWB500 - 60



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
120.0	313.6 (32.0)	627.2 (64.0)	2451.6 (249.8)	14709.8 (1499.0)	23078 (2354.9)	104.4	236.5	SUWB	500	60	No code (coil spring)
			—	20068.2 (2047.8)	31616 (3226.1)						GK *NGK
				19965.0 (2037.2)							GD *NGD
				20127.6 (2053.8)							GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	500	—	60	—	GK
SUWB	500	—	60	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



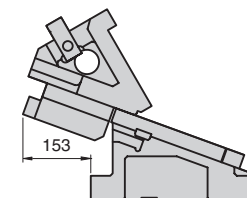
Order

SUWB500 - 60 - GK - N
SUWB500 - 60 - GK - NF



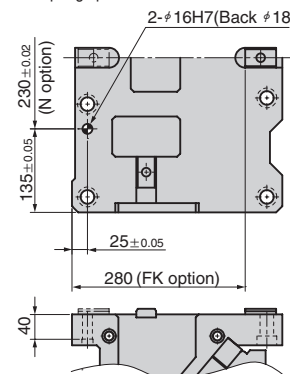
For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

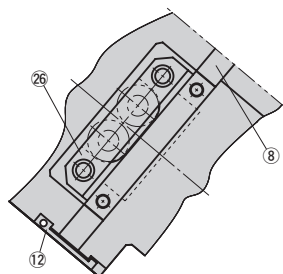
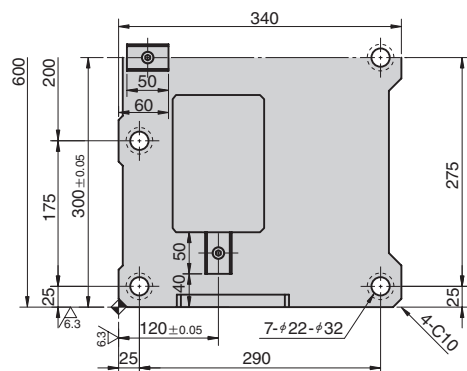
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate A	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	4	SS400
⑤	Spring Guide Block	3	FCD500 with Graphite	⑮	Spring	3	Refer to the Spring Specification table.
⑥	Spring Guide Pin	6	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate C-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate F	2	Bronze with Graphite	⑱	Spring Guide Plate	3	SS400
⑨	Washer	3	S45C	⑲	Stopper Plate	3	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate C-R	1	Bronze with Graphite

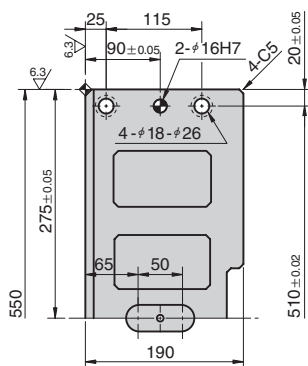
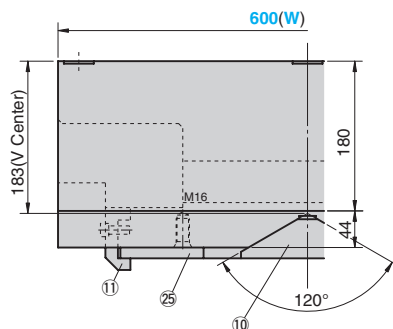
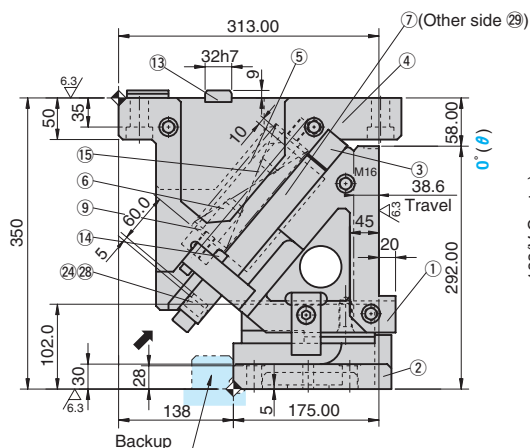


Bolts for assembly are not indicated.

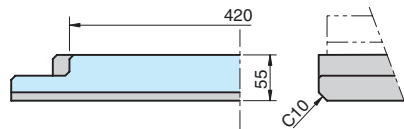
SUWB600 – 00



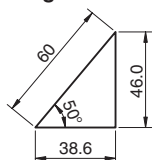
Arrow View



■ Detail of Driver Backup



■ Cam Diagram



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
38.6	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26951 (2750.1)	127.0	281.4	SUWB	600	00	No code (coil spring)
				26757.5 (2730.4)							GK * NGK
			—	26620.0 (2716.3)	36415 (3715.8)						GD * NGD
				26836.8 (2738.4)							GS * NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	00	—	GK
SUWB	600	—	00	—	NGK

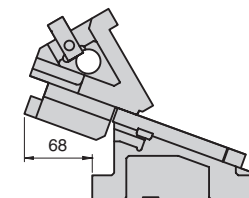
*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type.
The parts for installing the spring are included.

.....Without gas spring



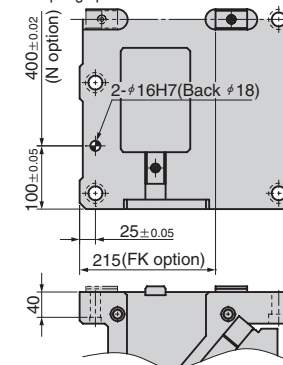
Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right.)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



■ Option part of **N** and **FK**.


※Gas spring specifications cannot do FK setting.



Order

SUWB600 – 00 – GK – N
SUWB600 – 00 – GK – NF



 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

■ Spring Specification

No.	Spring type	Model	Remark
⑮	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

■ Table of Components

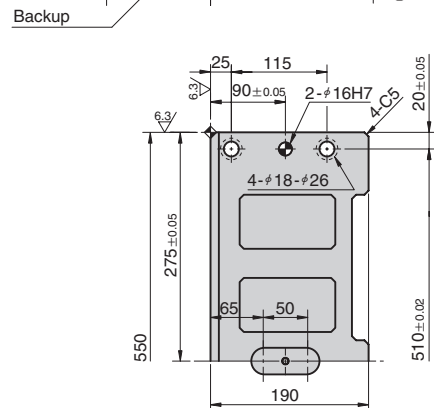
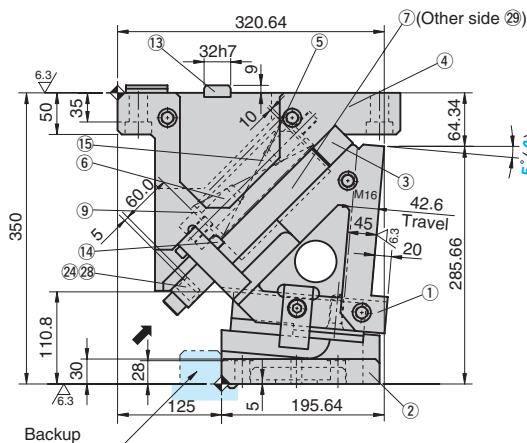
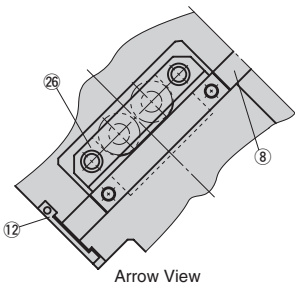
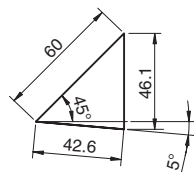
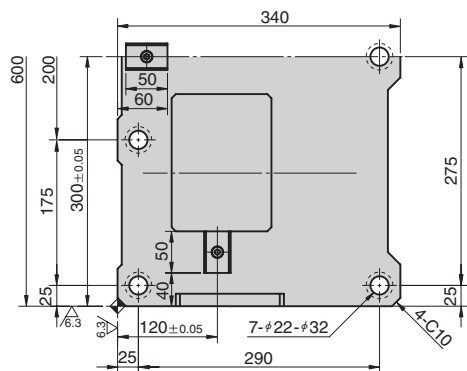
No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑳	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉑	Base Plate G-R	1	Bronze with Graphite



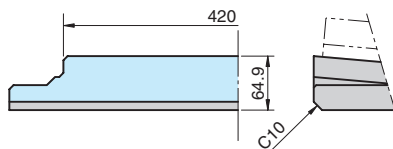
 Bolts for assembly are not indicated.

SUWB600 - 05

Cam Diagram



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
42.6	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26838 (2738.6)	127.0	277.9	SUWB	600	05	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	36302 (3704.3)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	600	05	GK
SUWB	600	05	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 05 - GK - N
SUWB600 - 05 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

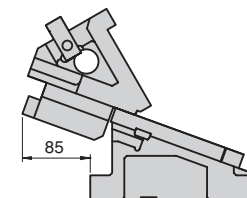
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate G-R	1	Bronze with Graphite



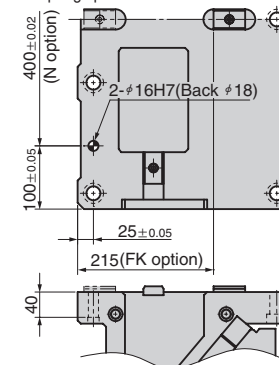
Bolts for assembly are not indicated.

Space for removing

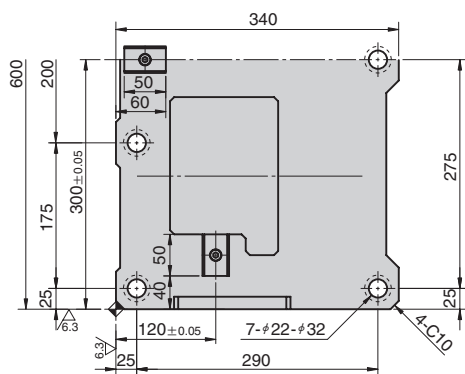


Option part of N and FK.

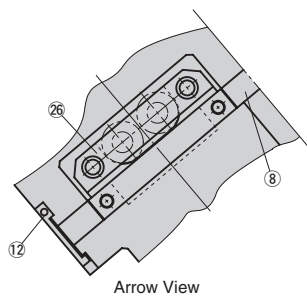
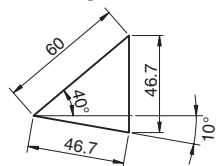
*Gas spring specifications cannot do FK setting.



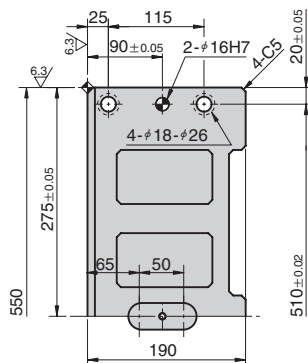
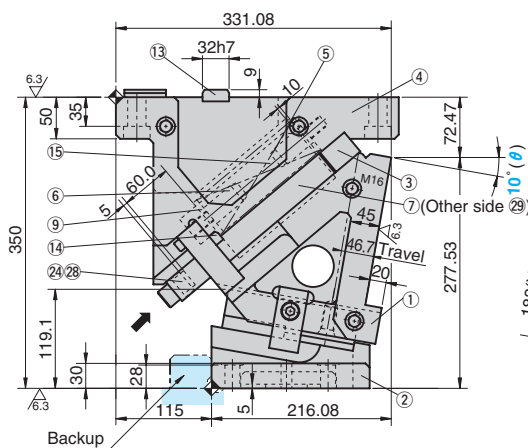
SUWB600 - 10



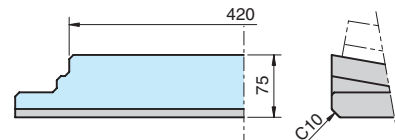
Cam Diagram



Arrow View



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
46.7	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26718 (2726.4)	127.0	274.1	SUWB	600	10	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	36182 (3692.0)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	600	10	GK
SUWB	600	10	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 10 - GK - N
SUWB600 - 10 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

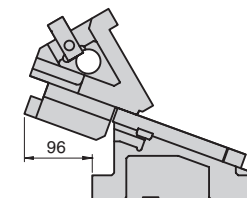
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate G-R	1	Bronze with Graphite



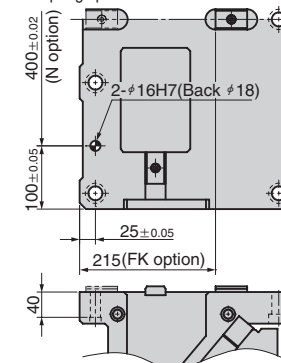
Bolts for assembly are not indicated.

Space for removing

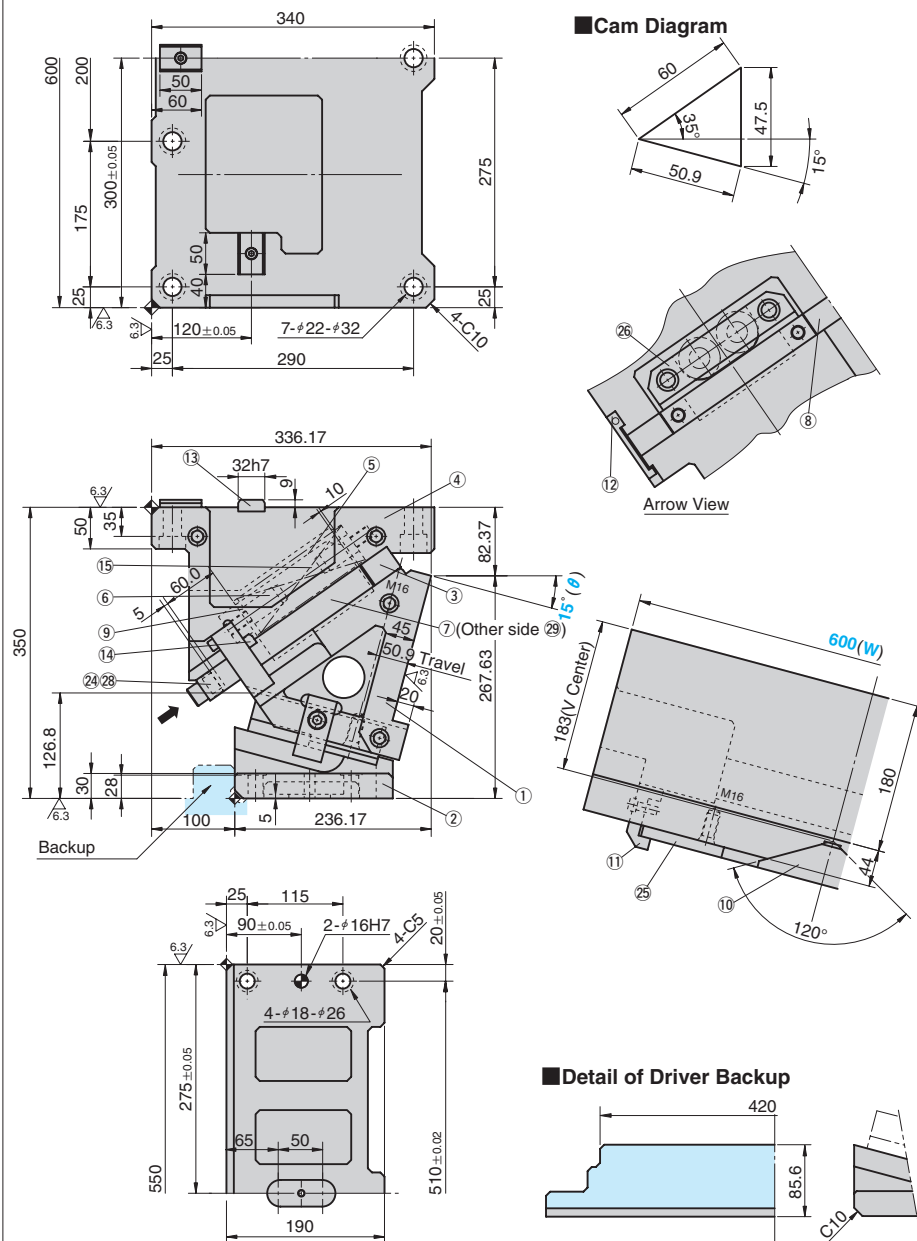


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 – 15



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
50.9			3268.8 (333.1)	19612.8 (1998.7)	26591 (2713.4)	127.0	272.3	SUWB	600	15	No code (coil spring)
				26757.5 (2730.4)							GK * NGK
	392.0 (40.0)	784.0 (79.9)	—	26620.0 (2716.3)	36055 (3679.1)						GD * NGD
				26836.8 (2738.4)							GS * NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	15	—	GK
SUWB	600	—	15	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type.
The parts for installing the spring are included.

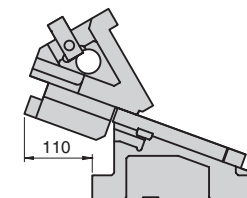
.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.


■ Space for removing



Order

SUWB600 – 15 – GK – N
SUWB600 – 15 – GK – NF



 For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

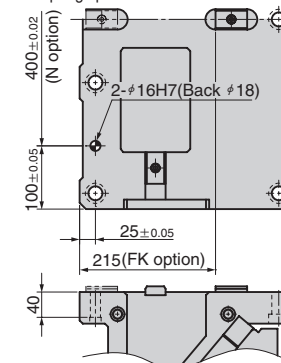
■ Spring Specification

No.	Spring type	Model	Remark
⑮	—	TM50-225	Coil spring(constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes


■ Option part of N and FK.

※Gas spring specifications cannot do FK setting.



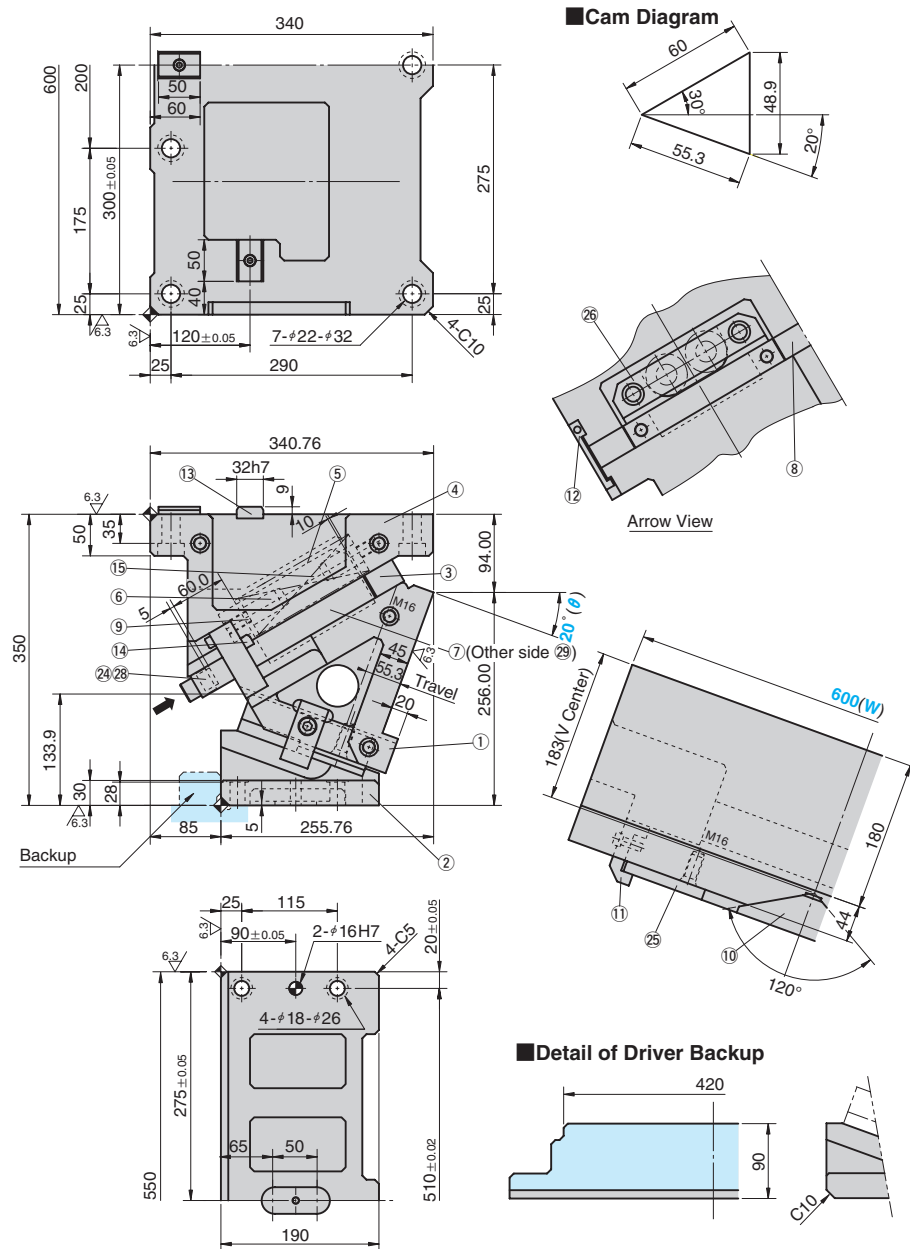
■ Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑰	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑱	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑲	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑳	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉑	Base Plate G-R	1	Bronze with Graphite

 Bolts for assembly are not indicated.

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SUWB600 - 20



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
55.3	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26459 (2699.9)	127.0	268.8	SUWB	600	20	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	35923 (3665.6)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	20	—	GK
SUWB	600	—	20	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

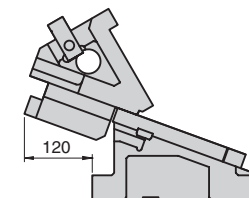
Without gas spring



Option

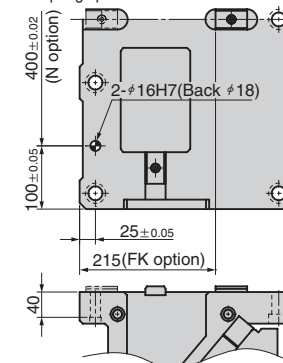
Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.

Space for removing



Option part of N and FK.

*Gas spring specifications cannot do FK setting.



Order

SUWB600 - 20 - GK - N
SUWB600 - 20 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

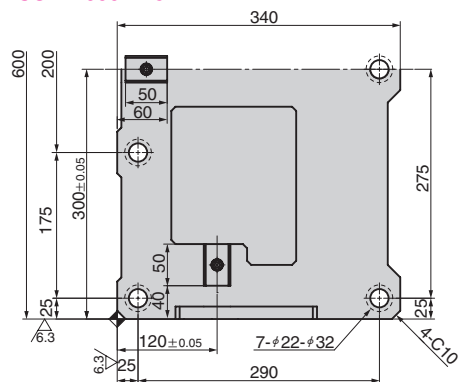
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate G-R	1	Bronze with Graphite

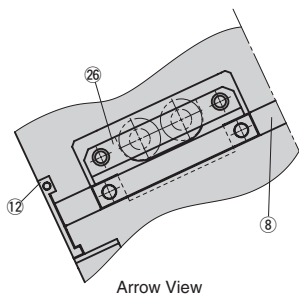
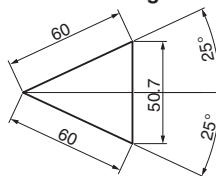


Bolts for assembly are not indicated.

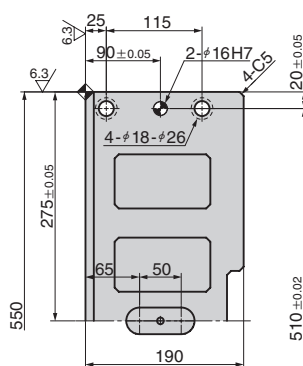
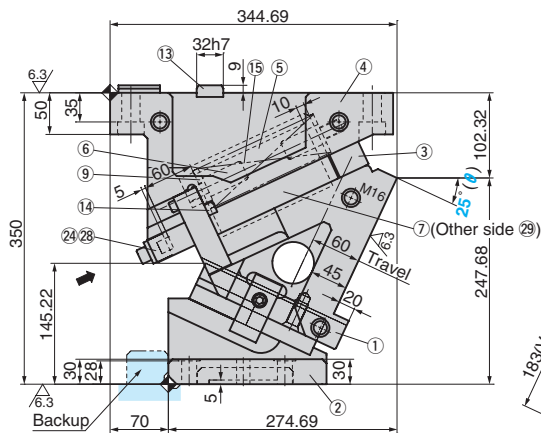
SUWB600 - 25



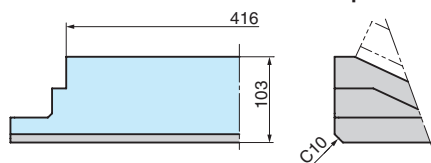
Cam Diagram



Arrow View



Detail of Driver Backup



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
60.0	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26322 (2685.9)	127.0	268.3	SUWB	600	25	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	35786 (3651.6)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	25	—	GK
SUWB	600	—	25	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 25 - GK - N
SUWB600 - 25 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

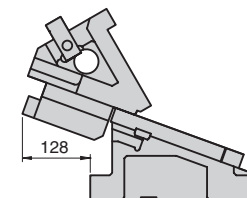
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑲	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑳	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	㉑	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	㉒	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	㉓	Base Plate G-R	1	Bronze with Graphite



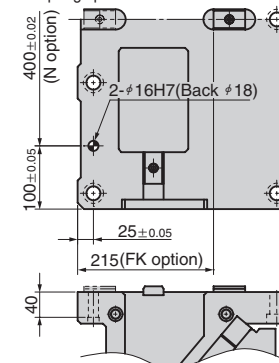
Bolts for assembly are not indicated.

Space for removing

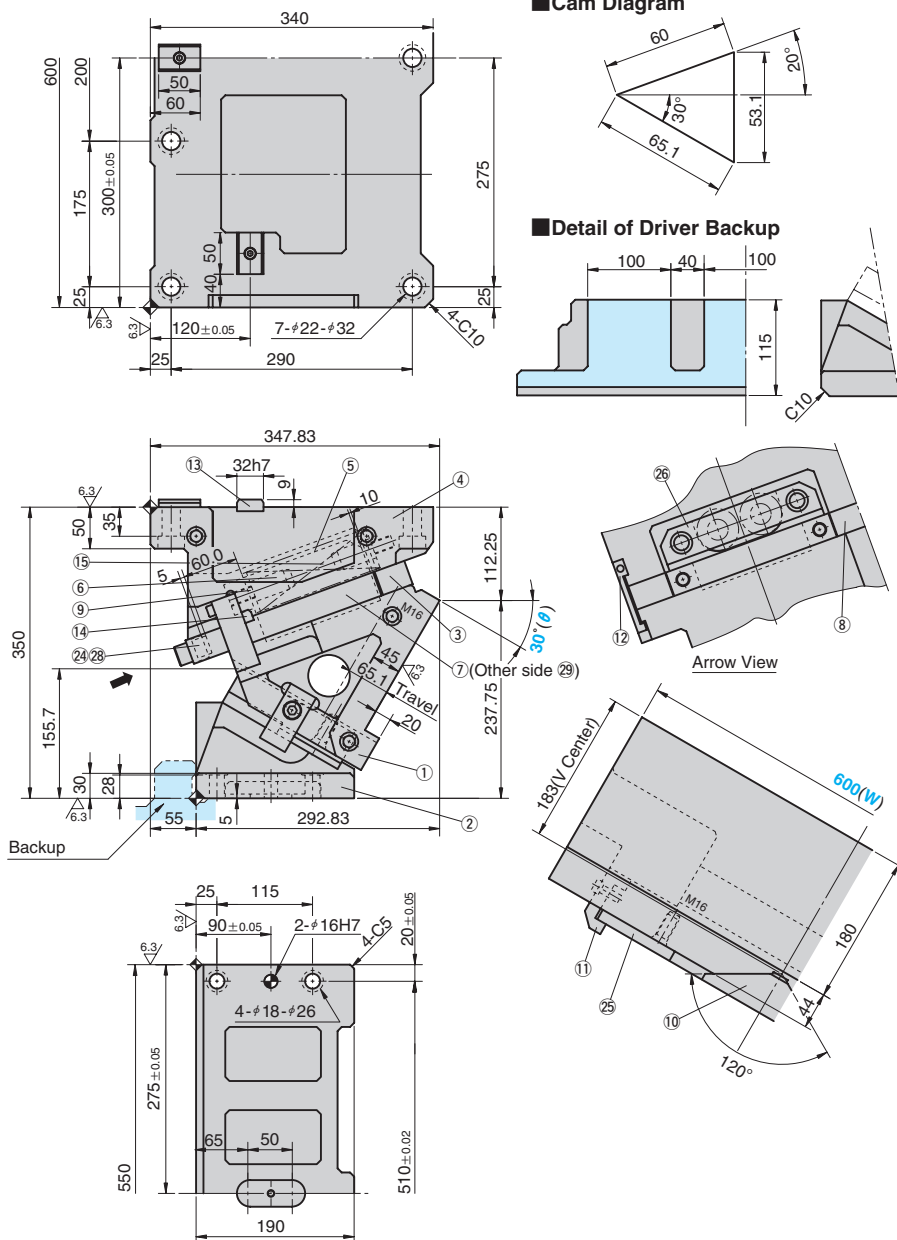


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 - 30



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
65.1	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26181 (2671.6)	127.0	276.6	SUWB	600	30	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	35645 (3637.3)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	600	30	GK
SUWB	600	30	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.

.....Without gas spring



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 30 - GK - N
SUWB600 - 30 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

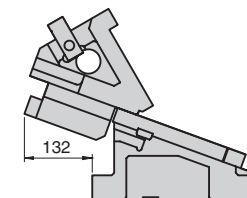
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	12	Safety Plate	2	SS400
13	Base Plate B	2	Bronze with Graphite	13	Key A	3	SS400
14	Cam Holder	1	FC250	14	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	15	Spring	4	Refer to the Spring Specification table.
16	Spring Guide Pin	8	S45C	16	Stopper	6	Urethane
17	Base Plate G-L	1	Bronze with Graphite	17	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate H	1	Bronze with Graphite	18	Spring Guide Plate	2	SS400
19	Washer	4	S45C	19	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	20	Base Plate G-R	1	Bronze with Graphit



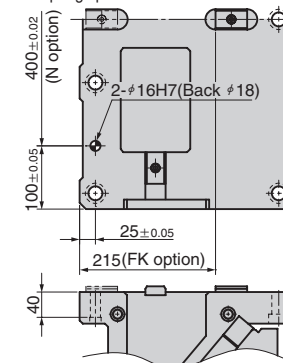
Bolts for assembly are not indicated.

Space for removing

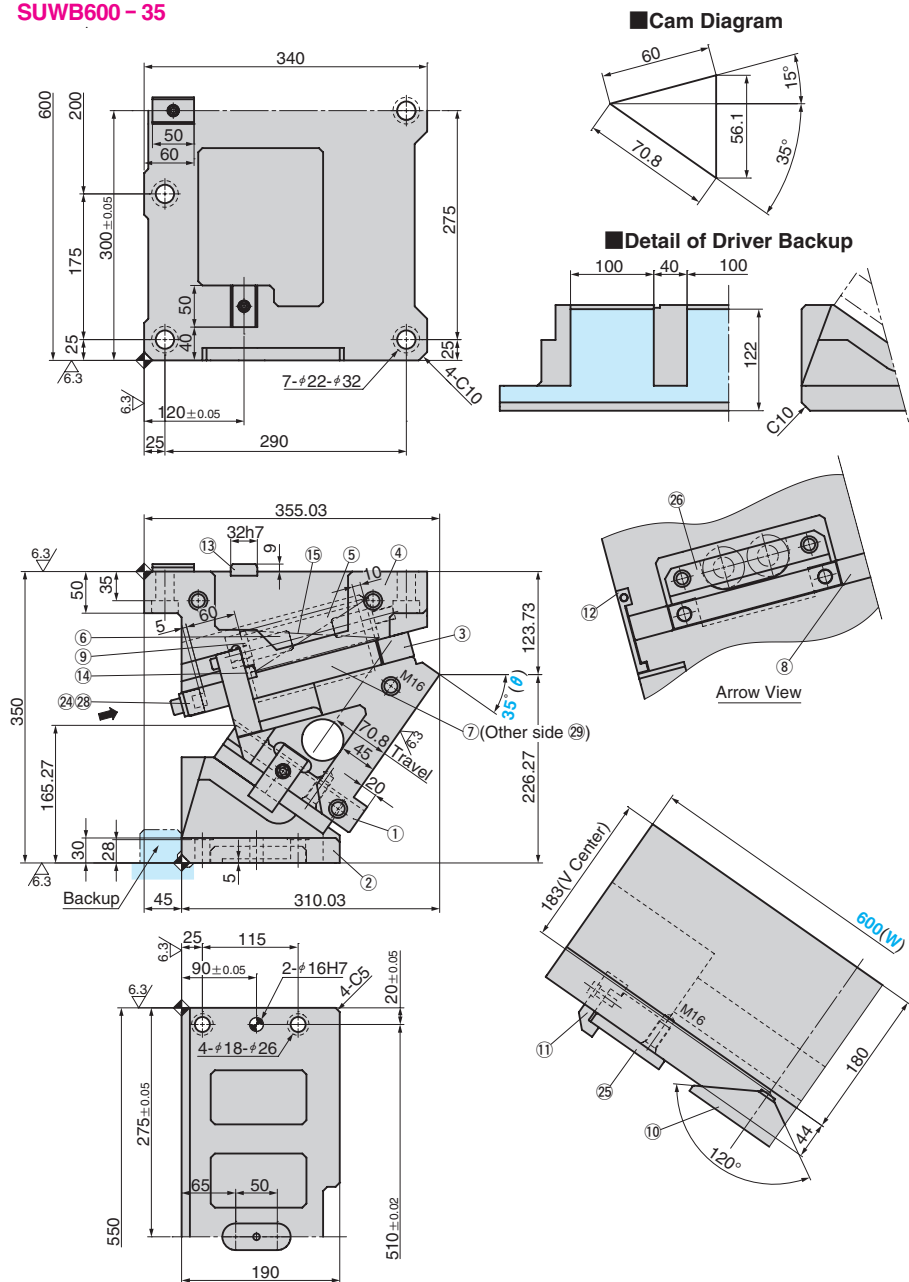


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 - 35



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
70.8	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	26038 (2657.0)	127.0	276.0	SUWB	600	35	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	35502 (3622.7)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	35	—	GK
SUWB	600	—	35	—	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 35 - GK - N
SUWB600 - 35 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

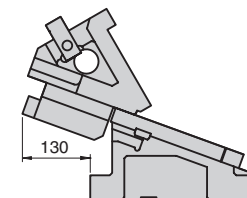
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	21	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	22	Safety Plate	2	SS400
13	Base Plate B	2	Bronze with Graphite	23	Key A	3	SS400
14	Cam Holder	1	FC250	24	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	25	Spring	4	Refer to the Spring Specification table.
16	Spring Guide Pin	8	S45C	26	Stopper	6	Urethane
17	Base Plate G-L	1	Bronze with Graphite	27	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate H	1	Bronze with Graphite	28	Spring Guide Plate	2	SS400
19	Washer	4	S45C	29	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	30	Base Plate G-R	1	Bronze with Graphit



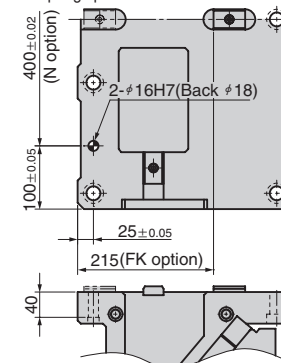
Bolts for assembly are not indicated.

Space for removing

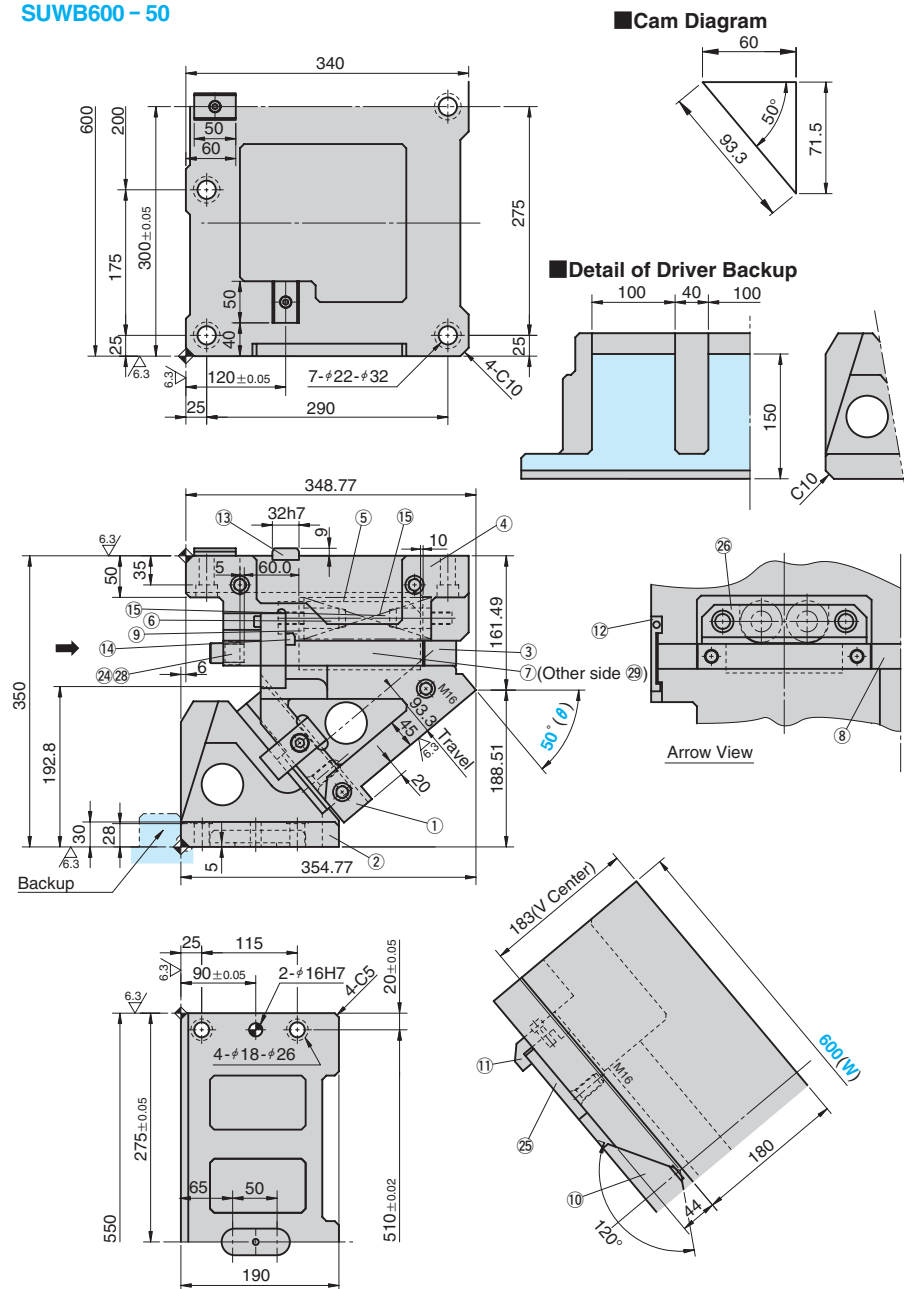


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 - 50



Cam Diagram

Detail of Driver Backup

Arrow View

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
93.3	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	25605 (2612.7)	127.0	283.5	SUWB	600	50	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	35069 (3578.4)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	600	50	GK
SUWB	600	50	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 50 - GK - N
SUWB600 - 50 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

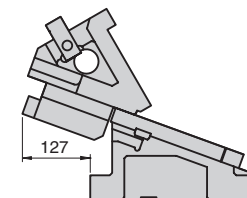
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
11	Cam Slider	1	FC250	11	Positive Return Follower	2	S45C
12	Cam Driver	1	FC250	12	Safety Plate	2	SS400
13	Base Plate B	2	Bronze with Graphite	13	Key A	3	SS400
14	Cam Holder	1	FC250	14	Key B	3	SS400
15	Spring Guide Block	2	FCD500 with Graphite	15	Spring	4	Refer to the Spring Specification table.
16	Spring Guide Pin	8	S45C	16	Stopper	6	Urethane
17	Base Plate G-L	1	Bronze with Graphite	17	Plate	R/L1	SS400 Copper powder sintered
18	Base Plate H	1	Bronze with Graphite	18	Spring Guide Plate	2	SS400
19	Washer	4	S45C	19	Stopper Plate	2	S45C
20	Slide Guide	1	SS400 Copper powder sintered	20	Base Plate G-R	1	Bronze with Graphite



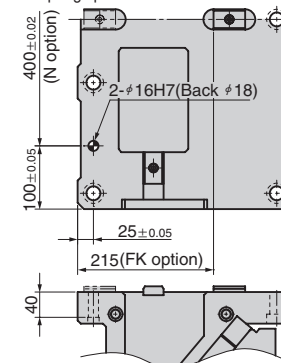
Bolts for assembly are not indicated.

Space for removing

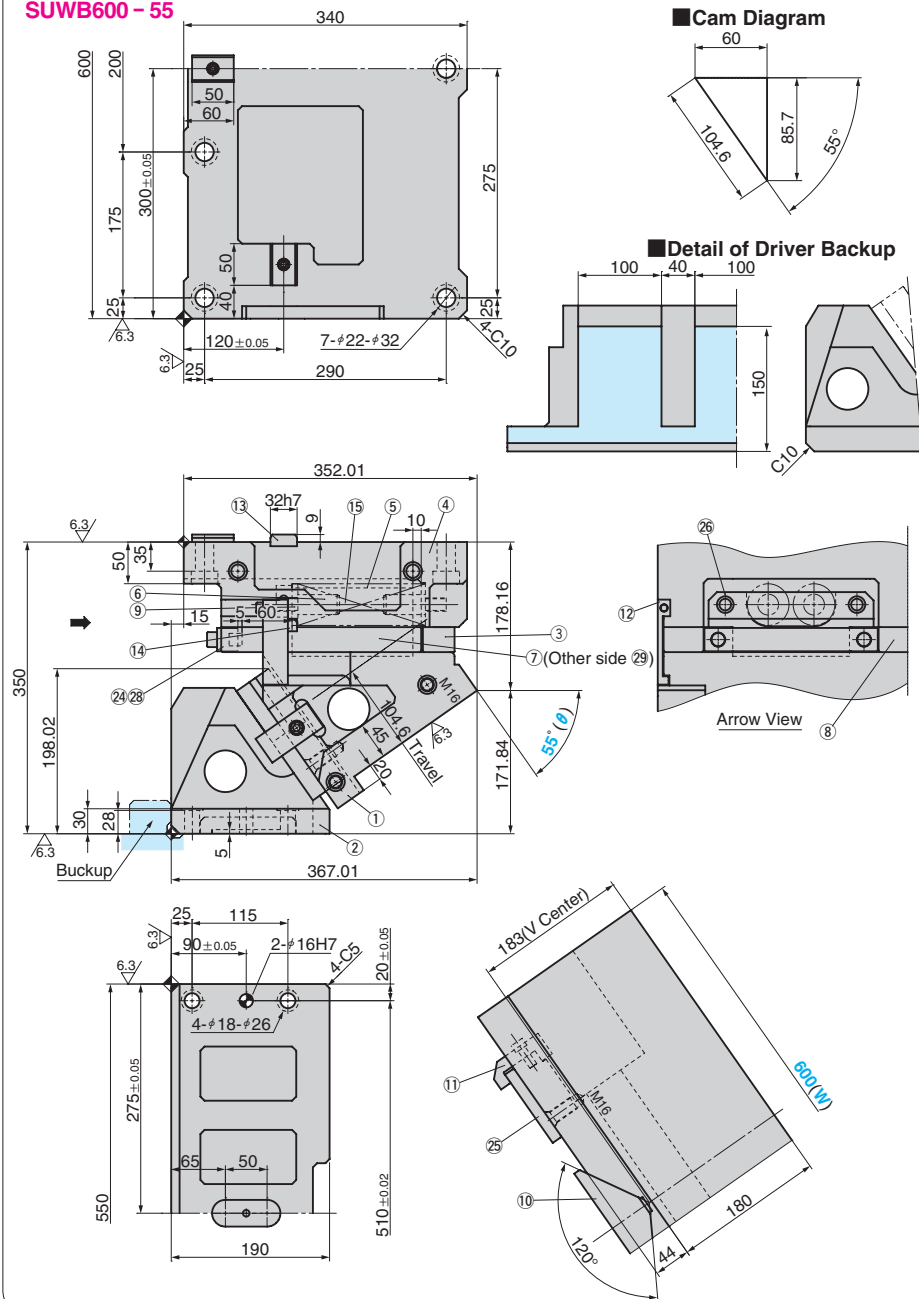


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 - 55



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
104.6	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	27844 (2841.2)	132.8	292.0	SUWB	600	55	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	38140 (3891.9)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	(θ)	PS
SUWB	600	55	GK
SUWB	600	55	NGK

*If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 55 - GK - N
SUWB600 - 55 - GK - NF



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

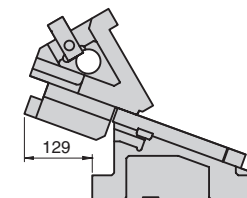
Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	①①	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	①②	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	①③	Key A	3	SS400
④	Cam Holder	1	FC250	①④	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	①⑤	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	②④	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	②⑤	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	②⑥	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	②⑧	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	②⑨	Base Plate G-R	1	Bronze with Graphite



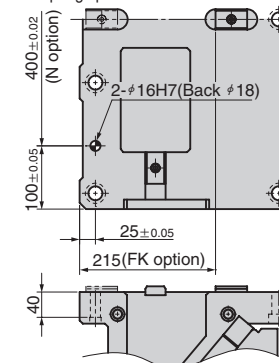
Bolts for assembly are not indicated.

Space for removing

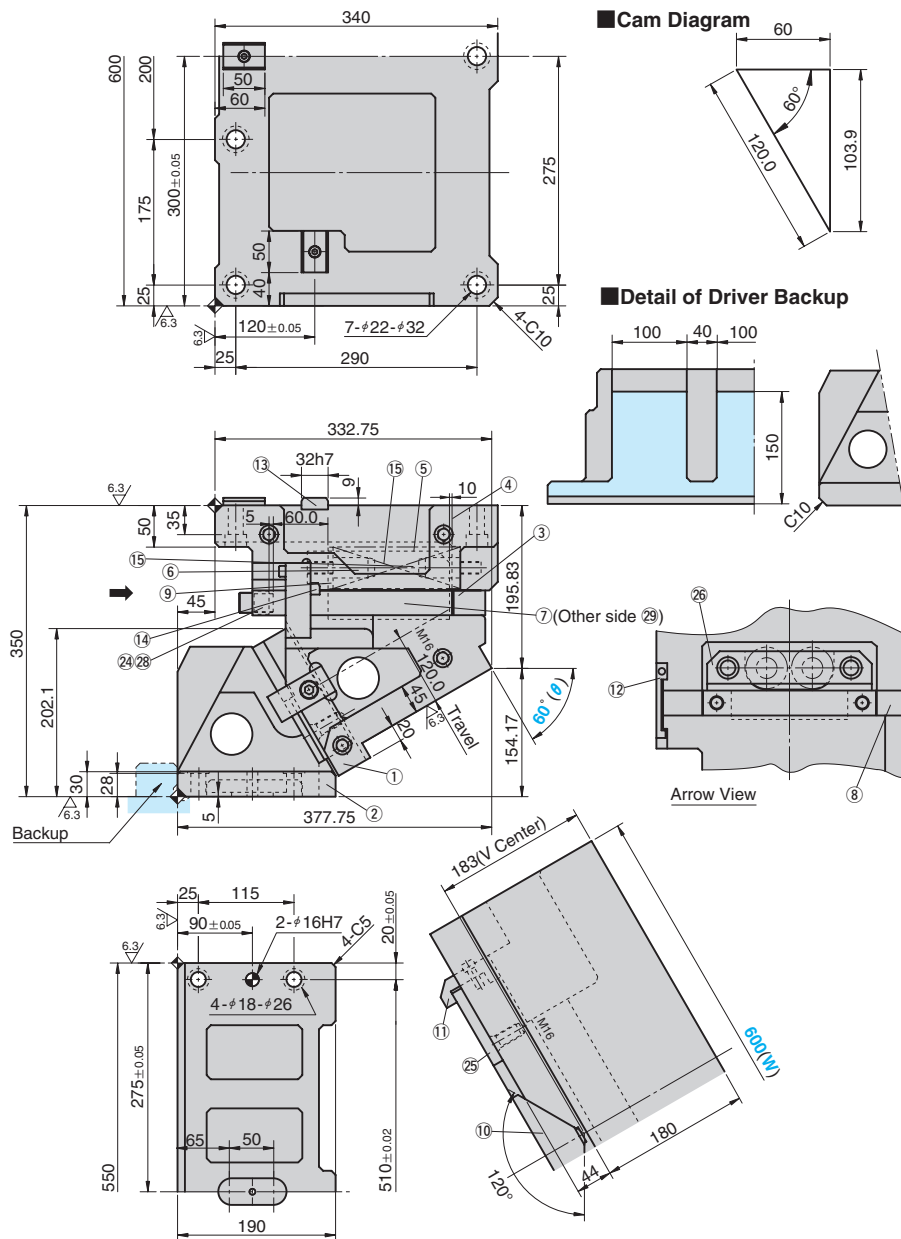


Option part of N and FK.

*Gas spring specifications cannot do FK setting.



SUWB600 - 60



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Return Force N(kgf)	Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Spring Type PS
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load							
120.0	392.0 (40.0)	784.0 (79.9)	3268.8 (333.1)	19612.8 (1998.7)	30785 (3141.3)	133.1	295.6	SUWB	600	60	No code (coil spring)
			—	26757.5 (2730.4)	—						GK *NGK
			—	26620.0 (2716.3)	42169 (4302.9)						GD *NGD
			—	26836.8 (2738.4)	—						GS *NGS



Order

Catalog No.	(W)	—	(θ)	—	PS
SUWB	600	—	60	—	GK
SUWB	600	—	60	—	NGK

* If no spring is required, specify "NGK", "NGD" and "NGS", prefixing "N" to the GK, GD and GS spring type. The parts for installing the spring are included.



Option

Option Code	Specification
K	A key for driver is attached. (It is not assembled to the main unit.)
N	φ16H7 dowel pin hole is additionally drilled on the cam holder. (Refer to the figure on the right)
FK	Move the key position forward. (Refer to the figure on the right.)
NF	Nitrogen gas is not charged. Applicable to GK, GD and GS only.



Order

SUWB600 - 60 - GK - N
SUWB600 - 60 - GK - NF

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 559. For detailed specification of the key, refer to page 1127.

Spring Specification

No.	Spring type	Model	Remark
15	—	TM50-225	Coil spring (constant = 68.1N/mm)
	GK	K750-63.5	Gas spring (KALLER)
	GD	L.750.075	Gas spring (DADCO)
	GS	SM.750.63	Gas spring (SDT)

*Guideline of coil spring durability 300,000 strokes

Table of Components

No.	Description	Qty	Material and Remark	No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250	⑪	Positive Return Follower	2	S45C
②	Cam Driver	1	FC250	⑫	Safety Plate	2	SS400
③	Base Plate B	2	Bronze with Graphite	⑬	Key A	3	SS400
④	Cam Holder	1	FC250	⑭	Key B	3	SS400
⑤	Spring Guide Block	2	FCD500 with Graphite	⑮	Spring	4	Refer to the Spring Specification table.
⑥	Spring Guide Pin	8	S45C	⑯	Stopper	6	Urethane
⑦	Base Plate G-L	1	Bronze with Graphite	⑰	Plate	R/L1	SS400 Copper powder sintered
⑧	Base Plate H	1	Bronze with Graphite	⑱	Spring Guide Plate	2	SS400
⑨	Washer	4	S45C	⑲	Stopper Plate	2	S45C
⑩	Slide Guide	1	SS400 Copper powder sintered	⑳	Base Plate G-R	1	Bronze with Graphite



Bolts for assembly are not indicated.