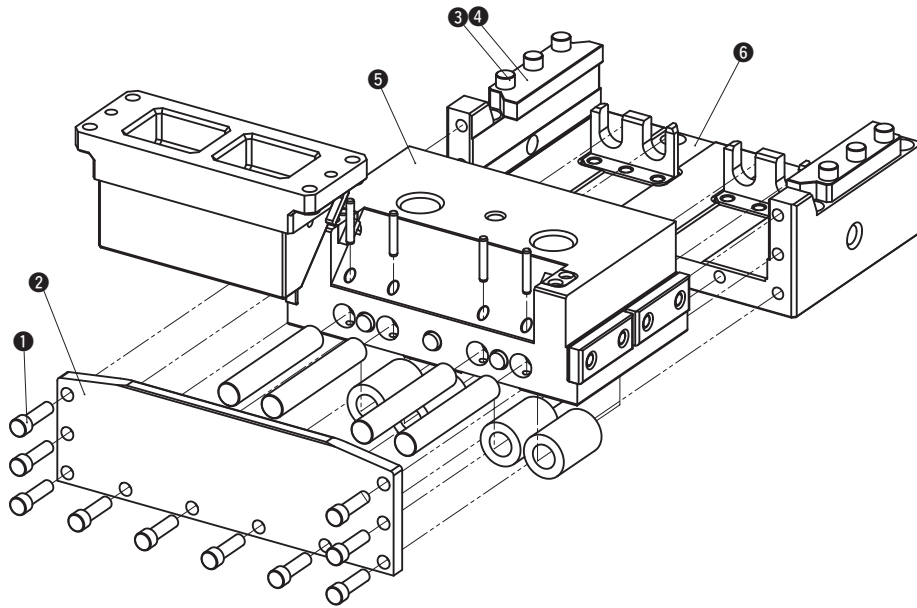


■ SKC/SKCA400, 500, 600 Structure and Assembly / Disassembly



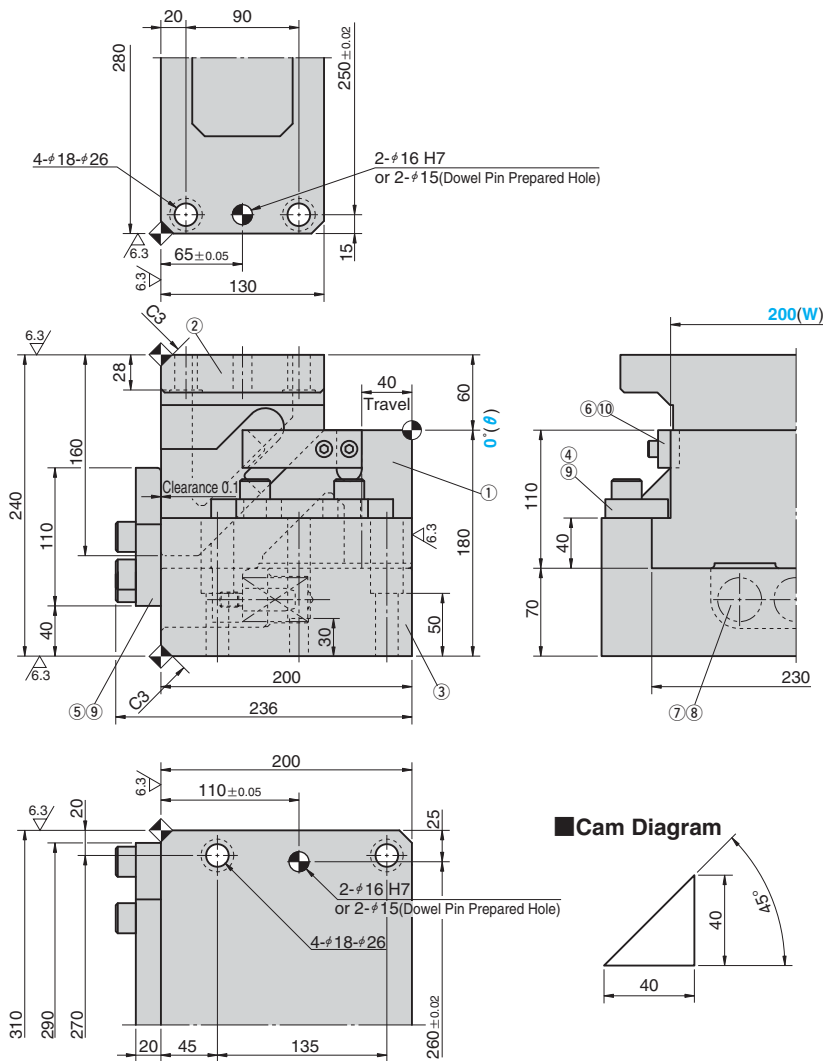
● Disassembly method of SKC/SKCA

- 1) Loosen hexagon socket head bolt (1) and remove backup plate (2).
- 2) Loosen hexagon socket head bolt (3) and remove upper plate (4).
- 3) Pull and remove cam slide (5) from cam holder (6).

● Assembly method of SKC/SKCA

- 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

SKCA200 - 00 - 40 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 200 - 00 - 40 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
78.4 (8.0)	117.6 (12.0)	460.8 (47.0)	2764.8 (282.2)	21.0	82.0	SKCA SKC	200	00	40

Order Catalog No. (W) - (θ) - S
 SKCA 200 - 00 - 40

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

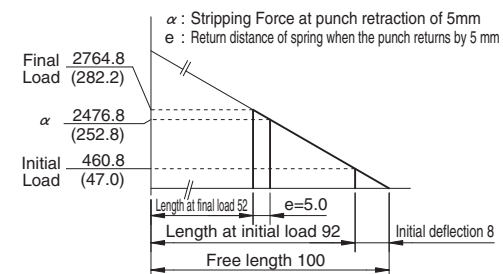
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	φ18×60
⑧	Coil Spring	3	TF35-100
⑨	Hexagon Socket Head Bolt	10	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

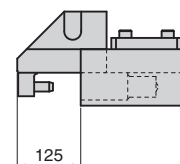
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TF35-100(3 pieces)
- Spring constant 19.2N/mm(1.96kgf/mm)



Space for removing

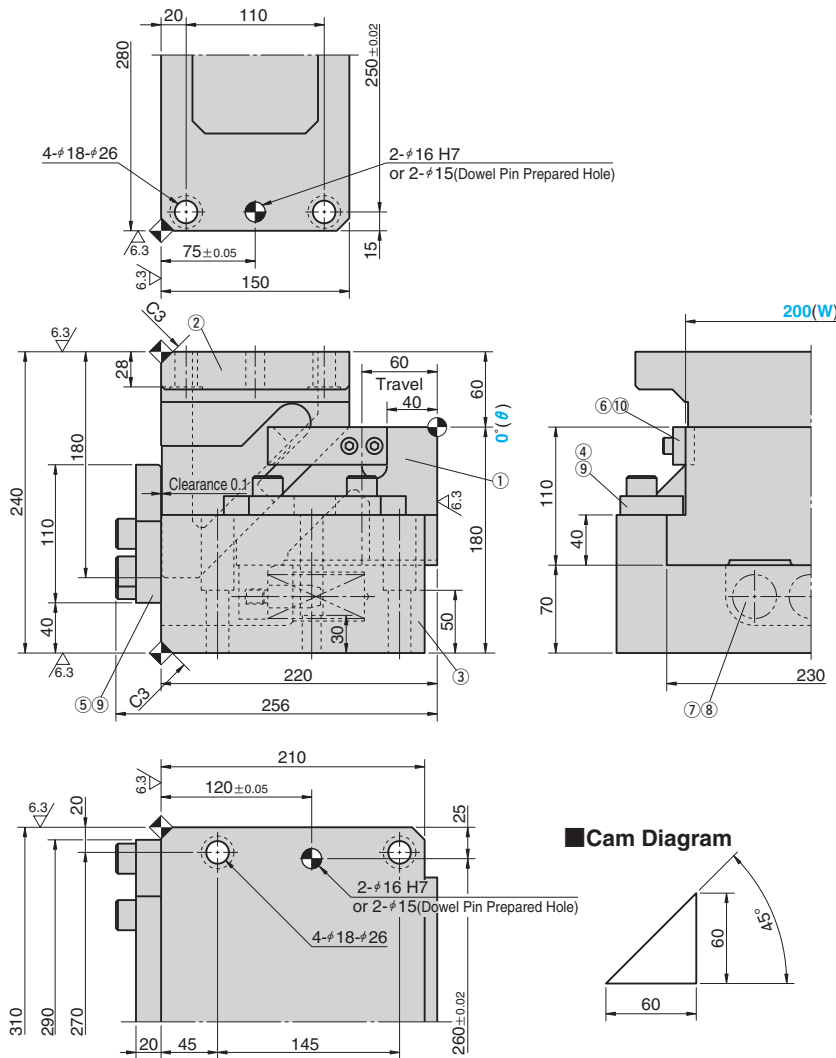


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA200 - 00 - 60 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 200 - 00 - 60 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
78.4 (8.0)	117.6 (12.0)	495.3 (50.7)	2781.3 (284.7)	21.0	84.0	SKCA SKC	200	00	60

Order Catalog No. (W) - (θ) - S
SKCA 200 - 00 - 60

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

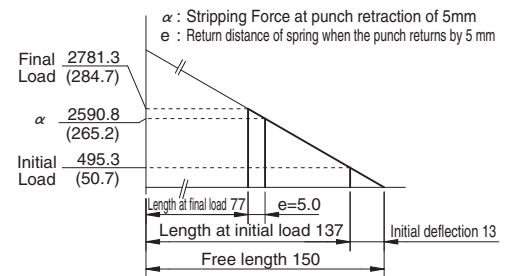
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	φ18×60
⑧	Coil Spring	3	TF35-150
⑨	Hexagon Socket Head Bolt	10	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

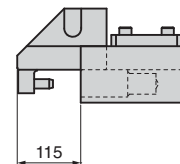
Spring Diagram

(Stripping Force at punch retraction of 5mm)

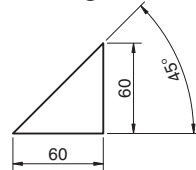
- Spring used TF35-150(3 pieces)
- Spring constant 12.7N/mm(1.30kgf/mm)



Space for removing



Cam Diagram

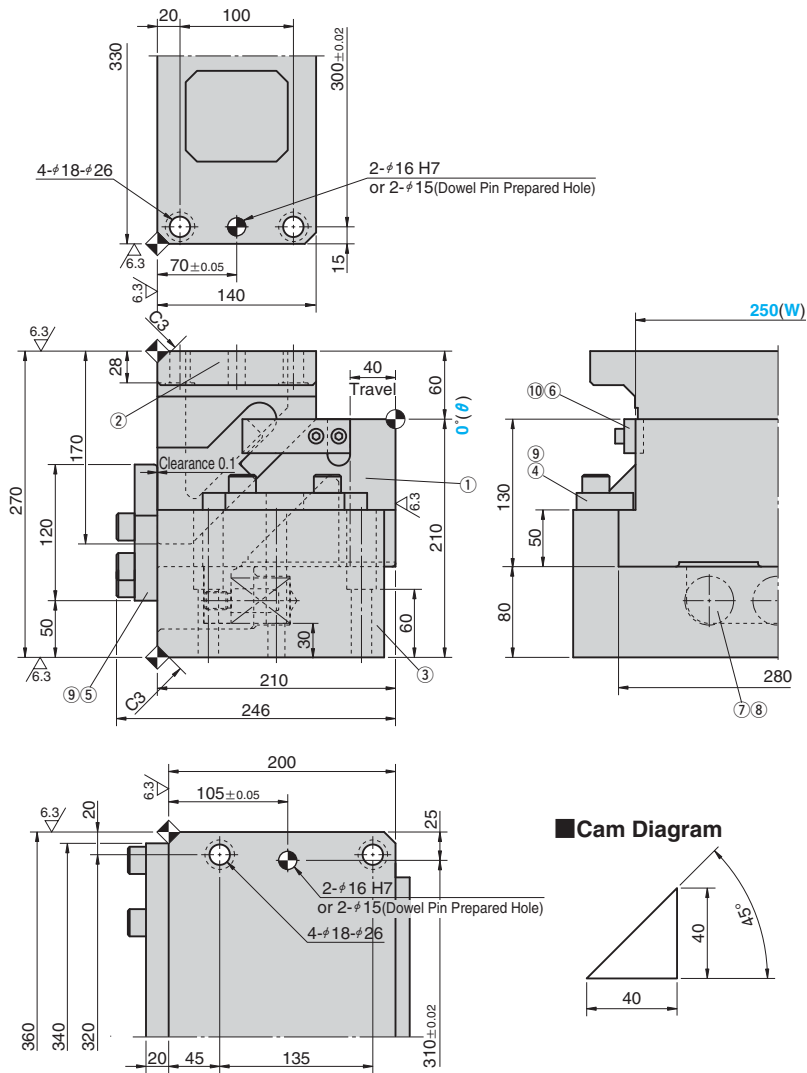


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA250 - 00 - 40 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 250 - 00 - 40 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
98.0 (10.0)	147.0 (15.0)	602.4 (61.4)	3614.4 (368.6)	33.4	106.0	SKCA SKC	250	00	40

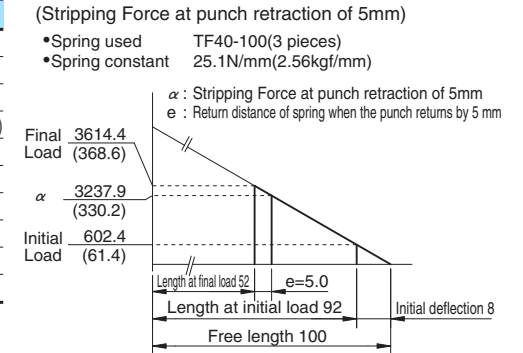
Order Catalog No. (W) - (θ) - S
SKCA 250 - 00 - 40

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

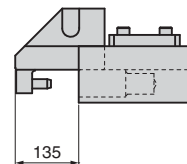
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	φ21×65
⑧	Coil Spring	3	TF40-100
⑨	Hexagon Socket Head Bolt	10	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

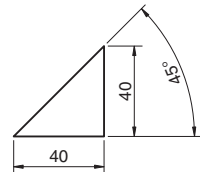
Spring Diagram



Space for removing



Cam Diagram

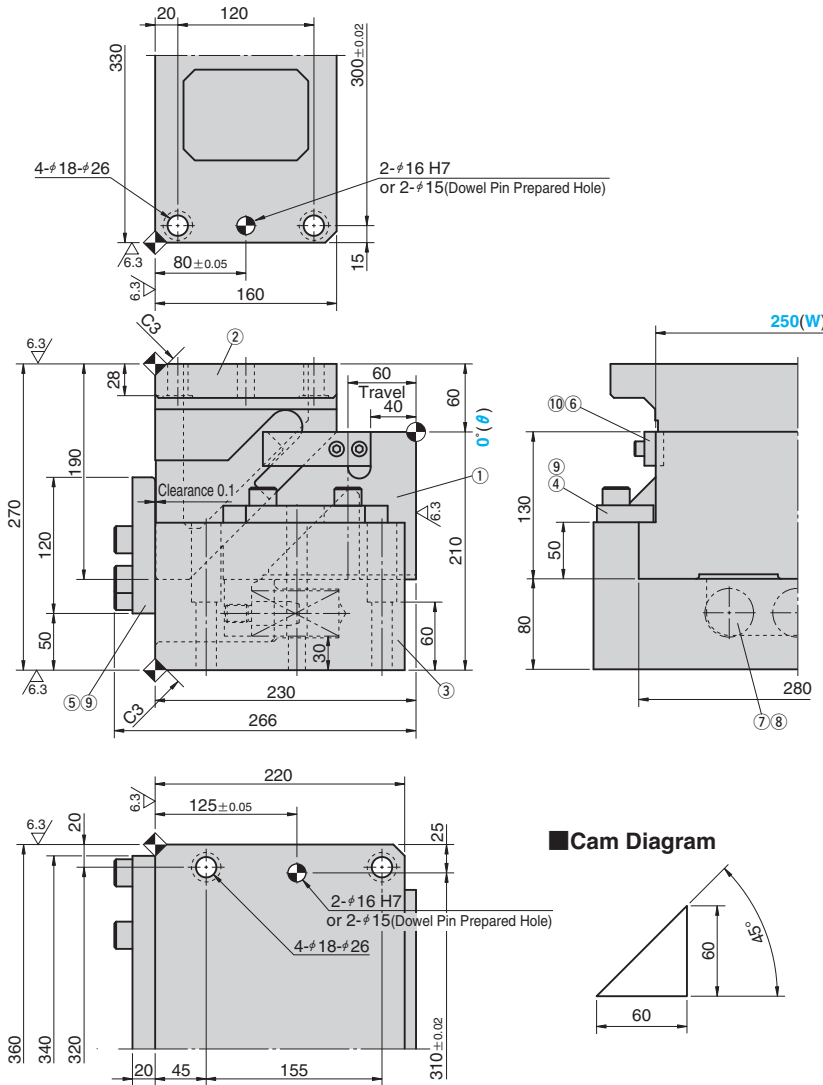


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA250 - 00 - 60 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 250 - 00 - 60 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
98.0 (10.0)	147.0 (15.0)	651.3 (66.3)	3657.3 (372.3)	33.4	127.0	SKCA SKC	250	00	60

Order Catalog No. (W) - (θ) - S
 SKCA 250 - 00 - 60

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

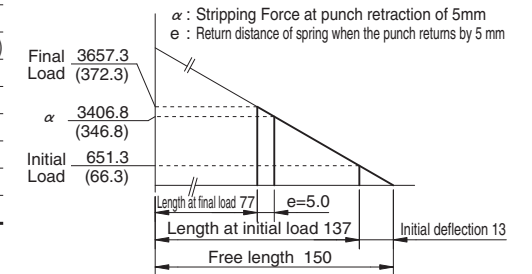
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	φ21×65
⑧	Coil Spring	3	TF40-150
⑨	Hexagon Socket Head Bolt	10	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

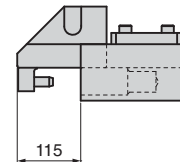
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TF40-150(3 pieces)
- Spring constant 16.7N/mm(1.70kgf/mm)



Space for removing

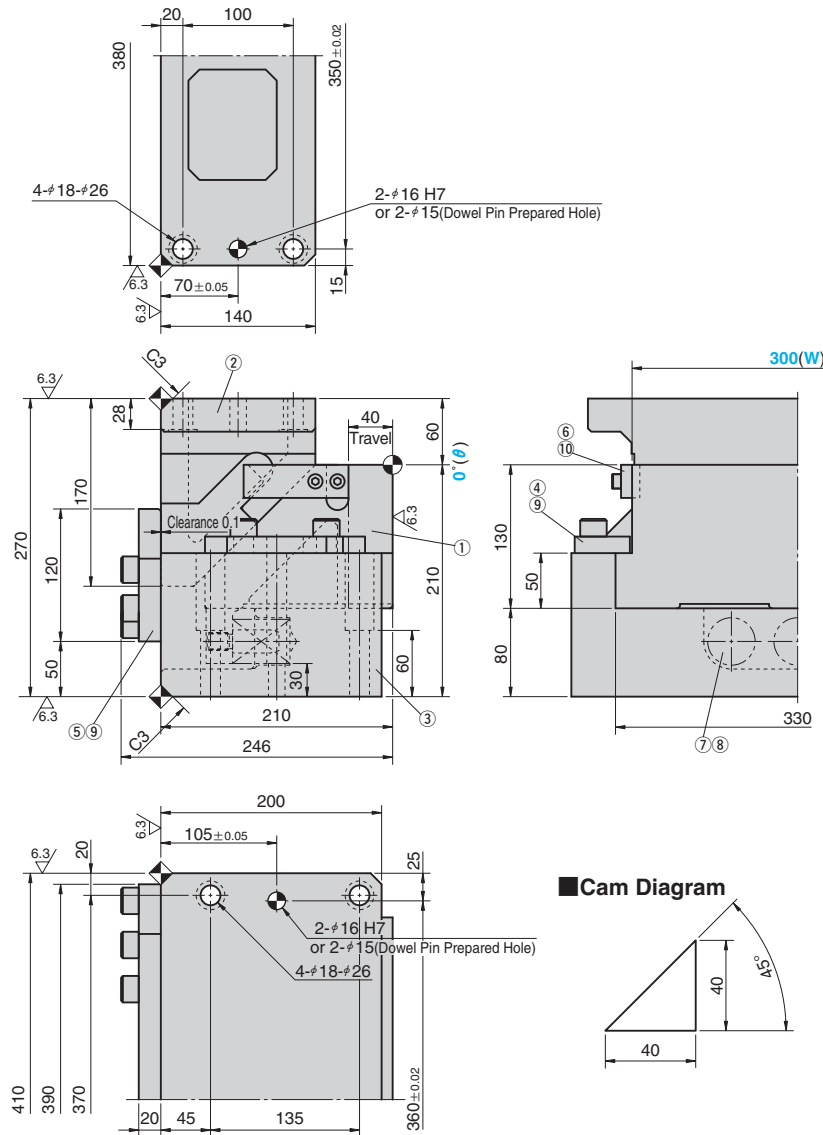


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA300 - 00 - 40 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 300 - 00 - 40 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
117.6 (12.0)	176.4 (18.0)	602.4 (61.4)	3614.4 (368.6)	38.0	106.0	SKCA SKC	300	00	40

Order Catalog No. (W) - (θ) - S
SKCA 300 - 00 - 40

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

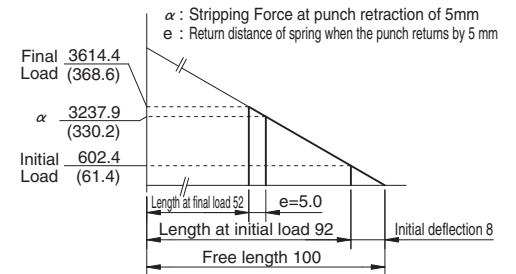
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	φ21×65
⑧	Coil Spring	3	TF40-100
⑨	Hexagon Socket Head Bolt	12	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

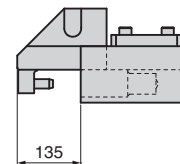
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TF40-100 (3 pieces)
- Spring constant 25.1N/mm(2.56kgf/mm)



Space for removing

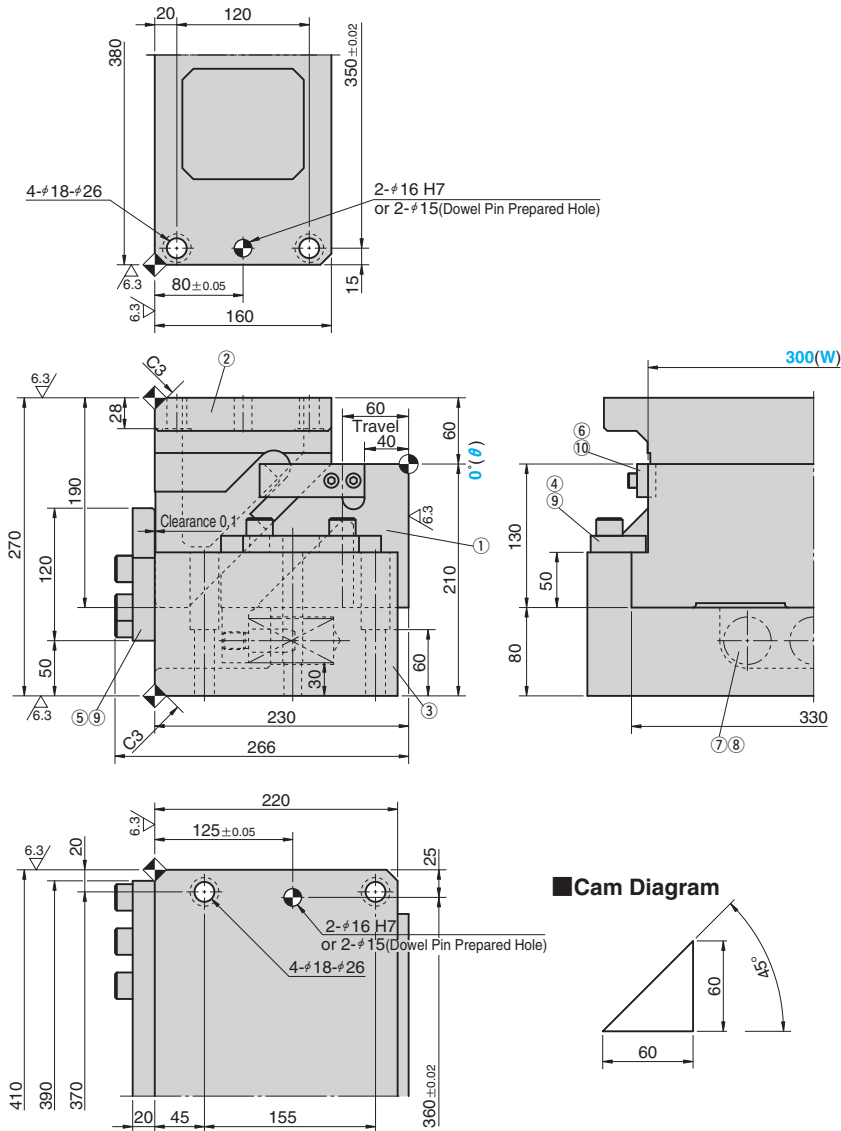


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA300 - 00 - 60 (Dowel Pin Hole Finished) ⚠ Tolerance are from dowel pin finished hole.
 SKC 300 - 00 - 60 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
117.6 (12.0)	176.4 (18.0)	651.3 (66.3)	3657.3 (372.3)	38.0	128.0	SKCA SKC	300	00	60

Order Catalog No. (W) - (θ) - S
SKCA 300 - 00 - 60

Option ⓘ Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

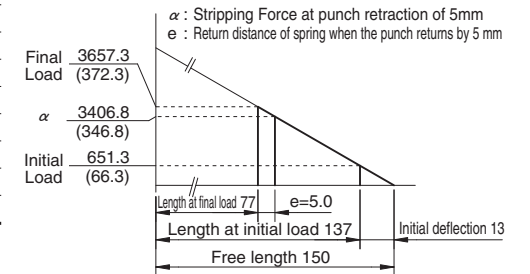
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	S45C Copper Powder Sintered (#220)
⑤	Back Up Plate	1	S45C(1045)
⑥	Positive Return Follower	2	S45C(1045)
⑦	Spring Guide Pin	3	#21×65
⑧	Coil Spring	3	TF40-150
⑨	Hexagon Socket Head Bolt	12	SCM435 M16×45
⑩	Hexagon Socket Head Bolt	4	SCM435 M8×30

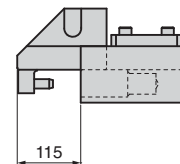
Spring Diagram

(Stripping Force at punch retraction of 5mm)

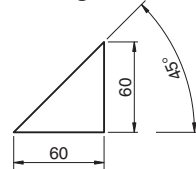
- Spring used TF40-150(3 pieces)
- Spring constant 16.7N/mm(1.70kgf/mm)



Space for removing



Cam Diagram

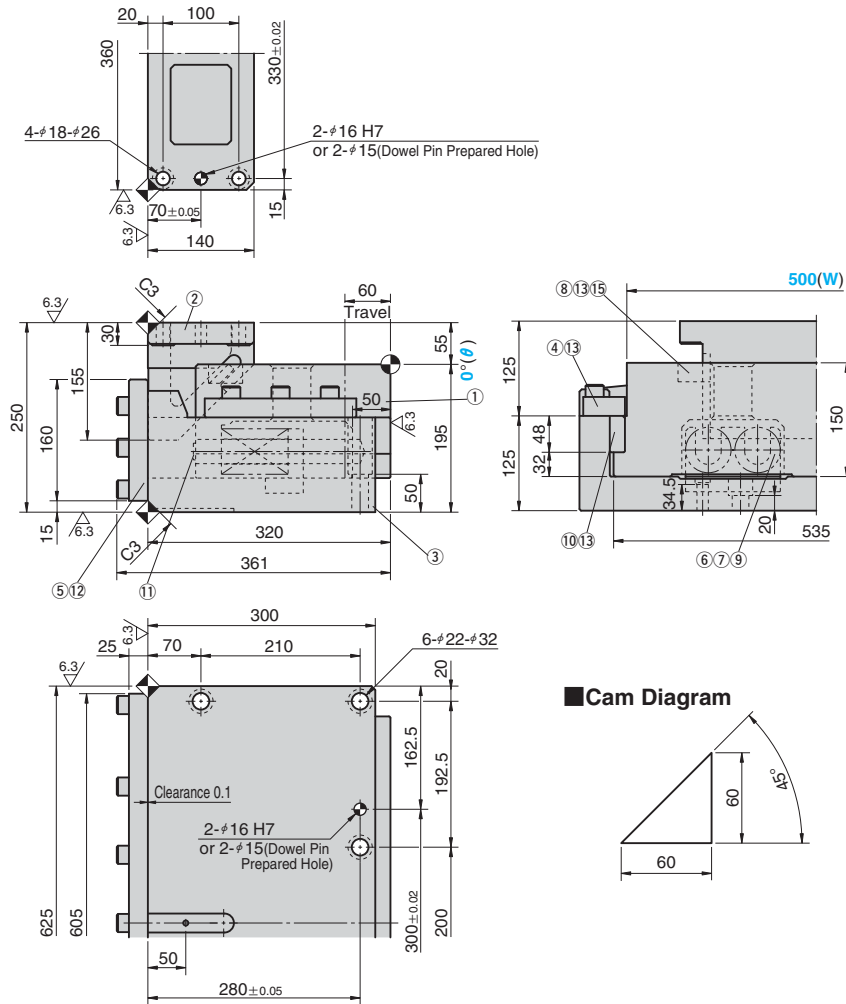


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA500 - 00 - 60 (Dowel Pin Hole Finished) ▲ Tolerance are from dowel pin finished hole.
 SKC 500 - 00 - 60 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider	Total	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load	Weight kg	Weight kg				
137.2 (14.0)	205.8 (21.0)	301.6 (30.7)	9349.6 (952.3)	101.6	237.0	SKCA SKC	500	00	60

Order

Catalog No.	(W)	—	(θ)	—	S
SKCA	500	—	00	—	60

Option

Option Code	Specification
K	Dedicated key is attached. (It is not assembled to the main unit.)

For detailed specification of the K keys. refer to page 1575.

Order SKCA500 - 00 - 60 - K

Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

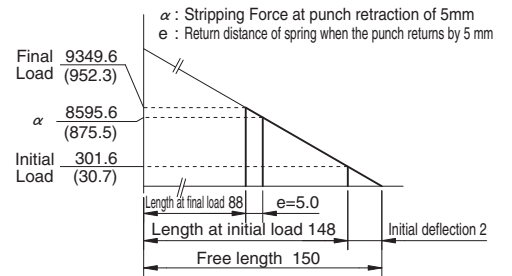
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Back Up Plate	1	S45C(1045)
⑥	Spring Stopper	2	S45C(1045)
⑦	Spring Guide Pin	4	S45C(1045)
⑧	Positive Return Follower	1	S45C(1045)
⑨	Coil Spring	4	TF60-150
⑩	Wear Plate	4	SESF48-125
⑪	Stopper	5	Urethane
⑫	Hexagon Socket Head Bolt	17	SCM435 M16×45
⑬	Hexagon Socket Head Bolt	18	SCM435 M10×30
⑭	Dowel Pin with Female Thread	4	SUJ2 #10×60
⑮	Positive Return Follower	1	S45C(1045)

Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TF60-150(4 pieces)
- Spring constant 37.7N/mm(3.84kgf/mm)

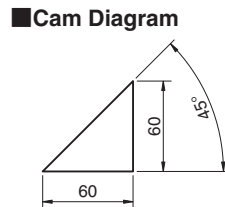
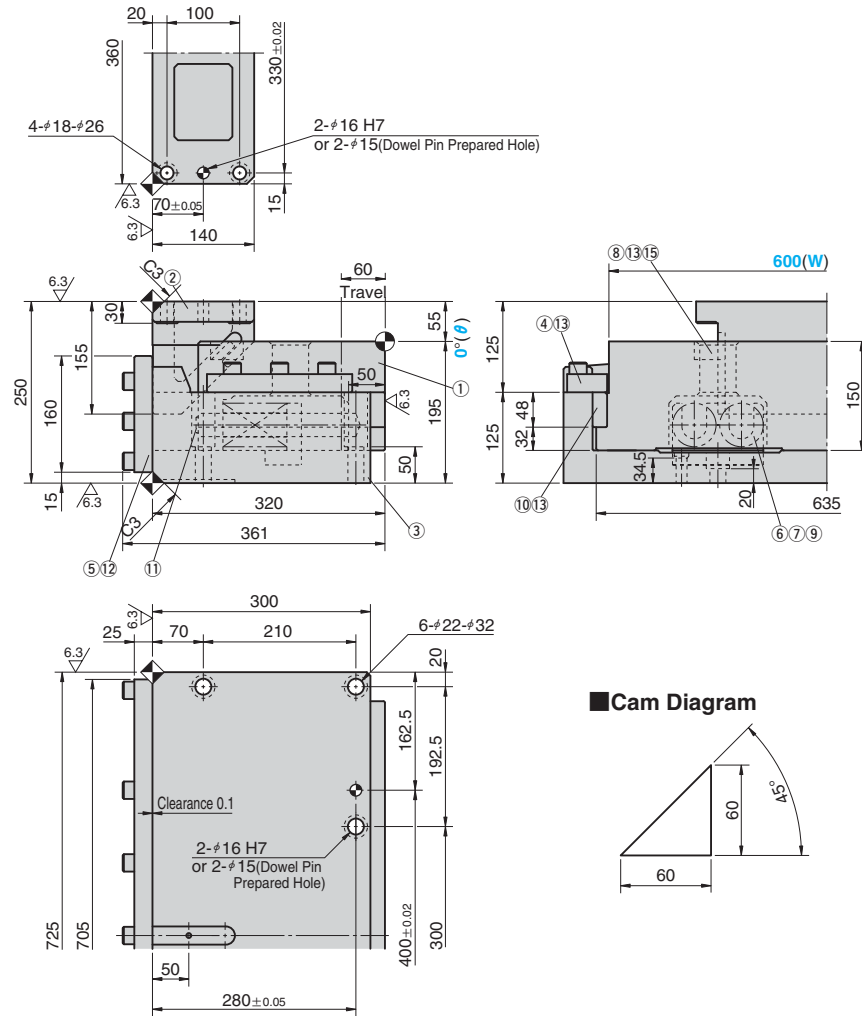


Die Mounted Cam Unit

FOR PIERCE AND FLANGE

CAD FILE

SKCA600 - 00 - 60 (Dowel Pin Hole Finished) ▲ Tolerance are from dowel pin finished hole.
 SKC 600 - 00 - 60 (Dowel Pin Prepared Hole)



Working Force kN(tonf)		Spring Force N(kgf)		Slider Weight kg	Total Weight kg	Catalog No.	(W)	(θ)	Travel S
Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load						
137.2 (14.0)	205.8 (21.0)	301.6 (30.7)	9349.6 (952.3)	129.8	279.0	SKCA SKC	600	00	60

Order **Catalog No.** **(W)** - **(θ)** - **S**
SKCA 600 - 00 - 60

Option **Option Code** **Specification**
K Dedicated key is attached. (It is not assembled to the main unit.)

For detailed specification of the K keys, refer to page 1575.

Order **SKCA600 - 00 - 60 - K**

Refer to page 552 for detailed specifications of tapped holes and dowel pin holes (prepared hole, finish hole) for retainer.

Table of Components

No.	Description	Qty	Material and Remark
①	Cam Slider	1	FC250 with Graphite
②	Cam Driver	1	FC250 with Graphite
③	Cam Holder	1	FC250
④	Upper Plate	2	FC250 with Graphite
⑤	Back Up Plate	1	S45C(1045)
⑥	Spring Stopper	2	S45C(1045)
⑦	Spring Guide Pin	4	S45C(1045)
⑧	Positive Return Follower	1	S45C(1045)
⑨	Coil Spring	4	TF60-150
⑩	Wear Plate	4	SESF48-125
⑪	Stopper	5	Urethane
⑫	Hexagon Socket Head Bolt	17	SCM435 M16×55
⑬	Hexagon Socket Head Bolt	18	SCM435 M10×30
⑭	Dowel Pin with Female Thread	4	SUJ2 φ10×60
⑮	Positive Return Follower	1	S45C(1045)

Spring Diagram

