SKCA [Overview]

Product Information

- Mount face widths 52, 65, 100, 150, 200, 250, and 300 mm.
- •Working angles from 0° to 20° in 5° increments for 65, 100, and 150 mm.
- Mount face widths of 52, 200, 250, and 300 mm are available with an angle of 0°.
- •Gas Spring is available in 65, 100, 150, and 200 mm width and 0°.
- ●The Box-type holder provides high rigidity.



■Gas Spring Specifications

Moun	Mount face			Working For		
w	Н	Working Angle	Travel	Standard Working Force 1,000,000 strokes	Allowable Working Force 300,000 strokes	Spring Force N (kgf)
65	70	00	38	19.6 (2.0)	39.2 (4.0)	667 (69.1)
100	100	00	40	29.4 (3.0)	58.8 (6.0)	1111 (113.4)
150	100	00	40	58.8 (6.0)	88.2 (9.0)	2051 (209.3)
200	110	00	40	78.4 (8.0)	117.6 (12.0)	2733 (278.9)

■Coil Spring Specifications

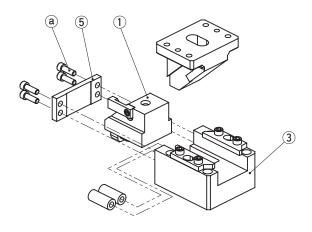
W H Working Angle Travel Conting Force (1,000,000 strokes) Standard Conting Force (1,000,000 strokes) Allowable Working Force (1,000,000 strokes) Allowa	Mount face					Working Force [kN (tonf)]		
52 65 00 40 14.7 (1.5) 29.4 (3.0) 00 40 00 40 05 70 10 45 19.6 (2.0) 39.2 (4.0) 15 70 20 45 70 40 20 45 70 40 100 00 60 29.4 (3.0) 58.8 (6.0) 80 45 70 45 39.2 (4.0) 78.4 (8.0) 15 70 45 20 45 39.2 (4.0) 78.4 (8.0) 15 70 45 20 45 64.7 (6.6) 98.0 (10.0) 150 10 10 70 64.7 (6.6) 98.0 (10.0) 20 45 70 45 64.7 (6.6) 98.0 (10.0) 20 110 00 40 78.4 (8.0) 117.6 (12.0) 250 130 00 40 117.6 (12.0) 176.4 (18.0)	w	н	Working Angle	Travel				
65 70 10 45 70 19.6 (2.0) 39.2 (4.0) 65 70 10 70 70 19.6 (2.0) 39.2 (4.0) 15 70 45 70 45 70 40 29.4 (3.0) 58.8 (6.0) 100 00 60 29.4 (3.0) 58.8 (6.0) 100 10 70 39.2 (4.0) 78.4 (8.0) 100 10 45 70 45 70 70 70 70 70 70 70 70 70 70 70 70 70				25				
00	52	65	00	40	14.7 (1.5)	29.4 (3.0)		
00 60 45 45 70 10 45 45 19.6 (2.0) 39.2 (4.0) 15 45 70 20 45 70 100 00 60 29.4 (3.0) 58.8 (6.0) 100 10 45 70 100 10 45 70 100 10 45 70 15 70 100 10 45 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 15 70 20 45 20 70 15 45 20 70 15 45 20 70 15 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 110 00 40 78.4 (8.0) 117.6 (12.0) 250 130 00 40 117.6 (12.0) 176.4 (18.0)				60				
65 70 10 45 70 19.6 (2.0) 39.2 (4.0) 15 45 70 15 70 15 70 20 70 445 20 70 40 20 70 45 70 100 00 60 29.4 (3.0) 58.8 (6.0) 80 100 70 39.2 (4.0) 78.4 (8.0) 100 10 70 39.2 (4.0) 78.4 (8.0) 15 70 20 45 20 70 45 70 15 70 20 45 70 15 45 70 20 45 70 15 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 46 20 70 20 47 20 70 20 48 20 70 20 46 20 70 20 47 20 48 20 70 20 48 20 70 20 48 20 70 20 48 20 70 20 41 20 70 20 42 20 70 20 70 20 70 20 70 20 46 20 70			00	40				
65 70 10 45 19.6 (2.0) 39.2 (4.0) 15 45 70 45 70 45 70 70 70 70 70 70 70 70 70 70 70 70 70			00	60				
65 70 10 45 19.6 (2.0) 39.2 (4.0) 15 45 70 45 70 70 70 70 70 70 70 70 70 70 70 70 70			0E	45				
65 70 10 70 19.6 (2.0) 39.2 (4.0) 15 45 70 20 45 70 40 100 00 60 29.4 (3.0) 58.8 (6.0) 80 05 45 70 100 10 45 90 45 20 45 70 100 58.8 (6.0) 70 45 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 46 20 70 20 47 20 48 20 70 20 40 98.0 (10.0) 147.6 (12.0) 176.4 (18.0) 117.6 (12.0) 117.6 (12.0) 117.6 (12.0) 117.6 (12.0) 117.6 (12.0) 117.6 (12.0) 117.6 (05	70				
15	G.E.	70	10	45	10.6 (2.0)	20.2 (4.0)		
15	05	70	10	70	19.6 (2.0)	39.2 (4.0)		
100			45	45				
100			15	70				
100 00 60 29.4 (3.0) 58.8 (6.0) 100 00 60 29.4 (3.0) 58.8 (6.0) 100 10 70 39.2 (4.0) 78.4 (8.0) 15 70 45 70 20 45 70 00 60 58.8 (6.0) 88.2 (9.0) 150 100 10 70 64.7 (6.6) 98.0 (10.0) 15 70 70 70 70 70 70 70 70 70 70 70 70 70			-00	45				
100 00 60 29.4 (3.0) 58.8 (6.0) 80 05 45 70 10 45 70 15 70 20 45 70 00 60 05 88.2 (9.0) 15 70 15 70 15 70 15 70 20 45 70 15 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 45 20 70 20 41 20 40 78.4 (8.0) 117.6 (12.0) 250 00 60 98.0 (10.0) 147.0 (15.0)			20	70				
100 10 45 70 10 10 45 70 45 70 45 70 20 45 70 46 78.4 (8.0) 117.6 (12.0) 250 130 00 40 117.6 (12.0) 176.4 (18.0)				40				
100 10 10 10 10 10 10 10 10 10		100	00	60	29.4 (3.0)	58.8 (6.0)		
100 10 10 10 10 10 10 10 10 10				80				
100 10 10 10 10 10 10 15 70 45 70 45 70 20 45 70 40 58.8 (6.0) 88.2 (9.0) 150 100 10 10 10 10 10 10 15 70 46.7 (6.6) 98.0 (10.0) 200 110 00 40 78.4 (8.0) 117.6 (12.0) 130 00 117.6 (12.0) 176.4 (18.0)			0-	45				
90			05	70				
90	100		40	45				
15		0.0	10	70	39.2 (4.0)	70.4 (0.0)		
20		90		45		78.4 (8.0)		
20 70 70 88.2 (9.0) 00 60 58.8 (6.0) 88.2 (9.0) 05 70 150 100 10 45 15 70 20 45 20 70 200 110 00 60 78.4 (8.0) 117.6 (12.0) 250 00 60 98.0 (10.0) 147.0 (15.0) 300 00 117.6 (12.0) 176.4 (18.0)			15	70				
70 40 58.8 (6.0) 88.2 (9.0) 05 45 70 45 70 45 45 70 45 45 70 45 45 70 20 45 70 20 45 70 20 45 70 20 40 70 40 70 40 98.0 (10.0) 117.6 (12.0) 130 300 00 117.6 (12.0) 117.6 (12.0) 117.6 (12.0)				45				
00 60 58.8 (6.0) 88.2 (9.0) 05 70 150 100 10 45 70 45 45 70 20 45 20 70 200 110 00 60 78.4 (8.0) 117.6 (12.0) 250 00 60 98.0 (10.0) 147.0 (15.0) 300 00 117.6 (12.0) 176.4 (18.0)			20	70				
150 100 10 45 70 45 64.7 (6.6) 98.0 (10.0) 15 70 45 70 20 45 70 20 45 70 20 110 00 60 78.4 (8.0) 117.6 (12.0) 250 00 60 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)				40	(o o)	00.0 (0.0)		
150 100 10 45 70 45 64.7 (6.6) 98.0 (10.0) 15 70 64.7 (6.6) 98.0 (10.0) 20 45 70 20 45 70 20 40 70 250 40 98.0 (10.0) 117.6 (12.0) 60 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)			00	60	58.8 (6.0)	88.2 (9.0)		
150 100 10 45 64.7 (6.6) 98.0 (10.0) 15 70 45 70 20 45 70 20 45 70 20 40 78.4 (8.0) 117.6 (12.0) 250 00 60 98.0 (10.0) 147.0 (15.0) 300 00 117.6 (12.0) 176.4 (18.0)			0.5	45				
150 100 10 70 64.7 (6.6) 98.0 (10.0) 15 70 45 70 20 45 70 200 110 00 40 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)			05	70				
200 110 00 40 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 00 40 117.6 (12.0) 176.4 (18.0)	450	400	40	45				
200 110 00 40 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)	150	100	10	70	0.4.7.(0.0)	00.0 (40.0)		
20			45	45	64.7 (6.6)	98.0 (10.0)		
20 70 110 00 40 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)			15	70				
200 110 00 40 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)				45				
200 110 00 60 78.4 (8.0) 117.6 (12.0) 250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)			20	70				
250 00 40 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)	000	440	00	40	70.4 (0.6)	1170 (100)		
250 00 60 98.0 (10.0) 147.0 (15.0) 300 40 117.6 (12.0) 176.4 (18.0)	200	110 00		60	/8.4 (8.0)	117.6 (12.0)		
300 00 40 117.6 (12.0) 176.4 (18.0)	070		0.0	40	00.0 ((0.0)	4470 (15.0)		
300 00 40 117.6 (12.0) 176.4 (18.0)	250	400	00	60	98.0 (10.0)	147.0 (15.0)		
300 00 60 117.6 (12.0) 176.4 (18.0)	000	130	00	40	1170 (100)	470.4 (40.0)		
	300		00	60	117.6 (12.0)	1/6.4 (18.0)		

SKCA

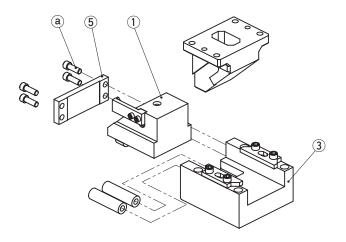
SKCA [Overview]

Product Information

■SKCA52, 65 Assembly Instructions



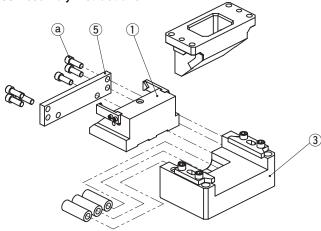
■SKCA100, 150 Assembly Instructions



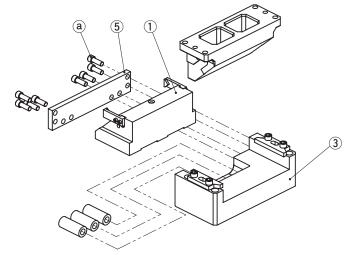
Disassembly

- 1) Remove Hexagon Socket Head Bolts (a), to pull out Stopper Plate (5).
- 2) Pull out and remove Cam Slider (1) from Cam Holder (3) to the rear.

■SKCA200, 250 Assembly Instructions



■SKCA300 Assembly Instructions



Assembly

Assembly is the reverse procedure of disassembly.

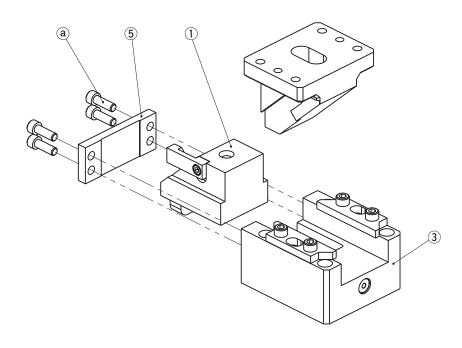
- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial number.
- · Make sure that all bolts are tighten to the recommended torque after assembly and disassembly.



SKCA [Overview]

Product Information

SKCA65, 100, 150 Assembly Instructions (Gas Spring)



Disassembly

- 1) Remove Hexagon Socket Head Bolts (a), to pull out Stopper Plate (5).
- 2) Pull out and remove Cam Slider (1) from Cam Holder (3) to the rear.

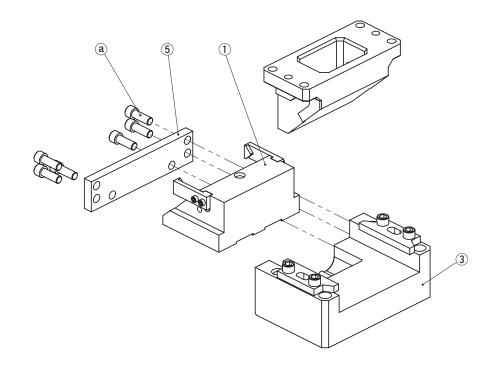
Assembly

Assembly is the reverse procedure of disassembly.

- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial number.
- · Make sure that all bolts are tighten to the recommended torque after assembly and disassembly.

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

■SKCA200 Assembly Instructions (Gas Spring)



Disassembly

- 1) Remove Hexagon Socket Head Bolts (a), to pull out Stopper Plate (5).
- 2) Pull out and remove Cam Slider (1) from Cam Holder (3) to the rear.

Assembly

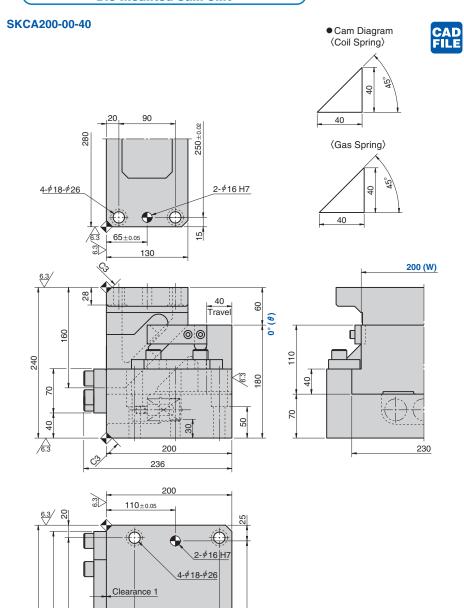
Assembly is the reverse procedure of disassembly.

- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial number.
- · Make sure that all bolts are tighten to the recommended torque after assembly and disassembly.

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

SKCA

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Standard	ce [kN (tonf)]	Spring N (I		Cam Slider Weight		Catalog No.	W	θ	Travel	Spring Type PS		
1,000,000 strokes	Working Force Working Force 1,000,000 strokes 300,000 strokes		Final Load	kg	kg				J	13		
78.4	117.6	460.3 (47.0)	2761.9 (282.2)	21.0	92.0	SKCA	200	00	40	No Code (Coil Spring) NISO		
(8.0)	(12.0)	_	2733 (278.9)	21.0	82.0	82.0	82.0	SKCA	200	00	40	GK NGK GD NGD GS NGS

No Code: Coil Spring GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT) NGK/NGD/NGS: Without Gas Spring NISO: Without Coil Spring Parts for spring assembly are included.



Catalog No.	W]-[θ]-[S]-[PS	- Option
SKCA	200	_	00	_	40	_	GK	
SKCA	200	_	00	_	40	_	NGK	
SKCA	200	_	00	_	40	_	GK	– NF

مر
Option

Option Code	Specification					
NF	Nitrogen gas not charged.					

Refer to page 377 for the machining details of tapped holes and dowel holes for retainer mounting.

■Spring Specification

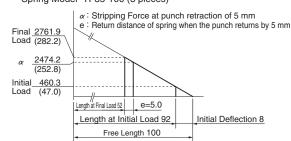
No.	PS	Spring Model	Qty	Remark
	No Code	TF35-100	3	Coil Spring 19.18 N/mm (1.96 kgf/mm)
8	GK	M2-50-Yellow	1	Gas Spring (KALLER)
0	GD	C.180.050.YW	1	Gas Spring (DADCO)
	GS	SFNA.200.50	1	Gas Spring (SDT)

Gas filling pressure: 18 MPa

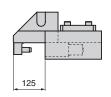
Life expectancy of Coil Spring is approximately 300,000 strokes.

■Spring Diagram

· Spring Model TF35-100 (3 pieces)



■Rear Removal Space



SKCA 200

C

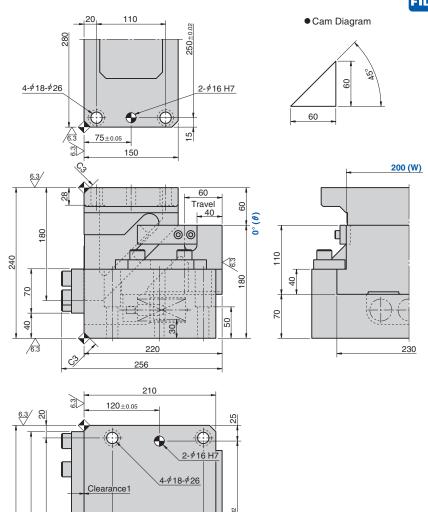
1035

310 290 270

Refer to page 1039, 1040 for Table of Components.

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SKCA200-00-60



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Standard	ce [kN (tonf)] Allowable Working Force	Spring Force N (kgf)		wable N (kgf) Weight Weight			Catalog No.	w	θ	Travel S
Working Force 1,000,000 strokes		Initial Load	Final Load	kg	kg					
78.4 (8.0)	117.6 (12.0)	498.8 (50.7)	2801.0 (284.7)	21.0	84.0	SKCA	200	00	60	

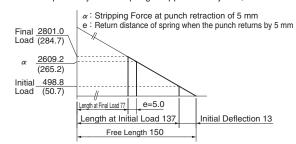




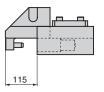
Refer to page 377 for the machining details of tapped holes and dowel holes for retainer

■Spring Diagram

- Spring Model TF35-150 (3 pieces)
- · Spring constant 12.79 N/mm (1.30 kgf/mm)
- · Life expectancy of Coil Spring is approximately 300,000 strokes.



■Rear Removal Space

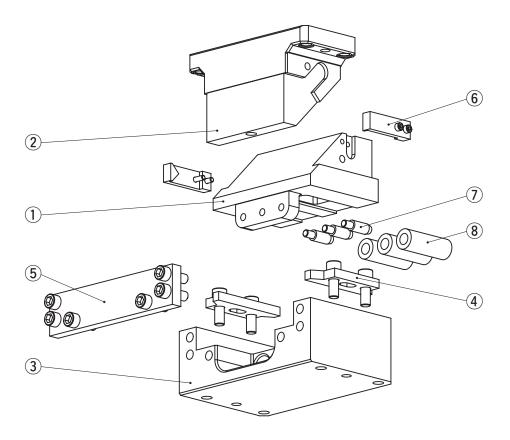


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SKCA [Table of Components]

Die Mounted Cam Unit

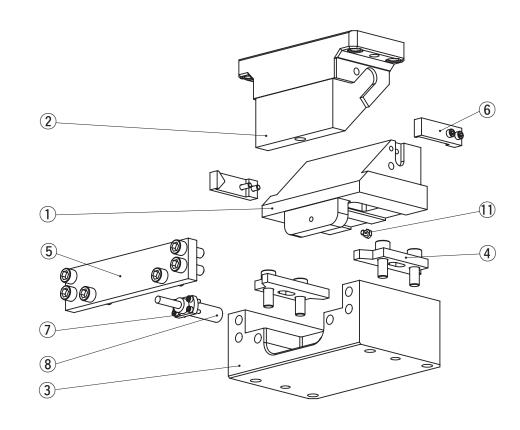
SKCA200 (Coil Spring)



No.	Description	Qty	Material and Remark
1	Cam Slider	1	Cast Iron with Graphite
2	Cam Driver	1	Cast Iron with Graphite
3	Cam Holder	1	Cast Iron
4	Upper Plate	2	Copper Powder Sintered
5	Stopper Plate	1	Steel
6	Positive Return Follower	1	Steel
7	Spring Guide Pin	2	∮18x60
8	Coil Spring	3	TF35-100 40st
8	Coil Spring	3	TF35-150 60st

Bolts, nuts, dowels, and washers for assembly are not indicated.

SKCA200 (Gas Spring)



No.	Description	Qty	Material and Remark
1	Cam Slider	1	Cast Iron with Graphite
2	Cam Driver	1	Cast Iron with Graphite
3	Cam Holder	1	Cast Iron
4	Upper Plate	2	Copper Powder Sintered
5	Stopper Plate	1	Steel
6	Positive Return Follower	2	Steel
7	Mounting Plate	1	Gas Spring specification only
8	Spring	_	Refer to the Spring Specification.
11	Stop Pin	1	Gas Spring specification only

Bolts, nuts, dowels, and washers for assembly are not indicated.



Cam Units [Overview]

Information

■ Tapped Hole and Dowel Hole (Prepared Hole, Finish) Machining for Retainer Mounting

Instruction method for machining

Indicate the tapped hole diameter and the dowel hole (or prepared hole) diameter with the XY coordinates.

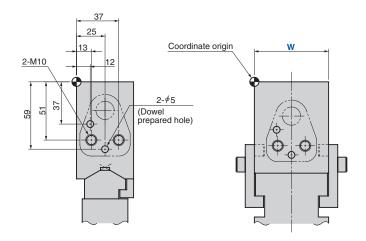
To indicate the coordinates

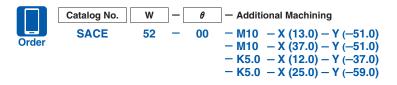
- The origin is positioned at the upper left corner of the mount face. (However, machining uses our machining datum as the reference.)
- · Indication symbol
- -M···Tapped hole, -N···Dowel prepared hole, -K···Dowel finish hole

Machining standard

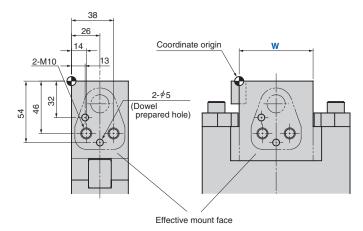
- · Tapped holes and dowel prepared holes are machined to general tolerances.
- The hole depth is 2.5 times the diameter for both tapped holes and dowel holes. The dowel pilot hole is processed for 2 times the diameter.
- \cdot The dowel hole spacing is machined to the tolerance of ± 0.02 . The hole tolerance is H7.

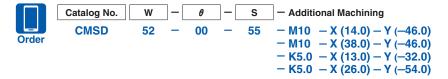
(Example of Aerial Cam Unit)





⟨Example of Die Mounted Cam Unit⟩





■Other machining

Please give instructions on a separate drawing for drilling or cutting other than tapped holes and dowel holes.