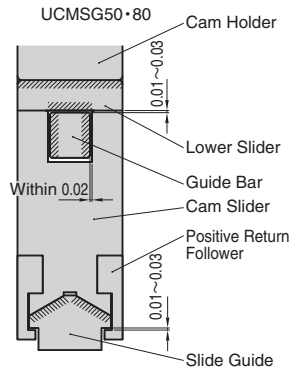
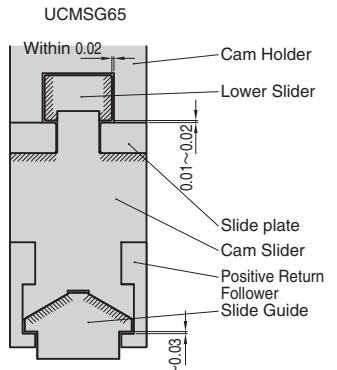


- Highly rigid structure with the overseas automobile manufacturer specification
- 50, 65, 80, 150, 200 and 300 are available for the mount width.
- Available angle is 0° to 65° at increments of 5°.
- ISO springs are used.

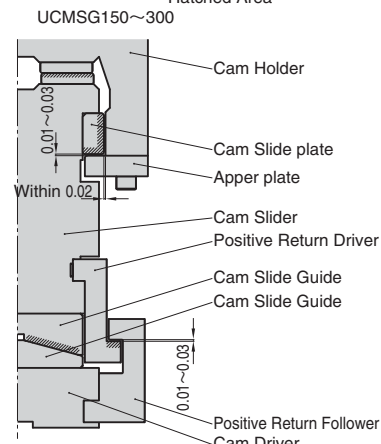
### Slide Structure and Positive Return Structure



\*Oilless System at Hatched Area



\*Oilless System at Hatched Area



\*Oilless System at Hatched Area

- Clearance between cam holder and slider is within 0.02 on one side. It enables the cam to take more thrust.
- Clearance between cam slider (positive return follower) and cam driver is 0.01-0.03. This makes smooth movement for slide and positive return.

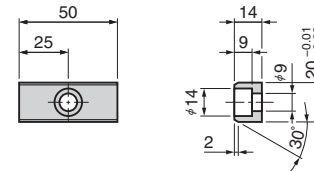
⚠ If a bigger clearance for cam holder or cam slider is needed, please contact your sales department.

### Option for UCMSG

#### Metric Key Specification(-K)

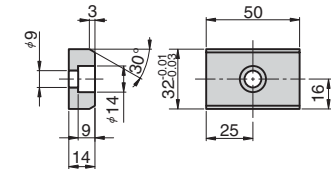
##### UCMSG50/65

LKU20-50 (with 3-M8 × 15 bolts)



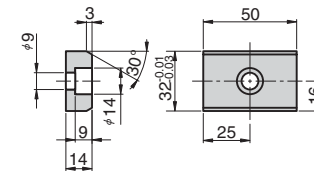
##### UCMSG80

LKU32-50 (with 3-M8 × 15 bolts)



##### UCMSG150/200/300

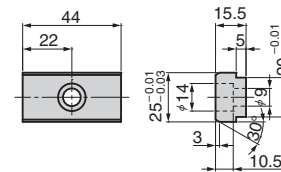
LKU32-50 (with 6-M8 × 15 bolts)



#### Metric Key Specification(-KA)

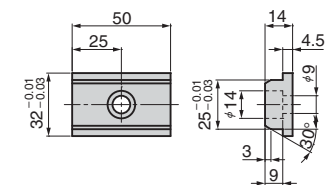
##### UCMSG50

LKA25-20-44 (with 3-M8 × 15 bolts)



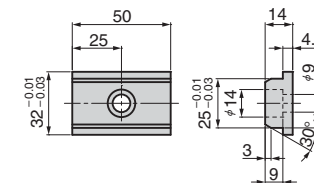
##### UCMSG80

LKE25-32-50 (with 3-M8 × 15 bolts)

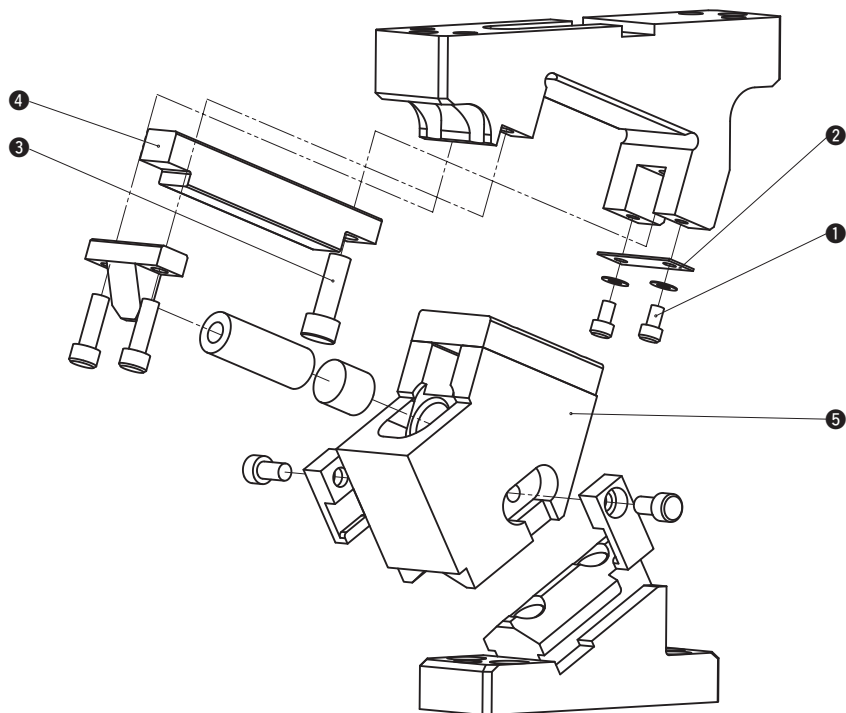


##### UCMSG150/200/300

LKE25-32-50 (with 6-M8 × 15 bolts)



## ■ UCMSG50 (UCMSG80) Structure and Assembly / Disassembly



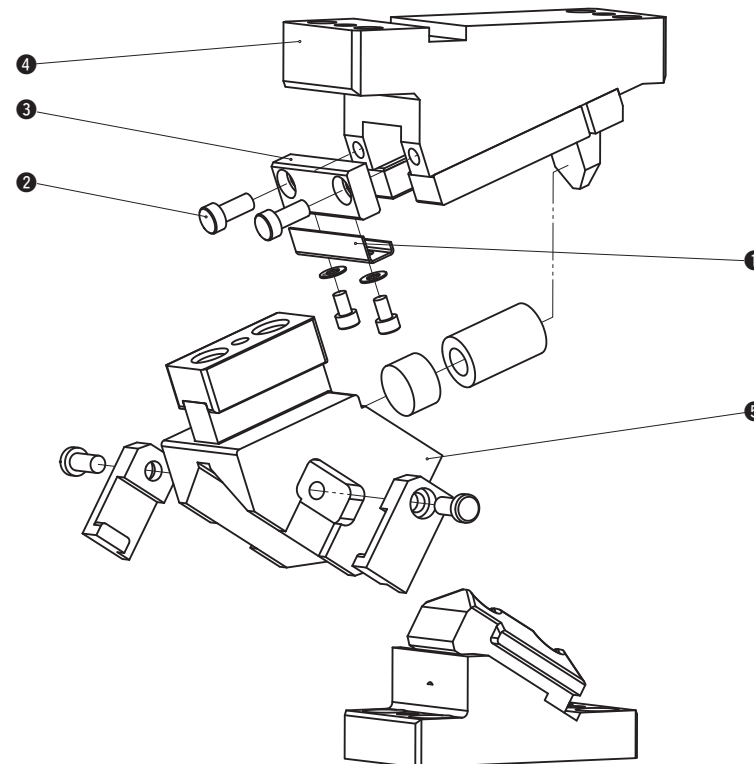
## ● Disassembly method of UCMSG50 (same for UCMSG80)

- 1) Remove hexagon socket head bolt (1) and remove safety plate (2).
- 2) Remove hexagon socket head bolt (3).
- 3) Shift guide bar (4) to the back then remove cam slider (5) from cam holder.

## ● Assembly method of UCMSG50 (same for UCMSG80)

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

## ■ UCMSG65 Structure and Assembly / Disassembly



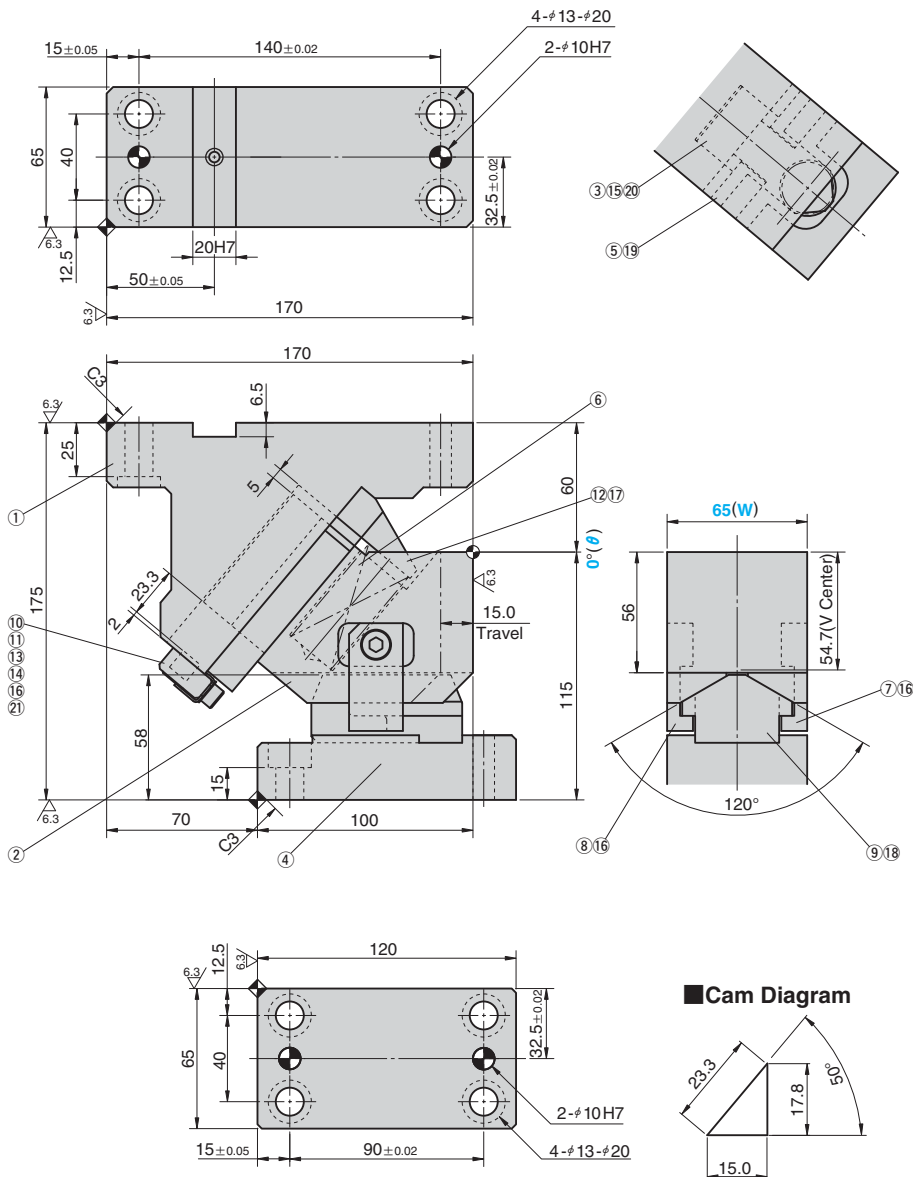
## ● Disassembly method of UCMSG65

- 1) Remove safety plate (1).
- 2) Loosen hexagon socket head bolt (2). Remove stopper plate (3).
- 3) Pull cam slider (4) from cam holder (5) to the rear.

## ● Assembly method of UCMSG65

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

UCMSG65 - 00



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
15.0	29.4 (3.0)	58.8 (6.0)	245.4 (25.0)	834.9 (85.1)	10.7	UCMSG	65	00



Order

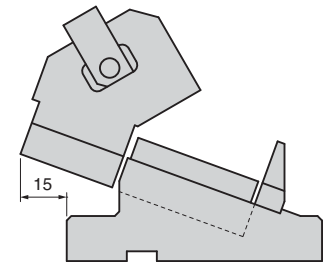
Catalog No. (W) - (θ)  
UCMSG 65 - 00



Option

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

Space for removing



Order

UCMSG65 - 00 - K



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

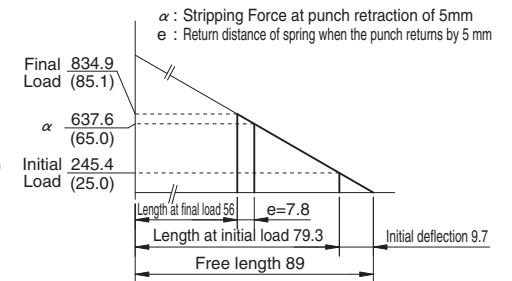
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-89
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10

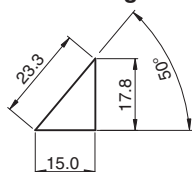
Spring Diagram

(Stripping Force at punch retraction of 5mm)

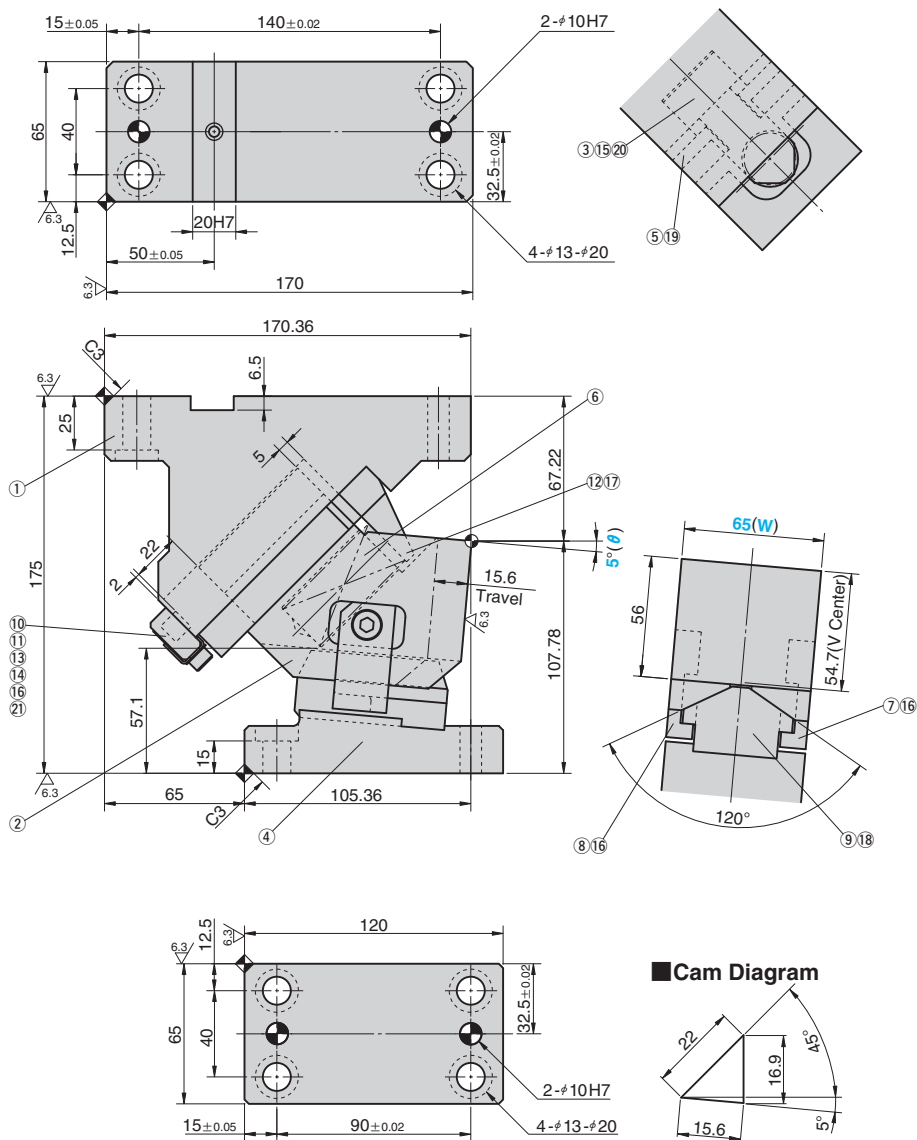
- Spring used TJL25-89 (1 piece)
- Spring constant 25.3N/mm(2.58kgf/mm)



Cam Diagram



UCMSG65 - 05



Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
15.6	29.4 (3.0)	58.8 (6.0)	278.3 (28.4)	834.9 (85.1)	10.4	UCMSG	65	05

Order **Catalog No.** **(W) - (θ)**  
**UCMSG 65 - 05**

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

Order **UCMSG65 - 05 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

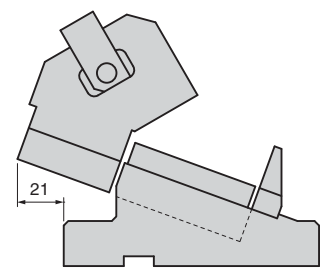
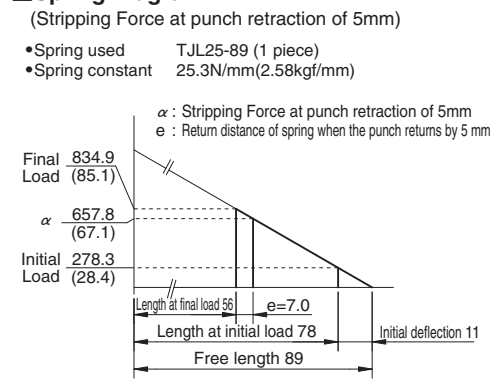


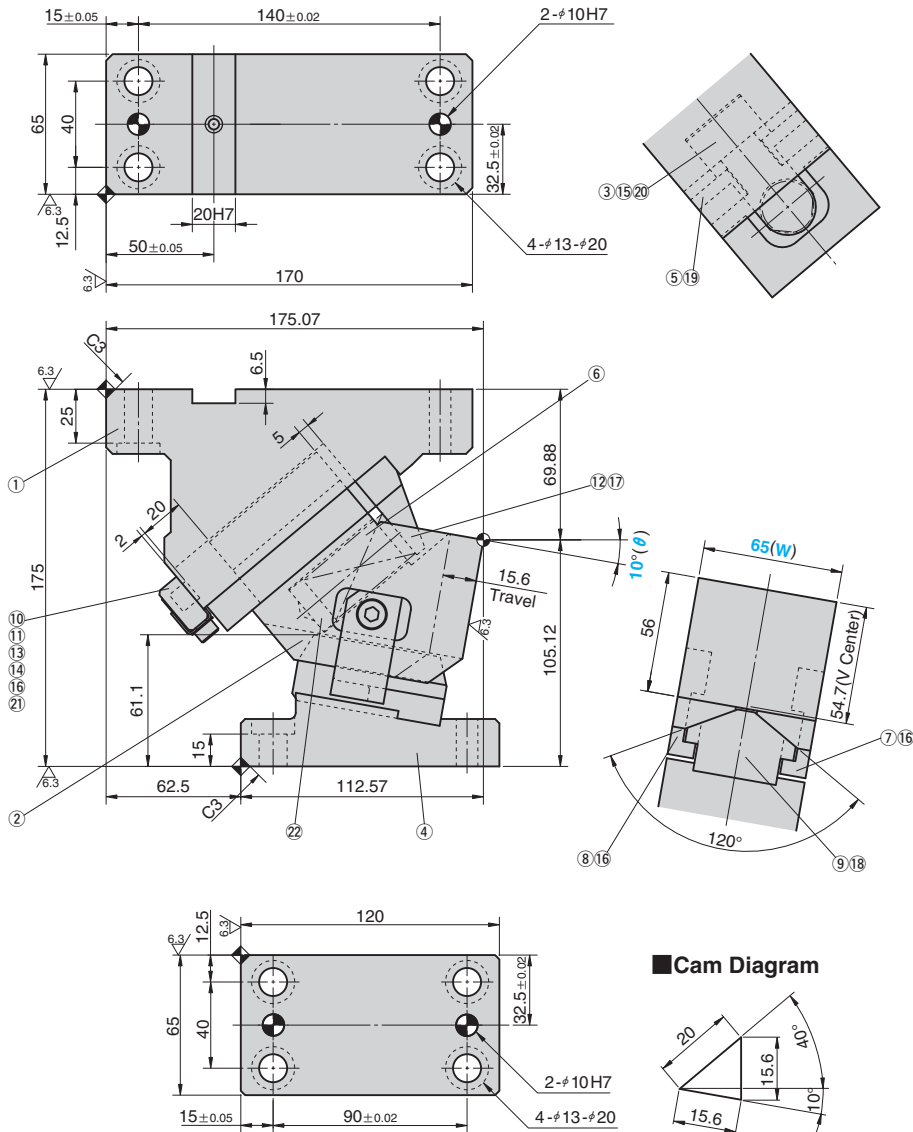
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-89
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10

Spring Diagram



UCMSG65 - 10



Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
15.6	29.4 (3.0)	58.8 (6.0)	236.8 (24.1)	828.8 (84.3)	10.2	UCMSG	65	10



Order

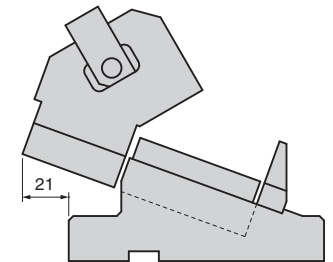
Catalog No. (W) - (θ)  
UCMSG 65 - 10



Option

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

Space for removing



Order UCMSG65 - 10 - K



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

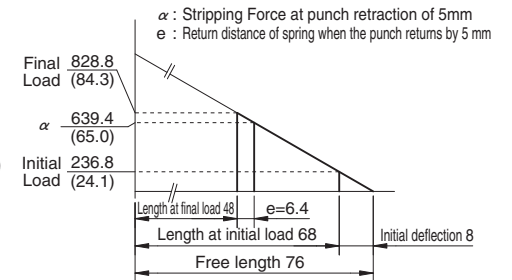
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-76
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

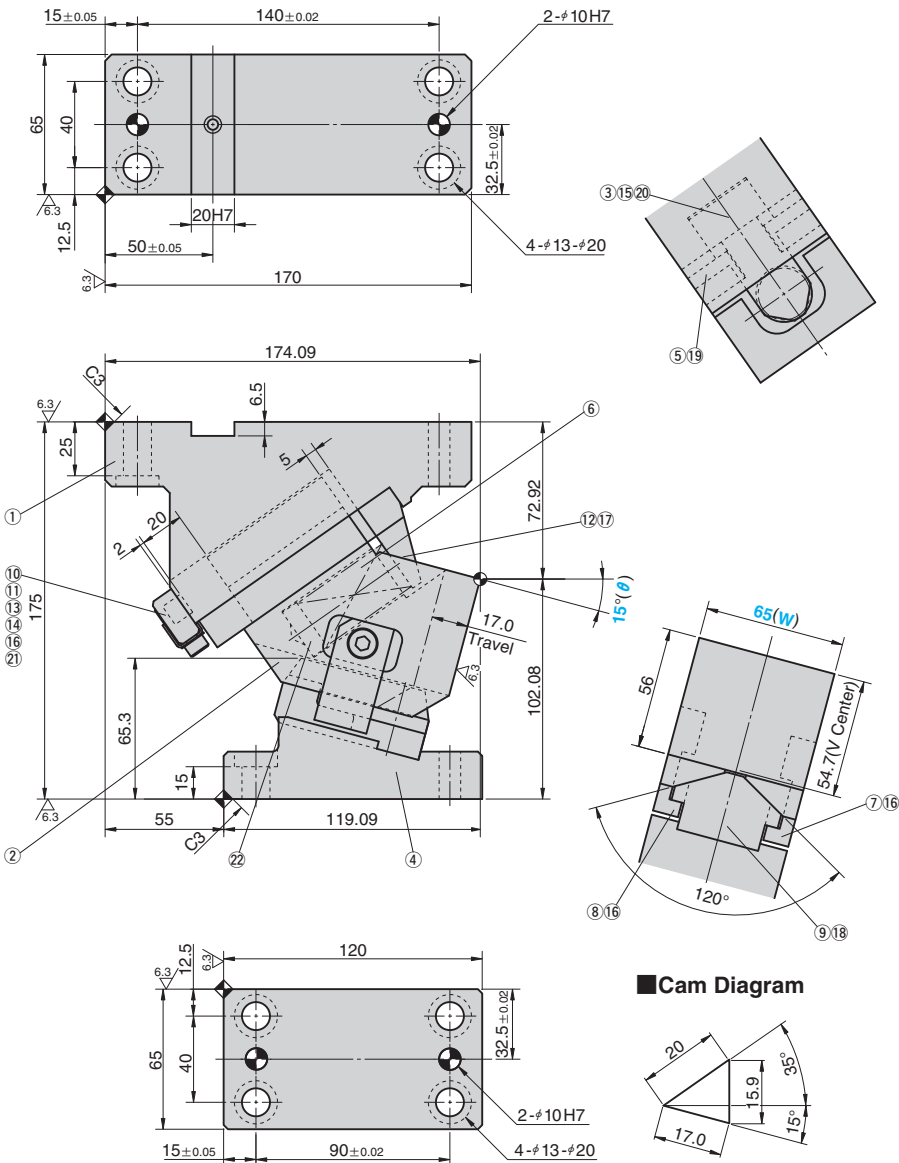
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-76 (1 piece)
- Spring constant 29.6N/mm(3.01kgf/mm)



UCMSG65 - 15



Cam Diagram

Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
17.0	29.4 (3.0)	58.8 (6.0)	236.8 (24.1)	828.8 (84.3)	9.9	UCMSG	65	15



Order

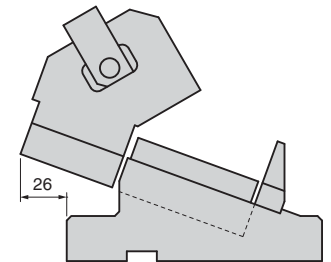
Catalog No. (W) - (θ)  
UCMSG 65 - 15



Option

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

Space for removing



Order UCMSG65 - 15 - K



For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

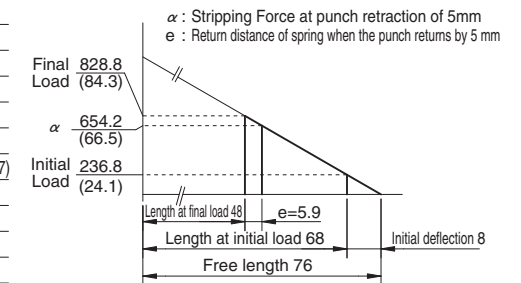
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-76
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 #8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

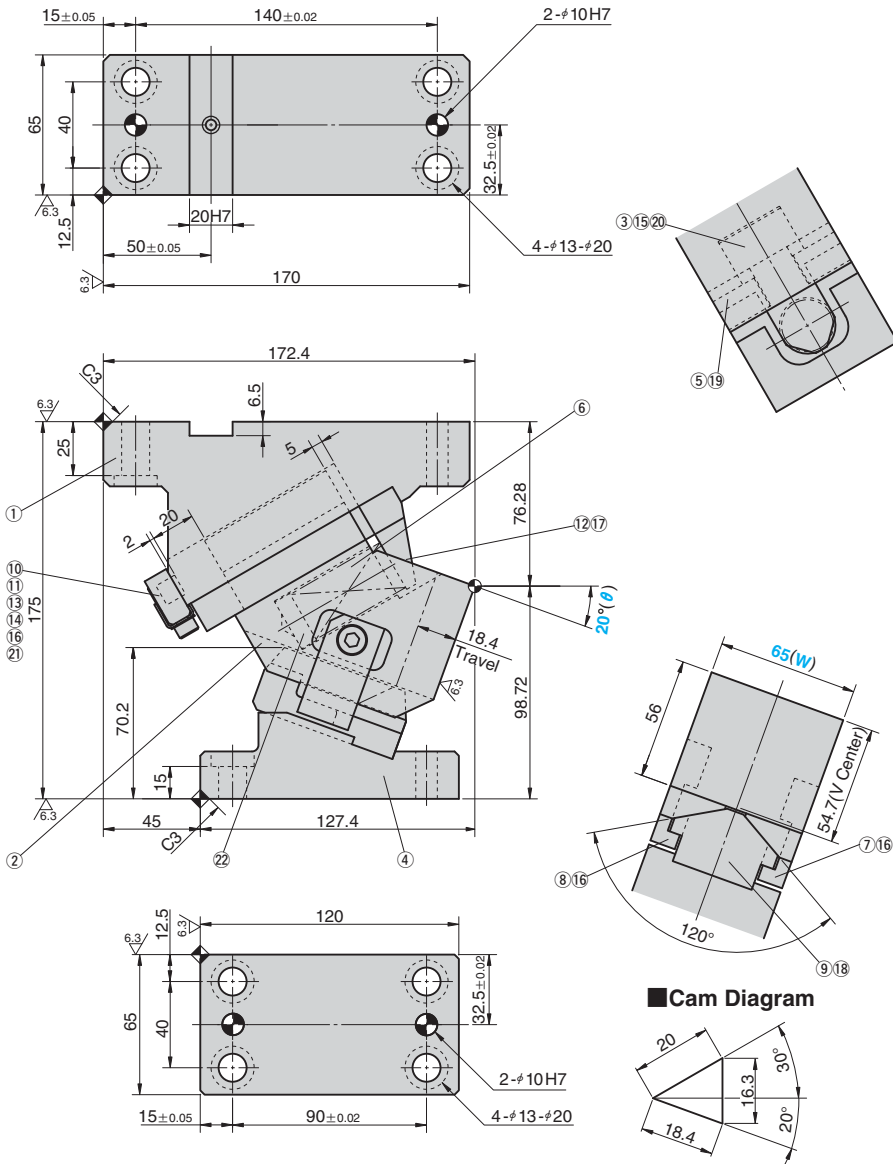
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-76 (1 piece)
- Spring constant 29.6N/mm(3.01kgf/mm)



UCMSG65 - 20



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
18.4	29.4 (3.0)	58.8 (6.0)	236.8 (24.1)	828.8 (84.3)	9.9	UCMSG	65	20

Order **Catalog No.** **(W)** - **(θ)**  
**UCMSG 65 - 20**

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

Order **UCMSG65 - 20 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

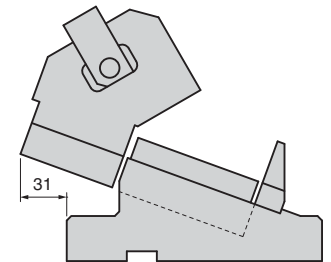


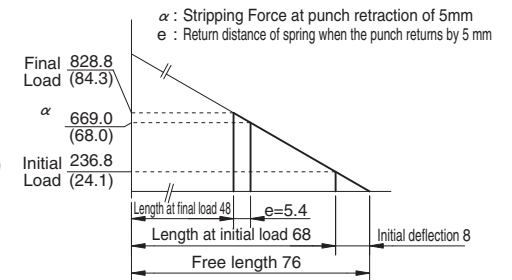
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-76
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 #8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

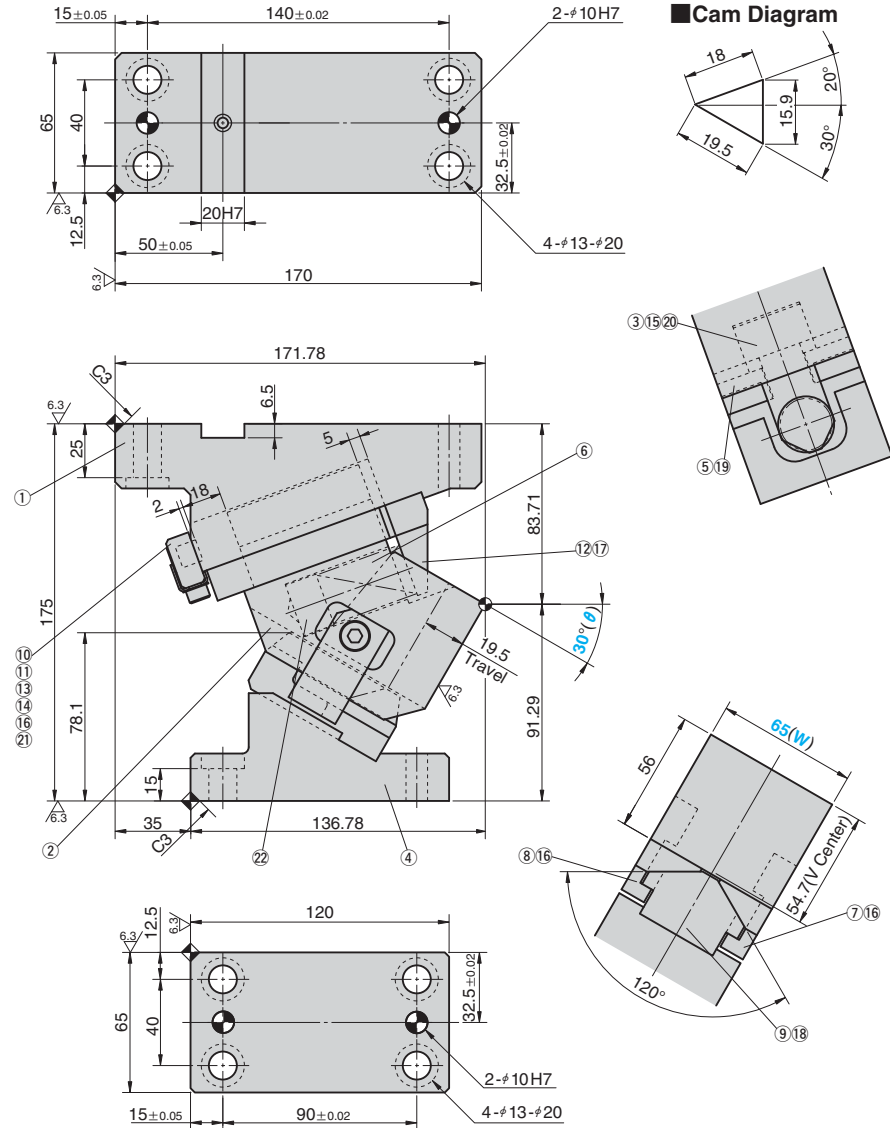
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-76 (1 piece)
- Spring constant 29.6N/mm(3.01kgf/mm)



UCMSG65 - 30



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
19.5	29.4 (3.0)	58.8 (6.0)	176.0 (18.0)	809.6 (82.6)	9.6	UCMSG	65	30

Order **Catalog No.** **(W)** - **(θ)**  
**UCMSG 65 - 30**

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

Order **UCMSG65 - 30 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

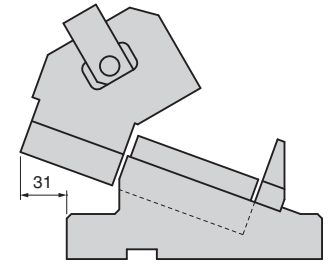


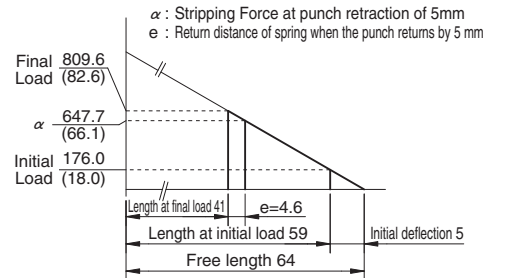
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-64
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

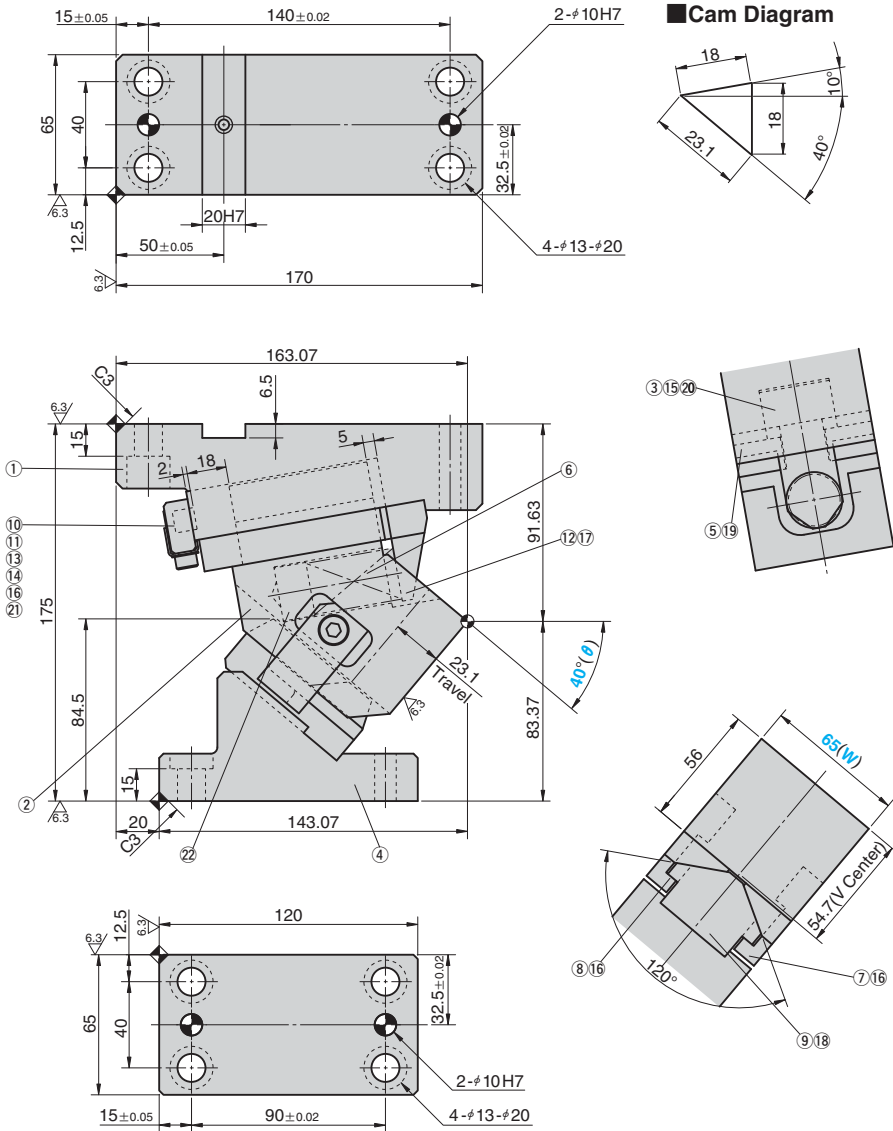
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-64 (1 piece)
- Spring constant 35.2N/mm(3.59kgf/mm)



UCMSG65 - 40



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
23.1	29.4 (3.0)	58.8 (6.0)	176.0 (18.0)	809.6 (82.6)	9.5	UCMSG	65	40

Order **Catalog No.** **(W)** - **(θ)**  
**UCMSG 65 - 40**

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

Order **UCMSG65 - 40 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

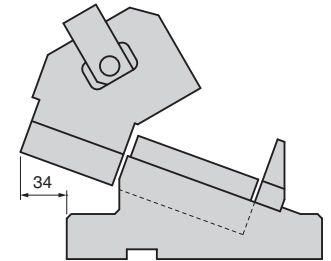


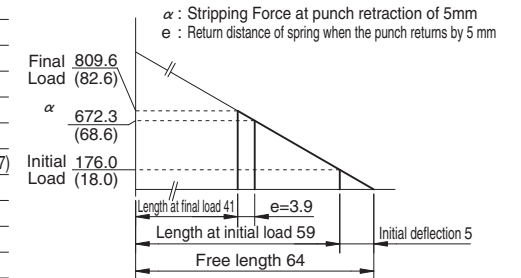
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-64
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

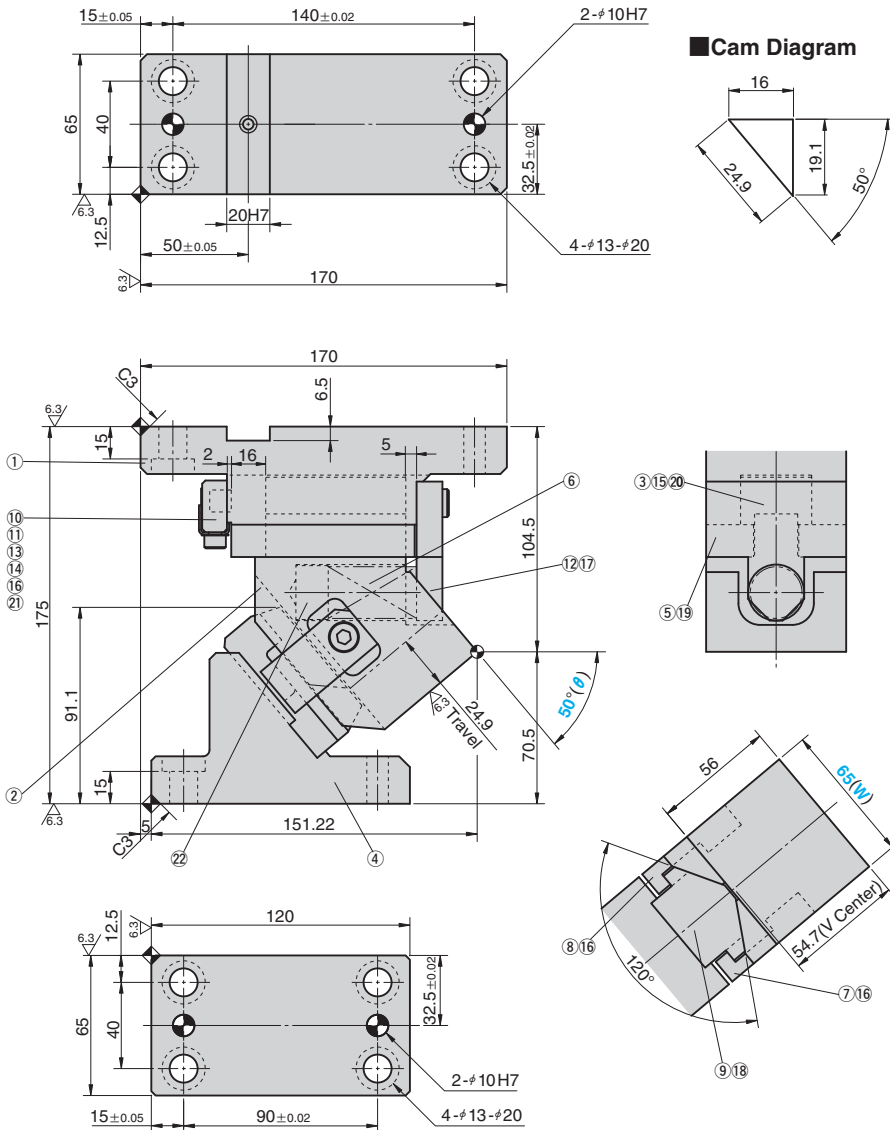
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-64 (1 piece)
- Spring constant 35.2N/mm(3.59kgf/mm)



UCMSG65 - 50



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
24.9	29.4 (3.0)	58.8 (6.0)	246.4 (25.1)	809.6 (82.6)	9.9	UCMSG	65	50

Order **Catalog No.** **(W)** - **(θ)**  
**UCMSG 65 - 50**

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

Order **UCMSG65 - 50 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

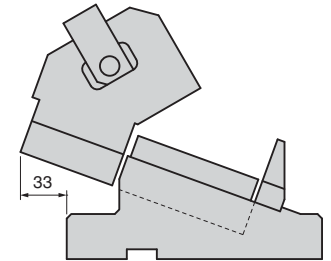


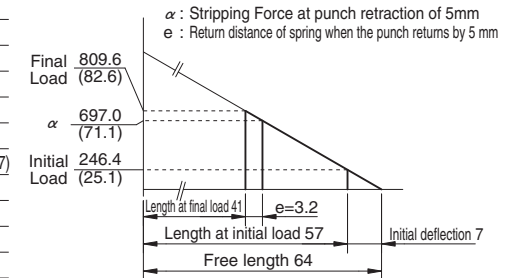
Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-64
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10
㉒	Spacer	1	SS400(1020)

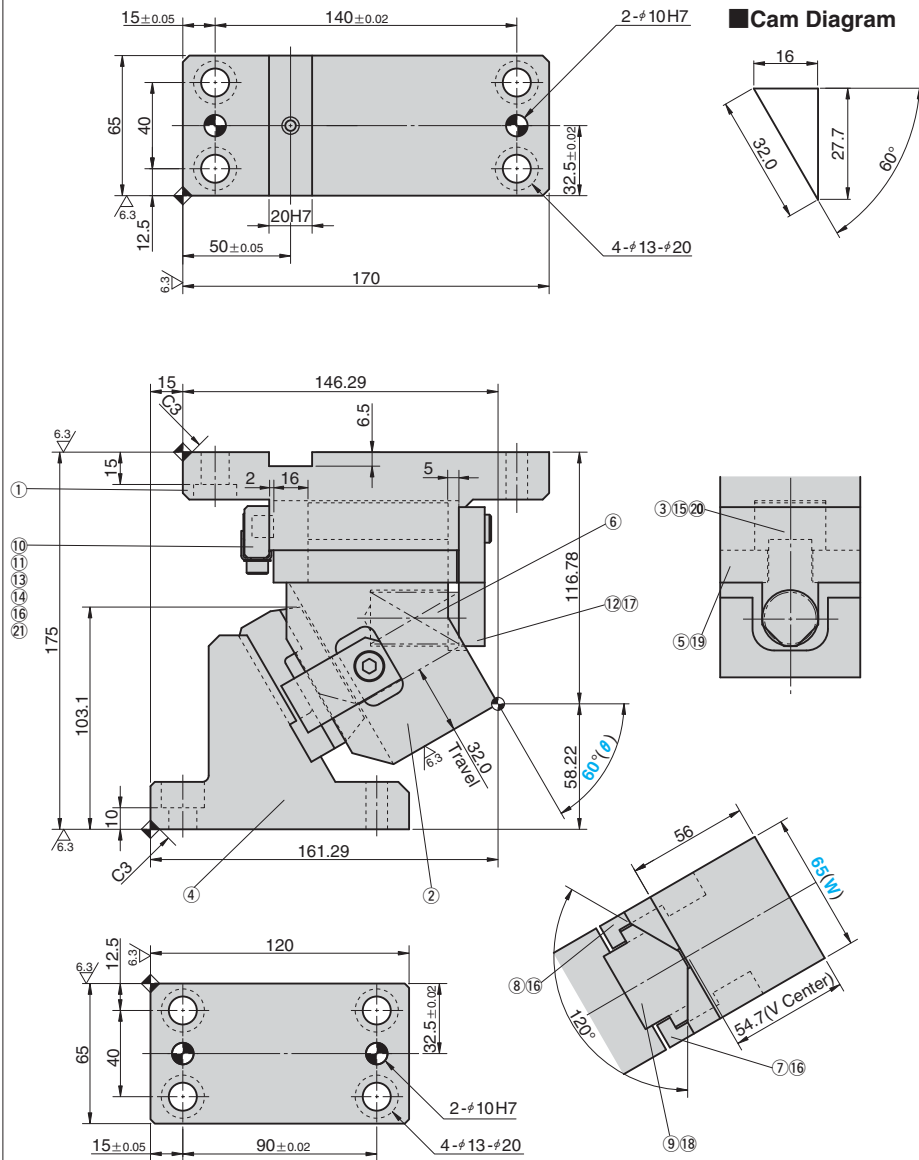
Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-64 (1 piece)
- Spring constant 35.2N/mm(3.59kgf/mm)



UCMSG65 - 60



Travel S	Working Force kN(tonf)		Spring Force N(kgf)		Total Weight kg	Catalog No.	(W)	(θ)
	Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)	Initial Load	Final Load				
32.0	29.4 (3.0)	58.8 (6.0)	246.4 (25.1)	809.6 (82.6)	11.1	UCMSG	65	60

Order **Catalog No.** (W) - (θ)  
**UCMSG 65 - 60**

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

Order **UCMSG65 - 60 - K**

For machining details or tapping hole and dowel hole (prepared hole and finished hole) for mounting of the retainer, refer to page 551. For detailed specification of the key, refer to page 1100.

Space for removing

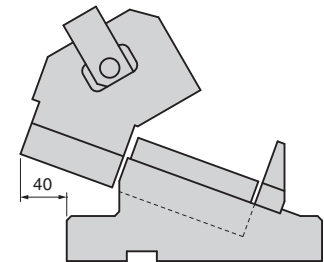


Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FCD450
②	Cam Slider	1	S45C with Graphite
③	Lower Slider	1	FC250 with Graphite
④	Cam Driver	1	S45C(1045)
⑤	Slide Plate	2	Bronze(SP2)
⑥	Coil Spring	1	TJL25-64
⑦	Positive Return Follower A	1	S45C(1045)
⑧	Positive Return Follower B	1	S45C(1045)
⑨	Slide Guide	1	Bronze with Graphite(SO#50SP7)
⑩	Stopper Plate	1	SS400(1020)
⑪	Safety Plate	1	SS400(1020)
⑫	Spring Block	1	SS400(1020)
⑬	Stopper	2	Urethane
⑭	Coned Disc Spring	1	M6
⑮	Dowel Pin with Female Thread	1	SUJ2 φ8×30
⑯	Hexagon Socket Brazier Head Bolt	4	SCM435 LCS8-18
⑰	Hexagon Socket Head Bolt	2	SCM435 M8×20
⑱	Hexagon Socket Head Bolt	2	SCM435 M10×30
⑲	Hexagon Socket Head Bolt	4	SCM435 M8×16
⑳	Hexagon Socket Head Bolt	2	SCM435 M10×20
㉑	Hexagon Socket Head Bolt	1	SCM435 M6×10

Spring Diagram

(Stripping Force at punch retraction of 5mm)

- Spring used TJL25-64 (1 piece)
- Spring constant 35.2N/mm(3.59kgf/mm)

