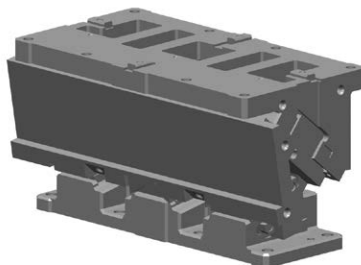


UCMSL [Overview]

Large Type

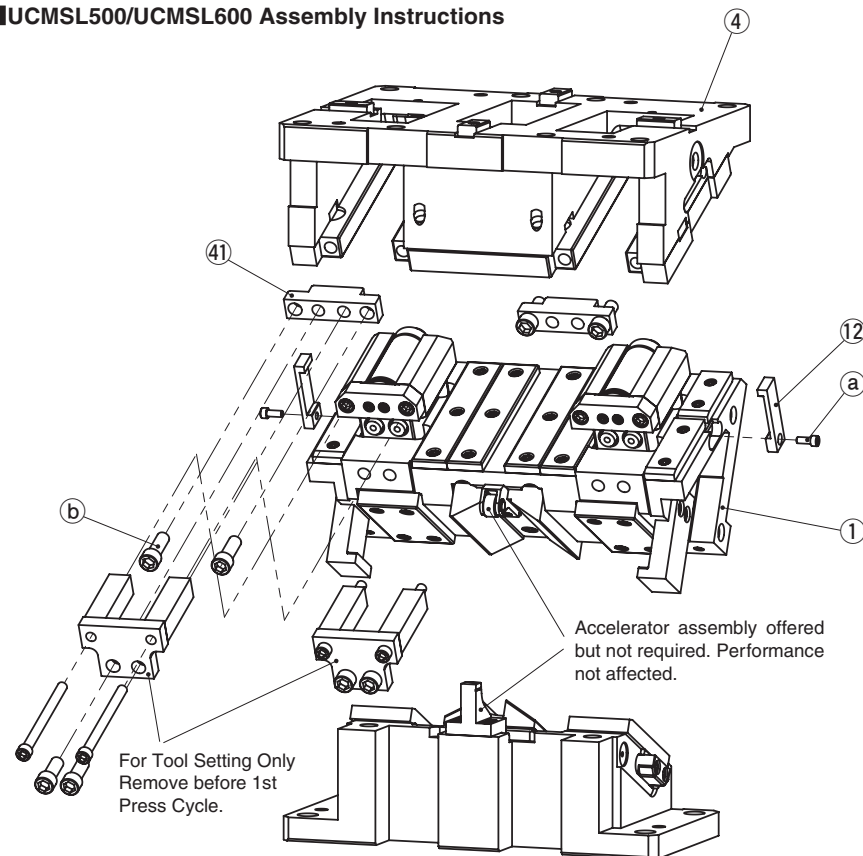
Product Information

- Mount face widths from 500 to 1000 mm in 100 mm increments.
- Working angles from 0° to 60° in 5° increments.
- Gas Spring is removable from the rear without disassembling.
- 1600 mm wide or smaller available on demand.
- 65°, 70°, 75° upon request.



Mount Face		Working Angle	Travel	Working Force kN (tonf)	Spring Force N (kgf)
W	H				
500 600	180	00	38.6	313.6 (32.0)	18682.0 (1906.3)
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.5		
		50	93.3		
		55	104.6		
700 800	180	60	120.0	470.4 (48.0)	28023.0 (2859.5)
		00	38.6		
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.5		
		50	93.3		
900 1000	180	55	104.6	627.2 (64.0)	37364.0 (3812.7)
		60	120.0		
		00	38.6		
		05	42.6		
		10	46.7		
		15	50.9		
		20	55.3		
		25	60.0		
		30	65.1		
		35	70.8		
		40	77.1		
		45	84.6		
		50	93.3		
		55	104.6		
		60	120.0		

UCMSL500/UCMSL600 Assembly Instructions



Disassembly

- 1) Remove Hexagon Socket Head Bolts (⑤), to pull out Safety Plate (⑫).
- 2) Remove Hexagon Socket Head Bolts (⑥), to pull out Stopper Plate (⑧).
- 3) Pull out and remove Cam Slider (①) from Cam Holder (④) 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.



Gas Spring

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.

UCMSL [Overview]

Large Type

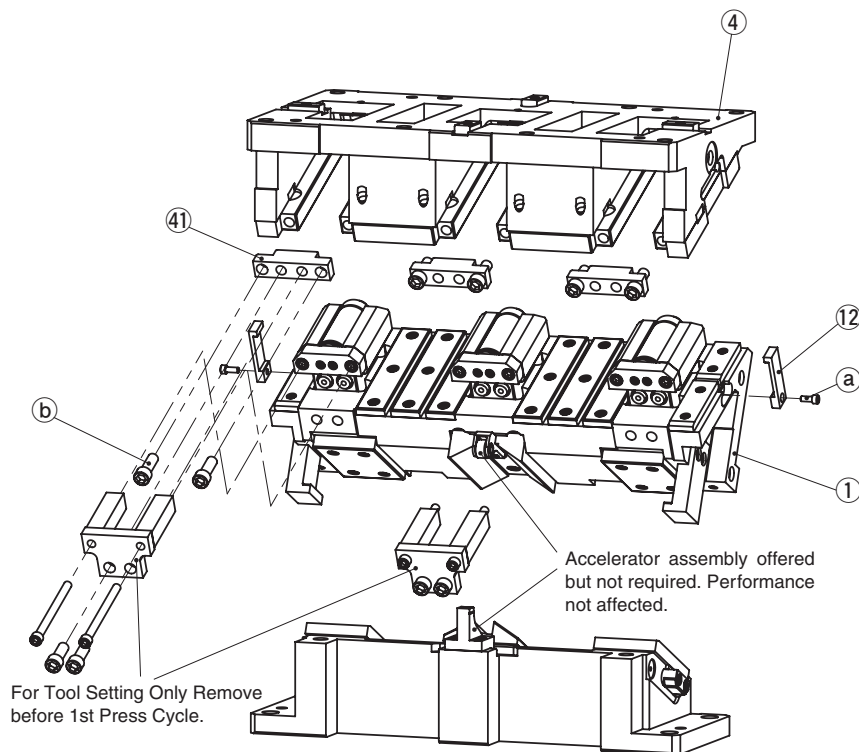
Product Information

For Pierce

For Trim

For Flange

■ UCMSL700/UCMSL800 Assembly Instructions



● Disassembly

- 1) Remove Hexagon Socket Head Bolts (Ⓐ), to pull out Safety Plate (Ⓐ).
- 2) Remove Hexagon Socket Head Bolts (Ⓑ), to pull out Stopper Plate (Ⓐ).
- 3) Pull out and remove Cam Slider (①) from Cam Holder (④) to the rear.

● Assembly

Assembly is the reverse procedure of disassembly.

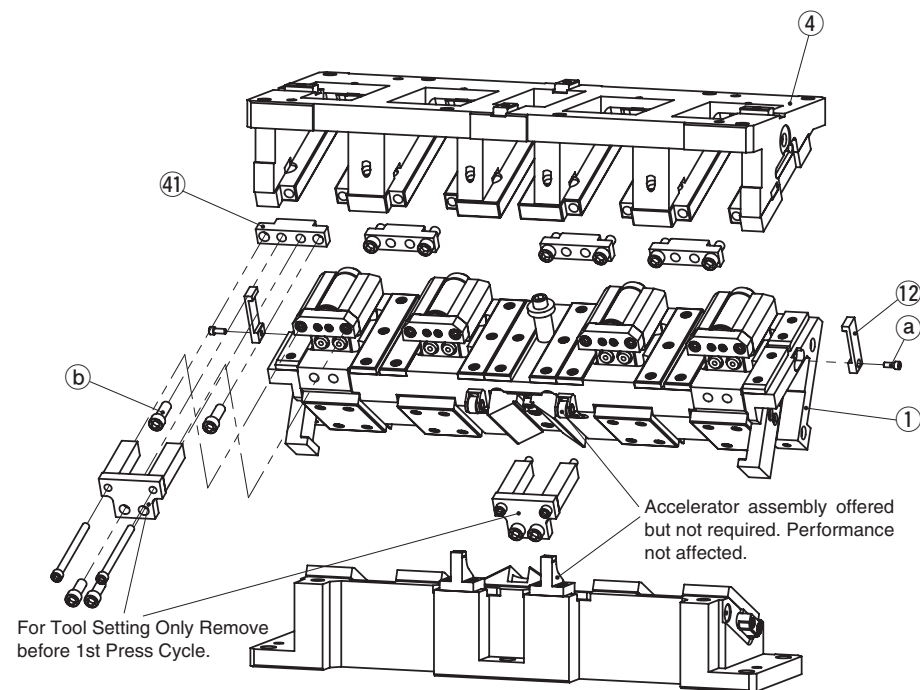
- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial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



Gas Spring

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.

■ UCMSL900/UCMSL1000 Assembly Instructions



● Disassembly

- 1) Remove Hexagon Socket Head Bolts (Ⓐ), to pull out Safety Plate (Ⓐ).
- 2) Remove Hexagon Socket Head Bolts (Ⓑ), to pull out Stopper Plate (Ⓐ).
- 3) Pull out and remove Cam Slider (①) from Cam Holder (④) to the rear.

● Assembly

Assembly is the reverse procedure of disassembly.

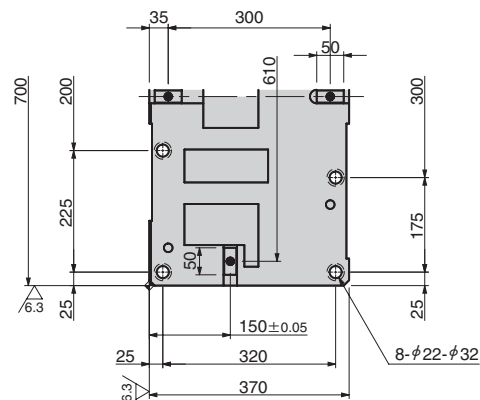
- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial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



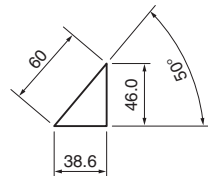
Gas Spring

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.

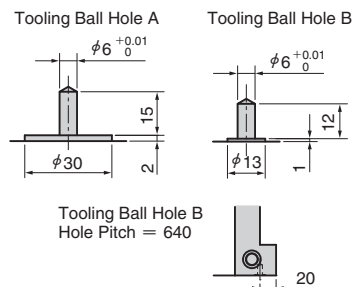
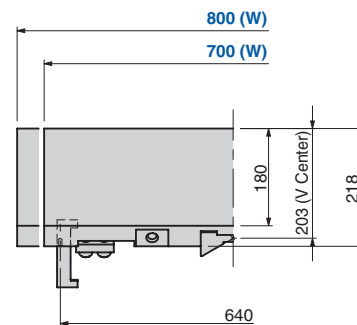
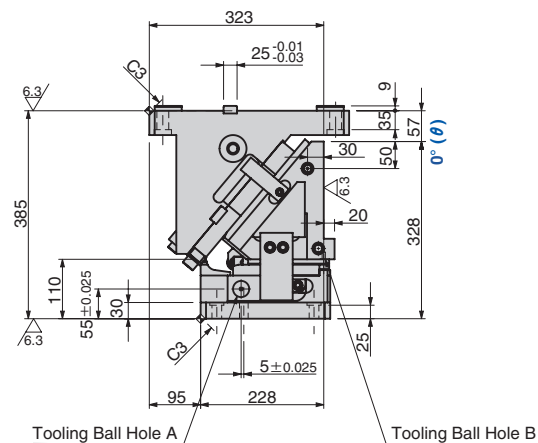
UCMSL700-00/UCMSL800-00



● Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
38.6	470.4 (48.0)	—	28023 (2859.5)	38301 (3908.3)	UCMSL	700 800	00	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	00	—	GK		
UCMSL	800	—	00	—	NGK		
UCMSL	700	—	00	—	GK	—	NF

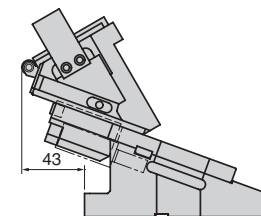


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



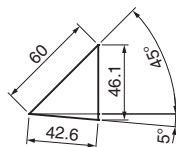
Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	362.6
800	158.9	369.4

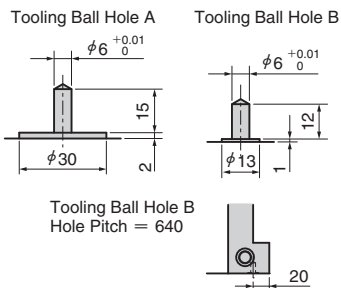
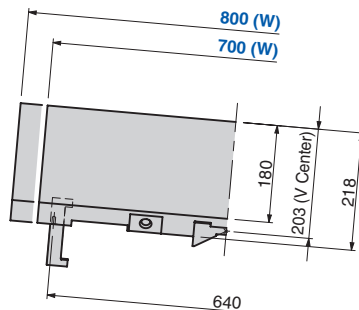
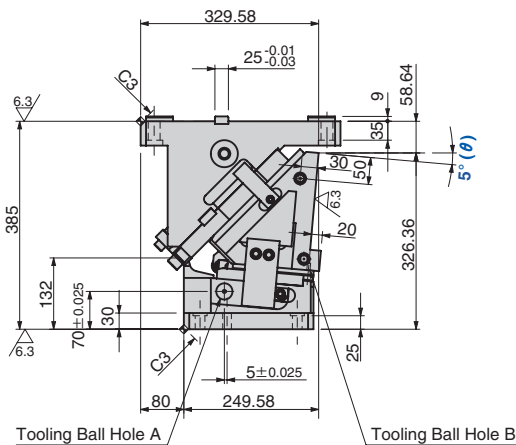
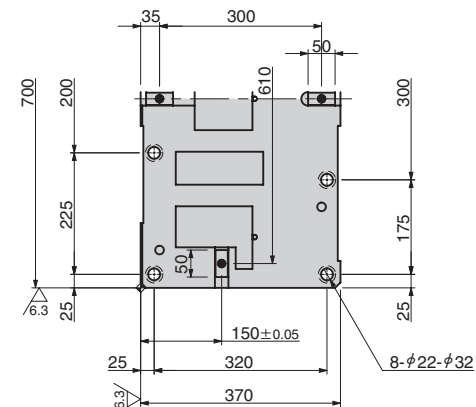
UCMSL700-05/UCMSL800-05



● Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
42.6	470.4 (48.0)	—	28023 (2859.5)	38166 (3894.5)	UCMSL	700 800	05	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	05	—	GK		
UCMSL	800	—	05	—	NGK		
UCMSL	700	—	05	—	GK	—	NF

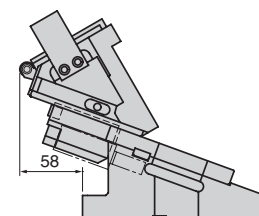


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	358.9
800	158.9	365.7

Large Type

Aerial Cam Unit

For Pierce

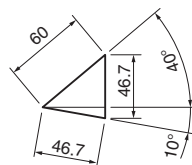
For Trim

For Flange

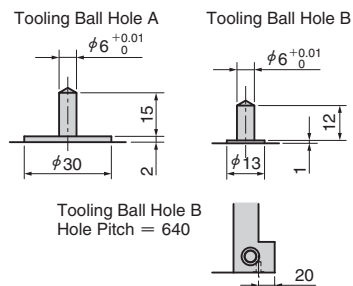
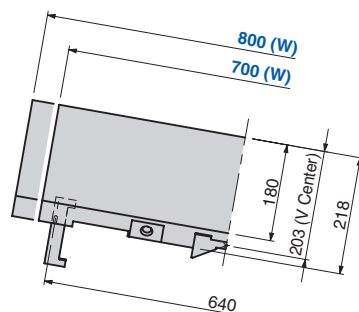
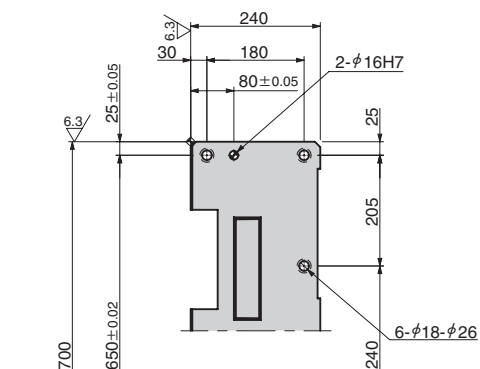
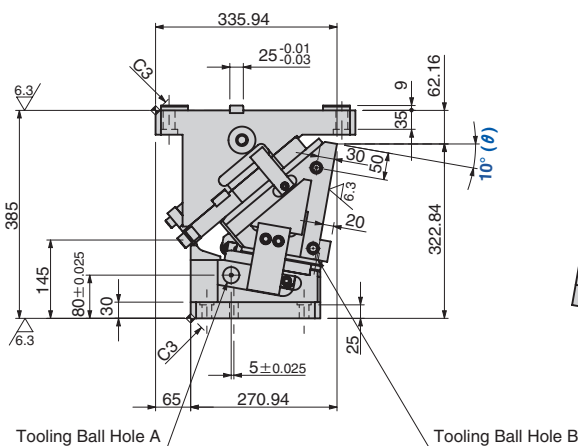
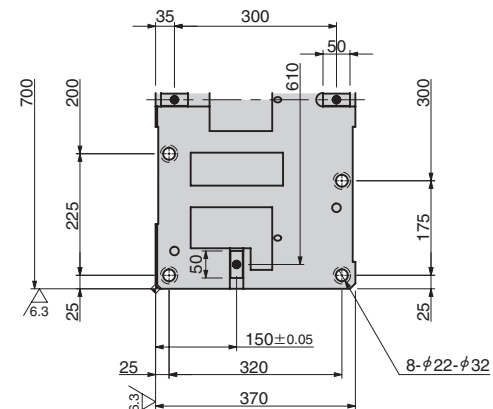
UCMSL700-10/UCMSL800-10



- Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
46.7	470.4 (48.0)	—	28023 (2859.5)	38022 (3879.8)	UCMSL	700 800	10	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Order

Catalog No.	W	θ	PS	Option
UCMSL 700	10	GK		
UCMSL 800	10	NGK		
UCMSL 700	10	GK		NF



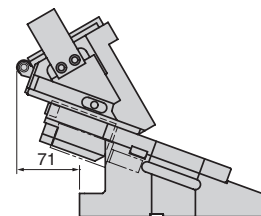
Option

Option Code	Specification
NF	Nitrogen gas not charged.

■ Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

■ Rear Removal Space



■ **Weight**

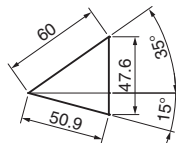
W	Cam Slider Weight kg	Total Weight kg
700	152	357.2
800	158.9	364

 Refer to page 897 for Table of Components.

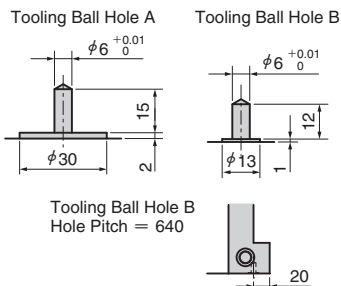
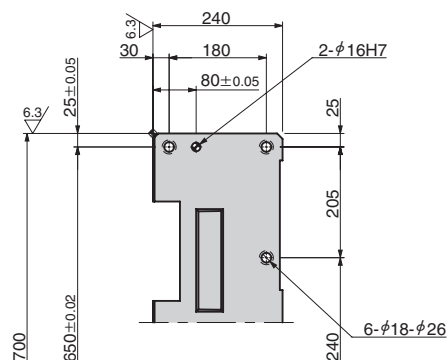
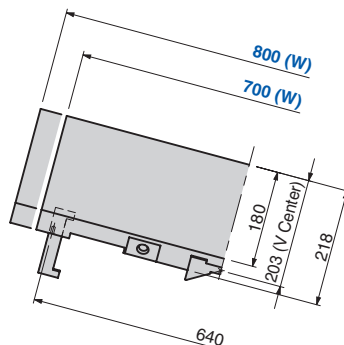
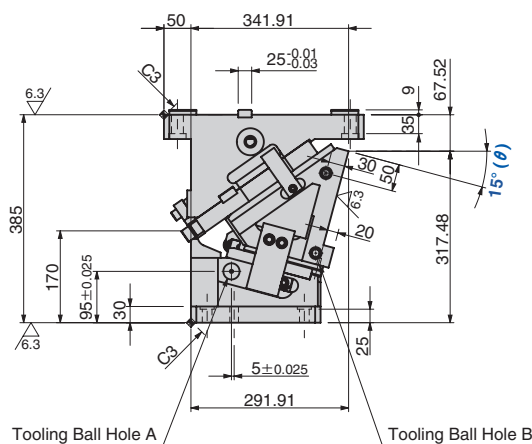
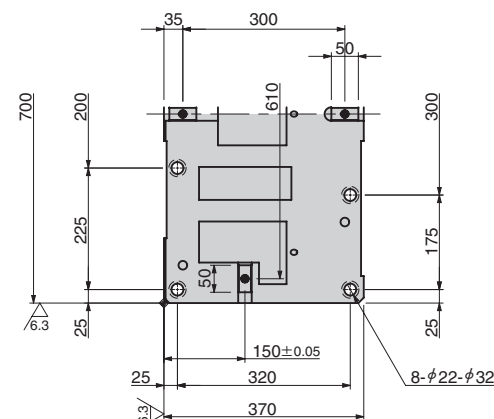
UCMSL700-15/UCMSL800-15



● Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
50.9	470.4 (48.0)	—	28023 (2859.5)	37871 (3864.4)	UCMSL	700 800	15	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	15	—	GK		
UCMSL	800	—	15	—	NGK		
UCMSL	700	—	15	—	GK	—	NF

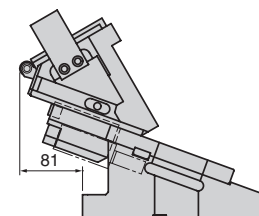


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



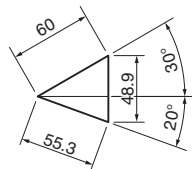
Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	357.0
800	158.9	363.8

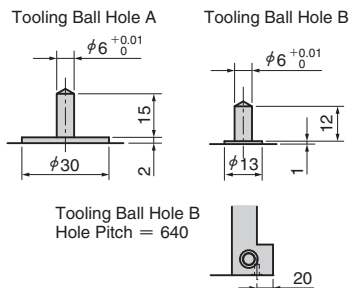
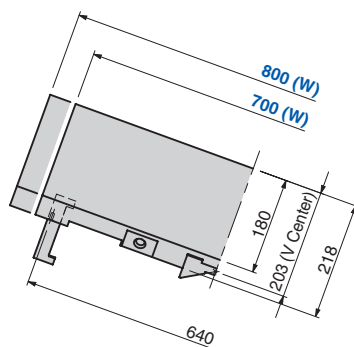
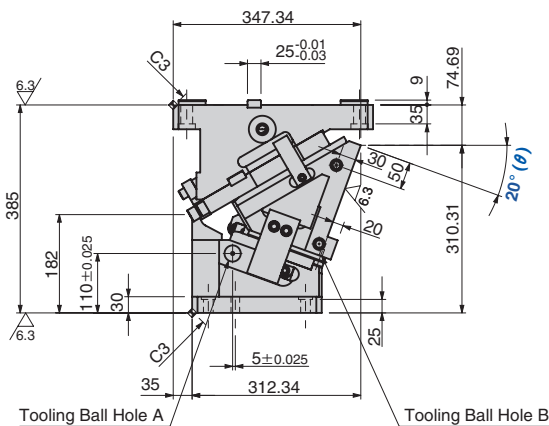
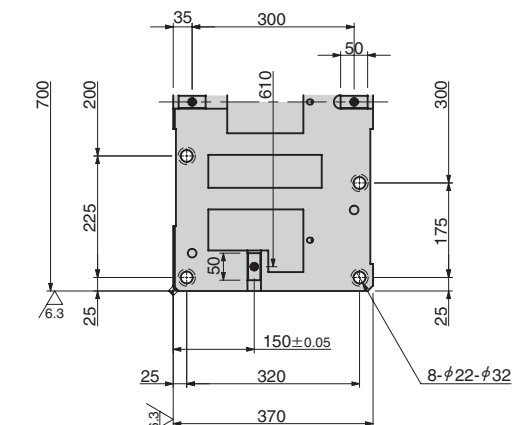
UCMSL700-20/UCMSL800-20



● Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
55.3	470.4 (48.0)	—	28023 (2859.5)	37712 (3848.2)	UCMSL	700 800	20	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	20	—	GK		
UCMSL	800	—	20	—	NGK		
UCMSL	700	—	20	—	GK	—	NF

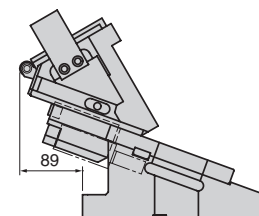


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	356.1
800	158.9	363

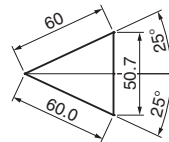
Large Type

Aerial Cam Unit

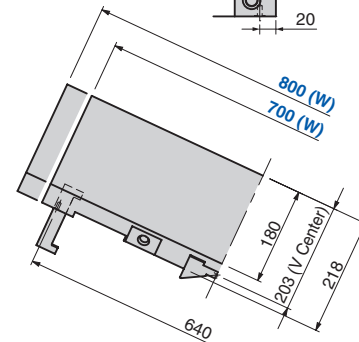
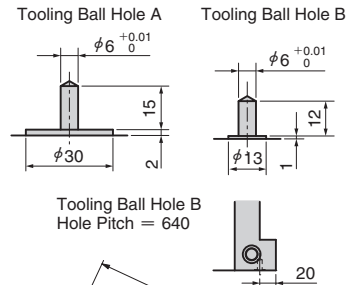
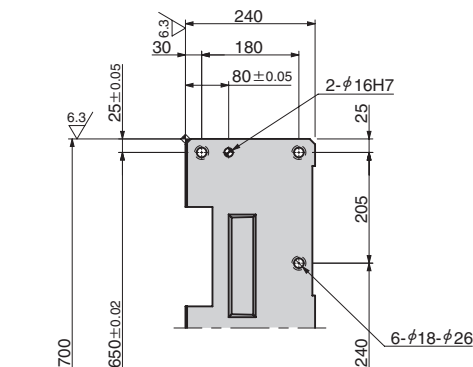
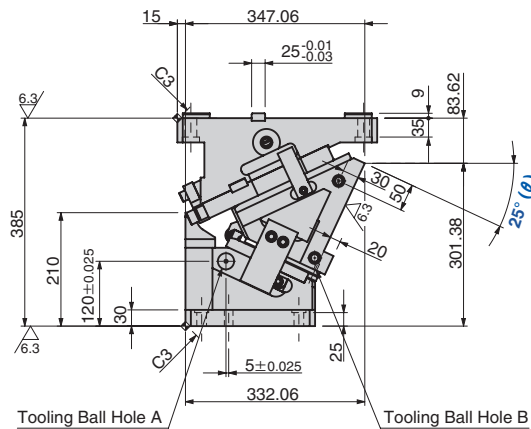
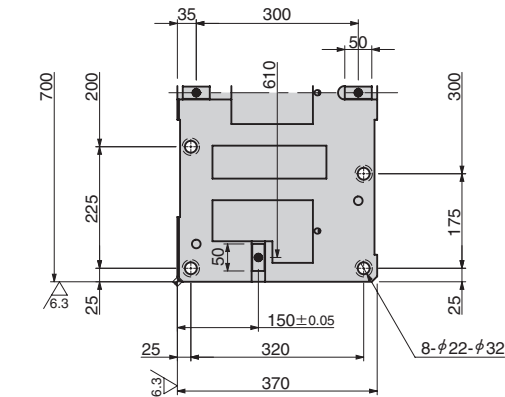
UCMSL700-25/UCMSL800-25



- Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
60.0	470.4 (48.0)	—	28023 (2859.5)	37548 (3831.4)	UCMSL	700 800	25	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	θ	PS	Option
UCMSL	700	25	GK	
UCMSL	800	25	NGK	
UCMSL	700	25	GK	NF

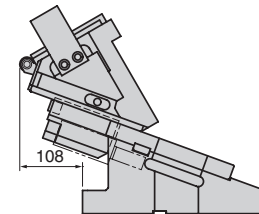


Option Code	Specification
NF	Nitrogen gas not charged.

■ Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

■ Rear Removal Space



■ **Weight**

W	Cam Slider Weight kg	Total Weight kg
700	152	357.3
800	158.9	364.2

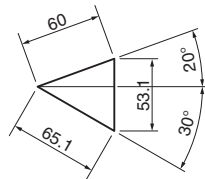


Refer to page 897 for Table of Components.

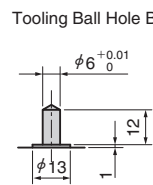
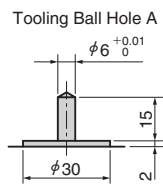
UCMSL700-30/UCMSL800-30



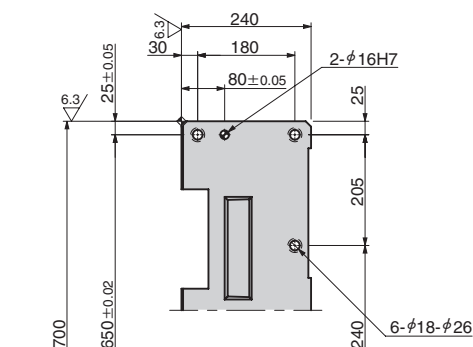
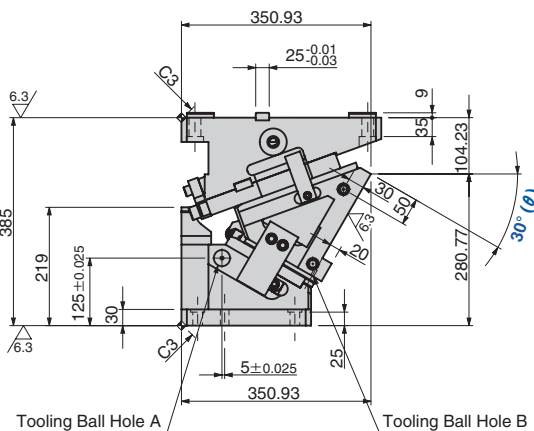
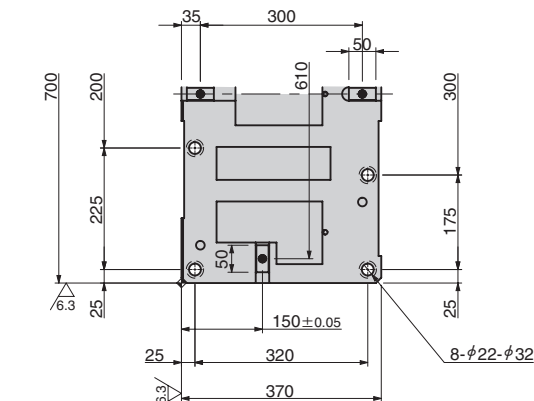
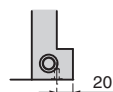
● Cam Diagram



The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Tooling Ball Hole B
Hole Pitch = 640



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
65.1	470.4 (48.0)	—	28023 (2859.5)	37380 (3814.3)	UCMSL	700 800	30	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	30	—	GK		
UCMSL	800	—	30	—	NGK		
UCMSL	700	—	30	—	GK	—	NF

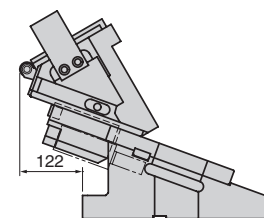


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



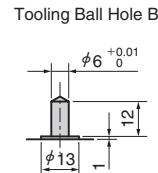
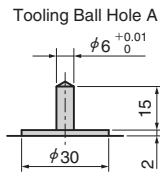
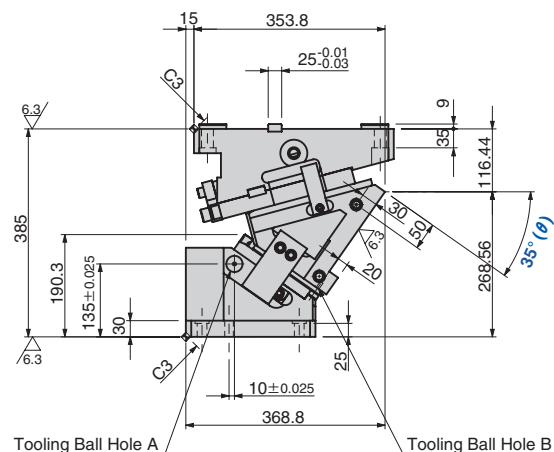
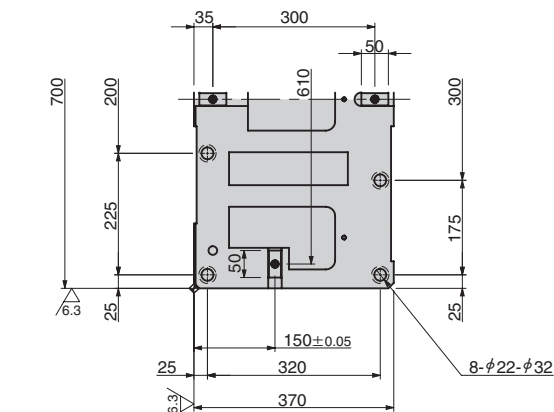
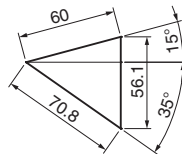
Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	362.7
800	158.9	369.5

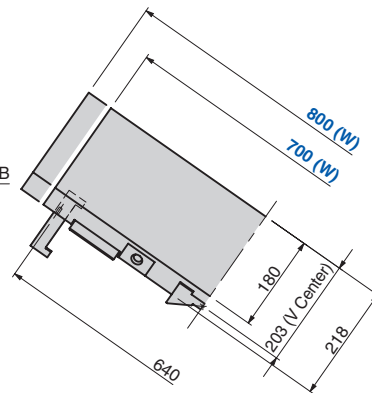
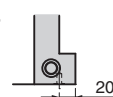
UCMSL700-35/UCMSL800-35



● Cam Diagram



Tooling Ball Hole B
Hole Pitch = 640



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
70.8	470.4 (48.0)	—	28023 (2859.5)	37209 (3796.8)	UCMSL	700 800	35	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	35	—	GK		
UCMSL	800	—	35	—	NGK		
UCMSL	700	—	35	—	GK	—	NF

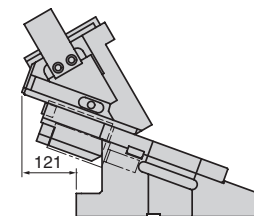


Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



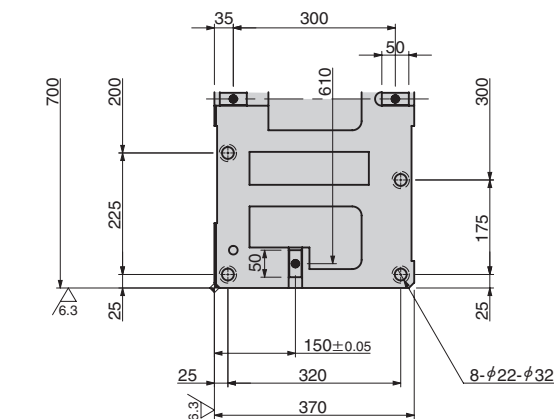
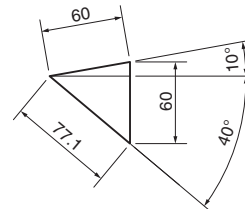
Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	370.6
800	158.9	377.4

UCMSL700-40/UCMSL800-40

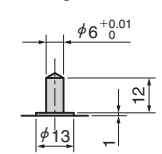
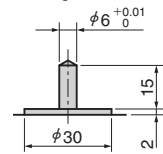


● Cam Diagram

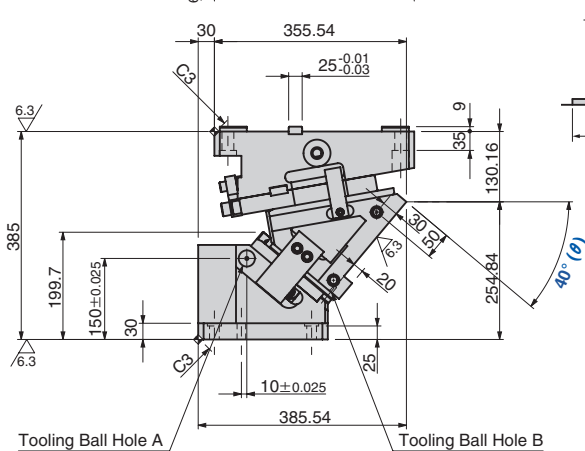
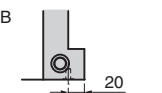


Tooling Ball Hole A

Tooling Ball Hole B

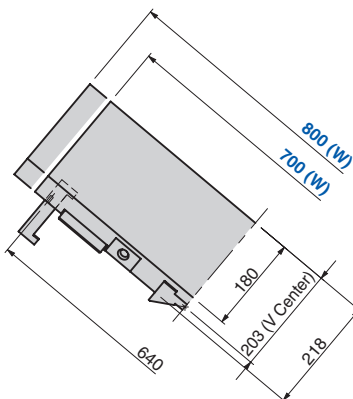
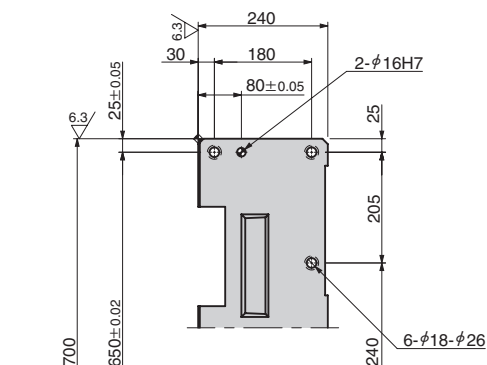


Tooling Ball Hole B
Hole Pitch = 640



Tooling Ball Hole A

Tooling Ball Hole B



Travel S	Working Force kN (tonf)	Spring Force N (kgf)		Return Force N (kgf)	Catalog No.	W	θ	Spring Type PS
		Initial Load	Final Load					
77.1	470.4 (48.0)	—	28023 (2859.5)	37036 (3779.1)	UCMSL	700 800	40	GK NGK GD NGD GS NGS

GK: Gas Spring (KALLER) GD: Gas Spring (DADCO) GS: Gas Spring (SDT)
NGK/NGD/NGS: Without Gas Spring Parts for spring assembly are included.



Order

Catalog No.	W	—	θ	—	PS	—	Option
UCMSL	700	—	40	—	GK		
UCMSL	800	—	40	—	NGK		
UCMSL	700	—	40	—	GK	—	NF



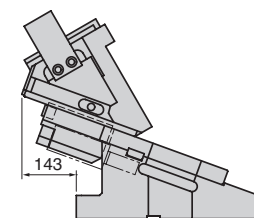
Option

Option Code	Specification
NF	Nitrogen gas not charged.

Spring Specification

No.	PS	Spring Model	Qty	Remark
15	GK	K750-80-TD	3	Gas Spring (KALLER)
	GD	L.750.075.TO.140	3	Gas Spring (DADCO)
	GS	SM0750.75	3	Gas Spring (SDT)

Rear Removal Space



Weight

W	Cam Slider Weight kg	Total Weight kg
700	152	377.0
800	158.9	383.8