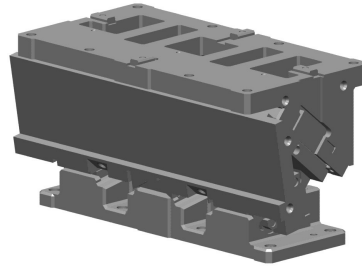


UCMSL [Overview]

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.



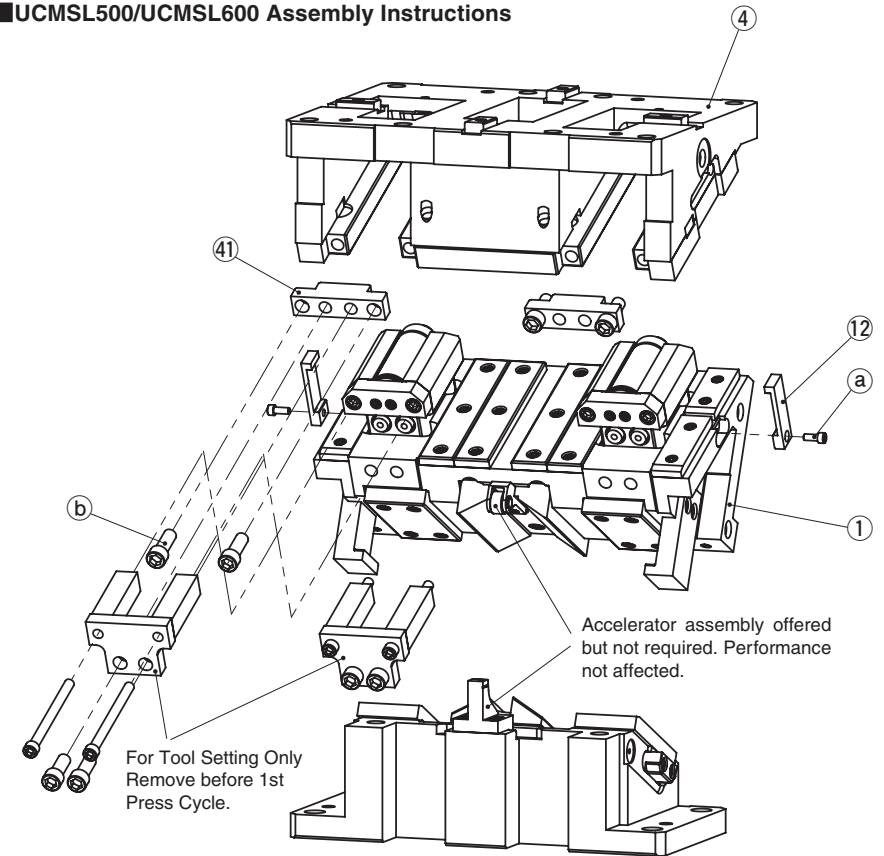
| Mount face | | Working Angle | Travel | Working Force kN (tonf) | Spring Force N (kgf) |
|-------------|-------|---------------|--------|----------------------------|-------------------------|
| W | H | | | | |
| 500 600 | 180 | 00 | 38.6 | 313.6 (32.0) | 18682.0 (1906.3) |
| | | 05 | 42.6 | | |
| | | 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 | | |
| 55 | 104.6 | | | | |
| 900 1000 | 180 | 60 | 120.0 | 627.2 (64.0) | 37364.0 (3812.7) |
| | | 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 | | | | |

For Pierce

For Trim

For Flange

UCMSL500/UCMSL600 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 (Ⓚ) from Cam Holder (Ⓖ) 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

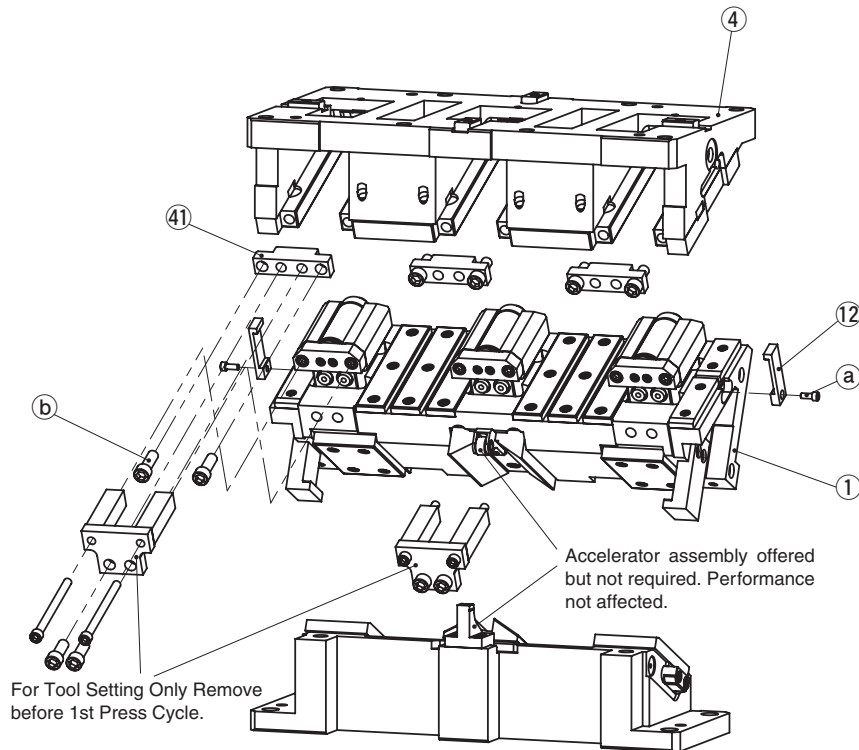
Product Information

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 (Ⓛ) from Cam Holder (Ⓜ) to the rear.

Assembly

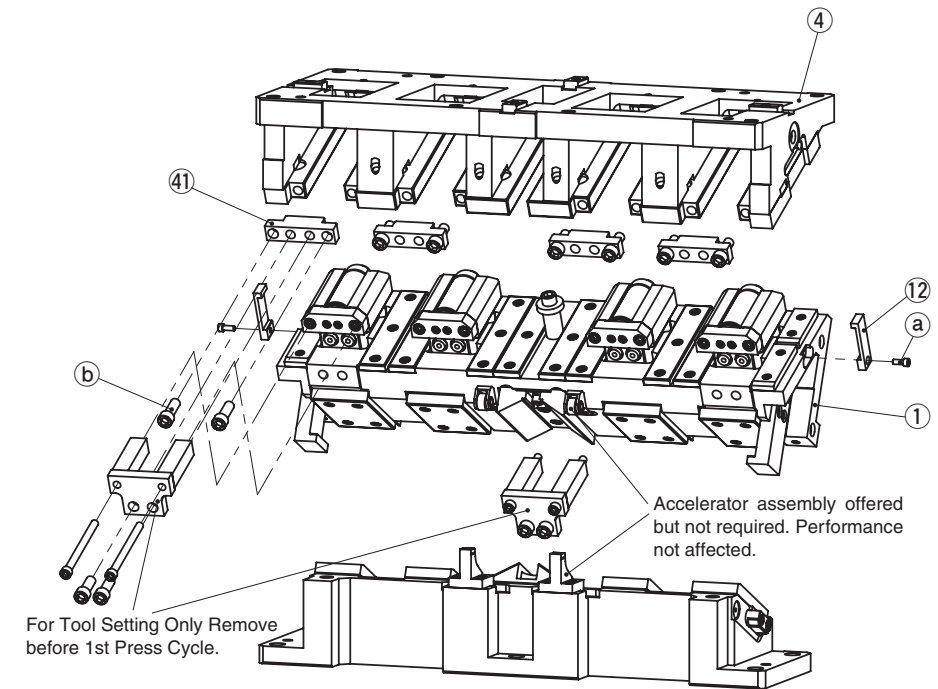
Assembly is the reverse procedure of disassembly.

- 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 (Ⓛ) from Cam Holder (Ⓜ) 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

Large Type

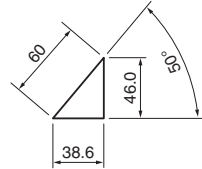
For Pierce For Trim For Flange

Aerial Cam Unit

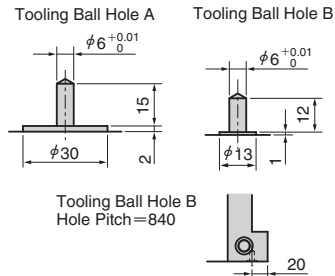
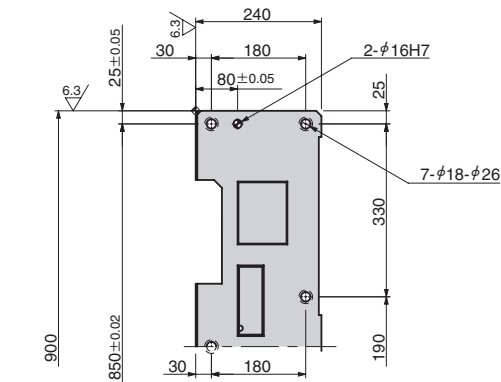
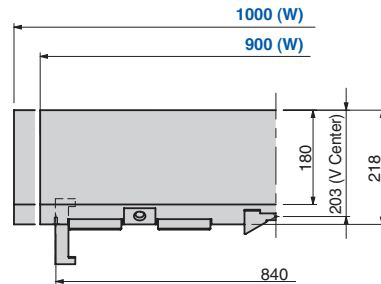
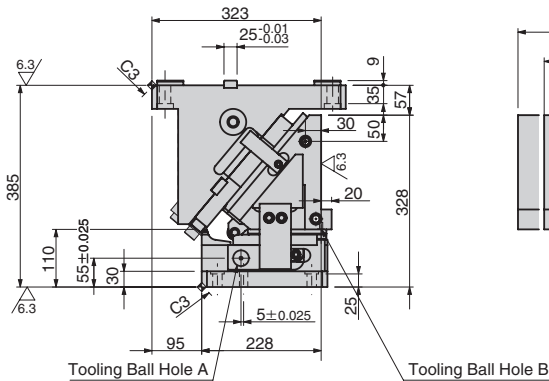
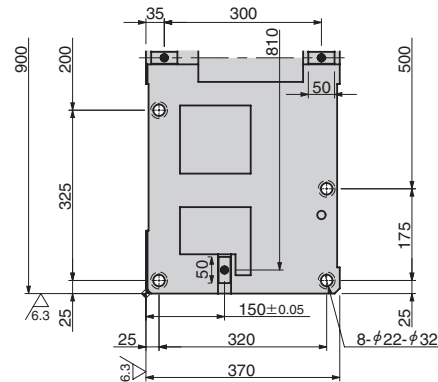
UCMSL900-00/UCMSL1000-00



● 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 | 627.2 (64.0) | — | 37364 (3812.7) | 51041 (5208.2) | UCMSL | 900 1000 | 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 | 900 | 00 | GK | |
| UCMSL | 1000 | 00 | NGK | |
| UCMSL | 900 | 00 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

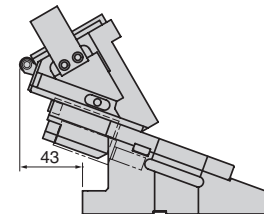
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 463.3 |
| 1000 | 206.4 | 470.2 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

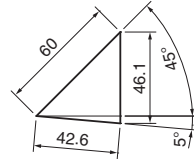
For Trim

For Flange

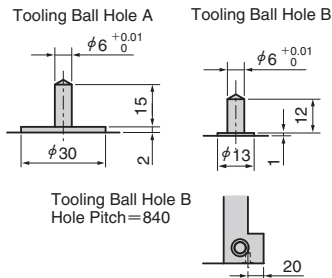
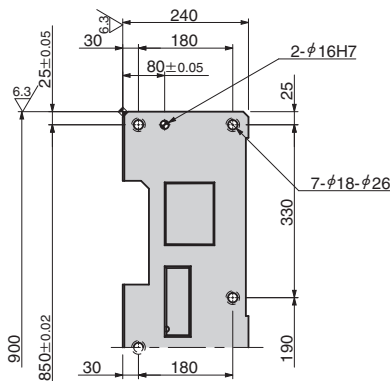
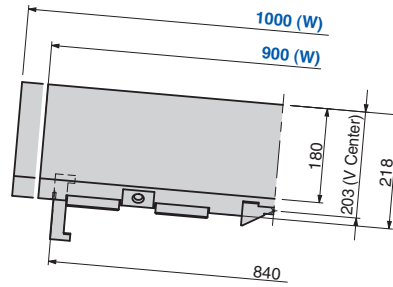
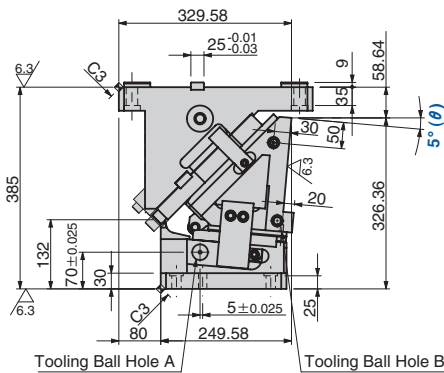
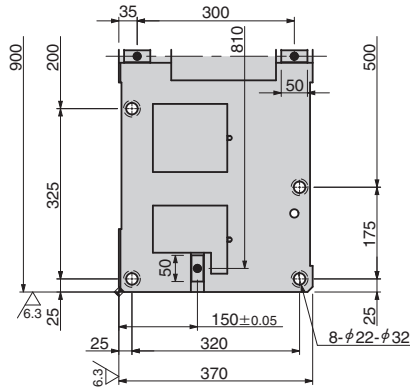
UCMSL900-05/UCMSL1000-05



● 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 | 627.2 (64.0) | — | 37364 (3812.7) | 50864 (5190.2) | UCMSL | 900 1000 | 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 | 900 | 05 | GK | |
| UCMSL | 1000 | 05 | NGK | |
| UCMSL | 900 | 05 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

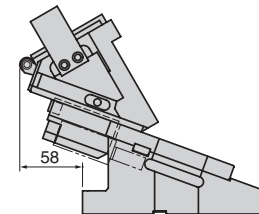
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 459.2 |
| 1000 | 206.4 | 466.1 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

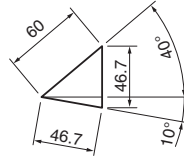
For Trim

For Flange

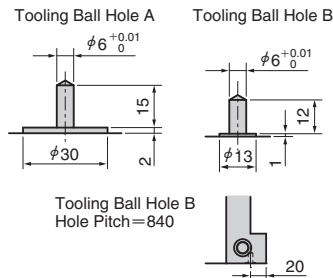
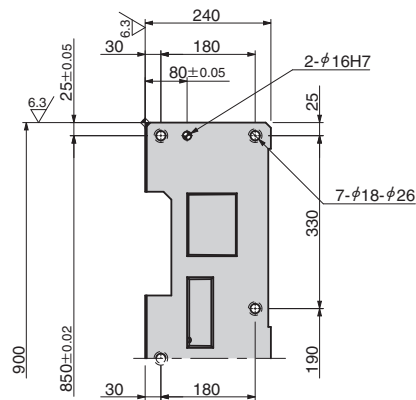
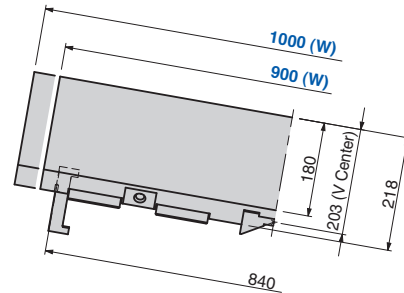
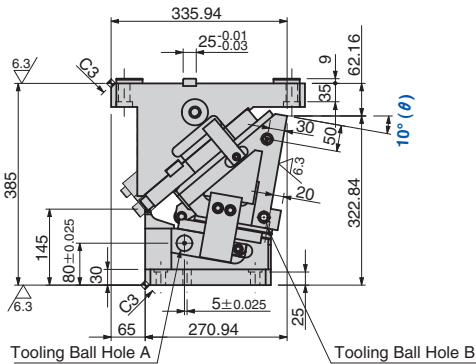
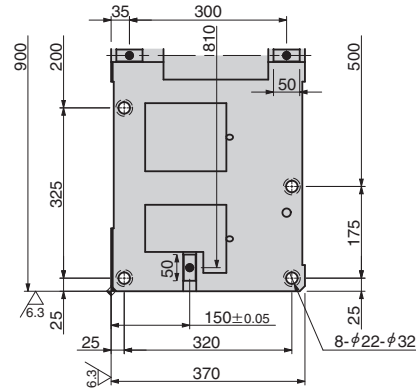
UCMSL900-10/UCMSL1000-10



● 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 | 627.2 (64.0) | — | 37364 (3812.7) | 50675 (5170.9) | UCMSL | 900 1000 | 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.



| Catalog No. | W | θ | PS | Option |
|-------------|------|----|-----|--------|
| UCMSL | 900 | 10 | GK | |
| UCMSL | 1000 | 10 | NGK | |
| UCMSL | 900 | 10 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

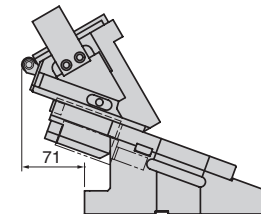
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 457.7 |
| 1000 | 206.4 | 464.6 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

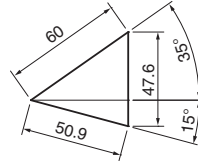
For Trim

For Flange

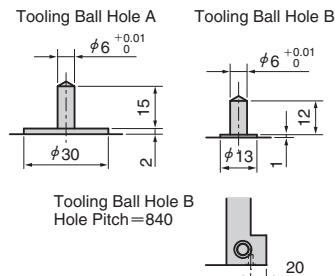
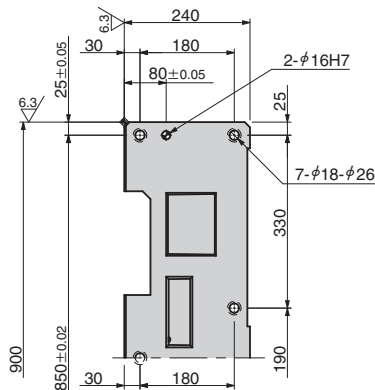
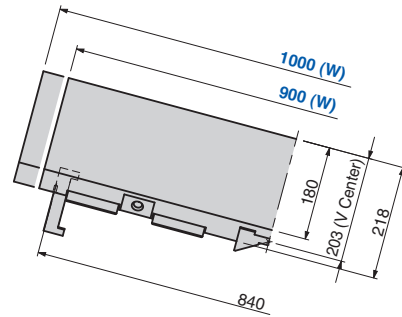
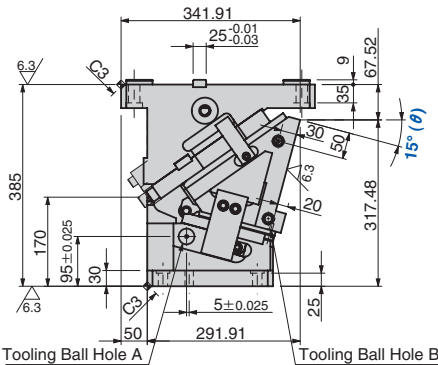
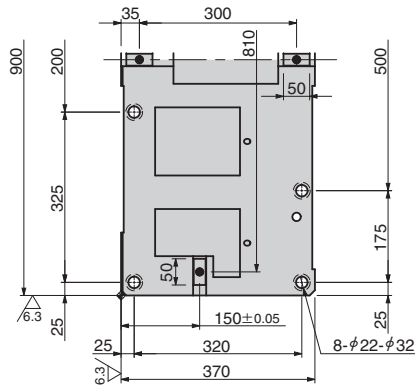
UCMSL900-15/UCMSL1000-15



● 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 | 627.2 (64.0) | — | 37364 (3812.7) | 50476 (5150.6) | UCMSL | 900 1000 | 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 | 900 | 15 | GK | |
| UCMSL | 1000 | 15 | NGK | |
| UCMSL | 900 | 15 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

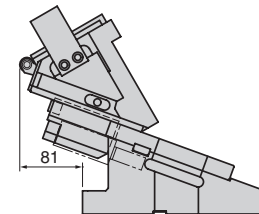
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 457.8 |
| 1000 | 206.4 | 464.7 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

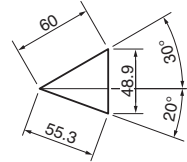
For Trim

For Flange

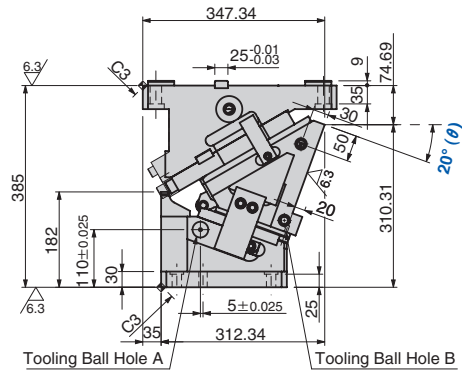
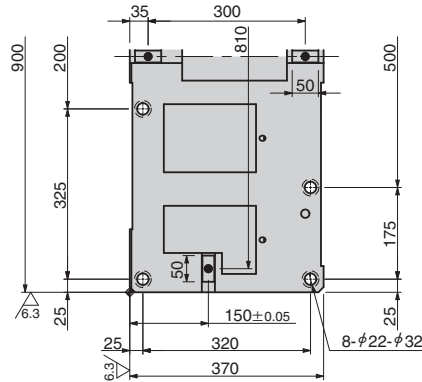
UCMSL900-20/UCMSL1000-20



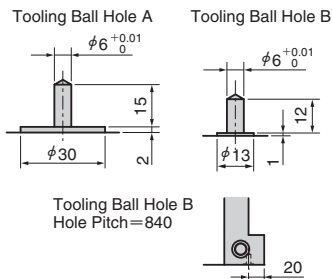
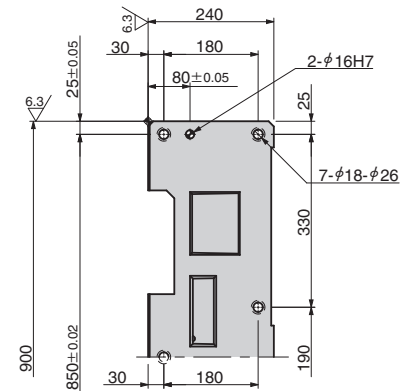
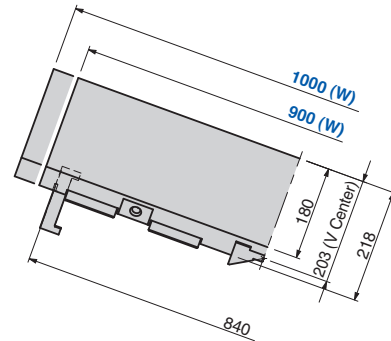
● Cam Diagram



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



Tooling Ball Hole 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 | | | | | |
| 55.3 | 627.2 (64.0) | — | 37364 (3812.7) | 50268 (5129.4) | UCMSL | 900 1000 | 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 | 900 | — | 20 | — | GK | | |
| UCMSL | 1000 | — | 20 | — | NGK | | |
| UCMSL | 900 | — | 20 | — | GK | — | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

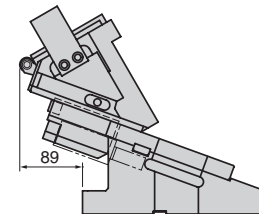
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 459.7 |
| 1000 | 206.4 | 466.5 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

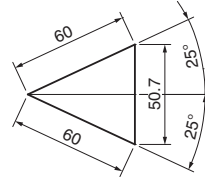
Aerial Cam Unit

For Pierce For Trim For Flange

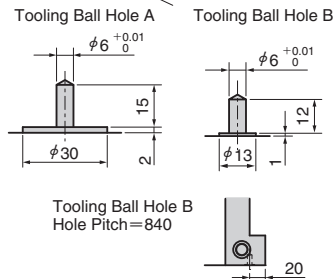
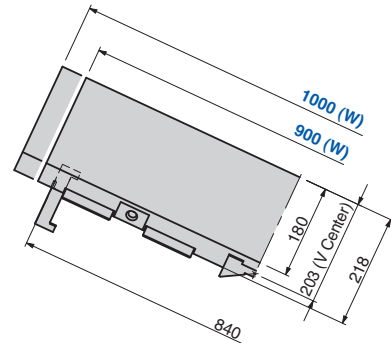
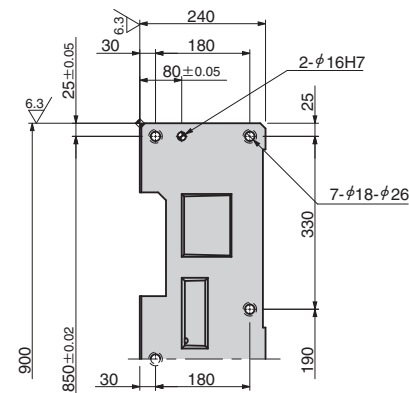
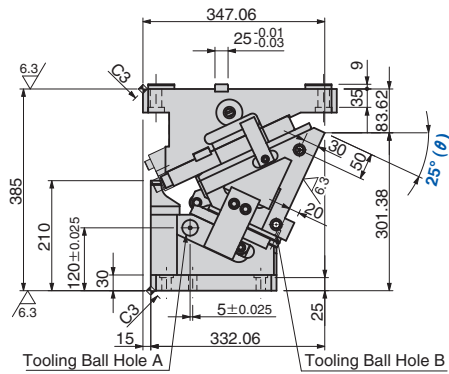
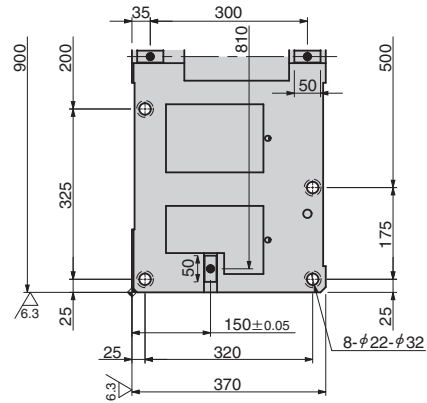
UCMSL900-25/UCMSL1000-25



● 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 | 627.2 (64.0) | — | 37364 (3812.7) | 50052 (5107.4) | UCMSL | 900 1000 | 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 | 900 | 25 | GK | |
| UCMSL | 1000 | 25 | NGK | |
| UCMSL | 900 | 25 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

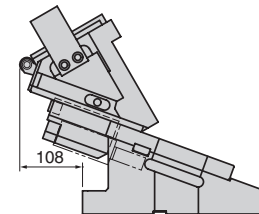
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 461.5 |
| 1000 | 206.4 | 468.4 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

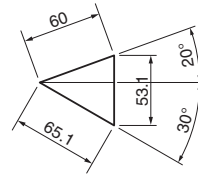
For Trim

For Flange

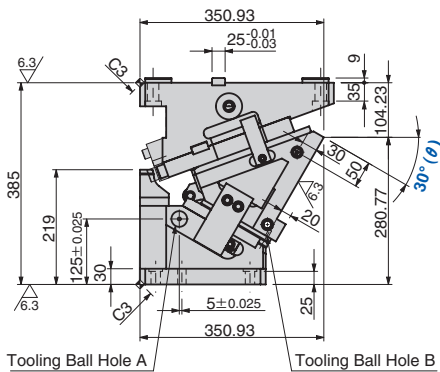
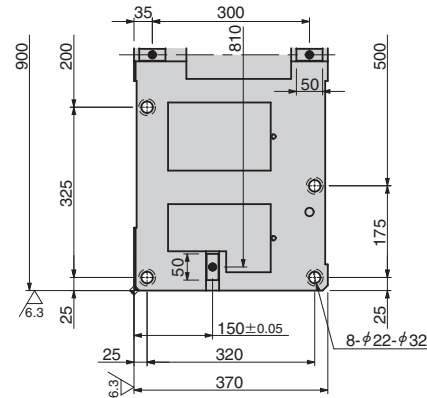
UCMSL900-30/UCMSL1000-30



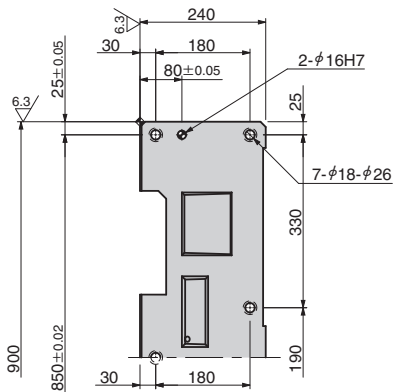
● Cam Diagram



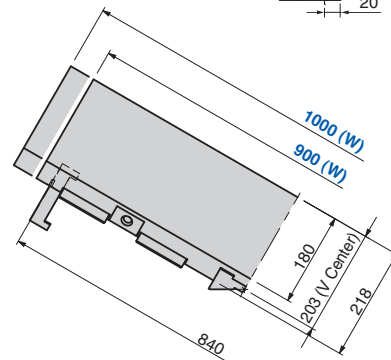
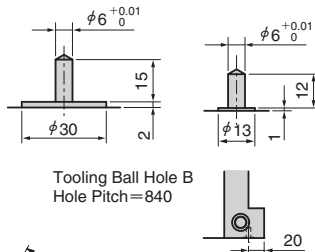
The Cam Diagram shows no Roller Bracket assemblies or Accelerators. If these items are needed, please contact local sales representative.



Tooling Ball Hole A Tooling Ball Hole B



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 | | | | | |
| 65.1 | 627.2 (64.0) | — | 37364 (3812.7) | 49832 (5084.9) | UCMSL | 900 1000 | 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.



Order

| Catalog No. | W | θ | PS | Option |
|-------------|------|----|-----|--------|
| UCMSL | 900 | 30 | GK | |
| UCMSL | 1000 | 30 | NGK | |
| UCMSL | 900 | 30 | GK | NF |



Option

| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

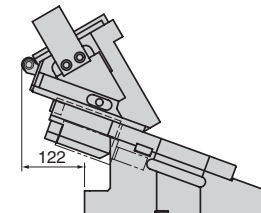
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 467.8 |
| 1000 | 206.4 | 474.7 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

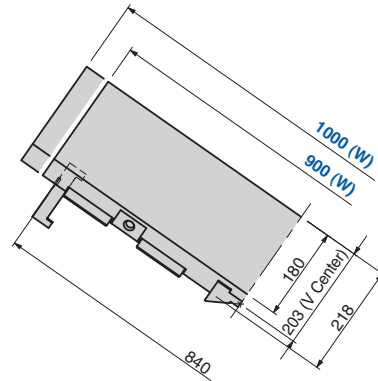
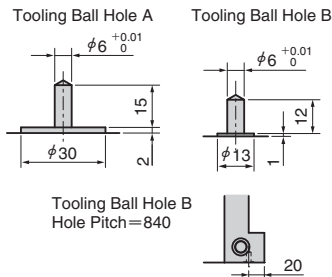
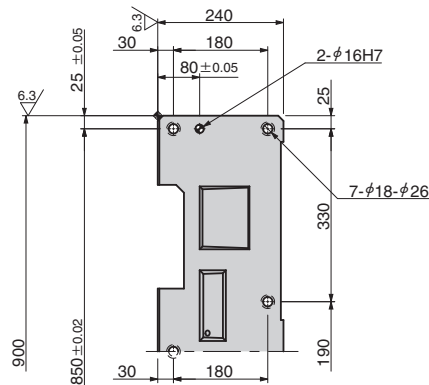
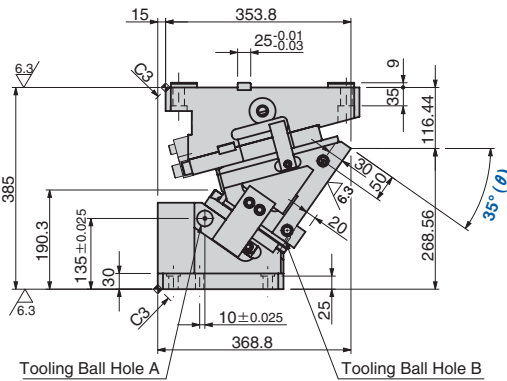
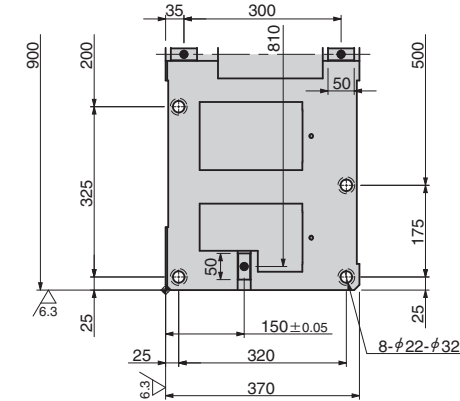
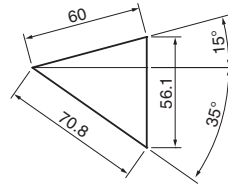
For Trim

For Flange

UCMSL900-35/UCMSL1000-35



● Cam Diagram



| 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 | 627.2 (64.0) | — | 37364 (3812.7) | 49607 (5061.9) | UCMSL | 900 1000 | 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.



Order

| Catalog No. | W | θ | PS | Option |
|-------------|------|----|-----|--------|
| UCMSL | 900 | 35 | GK | |
| UCMSL | 1000 | 35 | NGK | |
| UCMSL | 900 | 35 | GK | NF |



Option

| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

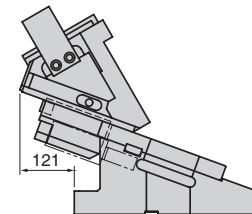
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 478.9 |
| 1000 | 206.4 | 485.8 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

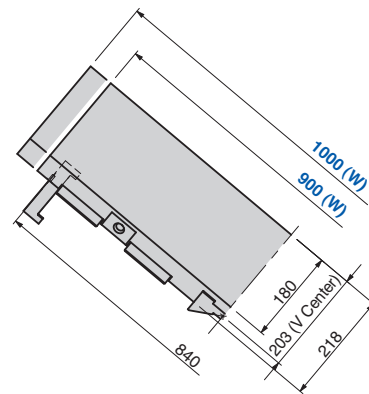
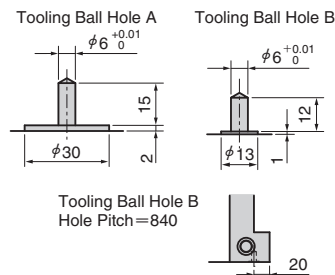
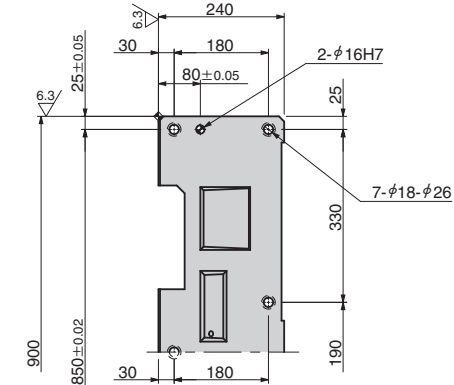
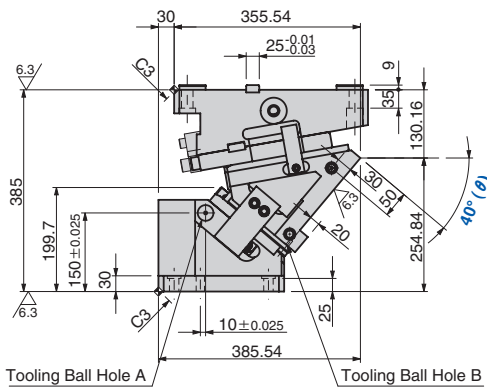
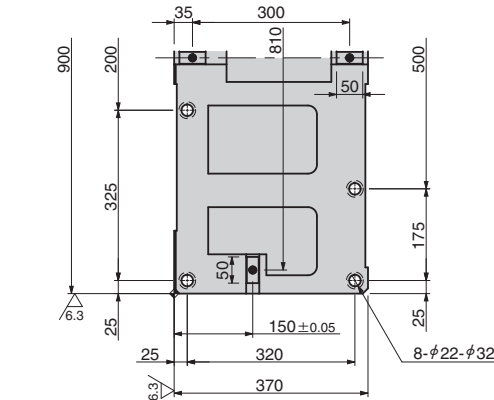
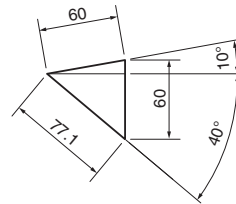
For Trim

For Flange

UCMSL900-40/UCMSL1000-40



● Cam Diagram



| 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 | 627.2 (64.0) | — | 37364 (3812.7) | 49380 (5038.7) | UCMSL | 900 1000 | 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 | 900 | 40 | GK | |
| UCMSL | 1000 | 40 | NGK | |
| UCMSL | 900 | 40 | GK | NF |



Option

| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

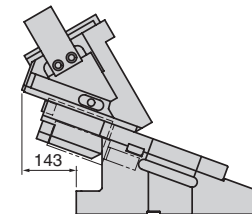
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 487.3 |
| 1000 | 206.4 | 494.2 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

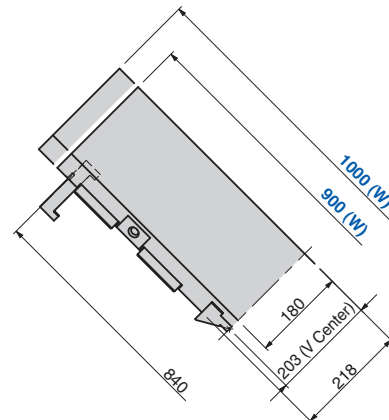
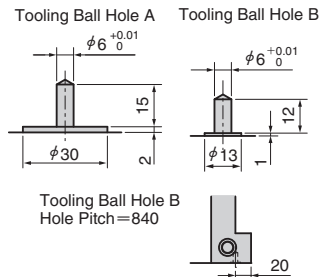
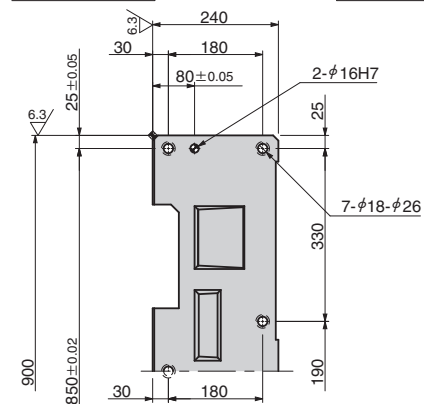
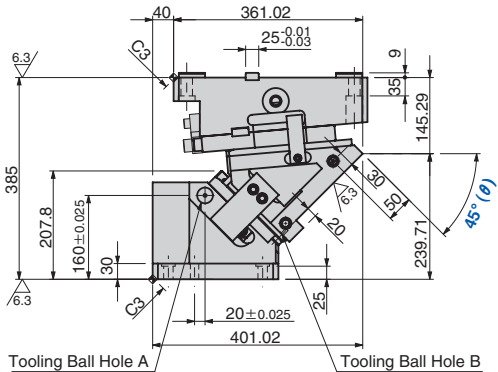
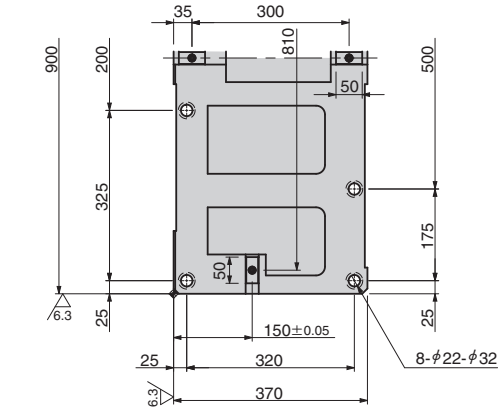
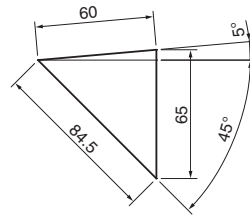
For Trim

For Flange

UCMSL900-45/UCMSL1000-45



● Cam Diagram



| 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 | | | | | |
| 84.5 | 627.2 (64.0) | — | 37364 (3812.7) | 49152 (5015.5) | UCMSL | 900 1000 | 45 | 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 | 900 | 45 | GK | |
| UCMSL | 1000 | 45 | NGK | |
| UCMSL | 900 | 45 | GK | NF |



Option

| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

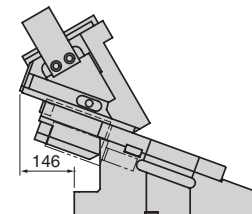
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 499.4 |
| 1000 | 206.4 | 506.3 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL Large Type

Aerial Cam Unit

For Pierce

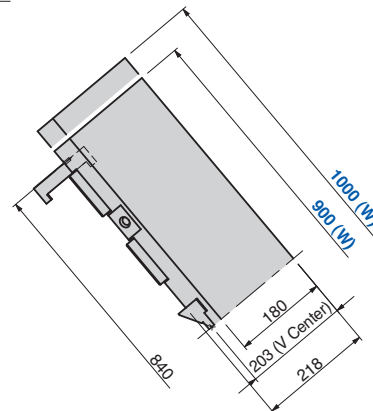
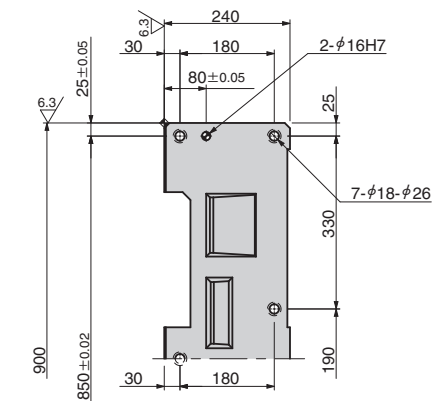
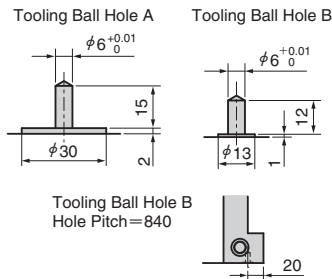
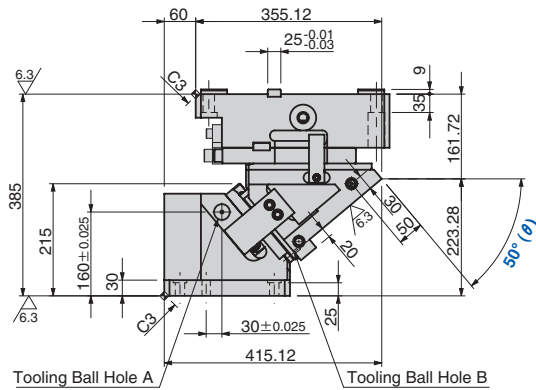
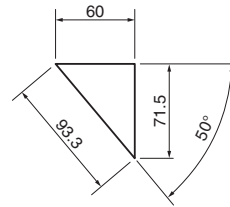
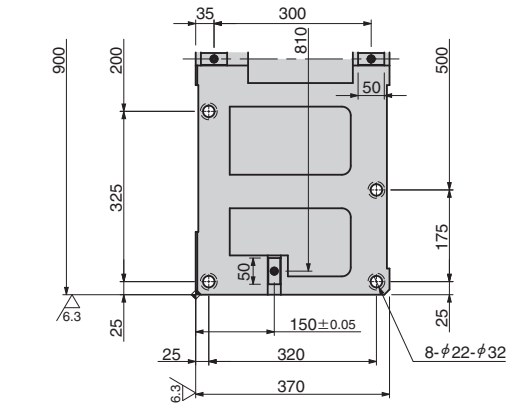
For Trim

For Flange

UCMSL900-50/UCMSL1000-50



● Cam Diagram



| 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 | | | | | |
| 93.3 | 627.2 (64.0) | — | 37364 (3812.7) | 48926 (4992.4) | UCMSL | 900 1000 | 50 | 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 | 900 | 50 | GK | |
| UCMSL | 1000 | 50 | NGK | |
| UCMSL | 900 | 50 | GK | NF |



Option

| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

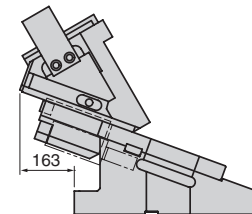
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 199.5 | 498.4 |
| 1000 | 206.4 | 505.3 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL

Large Type

For Pierce

For Trim

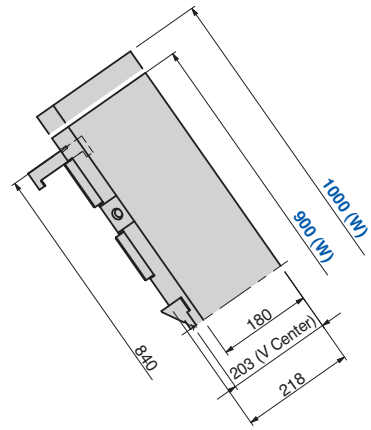
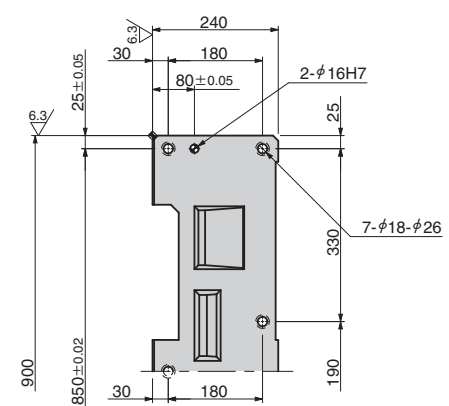
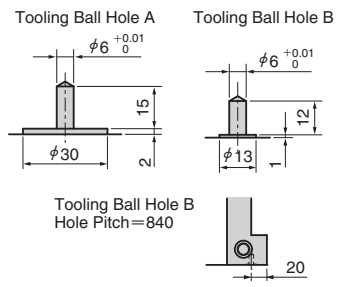
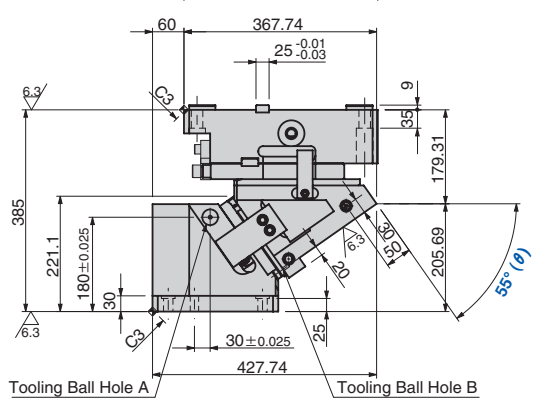
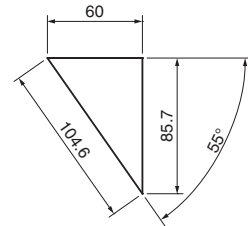
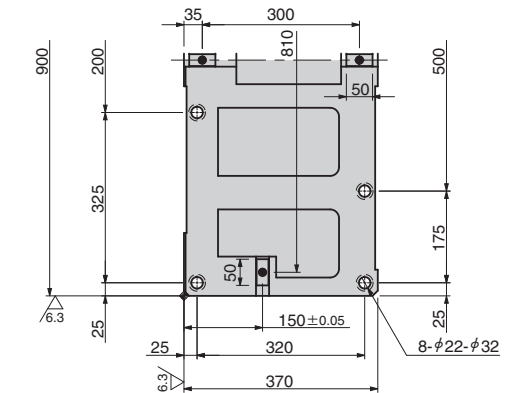
For Flange

Aerial Cam Unit

UCMSL900-55/UCMSL1000-55



● Cam Diagram



| 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 | | | | | |
| 104.6 | 627.2 (64.0) | — | 37364 (3812.7) | 53207 (5429.3) | UCMSL | 900 1000 | 55 | 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 | 900 | 55 | GK | |
| UCMSL | 1000 | 55 | NGK | |
| UCMSL | 900 | 55 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

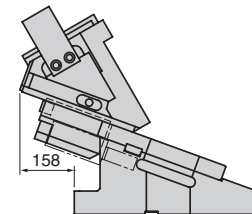
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 209.7 | 519.2 |
| 1000 | 217.4 | 526.9 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL

Large Type

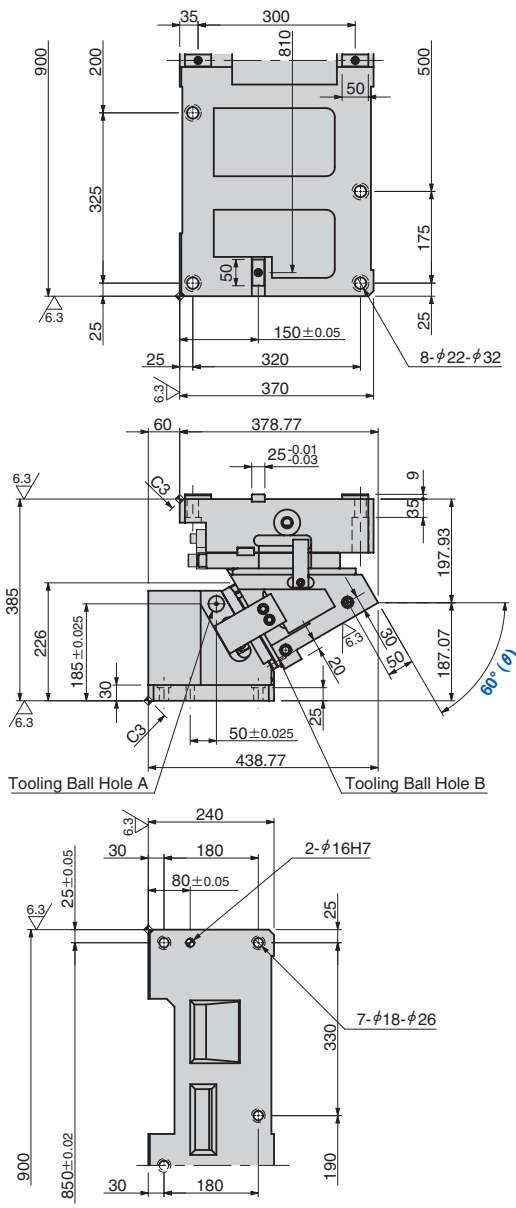
For Pierce

For Trim

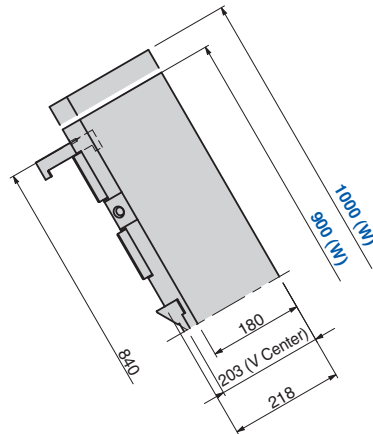
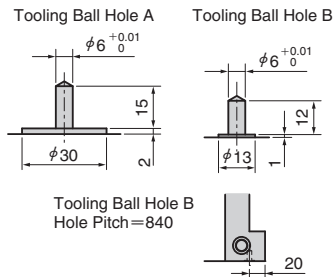
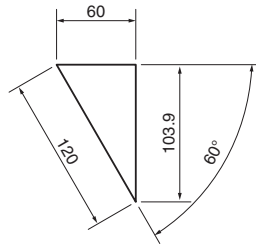
For Flange

Aerial Cam Unit

UCMSL900-60/UCMSL1000-60



● Cam Diagram



| 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 | | | | | |
| 120.0 | 627.2 (64.0) | — | 37364 (3812.7) | 58804 (6000.4) | UCMSL | 900 1000 | 60 | 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 | 900 | 60 | GK | |
| UCMSL | 1000 | 60 | NGK | |
| UCMSL | 900 | 60 | GK | NF |



| Option Code | Specification |
|-------------|---------------------------|
| NF | Nitrogen gas not charged. |

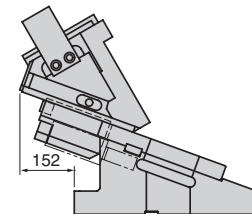
Spring Specification

| No. | PS | Spring Model | Qty | Remark |
|-----|----|------------------|-----|---------------------|
| 15 | GK | K750-80-TD | 4 | Gas Spring (KALLER) |
| | GD | L.750.075.TO.140 | 4 | Gas Spring (DADCO) |
| | GS | SM0750.75 | 4 | Gas Spring (SDT) |

Weight

| W | Cam Slider Weight kg | Total Weight kg |
|------|----------------------|-----------------|
| 900 | 219.7 | 535.2 |
| 1000 | 227.5 | 543.1 |

Rear Removal Space



Refer to page 925 for Table of Components.

UCMSL [Table of Components]

Large Type

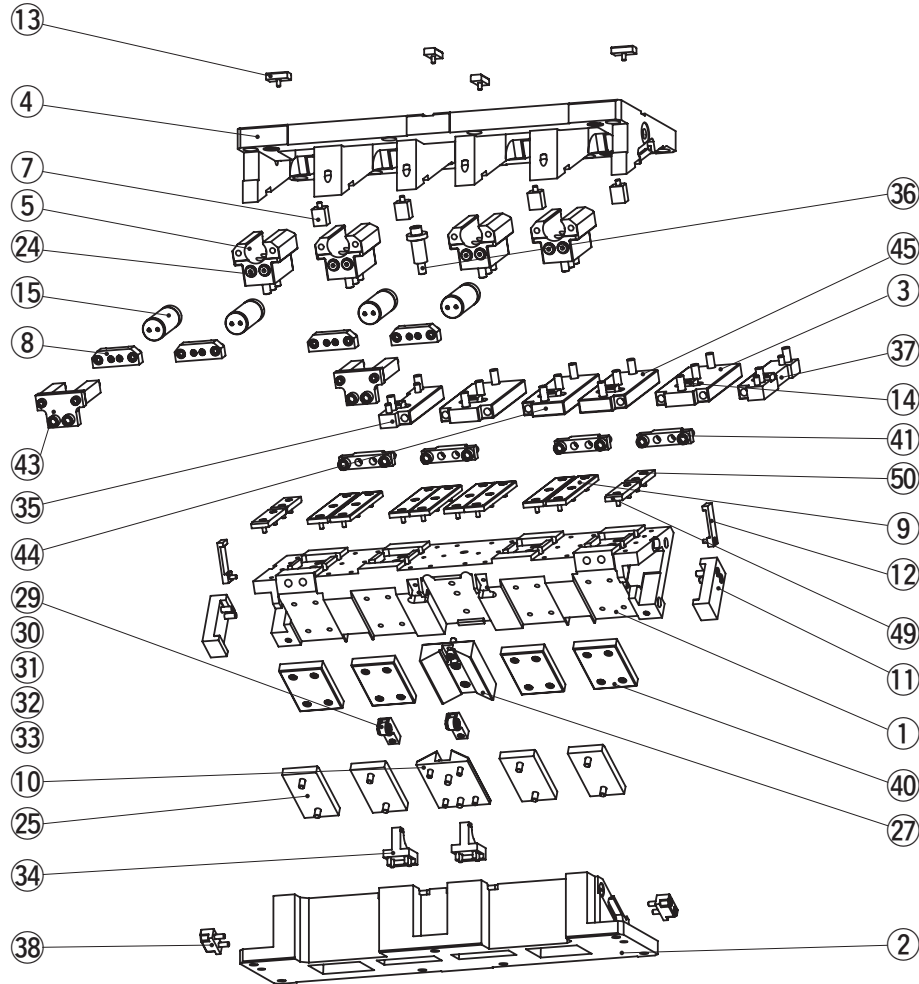
For Pierce

For Trim

For Flange

Aerial Cam Unit

UCMSL900/UCMSL1000



| No. | Description | Qty | Material and Remark |
|-----|--------------------------|-----|------------------------------------|
| 1 | Cam Slider | 1 | Cast Iron |
| 2 | Cam Driver | 1 | Cast Iron |
| 3 | Base Plate A | 2 | Steel |
| 4 | Cam Holder | 1 | Cast Iron |
| 5 | Spring Guide Block | 4 | Bronze with Graphite |
| 6 | Slide Lower Plate A | 2 | Bronze with Graphite 55°~60° only |
| 7 | Guide Pin Block | 4 | Steel |
| 8 | Spring Guide Plate | 4 | Steel |
| 9 | Slide Lower Plate B | 8 | Bronze with Graphite |
| 10 | Cam Slide Guide | 1 | Bronze with Graphite |
| 11 | Positive Return Follower | 2 | Steel |
| 12 | Safety Plate | 2 | Steel |
| 13 | Key A | 4 | Steel |
| 14 | Key B | 6 | Steel |
| 15 | Gas Spring | 4 | Refer to the Spring Specification. |
| 24 | Stopper | 8 | — |
| 25 | Cam Slide Plate | 4 | Bronze with Graphite |
| 27 | Cam Slide Guide | 1 | Steel |
| 29 | Roller Bracket | 2 | Steel 0°~30° only |
| 30 | Roller | 2 | Steel 0°~30° only |
| 31 | Roller Pin | 2 | Steel 0°~30° only |
| 32 | Bushing | 2 | SOB12-18-16 0°~30° only |
| 33 | Snap Ring E Type | 4 | φ 9 0°~30° only |
| 34 | Roller Driver | 2 | Steel 0°~30° only |
| 35 | Base Plate B R | 1 | Steel |
| 36 | Safety Pin | 1 | Steel |
| 37 | Base Plate B L | 1 | Steel |
| 38 | Positive Return Block | 2 | Bronze with Graphite |
| 40 | Lower Slide Plate B | 4 | Steel |
| 41 | Stopper Plate | 4 | Steel |
| 43 | Locking Plate | 2 | Steel |
| 44 | Base Plate C R | 1 | Steel |
| 45 | Base Plate C L | 1 | Steel |
| 49 | Slide Plate | 2 | Bronze with Graphite |
| 50 | Slide Plate | 2 | Bronze with Graphite |

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

Standard
Cam Units