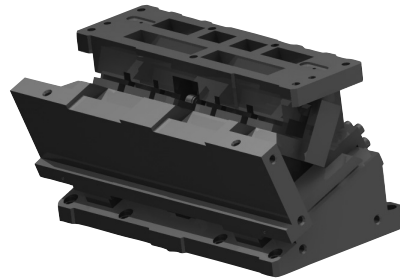


# KCMSL [Overview]

## Large Type

### Product Information

- Mount face widths from 500 to 1000 mm in 100 mm increments.
- Working angles from 0° to 20° in 5° increments.
- Gas Spring is removable from the rear without disassembling.
- 1600 mm wide or smaller available on demand.



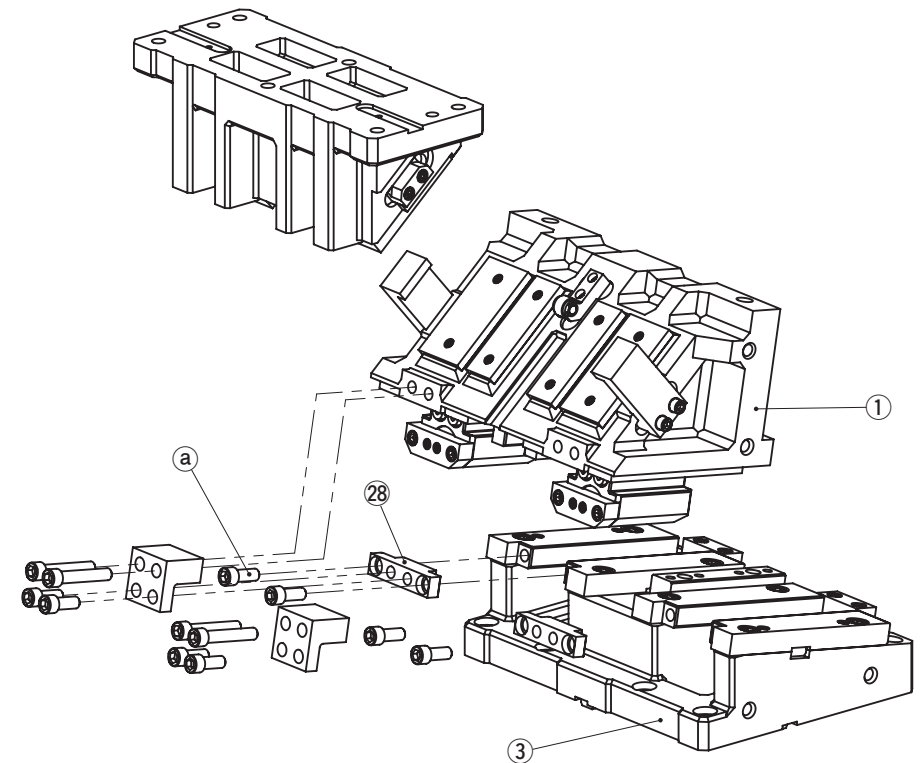
| Mount face  |     | Working Angle | Travel | Working Force<br>kN (tonf) | Spring Force<br>N (kgf) |
|-------------|-----|---------------|--------|----------------------------|-------------------------|
| W           | H   |               |        |                            |                         |
| 500<br>600  | 180 | 00            | 60     | 313.6 (32.0)               | 19600.0 (2000.0)        |
|             |     | 05            |        |                            |                         |
|             |     | 10            |        |                            |                         |
|             |     | 15            |        |                            |                         |
| 700<br>800  | 180 | 20            | 60     | 470.4 (48.0)               | 19600.0 (2000.0)        |
|             |     | 00            |        |                            |                         |
|             |     | 05            |        |                            |                         |
|             |     | 10            |        |                            |                         |
| 900<br>1000 | 180 | 15            | 60     | 627.2 (64.0)               | 39200.0 (4000.0)        |
|             |     | 20            |        |                            |                         |
|             |     | 00            |        |                            |                         |
|             |     | 05            |        |                            |                         |

For Pierce

For Trim

For Flange

### KCMSL500/KCMSL600, KCMSL700/KCMSL800 Assembly Instructions



#### Disassembly

- 1) Remove Hexagon Socket Head Bolts (a), to pull out Stopper Plate (28).
- 2) Pull out and remove Cam Slider (1) from Cam Holder (3) to the rear.

#### Assembly

Assembly is the reverse procedure of disassembly.

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



#### 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.

# KCMSL [Overview]

Large Type

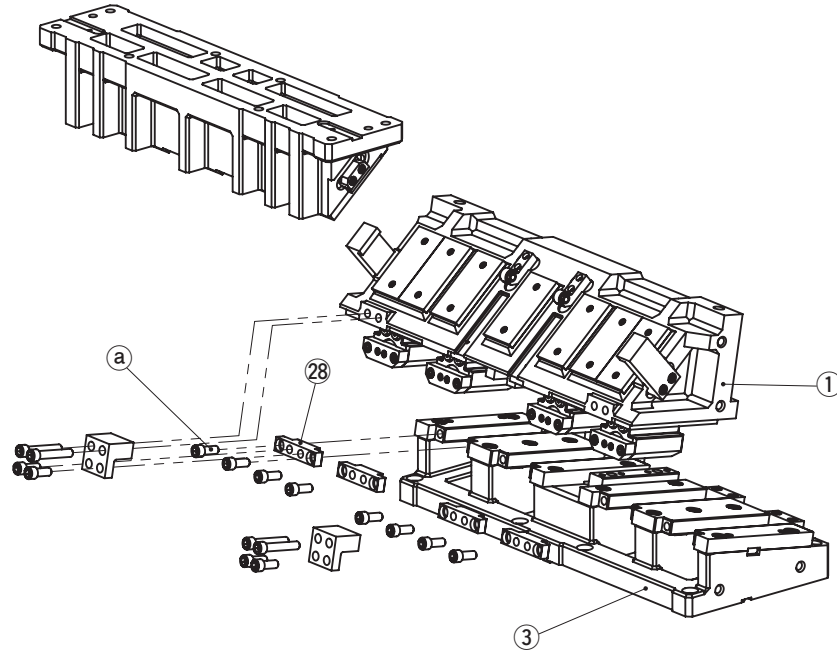
For Pierce

For Trim

For Flange

## Product Information

### ■KCMSL900/KCMSL1000 Assembly Instructions



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#### ● Disassembly

- 1) Remove Hexagon Socket Head Bolts (a), to pull out Stopper Plate (28).
- 2) Pull out and remove Cam Slider (1) from Cam Holder (3) to the rear.

#### ● Assembly

Assembly is the reverse procedure of disassembly.

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

#### 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.

# KCMSL

## Large Type

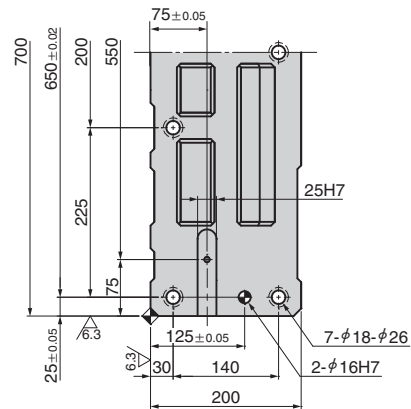
For Pierce

For Trim

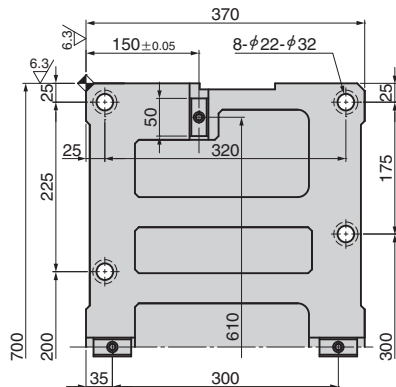
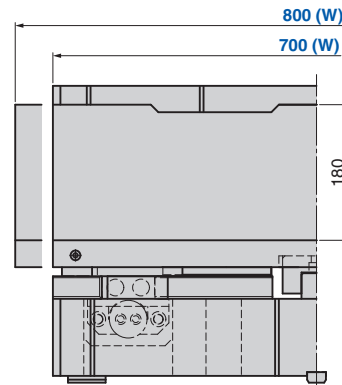
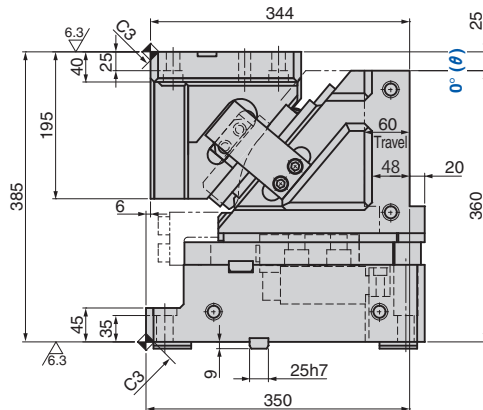
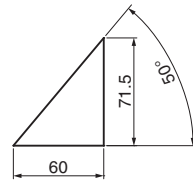
For Flange

### Die Mounted Cam Unit

KCMSL700-00 / KCMSL800-00



● Cam Diagram



| Travel S | Working Force kN (tonf) | Spring Force [N (kgf)] |              | Catalog No. | W          | θ  | Spring Type PS |
|----------|-------------------------|------------------------|--------------|-------------|------------|----|----------------|
|          |                         | Initial Load           | Final Load   |             |            |    |                |
| 60.0     | 470.4 (48.0)            | -                      | 20200 (2060) | KCMSL       | 700<br>800 | 00 | GK NGK         |
|          |                         | -                      | 19600 (2000) |             |            |    | GD NGD         |

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



| Catalog No. | W   | θ  | PS  | Option |
|-------------|-----|----|-----|--------|
| KCMSL       | 700 | 00 | GK  |        |
| KCMSL       | 800 | 00 | NGK |        |
| KCMSL       | 700 | 00 | GK  | NF     |



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

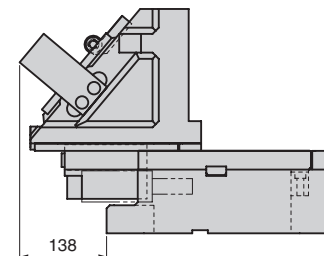
### Spring Specification

| No. | PS | Spring Model    | Qty | Remark              |
|-----|----|-----------------|-----|---------------------|
| 13  | GK | K750-80         | 2   | Gas Spring (KALLER) |
|     | GD | L750.075.TO.140 | 2   | Gas Spring (DADCO)  |

### Weight

| w   | Cam Slider Weight kg | Total Weight kg |
|-----|----------------------|-----------------|
| 700 | 197.0                | 436             |
| 800 | 205.4                | 446             |

### Rear Removal Space



Refer to page 1079 for Table of Components.

# KCMSL

## Large Type

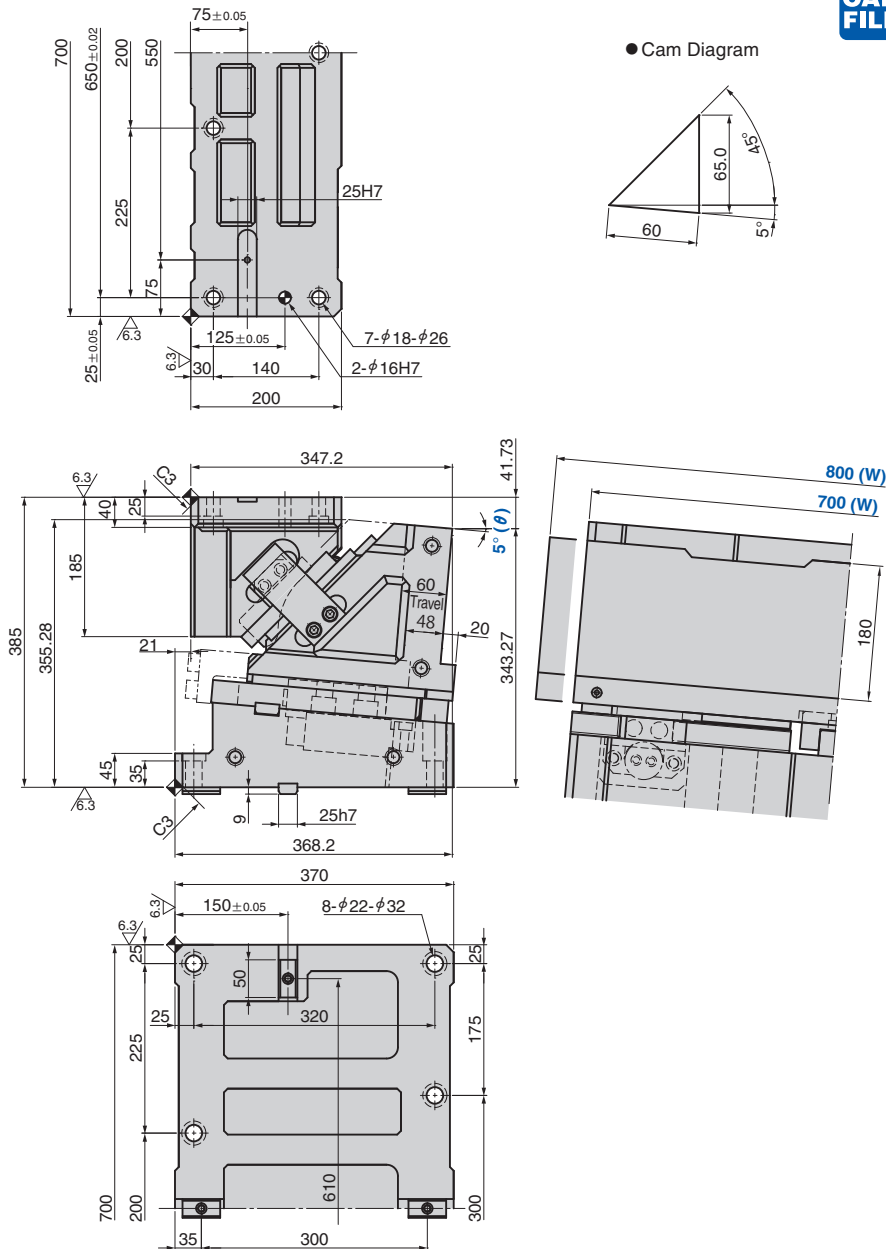
### Die Mounted Cam Unit

For Pierce

For Trim

For Flange

KCMSL700-05 / KCMSL800-05



| Travel S | Working Force kN (tonf) | Spring Force [N (kgf)] |              | Catalog No. | W          | θ  | Spring Type PS |
|----------|-------------------------|------------------------|--------------|-------------|------------|----|----------------|
|          |                         | Initial Load           | Final Load   |             |            |    |                |
| 60.0     | 470.4 (48.0)            | -                      | 20200 (2060) | KCMSL       | 700<br>800 | 05 | GK NGK         |
|          |                         | -                      | 19600 (2000) |             |            |    | GD NGD         |

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

| Order | Catalog No. | W   | θ  | PS  | Option |
|-------|-------------|-----|----|-----|--------|
|       | KCMSL       | 700 | 05 | GK  |        |
|       | KCMSL       | 800 | 05 | NGK |        |
|       | KCMSL       | 700 | 05 | GK  | NF     |

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

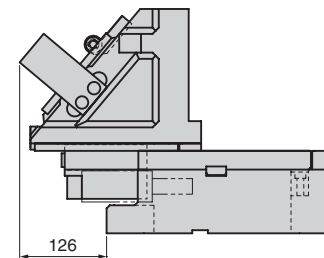
#### Spring Specification

| No. | PS | Spring Model    | Qty | Remark              |
|-----|----|-----------------|-----|---------------------|
| 13  | GK | K750-80         | 2   | Gas Spring (KALLER) |
|     | GD | L750.075.TO.140 | 2   | Gas Spring (DADCO)  |

#### Weight

| W   | Cam Slider Weight kg | Total Weight kg |
|-----|----------------------|-----------------|
| 700 | 197.0                | 429             |
| 800 | 205.4                | 438             |

#### Rear Removal Space



Refer to page 1079 for Table of Components.

# KCMSL

## Large Type

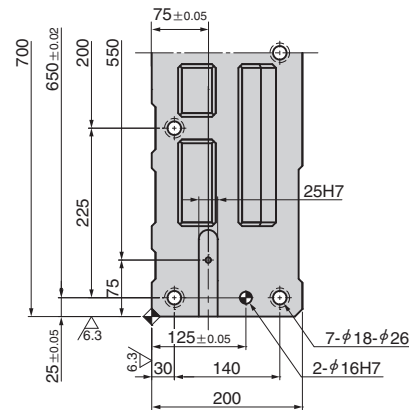
For Pierce

For Trim

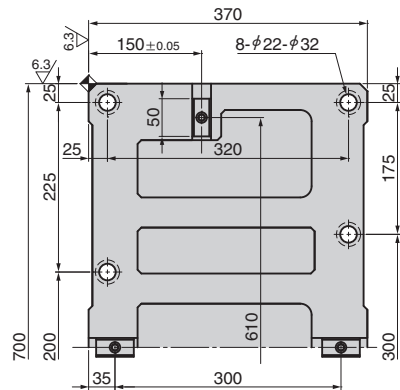
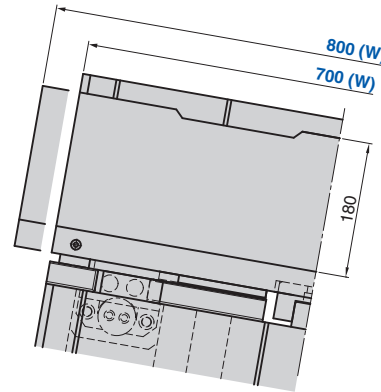
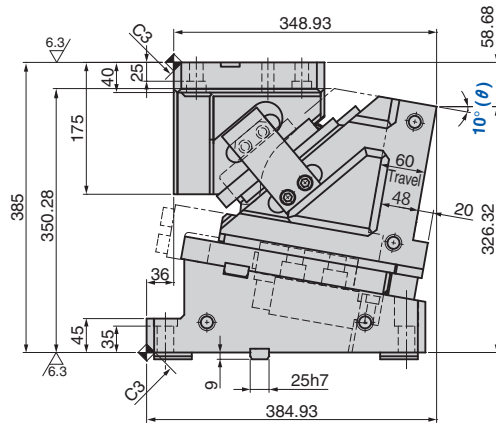
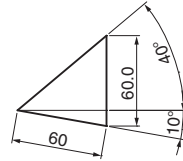
For Flange

### Die Mounted Cam Unit

KCMSL700-10 / KCMSL800-10



● Cam Diagram



| Travel S | Working Force kN (tonf) | Spring Force [N (kgf)] |              | Catalog No. | W          | θ  | Spring Type PS |
|----------|-------------------------|------------------------|--------------|-------------|------------|----|----------------|
|          |                         | Initial Load           | Final Load   |             |            |    |                |
| 60.0     | 470.4 (48.0)            | -                      | 20200 (2060) | KCMSL       | 700<br>800 | 10 | GK NGK         |
|          |                         | -                      | 19600 (2000) |             |            |    | GD NGD         |

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



| Catalog No. | W   | θ  | PS  | Option |
|-------------|-----|----|-----|--------|
| KCMSL       | 700 | 10 | GK  |        |
| KCMSL       | 800 | 10 | NGK |        |
| KCMSL       | 700 | 10 | GK  | NF     |



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

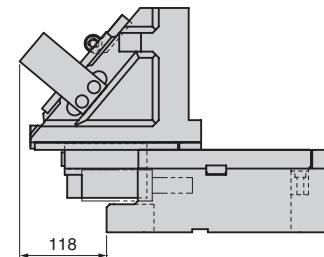
#### Spring Specification

| No. | PS | Spring Model    | Qty | Remark              |
|-----|----|-----------------|-----|---------------------|
| 13  | GK | K750-80         | 2   | Gas Spring (KALLER) |
|     | GD | L750.075.TO.140 | 2   | Gas Spring (DADCO)  |

#### Weight

| W   | Cam Slider Weight kg | Total Weight kg |
|-----|----------------------|-----------------|
| 700 | 197.0                | 421             |
| 800 | 205.4                | 430             |

#### Rear Removal Space



Refer to page 1079 for Table of Components.

# KCMSL

## Large Type

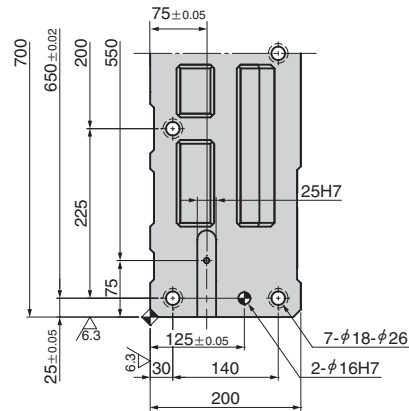
For Pierce

For Trim

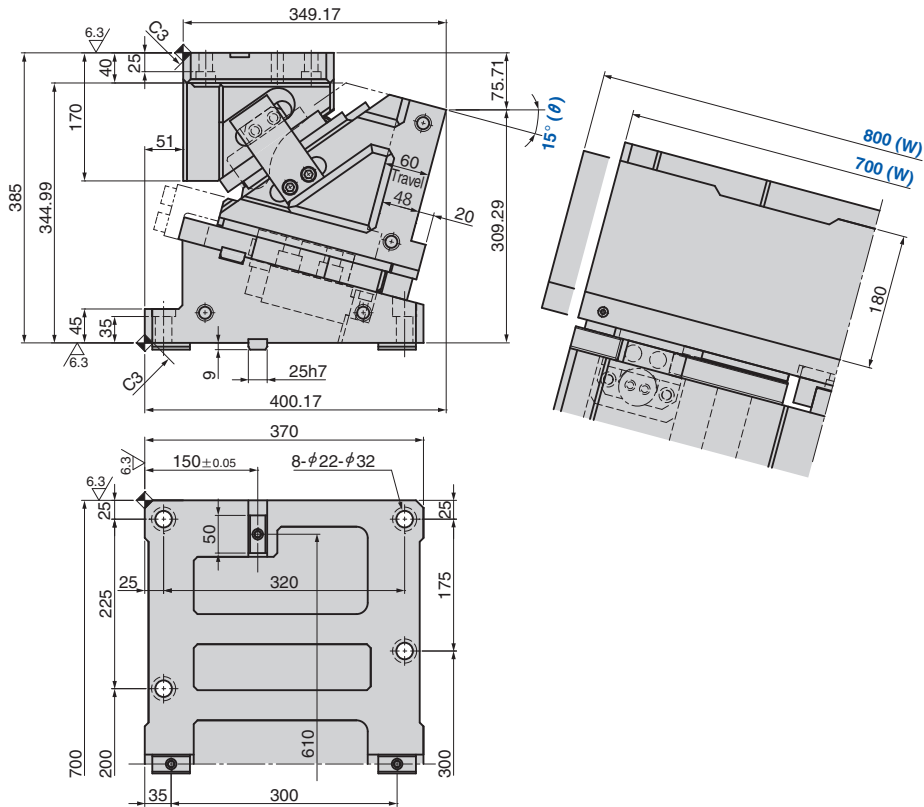
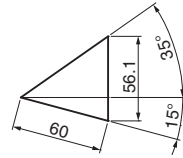
For Flange

### Die Mounted Cam Unit

KCMSL700-15 / KCMSL800-15



● Cam Diagram



| Travel S | Working Force kN (tonf) | Spring Force [N (kgf)] |              | Catalog No. | W          | θ  | Spring Type PS |
|----------|-------------------------|------------------------|--------------|-------------|------------|----|----------------|
|          |                         | Initial Load           | Final Load   |             |            |    |                |
| 60.0     | 470.4 (48.0)            | -                      | 20200 (2060) | KCMSL       | 700<br>800 | 15 | GK NGK         |
|          |                         | -                      | 19600 (2000) |             |            |    | GD NGD         |

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

| Order | Catalog No. | W   | θ  | PS  | Option |
|-------|-------------|-----|----|-----|--------|
|       | KCMSL       | 700 | 15 | GK  |        |
|       | KCMSL       | 800 | 15 | NGK |        |
|       | KCMSL       | 700 | 15 | GK  | NF     |

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

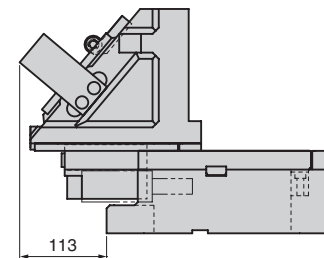
#### Spring Specification

| No. | PS | Spring Model    | Qty | Remark              |
|-----|----|-----------------|-----|---------------------|
| 13  | GK | K750-80         | 2   | Gas Spring (KALLER) |
|     | GD | L750.075.TO.140 | 2   | Gas Spring (DADCO)  |

#### Weight

| w   | Cam Slider Weight kg | Total Weight kg |
|-----|----------------------|-----------------|
| 700 | 197.0                | 415             |
| 800 | 205.4                | 424             |

#### Rear Removal Space



Refer to page 1079 for Table of Components.

# KCMSL

## Large Type

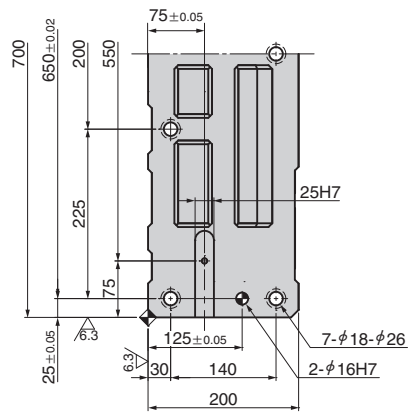
### Die Mounted Cam Unit

For Pierce

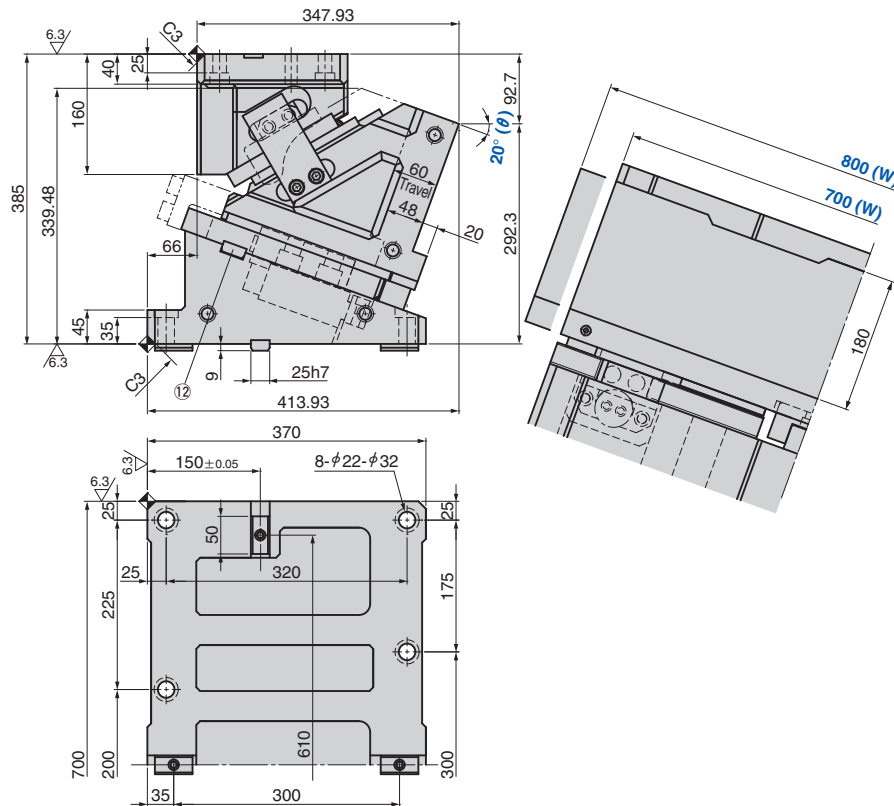
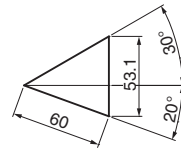
For Trim

For Flange

#### KCMSL700-20 / KCMSL800-20



● Cam Diagram



| Travel S | Working Force kN (tonf) | Spring Force [N (kgf)] |              | Catalog No. | W          | θ  | Spring Type PS |
|----------|-------------------------|------------------------|--------------|-------------|------------|----|----------------|
|          |                         | Initial Load           | Final Load   |             |            |    |                |
| 60.0     | 470.4 (48.0)            | -                      | 20200 (2060) | KCMSL       | 700<br>800 | 20 | GK NGK         |
|          |                         | -                      | 19600 (2000) |             |            |    | GD NGD         |

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



| Catalog No. | W   | θ  | PS  | Option |
|-------------|-----|----|-----|--------|
| KCMSL       | 700 | 20 | GK  |        |
| KCMSL       | 800 | 20 | NGK |        |
| KCMSL       | 700 | 20 | GK  | NF     |



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

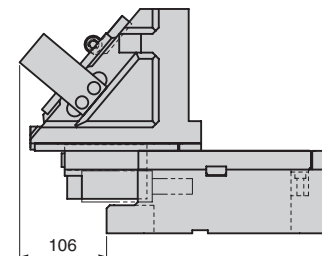
#### Spring Specification

| No. | PS | Spring Model    | Qty | Remark              |
|-----|----|-----------------|-----|---------------------|
| 13  | GK | K750-80         | 2   | Gas Spring (KALLER) |
|     | GD | L750.075.TO.140 | 2   | Gas Spring (DADCO)  |

#### Weight

| W   | Cam Slider Weight kg | Total Weight kg |
|-----|----------------------|-----------------|
| 700 | 197.0                | 410             |
| 800 | 205.4                | 418             |

#### Rear Removal Space



Refer to page 1079 for Table of Components.

# KCMSL [Table of Components]

Large Type

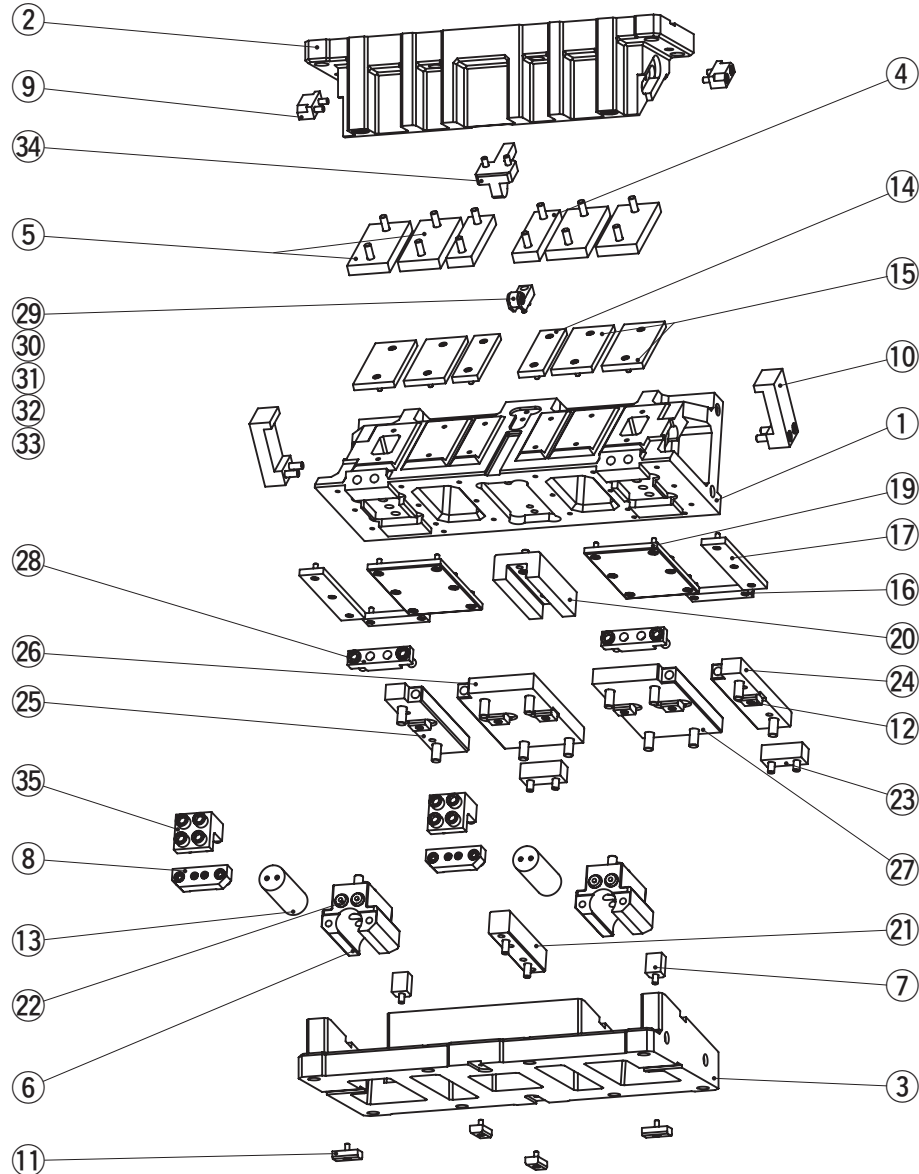
For Pierce

For Trim

For Flange

## Die Mounted Cam Unit

KCMSL700/KCMSL800



| No. | Description              | Qty | Material and Remark                |
|-----|--------------------------|-----|------------------------------------|
| 1   | Cam Slider               | 1   | Cast Iron                          |
| 2   | Cam Driver               | 1   | Cast Iron                          |
| 3   | Cam Holder               | 1   | Cast Iron                          |
| 4   | Cam Driver Plate A       | 2   | Bronze with Graphite               |
| 5   | Cam Driver Plate B       | 4   | Bronze with Graphite               |
| 6   | Spring Guide             | 2   | Bronze with Graphite               |
| 7   | Guide Pin Block          | 2   | Steel                              |
| 8   | Spring Guide Plate       | 2   | Steel                              |
| 9   | Positive Return Block    | 2   | Bronze with Graphite               |
| 10  | Positive Return Follower | 2   | Steel                              |
| 11  | Key A                    | 4   | Steel                              |
| 12  | Key B                    | 6   | Steel                              |
| 13  | Gas Spring               | 2   | Refer to the Spring Specification. |
| 14  | Lower Plate A            | 2   | Steel                              |
| 15  | Lower Plate B            | 4   | Steel                              |
| 16  | Slide Lower Plate A      | 2   | Bronze with Graphite               |
| 17  | Slide Lower Plate B      | 2   | Bronze with Graphite               |
| 19  | Slide Lower Plate D      | 2   | Bronze with Graphite               |
| 20  | Center Key Guide         | 1   | Steel                              |
| 21  | Center Key               | 1   | Bronze with Graphite               |
| 22  | Stopper                  | 4   | —                                  |
| 23  | Base Plate A             | 2   | Steel                              |
| 24  | Base Plate B L           | 1   | Steel                              |
| 25  | Base Plate B R           | 1   | Steel                              |
| 26  | Base Plate E R           | 1   | Steel                              |
| 27  | Base Plate E L           | 1   | Steel                              |
| 28  | Stopper Plate            | 2   | Steel                              |
| 29  | Roller Bracket           | 1   | Steel                              |
| 30  | Roller                   | 1   | Steel                              |
| 31  | Roller Pin               | 1   | Steel                              |
| 32  | Bushing                  | 1   | SOB12-18-16                        |
| 33  | E Type Snap Ring         | 2   | φ 9                                |
| 34  | Roller Driver            | 1   | Steel                              |
| 35  | Lock Plate               | 2   | Steel                              |

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

Standard  
Cam Units