## For Flange

# **Large Type**

## **Product Information**

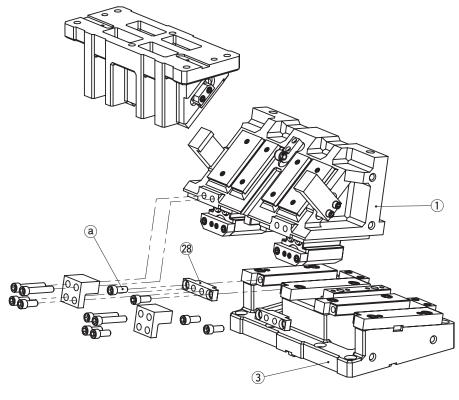
**KCMSL** [Overview]

- 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	Tuestal	Working Force	Spring Force
W	Н	Angle	Travel	kN (tonf)	N (kgf)
		00			
500		05			
500 600	180	10	60	313.6 (32.0)	19600.0 (2000.0)
000		15			
		20			
		00			
700		05			
700 800	180	10	60	470.4 (48.0)	19600.0 (2000.0)
000		15			
		20			
		00			
000		05			
900 1000	180	10	60	627.2 (64.0)	39200.0 (4000.0)
1000		15			
		20			

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



#### Disassembly

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

#### Assembly

Assembly is the reverse procedure of disassembly.

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

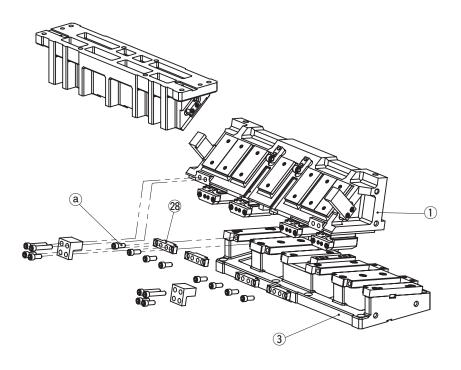


Please contact your local sales representative if you prefer to use a gas spring not specified in our catalog. For use and maintenance of gas spring, please contact the manufacturer directly.

**KCMSL** 

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## ■KCMSL900/KCMSL1000 Assembly Instructions



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#### Disassembly

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

#### Assembly

Assembly is the reverse procedure of disassembly.

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



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

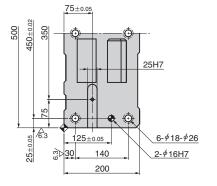
KCMSL

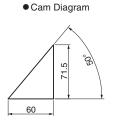
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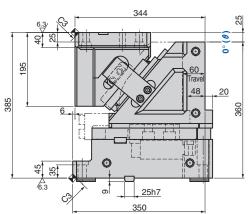
**KCMSL** 

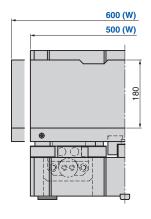
#### KCMSL500-00/KCMSL600-00

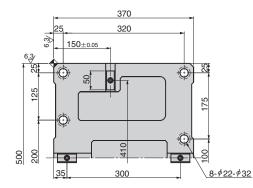












Travel	Working Force	Spring Ford	ce [N (kgf)]	Cotolog No	w	_	Spring Type
S	kN (tonf)	Initial Load	Final Load	Catalog No.	VV	0	PS
	313.6	_	20200 (2060)	KOMOL	500	00	GK NGK
60.0	(32.0)	_	19600 (2000)	KCMSL	600	00	GD NGD

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	500	_	00	_	GK	
KCMSL	600	_	00	_	NGK	
KCMSL	500	_	00	_	GK	– NF

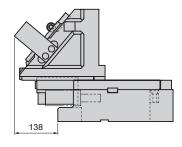
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Option

Option Code	Specification
NF	Nitrogen gas not charged.

## ■Spring Specification

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

## ■Rear Removal Space



#### Weight

<u> </u>		
W	Cam Slider Weight kg	Total Weight kg
500	133.3	316
600	141.4	325

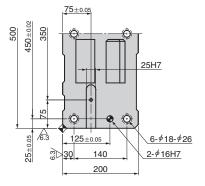
Standard Cam Units

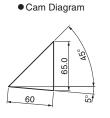
# **KCMSL Large Type**

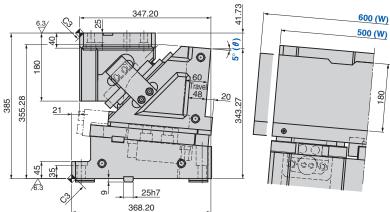
## **Die Mounted Cam Unit**

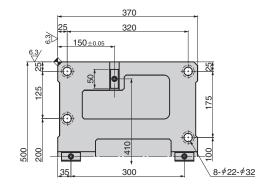
#### KCMSL500-05/KCMSL600-05











Travel	Working Force	Spring For	Spring Force [N (kgf)]		w	θ	Spring Type
S	kN (tonf)	Initial Load	Final Load	Catalog No.	VV	0	PS
	313.6 (32.0)	_	20200 (2060)	KCMSL	500	0.5	GK NGK
60.0		_	19600 (2000)	KUMSL	600	05	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	500	_	05	_	GK		
KCMSL	600	_	05	_	NGK		
KCMSL	500	_	05	_	GK	_	NF

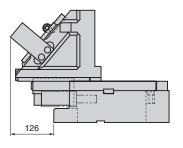
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Option

<b>Option Code</b>	Specification		
NF	Nitrogen gas not charged.		

## ■Spring Specification

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

## ■Rear Removal Space



#### Weight

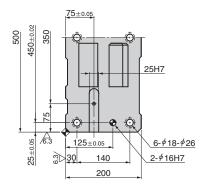
w	Cam Slider Weight kg	Total Weight kg
500	133.3	310
600	141.4	318

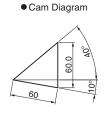
Standard Cam Units

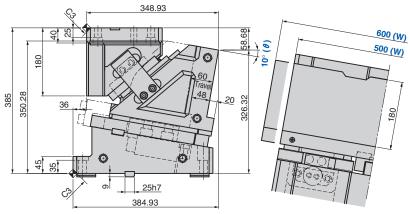
## **Die Mounted Cam Unit**

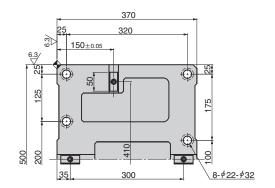
#### KCMSL500-10/KCMSL600-10











Travel	Travel Working Force Spring Force [N (kgf)]		Catalog No.	w	θ	Spring Type	
S	kN (tonf)	I (tonf) Initial Load Final Load		Catalog No.	VV	0	PS
	313.6	_	(2060)	KOMOI	500	10	GK NGK
60.0	(32.0)	_	19600 (2000)	KCMSL	600	10	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	500	_	10	_	GK	
KCMSL	600	_	10	_	NGK	
KCMSL	500	_	10	_	GK	– NF

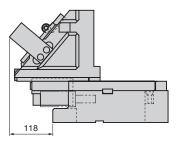
	٦
- (	Option

Option Code	Specification
NF	Nitrogen gas not charged.

## ■Spring Specification

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

## ■Rear Removal Space



## **■**Weight

w	Cam Slider Weight kg	Total Weight kg
500	133.3	306
600	141.4	314

Standard Cam Units

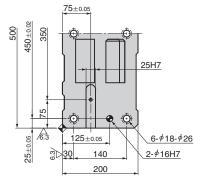
Standard Cam Units

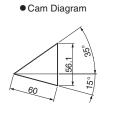
# **KCMSL Large Type**

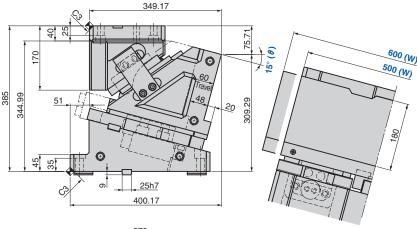
## **Die Mounted Cam Unit**

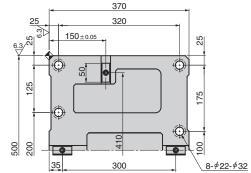
# KCMSL500-15/KCMSL600-15











Travel	Travel Working Force Spring Force		ce [N (kgf)]	f)] Catalog No.		4	Spring Type
S	kN (tonf)	onf) Initial Load Final Load		Catalog No.	W	θ	PS
	313.6	_	20200 (2060)	KCMSL	500	45	GK NGK
60.0	(32.0)	_	19600 (2000)	KCIVISL	600	15	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	500	_	15	_	GK	
KCMSL	600	_	15	_	NGK	
KCMSL	500	_	15	_	GK	– NF

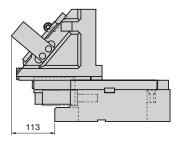
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Option

Option Code	Specification
NF	Nitrogen gas not charged.

## ■Spring Specification

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

## ■Rear Removal Space



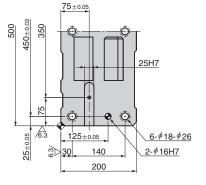
## ■Weight

w	Cam Slider Weight kg	Total Weight kg
500	133.3	302
600	141.4	310

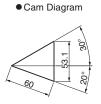


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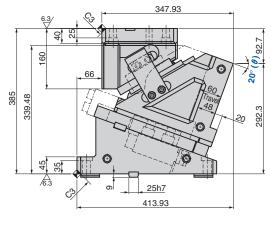


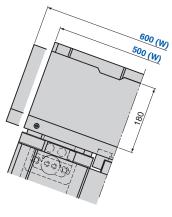


**Die Mounted Cam Unit** 



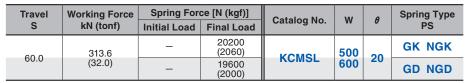
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GK: Gas Spring (KALLER) GD: Gas Spring (DADCO)

NGK/NGD: Without Gas Spring Parts for spring assembly are included.



Catalog No.	W	]-[	θ	]-[	PS	- Option
KCMSL	500	_	20	_	GK	
KCMSL	600	_	20	_	NGK	
KCMSL	500	_	20	_	GK	– NF

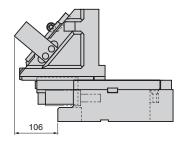


	Option Code	Specification
NF Nitrogen ga		Nitrogen gas not charged.

## **■**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)

## ■Rear Removal Space



#### **■**Weight

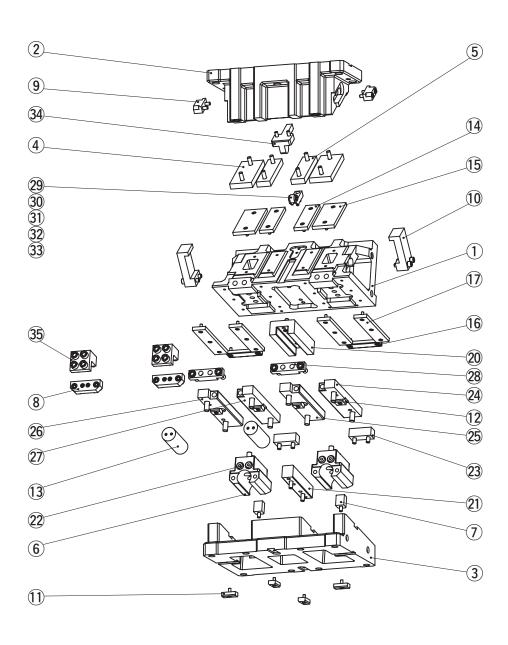
W	Cam Slider Weight kg	Total Weight kg
500	133.3	298
600	141.4	306

# **KCMSL** [Table of Components]

**Large Type** 

**Die Mounted Cam Unit** 

### KCMSL500/KCMSL600



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	2	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	4	Steel
13	Gas Spring	2	Refer to the Spring Specification.
14	Lower Plate A	2	Steel
15	Lower Plate B	2	Steel
16	Slide Lower Plate A	2	Bronze with Graphite
17	Slide Lower Plate B	4	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 C L	1	Steel
26	Base Plate B R	1	Steel
27	Base Plate C R	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
	E Type Snap Ring	2	φ9
34	Roller Driver	1	Steel
35	Lock Plate	2	Steel

For Pierce

For Trim

For Flange

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

