



Improved Maintenance

oint!

No Special Tools are Required to Assemble/Disassemble!

The structure has been redesigned. It's simple and easy to maintain.



No special tools are required.

No skilled labor is required.

Small clamps can be assembled and disassembled on the platens.

Simple structure with high durability.

^{*} For larger models, it is recommended to remove them from the platen during assembly/disassembly for safety.

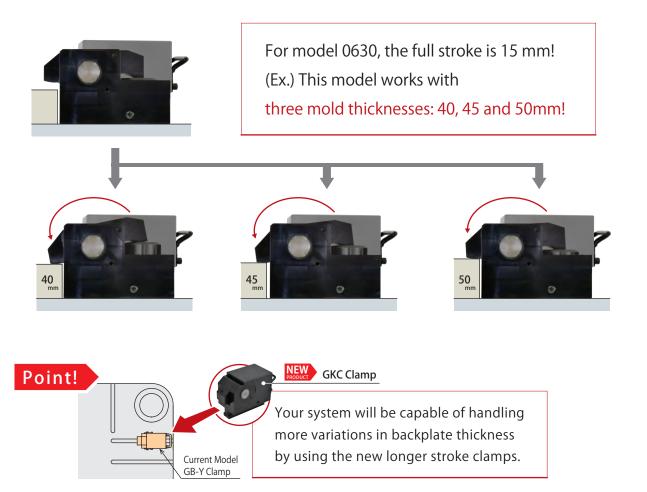
Additional Standard Models

Longer Stroke Model

Point!

The World's Best Long Stroke Clamp!

0100~0400 Size: St. 8~12mm, 0630~5000 Size: St. 15~16.5mm



T-Slot Automatic Slide Model

Point!

Push Button Operation Completes

the Clamp Positioning and Lock Operation

There is no need to go to the non-operation side. Clamp movement is automated.

Additional Smaller and Larger Sizes

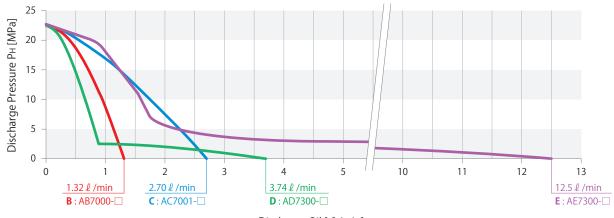
Standard System

Die Casting	*1 Clamp	Clamp	Stationary / Movable	ŀ	Hydraulic Unit		Mold	Air Valve
Machine Capacity	Size	Qty.	Clamping Force [kN]	Unit Model	Pump Model	Clamp Operation Speed	Fall Prevention Block	Unit (Only GKE/GKF)
~ 350	0100		40				MJ0010	
~ 500	0160		64	CTBN0□0	AB7000-□		IVIJOOTO	-
~ 750	0250		100	CTDN0□0 CTCN0□0	AD7300-□ AC7001-□			
~ 1500	0400		160	CTEN0□0	AE7300-□		MJ0020	MV/2012 25
~ 2500	0630	0	252					MV3012-25
~ 5000	1000	Stationary: 4	400	CTDN0□0	AD7300-□		MJ0030	
~ 6500	1600	\ Movable: 4 /	640	CTCN0□0 CTEN0□0	AC7001-□ AE7300-□		MJ0040	
~11000	2500		1000	CTCN0□0 CTEN0□0	AC7001-□ AE7300-□		MJ0050	
~ 16500	4000		1600				NIJOUSU	MV3022-25
~ 22500	5000		2000	CHENIO	457200 G		Diago	
~ 25000	4000	12	2400	CUEN0□0	AE7300-□	Faster	Please contact us.	
~30000	5000	Stationary: 6 Movable: 6	3000				us.	

Notes

- **1. T-Slot Manual Slide (Model GKB/GKC): sizes 0100~5000, T-Slot Automatic Slide (Model GKE/GKF): sizes 0400~5000. Please contact us for T-slot automatic slide clamp sizes smaller than 0400.
 - 1. The standard system above is just a reference. Please contact us for exact specifications for your machine.

Pump Performance Curve



Hydraulic Clamp

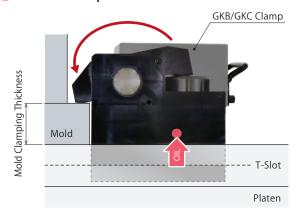
T-Slot Manual-Slide

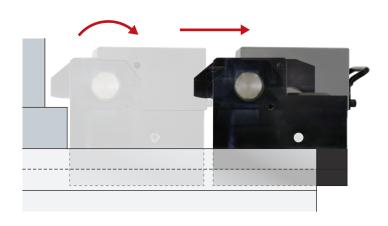
Model **GKC** (Longer Stroke)



The clamp is designed for use under severe conditions where mold lubricant and/or molten metal may spatter. Selection of 10 sizes for small to extra-large die casting machines.

Action Description



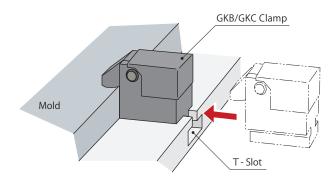


Locking Action

- ① Load the mold.
- ② Slide the clamp forward in the T-slot.
- ③ By supplying hydraulic pressure, the clamp secures the mold.

Releasing Action

- ① The lever is released by the internal spring when the pressure is released.
- ② Slide the clamp backward in the T-slot.
- 3 Unload the mold.



We provide GKB/GKC clamps according to the mold clamping thickness and T-slot dimension. Please refer to the external dimensions for details.

Model No. Indication



1 Stroke * The stroke differs depending on 2 Clamping Force. Please refer to the specifications for the detail.

B: Standard Stroke **C**: Longer Stroke

Clamping Force

: Clamping Force = 10kN : Clamping Force = 63kN 400 : Clamping Force = 400kN : Clamping Force = 100kN : Clamping Force = 16kN 500: Clamping Force = 500kN

: Clamping Force = 25kN : Clamping Force = 160kN : Clamping Force = 40kN 250: Clamping Force = 250kN

3 Design No.

0 : Revision Number

4 Option * Please contact us for specifications and external dimensions for these options.

Blank : None (Standard Model)

: With Handle (2 063 or more) D

Ε : Reinforced Body

н Extra Height Body (When h dimension is more than max. h dimension shown in the external drawing.)

J : Low Lever (When h dimension is less than min. h dimension shown in the external drawing.)

: Rear Port K

L1/L2: Wide Lever (For U-Cut of Mold) *1

M1/M2: For Mold with Notch

: NPT Port **2 Ν

: With Mold Confirmation Limit Switch (2 040 or more) **3 Ρ

R : Longer D Dimension of T-Leg

: T-Slot Locking

Notes:

- *1. Please indicate the U-cut dimension of the mold.
- ※2. Dimensions in the specification sheet and other documents are in inches.

U1/U2/U3: With Grease Nipple (Only for 2 040~250) (Standard Option for 2 400, 500)

(U1: Left Side as Seen from Clamp Back Side, U2: Right Side as Seen from Clamp Back Side, U3: Both Sides)

5 Mold Confirmation Limit Switch Load Voltage (Current) *3. Only when selecting P: Mold Confirmation Limit Switch

1 : AC100V **2** : AC200V

5 : DC24V (5~40mA)

6 Mold Confirmation Limit Switch Mounting Position *3. Only when selecting P: Mold Confirmation Limit Switch

L : Left (Left Side as Seen from Clamp Back Side)

R: Right (Right Side as Seen from Clamp Back Side)

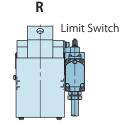
7 Fluid Code

0 : General Hydraulic Oil (Equivalent to ISO-VG-32)

G: Water•Glycol S: Silicon Oil

F: Fatty Acid Ester

L Limit Switch



8 Production Number

This number represents the main specification of the clamp's T-slot stem and the clamping height. After the specification is confirmed, we will create a number.

Hydraulic Clamp

Hydraulic Unit

Operational **Control Unit**

Company Profile

Hydraulic Clai

GKE

GKF

Hydraulic Unit СТВ

CTD CTC CTE

CUC CUE

Air Valve Unit ΜV

Operational Control Unit

YMB080

Cautions

Notes on Design Installation Notes

Hvdraulic Fluid List Notes on Hydraulic Cylinder

Notes on Handling

Maintenance/

Inspection Warranty

Our Products

QMCS ODCS

KWCS

FA•Industrial Robot Related Products

Company Profile

Company Profile After-Sales Service

History

Specifications

Model	Standard Stroke		GKB0100	GKB0160	GKB0250	GKB0400	GKB0630	GKB1000	GKB1600	GKB2500	GKB4000	GKB5000
No.	Longer Stroke		GKC0100	GKC0160	GKC0250	GKC0400	GKC0630	GKC1000	GKC1600	GKC2500	GKC4000	GKC5000
Clam	ping Force	kN	10	16	25	40	63	100	160	250	400	500
Work	ing Pressure	MPa				25	(For Rated	Clamp Force	e)			
Withs	tanding Pressure	MPa					3	7				
troke	Full Stroke	mm	6	7	7	7	8	8	8	8	8	8
B :Standard Stroke	Clamp Stroke	mm	2	2	2	2	2	2	2	2	2	2
:Stan	Extra Stroke	mm	4	5	5	5	6	6	6	6	6	6
<u>-</u>	Cylinder Capacity (At Full Stro	ke) cm ³	2.5	4.6	7.2	11.5	20.6	33.6	53.8	83.8	130.8	166.0
roke	Full Stroke	mm	8	9	10	12	15	15.5	16	16	16	16.5
ger St	Clamp Stroke	mm	0.5	1	1.5	3.5	1	1.5	2	2	2	2.5
C:Longer Stroke	Extra Stroke	mm	7.5	8	8.5	8.5	14	14	14	14	14	14
<u>-</u>	Cylinder Capacity (At Full Stro	ke) cm ³	4	6	10	19	38	63	105	160	253	331
Opera	ating Temperature	$^{\circ}$	0 ~ 120									
Use F	requency *1			Less than 20 Cycles / Day **1								
Press	urizing Agent *2 *3	*4		Refer to 7 Fluid Code								
Min.	Γ-Slot Width a(JIS) *	5 mm	10	12	14	18	22	24	28	36	36	36 (2 T-Legs)
Max.	T-Slot Width a (JIS) *	⁶⁵ mm	20	24	32	42	42	54	54	54	54	42 (2 T-Legs)

Notes:

- ※1. Please contact us for more frequent use.
- ※2. Please contact us for fluids other than those mentioned on the list.
- *3. If hydraulic viscosity is higher than specified, action time will be longer. Please refer to Hydraulic Fluid List on P.46.
- #4. If using it at low temperature, action time will be longer because the viscosity of hydraulic oil becomes higher.
- *5. It shows reference dimensions. The dimension may differ from specification depending on T-slot (T-leg) dimension, dimension of clamp cylinder that sticks out of T-slot during lock action, or body material.



T-Slot

Option



With Handle D (GKB/GKC0630 or larger)



E Reinforced Body For undersize or large tolerance T-slot.



H Extra Height Body When the h dimension is greater than standard.



Low Lever When the h dimension is less than standard.



K Rear Port

Piping from Backside



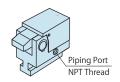
(For U-Cut of Mold)

If a mold has a notch such as U-Cut.



M ☐ For Mold with Notch

For limited space at mold clamping part in Z-axis.

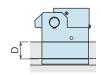


NPT Port



With Mold Confirmation Limit Switch (GKB/GKC0400 or lager)

Secure Clamping with Mold Confirmation Switch



R Longer D-Dimension of T-Leg For Longer D Dimension of

T-Leg



T-Slot Locking Prevents clamp movement



With Grease Nipple (GKB/GKC0400∼2500)

Standard Option for GKB/GKC4000, GKB/GKC5000

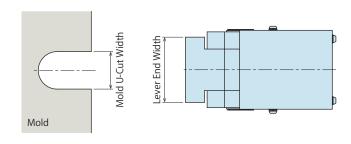
1. Specifications/external dimensions for these options are different from standard model. Please contact us for further information.



L1/L2 Detail of Wide Lever Option

Model No.

Indication



(mm)

Model No.	Mold U-Cut Width	Lever End Width
GKB/GKC0100-L1	~ 20	35
GKB/GKC0160-L1	~ 25	48
GKB/GKC0250-L1	~ 25	48
GKB/GKC0250-L2	25 ~ 35	58
GKB/GKC0400-L1	~ 30	58
GKB/GKC0400-L2	30 ~ 40	68
GKB/GKC0630-L1	~ 38	72
GKB/GKC0630-L2	38 ~ 50	85
GKB/GKC1000-L1	~ 40	85
GKB/GKC1000-L2	40 ~ 55	97
GKB/GKC1600-L1	~ 45	97
GKB/GKC1600-L2	45 ~ 55	107
GKB/GKC2500-L1	~ 45	107
GKB/GKC2500-L2	45 ~ 55	117

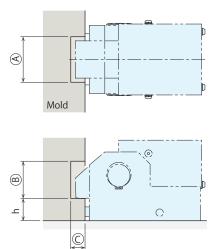
Note:

1 . Please contact us for the mold U-cut width and lever end width of GKB/GKC4000-L \square , KB/GKC5000-L \square .

M1/M2 Detail of Mold with Notch Option

(M1: Standard Lever Material, M2: High Strength Lever Material) *1

When making an order, please indicate (A)•(B)•(C) and h dimensions of mold clamping thickness.



Notes:

- 2. This option may not be available depending on the mold notch dimensions. Please contact us.
- 3. Please contact us for other mold notch shapes.
- *1. The lever material is decided by Kosmek based on the mold notch dimensions.

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions **Company Profile**

Hydraulic Cla

GKE GKF

Hydraulic Unit

СТВ CTD CTC CTE CUC CUE

Air Valve Unit MV

Operational Control Unit YMB080

Cautions

Notes on Design Installation Notes

Hydraulic Fluid List Notes on Hydraulic Cylinder

Notes on Handling Maintenance/ Inspection

Warranty

Our Products QMCS

> QDCS KWCS

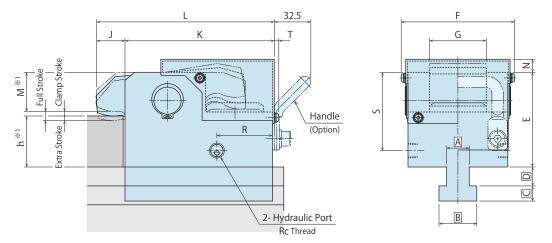
FA•Industrial Robot Related Products

Company Profile

Company Profile After-Sales Service History

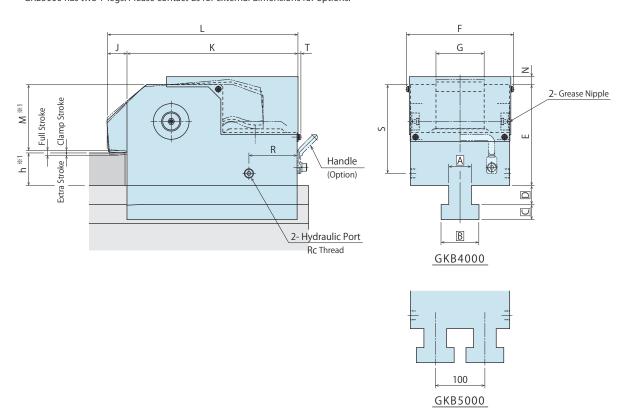
External Dimensions: GKB0100~GKB2500

** This drawing shows GKB0100~GKB2500 standard model. Contact us for external dimensions for options.

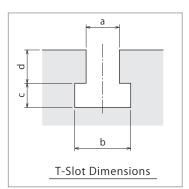


External Dimensions: GKB4000/GKB5000

** This drawing shows GKB4000/GKB5000 standard model. GKB4000/GKB5000 has the grease nipple as standard. GKB5000 has two T-legs. Please contact us for external dimensions for options.



T-Slot Dimensions



Notes:

- $1. \ \ \, \text{Do not exceed the clamping force on the specification.}$
- 2. Specifications/Contents in this catalog are subject to change without prior notice. Ask for the approval drawing before deciding to purchase.



External Dimensions: Model **GKB** (Standard Stroke)

(mm)

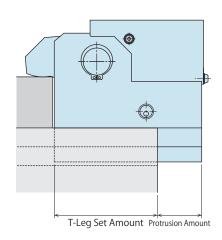
Model No.	GKB0100	GKB0160	GKB0250	GKB0400	GKB0630	GKB1000	GKB1600	GKB2500	GKB4000	GKB5000
Full Stroke	6	7	7	7	8	8	8	8	8	8
Clamp Stroke	2	2	2	2	2	2	2	2	2	2
Extra Stroke	4	5	5	5	6	6	6	6	6	6
min. E	42.5	49	58	66	81	105.5	122.5	144.5	177.5	202.5
F	47	57	67	80	100	111.5	131.5	158.5	189.5	214.5
G	20	26	32	38	50	53	60	73	85	100
J	15	17	19	22	25	30	30	30	35	37
K	59.5	71.5	85.5	107.5	132	161	201	242	302	342
L	74.5	88.5	104.5	129.5	157	191	231	272	337	379
N	8	10	10	10	11.5	11.5	12.5	13.5	14	15
R	27	27	37	42	49	68	73	69.5	85	90
S	33.5	40	46	54	69	93.5	108.5	127.5	156.5	174.5
T	3	3	3	4	4	5.5	5.5	5.5	5.5	5.5
Rc	Rc1/8	Rc1/8	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc3/8	Rc3/8
min. h	20	20	25	25	30	40	40	45	50	60
max. h	40	40	50	50	60	70	80	80	85	85

Notes:

- **1. M dimension (Lever Thickness) in the drawing varies depending on h dimension (Mold Clamping Thickness).
 Please contact us for further information.
 - 1. If you would like to change the ratio of clamp stroke and extra stroke, please contact us.
 - 2. A B C D dimensions are determined by Kosmek according to the T-slot dimensions.
 - 3. When making an order, please indicate a, b, c, d dimension of T-slot and h dimensions of mold clamping thickness.
 - 4. Please set the dimensions of a, b, c, d and h by every 0.1mm.

The Allowable Protrusion Amount of Cylinder

(mm)



		(11111)
Model No.	Min. T-Leg Set Amount	Allowable Protrusion Amount
GKB0100	40.5	17.5
GKB0160	49.0	21.0
GKB0250	59.0	25.0
GKB0400	73.5	32.0
GKB0630	91.0	39.0
GKB1000	114.0	45.0
GKB1600	142.0	57.0
GKB2500	170.5	69.5
GKB4000	-	0
GKB5000	-	0

Note:

 The dimensions on the list are for reference.
 The dimensions may differ from specification depending on T-slot (T-leg) dimension or body material. Hydraulic Clamp

Hydraulic Unit

Operational
Control Unit

Cautions
Company Profile

Hydraulic Clam

GKC
GKE
GKF

Hydraulic Unit
CTB
CTD

CTC
CTC
CTC
CTC

Air Valve Unit

Operational Control Unit

YMB080

Cautions

Notes on Design Installation Notes Hydraulic Fluid List Notes on Hydraulic Cylinder Speed Control Circuit Notes on Handling Maintenance/ Inspection Warranty

Our Products

QMCS

QDCS

KWCS

FA-Industrial Robot Related Products

Company Profile

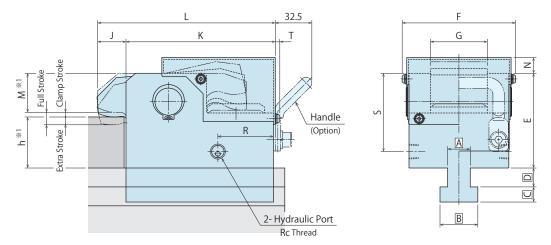
Company Profile

After-Sales Service

History
Sales Offices

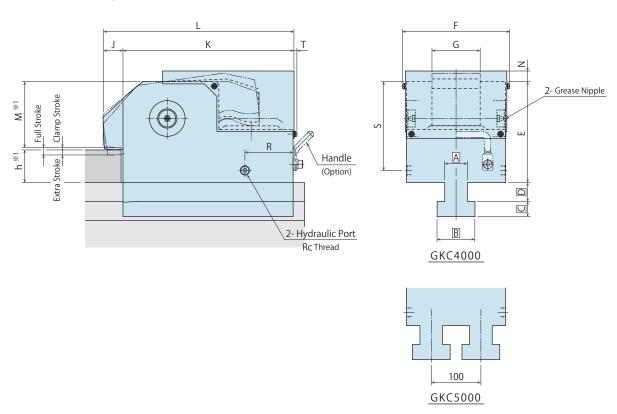
External Dimensions: GKC0100~GKC2500

** This drawing shows GKC0100 ~ GKC2500 standard model. Contact us for external dimensions for options.

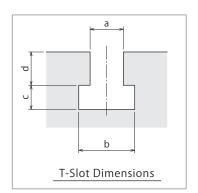


External Dimensions : GKC4000/GKC5000

** This drawing shows GKC4000/GKC5000 standard model. GKC4000/GKC5000 has the grease nipple as standard. GKC5000 has two T-legs. Please contact us for external dimensions for options.



T-Slot Dimensions



Notes:

- $1. \ \ \, \text{Do not exceed the clamping force on the specification.}$
- 2. Specifications/Contents in this catalog are subject to change without prior notice. Ask for the approval drawing before deciding to purchase.

© External Dimensions: моdel GKC (Longer Stroke)

(mm)

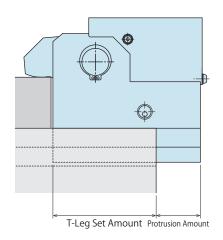
Model No.	GKC0100	GKC0160	GKC0250	GKC0400	GKC0630	GKC1000	GKC1600	GKC2500	GKC4000	GKC5000
Full Stroke	8	9	10	12	15	15.5	16	16	16	16.5
Clamp Stroke	0.5	1	1.5	3.5	1	1.5	2	2	2	2.5
Extra Stroke	7.5	8	8.5	8.5	14	14	14	14	14	14
min. E	45.5	52	62	71	88.5	114	132.5	154.5	187.5	212.5
F	47	57	67	80	100	111.5	131.5	158.5	189.5	214.5
G	20	26	32	38	50	53	60	73	85	100
J	15	17	19	22	25	30	30	30	35	37
К	59.5	71.5	85.5	107.5	132	161	201	242	302	342
L	74.5	88.5	104.5	129.5	157	191	231	272	337	379
N	10	12	12.5	14	18	18	20.5	22.5	22.5	24.5
R	27	27	37	42	49	68	73	69.5	85	90
S	36.5	43	50	59	76.5	102	118.5	137.5	166.5	184.5
Т	3	3	3	4	4	5.5	5.5	5.5	5.5	5.5
Rc	Rc1/8	Rc1/8	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc3/8	Rc3/8
min. h	20	20	25	25	30	40	40	45	50	60
max. h	40	40	50	50	60	70	80	80	85	85

Notes:

- ※1. M dimension (Lever Thickness) in the drawing varies depending on h dimension (Mold Clamping Thickness).
 Please contact us for further information.
 - $1. \ If you would \ like to change the \ ratio of \ clamp \ stroke \ and \ extra \ stroke, \ please \ contact \ us.$
 - 2. ABCD dimensions are determined by Kosmek according to the T-slot dimensions.
 - 3. When making an order, please indicate a, b, c, d dimension of T-slot and h dimensions of mold clamping thickness.
 - 4. Please set the dimensions of a, b, c, d and h by every 0.1mm and if h dimension has variations, please indicate the variations.

The Allowable Protrusion Amount of Cylinder





Model No.	Min. T-Leg Set Amount	Allowable Protrusion Amount
GKC0100	40.5	17.5
GKC0160	49.0	21.0
GKC0250	59.0	25.0
GKC0400	73.5	32.0
GKC0630	91.0	39.0
GKC1000	114.0	45.0
GKC1600	142.0	57.0
GKC2500	170.5	69.5
GKC4000	-	0
GKC5000	-	0

Note:

 The dimensions on the list are for reference.
 The dimensions may differ from specification depending on T-slot (T-leg) dimension or body material. Hydraulic Clamp

Hydraulic Unit

Operational
Control Unit

Cautions
Company Profile

GKB

GKC

GKE

GKF

CTB
CTC
CTC
CTE
CUC
CUE

Air Valve Unit

Operational Control Unit

YMB080

Cautions

Notes on Design
Installation Notes
Hydraulic Fluid List
Notes on Hydraulic Cylinder
Speed Control Circuit

Maintenance/ Inspection

Our Products

QMCS

QDCS

KWCS

FA-Industrial Robot Related Products

Company Profile

Company Profile

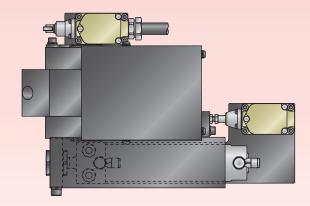
After-Sales Service

History

Hydraulic Clamp

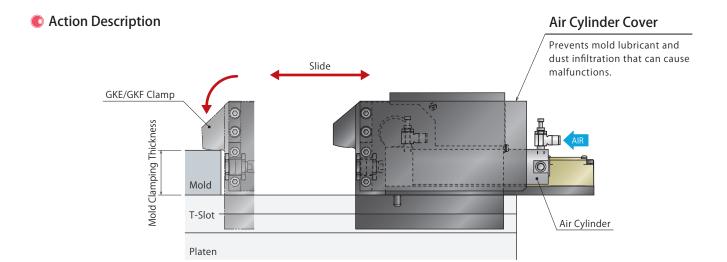
T-Slot Automatic-Slide

Model **GKF** (Longer Stroke)



GKB/GKC Clamp with an air cylinder.

Push button operation completes the clamp positioning and lock operations.



Locking Action

- ① Load the mold.
- ② Air is supplied to the air cylinder and the GKE/GKF moves forward.
- ③ Forward End Confirmation Switch (Limit Switch) detects the mold.
- ④ By supplying hydraulic pressure, the clamp secures the mold.



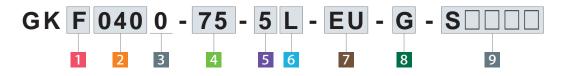
Releasing Action

- ① The mold is released by the internal spring when the hydraulic pressure is released.
- ② Air is supplied to the air cylinder (backward side) and GKE/GKF clamp moves backward.
- 3 Backward End Confirmation Switch (Limit Switch) detects that the clamp has moved backward.
- 4 Unload the mold.



We provide GKE/GKF clamps according to the mold clamping thickness and T-slot dimension.
Please refer to the external dimensions for details.

Model No. Indication



1 Stroke * The stroke differs depending on 2 Clamping Force. Please refer to the specifications for the detail.

B: Standard Stroke **C**: Longer Stroke

Clamping Force

040: Clamping Force = 40kN 160: Clamping Force = 160kN 500: Clamping Force = 500kN

: Clamping Force = 63kN 250: Clamping Force = 250kN : Clamping Force = 100kN : Clamping Force = 400kN

3 Design No.

0 : Revision Number

4 Slide (Air Cylinder) Stroke Length

25 : Clamp Travel Distance = 25mm

300 : Clamp Travel Distance = 300mm

* Selectable 4 Slide Stroke Length differs according to 2 Clamping Force. Please refer to the slide stroke on specifications.

* Extra distance should be considered when determining the travel distance.

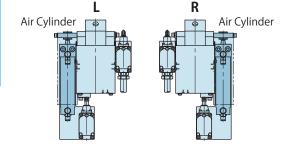
5 Limit Switch Load Voltage (Current)

1 : AC100V 2 : AC200V

5 : DC24V (5~40mA)

6 Air Cylinder Mounting Position

L : Left (Left Side as Seen from Clamp Back Side) **R**: Right (Right Side as Seen from Clamp Back Side)



7 Option * Please contact us for specifications and external dimensions for these options.

Blank: None (Standard Model)

Ε : Reinforced Body

н Extra Height Body (When h dimension is more than max. h dimension shown in the external drawing.)

: Low Lever (When h dimension is less than min. h dimension shown in the external drawing.)

: Rear Port (Standard Option for 2 040, 063, 100)

L1/L2: Wide Lever (For U-Cut of Mold) *1

M1/M2: For Mold with Notch

: NPT Port **2 Ν

: Longer D Dimension of T-Leg

Notes:

%1. Please indicate the U-cut dimension of the mold.

※2. Dimensions in the specification sheet and other

documents are in inches.

U1/U2/U3: With Grease Nipple (Only for 2 040~250) (Standard Option for 2 400, 500)

(U1: Left Side as Seen from Clamp Back Side, U2: Right Side as Seen from Clamp Back Side, U3: Both Sides)

8 Fluid Code

0 : General Hydraulic Oil (Equivalent to ISO-VG-32) S: Silicon Oil **G**: Water•Glycol **F**: Fatty Acid Ester

9 Production Number

This number represents the main specification of the clamp's T-slot stem and the clamping height. After the specification is confirmed, we will create a number.

Hydraulic Clam

Hydraulic Unit

Operational **Control Unit**

Company Profile

GKB

GKC

Hydraulic Unit

СТВ CTD

CTC CTE

CUC CUE

Air Valve Unit ΜV

Operational Control Unit

YMB080

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Our Products

QMCS

ODCS KWCS

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Specifications

	Standard Stroke	GKE0400	GKE0630	GKE1000	GKE1600	GKE2500	GKE4000	GKE5000				
Model	(GKB Clamp Model No.)	(GKB0400)	(GKB0630)	(GKB1000)	(GKB1600)	(GKB2500)	(GKB4000)	(GKB5000)				
No.	Longer Stroke	GKF0400	GKF0630	GKF1000	GKF1600	GKF2500	GKF4000	GKF5000				
	(GKC Clamp Model No.)	(GKC0400)	(GKC0630)	(GKC1000)	(GKC1600)	(GKC2500)	(GKC4000)	(GKC5000)				
Clamp	oing Force kN	40	63	100	160	250	400	500				
Worki	ng Pressure MPa			25 (Fo	or Rated Clamp F	orce)						
Withstanding Pressure MPa 37												
Air Pre	ssure for Air Cylinder MPa				0.4 ~ 0.5							
Slide S	Stroke mm	25~200	50~200	50~200	50~300	50~300	50~300	50~300				
troke	Full Stroke mm	7	8	8	8	8	8	8				
E:Standard Stroke	Clamp Stroke mm	2	2	2	2	2	2	2				
:Stan	Extra Stroke mm	5	6	6	6	6	6	6				
—	Cylinder Capacity (At Full Stroke) cm ³	11.5	20.6	33.6	53.8	83.8	130.8	166.0				
roke	Full Stroke mm	12	15	15.5	16	16	16	16.5				
ger St	Clamp Stroke mm	3.5	1	1.5	2	2	2	2.5				
F:Longer Stroke	Extra Stroke mm	8.5	14	14	14	14	14	14				
<u>г</u>	Cylinder Capacity (At Full Stroke) cm ³	19	38	63	105	160	253	331				
Opera	ting Temperature °C				0 ~ 120							
Use Fr	equency *1		Less than 20 Cycles / Day ^{**1}									
Pressu	ırizing Agent *2 *3 *4			Re	efer to 8 Fluid C	ode						
Min. T	-Slot Width a (JIS) *5 mm	18	22	24	28	36	36	36 (2 T-Legs)				
Max. 7	Slot Width a (الحام) **5 mm	42	42	54	54	54	54	42 (2 T-Legs)				

Notes:

- \times 1. Please contact us for more frequent use.
- $\ensuremath{\%2}$ 2. Please contact us for fluids other than those mentioned on the list.
- *3. If hydraulic viscosity is higher than specified, action time will be longer. Please refer to Hydraulic Fluid List on P.46.
- *4. If using it at low temperature, action time will be longer because the viscosity of hydraulic oil becomes higher.
- % 5. It shows reference dimensions. The dimension may differ from specification depending on T-slot (T-leg) dimension, dimension of clamp cylinder that sticks out of T-slot during lock action, or body material.
 - 1. Please refer to GKB/GKC clamp pages for details of clamp body.
 - 2. Please contact us for smaller clamps than GKE/GKF0400.



T-Slot

External Dimensions Model No. Cautions Specifications Action Description Model GKE P.045 Indication Model GKF



MEMO

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions **Company Profile**

Hydraulic Cla

GKB

GKC GKE

GKF

Hydraulic Unit

СТВ CTD

CTC CTE

CUC CUE

Air Valve Unit

MV

Operational Control Unit

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Our Products

QMCS

QDCS KWCS

FA•Industrial Robot Related Products

Company Profile

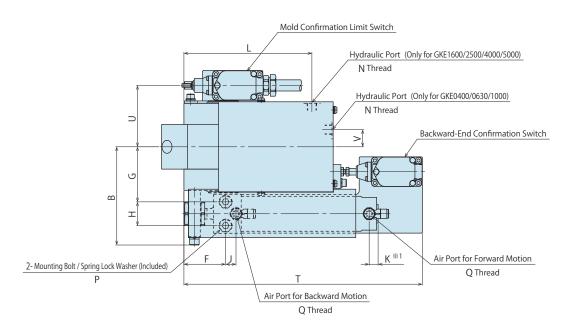
Company Profile

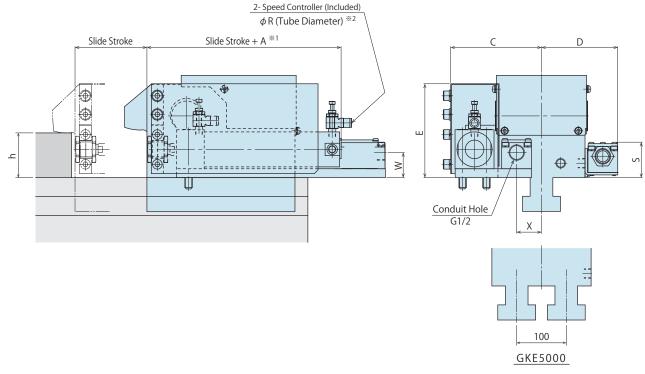
After-Sales Service

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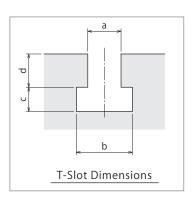
External Dimensions : Model GKE (Standard Stroke)

** This drawing shows GKE0400 ~ GKE5000 standard model, air cylinder mounting position: L. GKE4000/GKE5000 has the grease nipple as standard. GKE5000 has two T-legs.
Please contact us for external dimensions for options. Please refer to GKB clamp pages for details of clamp body.





T-Slot Dimensions



Notes:

- $1. \ \ \, \text{Do not exceed the clamping force on the specification.}$
- 2. Specifications/Contents in this catalog are subject to change without prior notice. Ask for the approval drawing before deciding to purchase.



© External Dimensions: Model **GKE** (Standard Stroke)

(mm)

Model No.	GKE0400	GKE0630	GKE1000	GKE1600	GKE2500	GKE4000	GKE5000
GKB Clamp Model No.	GKB0400	GKB0630	GKB1000	GKB1600	GKB2500	GKB4000	GKB5000
Full Stroke	7	8	8	8	8	8	8
Clamp Stroke	2	2	2	2	2	2	2
Extra Stroke	5	6	6	6	6	6	6
A *1	105	112	118	136	157	184	184
В	80.5	96.5	107.5	132	157	239.5	252
С	74	89	100	122	144.5	224.5	237
D	78	88	92.5	102.5	116	131.5	144
E	85	95	109.5	126.5	148.5	181.5	206.5
F	39	45	46	56	64	57	57
G	44	55	61	74	89	106.5	119
Н	18	22	24	32	41	96	96
J	9	10	13	14	16	36	36
K *1	12	12	12	12	14	19	19
L	-	-	-	172	170.5	215	250
N	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc3/8	Rc3/8
Р	M5x0.8x40	M6x1x50	M8x1.25x55	M10x1.5x70	M12x1.75x85	M16x2x130	M16x2x130
Q	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc3/8	Rc3/8
R **2	6	6	6	6	10	10	10
S	48	48	48	48	48	48	48
Т	227	251.5	280.5	320.5	349.5	409.5	449.5
U	58	68	72.5	82.5	96	111.5	124
V	22	25	25	-	-	-	-
W	27.6	30.6	33.6	33.6	37.6	40.6	40.6
X	11	19	23.5	33.5	47	62.5	75
min. h	25	30	40	40	45	50	60
max. h	50	60	70	80	80	85	85

Notes:

- % 1. "A" and "K" dimensions are different when exceeding the stroke value written in the list. Please contact us for detail.
- ※2. For N: NPT port, "R" dimension (tube diameter) of the speed controller is in inches.
 - 1. If you would like to change the ratio of clamp stroke and extra stroke, please contact us.
 - 2. When making an order, please indicate a, b, c, d dimension of T-slot and h dimensions of mold clamping thickness.
 - 3. Please set the dimensions of a, b, c, d and h by every 0.1mm.
 - 4. Please adjust the moving speed of the clamp with speed controller to fully stroke within 1 to 2 seconds.
 - 5. Do not set the mold confirmation limit switch to the mold surface near the U-slot.
 - 6. When determining slide stroke, provide the forward end with an extra stroke between 2 and 5 mm considering dimensional accuracy of the air cylinder and detection distance of the limit switch.
 - Clamp sliding surface should be smooth.
 - 8. Please refer to GKB clamp pages for unlisted dimensions.

Slide Stroke

Model No.		Slide Stroke (mm)									
Model No.	25	50	75	100	125	150	200	250	300		
GKE0400	0	0	0	0	0	0	0				
GKE0630		0	0	0	0	0	0				
GKE1000		0	0	0	0	0	0				
GKE1600		0	0	0	0	0	0	0	0		
GKE2500		0	0	0	0	0	0	0	0		
GKE4000		0	0	0	0	0	0	0	0		
GKE5000		0	0	0	0	0	0	0	0		

Note

1. "A" and "K" dimensions are different when exceeding the stroke value written in the list. Please contact us for detail.

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions **Company Profile**

Hydraulic Cl GKB

GKC GKF

Hydraulic Unit CTB CTD CTC CTE CUC CUE

Air Valve Unit MV

Control Unit YMB080

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Our Products QMCS

QDCS KWCS

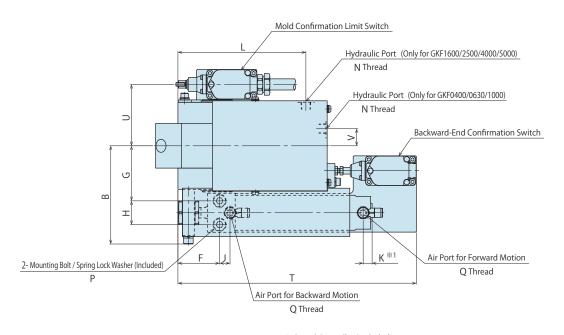
FA•Industrial Robot Related Products

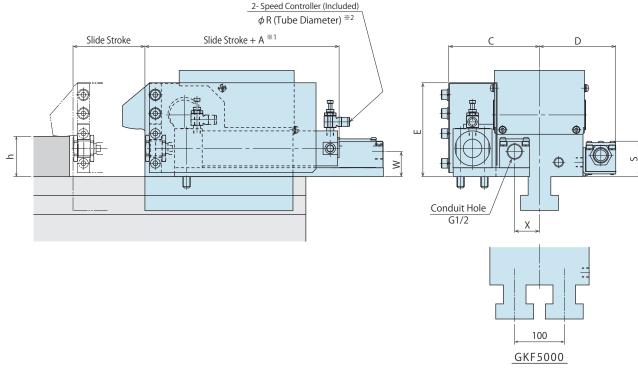
Company Profile

Company Profile After-Sales Service History

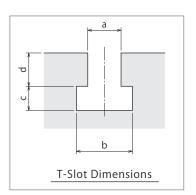
External Dimensions: Model GKF (Longer Stroke)

** This drawing shows GKF0400 ~ GKF5000 standard model, air cylinder mounting position: L. GKF4000/GKF5000 has the grease nipple as standard. GKF5000 has two T-legs.
Please contact us for external dimensions for options. Please refer to GKB clamp pages for details of clamp body.





T-Slot Dimensions



Notes

- $1. \ \ \, \text{Do not exceed the clamping force on the specification.}$
- 2. Specifications/Contents in this catalog are subject to change without prior notice. Ask for the approval drawing before deciding to purchase.



External Dimensions: Model GKF (Longer Stroke)

(mm)

		. 3	-				· · · · · ·
Model No.	GKF0400	GKF0630	GKF1000	GKF1600	GKF2500	GKF4000	GKF5000
GKC Clamp Model No.	GKC0400	GKC0630	GKC1000	GKC1600	GKC2500	GKC4000	GKC5000
Full Stroke	12	15	15.5	16	16	16	16.5
Clamp Stroke	3.5	1	1.5	2	2	2	2.5
Extra Stroke	8.5	14	14	14	14	14	14
A *1	105	112	118	136	157	184	184
В	80.5	96.5	107.5	132	157	239.5	252
С	74	89	100	122	144.5	224.5	237
D	78	88	92.5	102.5	116	131.5	144
E	85	95	109.5	126.5	148.5	181.5	206.5
F	39	45	46	56	64	57	57
G	44	55	61	74	89	106.5	119
Н	18	22	24	32	41	96	96
J	9	10	13	14	16	36	36
K *1	12	12	12	12	14	19	19
L	-	-	-	172	170.5	215	250
N	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc1/4	Rc3/8	Rc3/8
Р	M5x0.8x40	M6x1x50	M8x1.25x55	M10x1.5x70	M12x1.75x85	M16x2x130	M16x2x130
Q	Rc1/8	Rc1/8	Rc1/8	Rc1/8	Rc1/4	Rc3/8	Rc3/8
R *2	6	6	6	6	10	10	10
S	48	48	48	48	48	48	48
Т	227	251.5	280.5	320.5	349.5	409.5	449.5
U	58	68	72.5	82.5	96	111.5	124
V	22	25	25	-	-	-	-
W	27.6	30.6	33.6	33.6	37.6	40.6	40.6
X	11	19	23.5	33.5	47	62.5	75
min. h	25	30	40	40	45	50	60
max. h	50	60	70	80	80	85	85

Notes:

- *1. "A" and "K" dimensions are different when exceeding the stroke value written in the list. Please contact us for detail.
- ※2. For N: NPT port, "R" dimension (tube diameter) of the speed controller is in inches.
 - 1. If you would like to change the ratio of clamp stroke and extra stroke, please contact us.
 - 2. When making an order, please indicate a, b, c, d dimension of T-slot and h dimensions of mold clamping thickness.
 - 3. Please set the dimensions of a, b, c, d and h by every 0.1mm and if h dimension has variations, please indicate the variations.
 - 4. Please adjust the moving speed of the clamp with speed controller to fully stroke within 1 to 2 seconds.
 - 5. Do not set the mold confirmation limit switch to the mold surface near the U-slot.
 - 6. When determining slide stroke, provide the forward end with an extra stroke between 2 and 5 mm considering dimensional accuracy of the air cylinder and detection distance of the limit switch.
 - Clamp sliding surface should be smooth.
 - 8. Please refer to GKC clamp pages for unlisted dimensions.

Slide Stroke

Model No.	Slide Stroke (mm)										
	25	50	75	100	125	150	200	250	300		
GKF0400	0	0	0	0	0	0	0				
GKF0630		0	0	0	0	0	0				
GKF1000		0	0	0	0	0	0				
GKF1600		0	0	0	0	0	0	0	0		
GKF2500		0	0	0	0	0	0	0	0		
GKF4000		0	0	0	0	0	0	0	0		
GKF5000		0	0	0	0	0	0	0	0		

Note:

1. "A" and "K" dimensions are different when exceeding the stroke value written in the list. Please contact us for detail.

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Company Profile

GKB GKC

GKE

Hydraulic Unit CTB CTD CTC CTE CUC CUE

Air Valve Unit MV

Operational Control Unit YMB080

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> Hydraulic Fluid List Notes on Hydraulic Cylinder

Notes on Handling Maintenance/

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Our Products QMCS

QDCS KWCS

FA•Industrial Robot Related Products

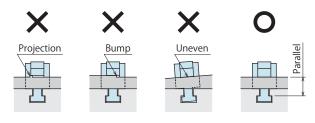
Company Profile

Company Profile After-Sales Service History

Cautions

Notes for Design

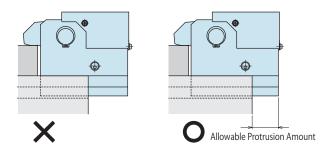
- 1) Check Specifications
- Please use each product according to its specifications.
- Operating hydraulic pressure is 25 MPa.
 Do not use clamps with excessive operating pressure.
 Falling down of the mold due to the damage on clamps leads to injury accident. In order to reduce clamping force, use them with lower operating pressure.
- 2) Check the thickness of the mold clamping part.
- Please check the thickness of the mold clamping part.
 If using molds other than specified, clamps cannot conduct locking action normally leading to injury accident.
- 3) The clamp surface and T-slot must be parallel to mounting surface of the mold.
- If clamp surface is not even or parallel, excessive force is applied to the clamp and it deforms main body and lever of the clamp resulting in falling off of the clamp and injury accident.



- 4) Make sure that advance/retraction of the clamp is smoothly conducted. (model GKE / GKF)
- Please control air cylinder for slide with two-position double solenoid (with detent).
- Supply more than 0.4MPa air pressure to air cylinder.
- Please adjust the moving speed of the clamp with speed controller to fully stroke within 1 to 2 seconds.
- Do not set the limit switch to the mold surface near the U-slot, because it is used as forward-end detection.
- The clamp sliding surface must be smooth (without any bumps).
- 5) Make sure that dust, sand, cutting chips or blank pieces do not enter the clamp.
- Clamp does not operate smoothly and may be damaged.

 When the clamp cylinder sticks out of U-slot or T-slot, please use it within the allowable protrusion amount.

Model GKB / GKC / GKE / GKF



Allowable Protrusion Amount

Model No.	Allowable Protrusion Amount (mm)
GKB0100 / GKC0100	17.5
GKB0160 / GKC0160	21
GKB0250 / GKC0250	25
GKB0400 / GKC0400 / GKE0400 / GKF0400	32
GKB0630 / GKC0630 / GKE0630 / GKF0630	39
GKB1000 / GKC1000 / GKE1000 / GKF1000	45
GKB1600 / GKC1600 / GKE1600 / GKF1600	57
GKB2500 / GKC2500 / GKE2500 / GKF2500	69.5
GKB4000 / GKC4000 / GKE4000 / GKF4000	0
GKB5000 / GKC5000 / GKE5000 / GKF5000	0



Installation Notes

- 1) Check the fluid to use.
- Please use the appropriate fluid by referring to the Hydraulic Fluid List.
- If using hydraulic oil having viscosity higher than viscosity grade ISO-VG-32, action time will be longer.
- If using it at low temperature, action time will be longer because the viscosity of hydraulic oil becomes higher.

2) Procedure before piping

 The pipeline, piping connector and fixture circuits should be cleaned by thorough flushing. The dust and cutting chips in the circuit may lead to fluid leakage and malfunction.

(The filter which removes contaminant in the hydraulic piping or hydraulic system is not provided.)

3) Applying sealing tape

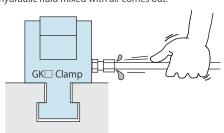
Wrap with tape 1 to 2 times following the screwing direction.
 When piping, be careful that contaminants such as sealing tape do not enter in products.

Pieces of the sealing tape can lead to air leaks and malfunction.

4) Air bleeding in the hydraulic circuit

- If the hydraulic circuit has excessive air, the action time may become
 very long. If air enters the circuit after connecting the hydraulic port
 or under the condition of no air in the oil tank, please conduct air
 bleeding with the end of the piping.
- ① Reduce hydraulic supply pressure to less than 2MPa.
- ② Please loosen the cap nut of pipe fitting that is closest to clamps by one full turn.
- ③ Wiggle the pipeline to loosen the outlet of pipeline fitting.

 The hydraulic fluid mixed with air comes out.



- ④ Tighten the cap nut after bleeding.
- ⑤ It is more effective to bleed air at the highest point inside the circuit or at the end of the circuit.

5) Checking Looseness and Retightening

 At the beginning of the machine installation, the bolt/nut may be tightened lightly.

Check torque and re-tighten as required.

6) Mounting the Clamp

 After setting the clamp in the T-slot, use attached hex. socket bolts and tighten it with the torque shown below (model GKE / GKF)

Model No.	Thread Size	Tightening Torque (N·m)
GKE0400 / GKF0400	M5×0.8	6.3
GKE0630 / GKF0630	M6×1	10
GKE1000 / GKF1000	M8×1.25	25
GKE1600 / GKF1600	M10×1.5	50
GKE2500 / GKF2500	M12×1.75	80
GKE4000 / GKF4000	M16×2	200
GKE5000 / GKF5000	M16×2	200

- 7) Wiring of the Forward-End Confirmation Switch
- Make sure there is enough slack in the wire so that the clamp can complete the sliding action without putting tension on the wire.

Hydraulic Fluid List

- Please use appropriate fluid referring to the fluid lists below.
- Select the same fluid as Fluid Code of hydraulic clamp and unit.

Warranty

General Hydraulic	Oil	O Viscosity Grade ISO-VG-32
Maker	Anti-Wear Hydraulic Oil	Multi-Purpose Hydraulic Oil
Showa Shell Sekiyu	Tellus S2 M 32	Morlina S2 B 32
Idemitsu Kosan	Daphne Hydraulic Fluid 32	Daphne Super Multi Oil 32
JX Nippon Oil & Energy	Super Hyrando 32	Super Mulpus DX 32
Cosmo Oil	Cosmo Hydro AW32	Cosmo New Mighty Super 32
ExxonMobil	Mobil DTE 24	Mobil DTE 24 Light
Matsumura Oil	atsumura Oil Hydol AW-32	
Castrol	Hyspin AWS 32	

Water • Glycol ISO Viscosity Grade ISO-VG-32 Maker Water • Glycol JX Nippon Oil & Energy Hyrando FRZ32 Cosmo Oil Cosmo Fluid HQ46 Matsumura Oil Hydol HAW32

Silicon Oil	ISO Viscosity Grade ISO-VG-68
Maker	Silicon Oil
Shin-Etsu Chemical	KF-50-100cs

Fatty Acid Ester

•			
Maker	Fatty Acid Ester	ISO Viscosity Grade	
Showa Shell Sekiyu Shell Irus Fluids DU56		(ISO-VG-56)	
Idemitsu Kosan Firgist ES		ISO-VG-68	
JX Nippon Oil & Energy	Hyrando SS56	(ISO-VG-56)	
Cosmo Oil Cosmo Fluid E46		ISO-VG-46	
Nippon Quaker Chemical	Quintolubric 822-200	ISO-VG-46	

Note: As it may be difficult to purchase the products as shown in the table from overseas, please contact the respective manufacturer.

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions
Company Profile

Hydraulic Clamp

GKB

GKC

GKE

GKF

CTB
CTD
CTC
CTE
CUC

Air Valve Unit

MV

Operational Control Unit YMB080

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Installation Notes
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Maintenance/ Inspection Warranty

Our Products

QMCS

QDCS

KWCS

FA•Industrial Robot Related Products

Company Profile

Company Profile

After-Sales Service

History

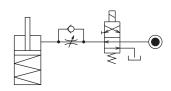
Notes on Hydraulic Cylinder Speed Control Unit



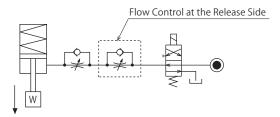
Please pay attention to the cautions below. Design the hydraulic circuit for controlling the action speed of hydraulic cylinder. Improper circuit design may lead to malfunctions and damages. Please review the circuit design in advance.

• Flow Control Circuit for Single Acting Cylinder
For spring return single acting cylinders, restricting flow
during release can extremely slow down or disrupt release action.
The preferred method is to control the flow during the lock action
using a valve that has free-flow in the release direction.

It is also preferred to provide a flow control valve at each actuator.

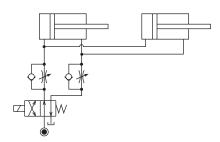


Accelerated clamping speed by excessive hydraulic flow to the cylinder may sustain damage. In this case add flow control to regulate flow.

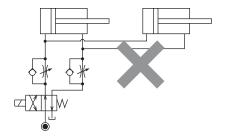


Flow Control Circuit for Double Acting Cylinder
 Flow control circuit for double acting cylinder should have meter-out circuits for both the lock and release sides. Meter-in control can have adverse effect by presence of air in the system.

[Meter-out Circuit]

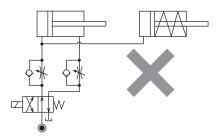


[Meter-in Circuit]



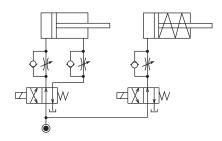
- In the case of meter-out circuit, the hydraulic circuit should be designed with the following points.
- ① Single acting components should not be used in the same flow control circuit as the double acting components.

 The release action of the single acting cylinders may become erratic or very slow.

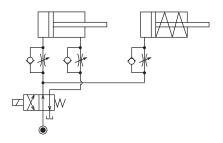


Refer to the following circuit when both the single acting cylinder and double acting cylinder are used together.

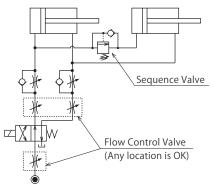
O Separate the control circuit.



O Reduce the influence of double acting cylinder control unit. However, due to the back pressure in tank line, single action cylinder is activated after double action cylinder works.



② In the case of meter-out circuit, the inner circuit pressure may increase during the cylinder action because of the fluid supply. The increase of the inner circuit pressure can be prevented by reducing the supplied fluid beforehand via the flow control valve. Especially when using sequence valve or pressure switches for clamping detection. If the back pressure is more than the set pressure then the system will not work as it is designed to.



Notes on Handling

- When stopping a machine, make sure no load is applied on clamps.
 Otherwise, a mold may fall causing an injury accident.
- 2) It should be handled by qualified personnel.
- The hydraulic machine should be handled and maintained by qualified personnel.
- 3) Do not handle or remove the machine unless the safety protocols are ensured.
- ① The machine and equipment can only be inspected or prepared when it is confirmed that the preventive devices are in place.
- ② Before the machine is removed, make sure that the above-mentioned safety measures are in place. Shut off the air of hydraulic source and make sure no pressure exists in the hydraulic circuit.
- ③ After stopping the machine, do not remove until the temperature cools down.
- 4 Make sure there is no abnormality in the bolts and respective parts before restarting the machine or equipment.
- 4) Do not touch clamps while they are working.
- Otherwise, your hands may be injured due to clinching.



- 5) If there is a change for mold width, make sure to check the allowable protrusion amount.
- If exceeding the allowable protrusion amount, excessive force is applied on clamps leading to deformation or dislocation which cause falling of a mold or an injury accident.
 - Please refer to "Notes for Design 6" for allowable protrusion amount.
- 6) Please hold the main body of the clamp when moving or removing it.
- If pulling on hydraulic hose or air tube, the clamp will fall off leading to injury accident. Also, rivet part of the hose will be loosened leading to fluid leakage.

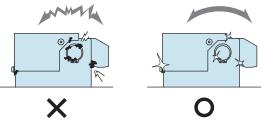


- 7) Do not disassemble or modify.
- If the equipment is taken apart or modified, the warranty will be voided even within the warranty period.
- 8) Do not get water or oil onto the equipment.
- It may lead to malfunction or deterioration of the product and cause an accident.



Maintenance • Inspection

- 1) Removal of the Machine and Shut-off of Pressure Source
- Before the machine is removed, make sure that the above-mentioned safety measures are in place. Shut off the air of hydraulic source and make sure no pressure exists in the hydraulic and air circuit.
- Make sure there is no abnormality in the bolts and respective parts before restarting.
- 2) Regularly clean the area around the equipment.
- If it is used when the surface is contaminated with dirt, it may lead to packing seal damage, malfunctioning, fluid leakage and air leaks.



- If disconnecting by couplers on a regular basis, air bleeding should be carried out daily to avoid air mixed in the circuit.
- 4) Regularly tighten bolts and pipe line, mounting bolts, nuts, circlips and cylinders to ensure proper use.
- 5) Make sure the hydraulic fluid has not deteriorated.
- 6) Make sure there is smooth action and no abnormal noise.
- Especially when it is restarted after left unused for a long period, make sure it can be operated correctly.
- 7) The products should be stored in the cool and dark place without direct sunshine or moisture.
- 8) Please contact us for overhaul and repair.

Warranty

- 1) Warranty Period
- The product warranty period is 18 months from shipment from our factory or 12 months from initial use, whichever is earlier.
- 2) Warranty Scope
- If the product is damaged or malfunctions during the warranty period due to faulty design, materials or workmanship, we will replace or repair the defective part at our expense.
 Defects or failures caused by the following are not covered.
- $\ensuremath{\mathfrak{I}}$ If the stipulated maintenance and inspection are not carried out.
- ② If the product is used while it is not suitable for use based on the operator's judgment, resulting in defect.
- ③ If it is used or handled in inappropriate way by the operator.

 (Including damage caused by the misconduct of the third party.)
- $\ensuremath{\mathfrak{A}}$ If the defect is caused by reasons other than our responsibility.
- ⑤ If repair or modifications are carried out by anyone other than Kosmek, or without our approval and confirmation, it will void warranty.
- ⑥ Other caused by natural disasters or calamities not attributable to our company.
- Parts or replacement expenses due to parts consumption and deterioration.

(Such as rubber, plastic, seal material and some electric components.)

Damages excluding from direct result of a product defect shall be excluded from the warranty.

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions Company Profile

Hydraulic Clamp

GKB GKC GKE

Hydraulic Unit

GKF

CTB
CTD
CTC
CTE

CUC

Air Valve Unit

Operational Control Unit

YMB080

Cautions

Notes on Design

Hydraulic Fluid List

Notes on Hydraulic Cylinde Speed Control Circuit

Notes on Handling

Maintenance/

Warranty

Our Products

QMCS

QDCS KWCS

FA•Industrial Robot Related Products

Company Profile

Company Profile

After-Sales Service History



KOSMEK LTD. Head Office

Company Name KOSMEK LTD.
Established May 1986
Capital ¥99,000,000

Sales 55 billion yen (period ended March 2014)

Chairman Keitaro Yonezawa President Tsutomu Shirakawa

Employee Count 220

Group Company KOSMEK LTD.

KOSMEK ENGINEERING LTD.

KOSMEK (USA) LTD. KOSMEK (CHINA) LTD.

Business Fields Design, production and sales of precision products, and hydraulic and pneumatic equipment

Customers Manufacturers of automobiles, industrial machinery, semiconductors and electric appliances

Banks Resona bank, Tokyo-Mitsubishi bank, Ikeda bank

Major Machine Tool Devices (As of March 2014)

 \cdot Lathe machine devices etc. : Composite CNC lathe etc. (57units)

• Machining center devices etc. : Horizontal Machining center etc. (18 units)

• Grinding machine : Internal and external cylindrical NC grinding machine etc. (6 units)

Other machine tools
 Honing machine etc. (24 units)
 Measuring instruments
 Precision 3D CMM etc. (9 units)
 Heat treatment etc.
 Nitriding furnace etc. (5 units)

Major Industrial Property Rights

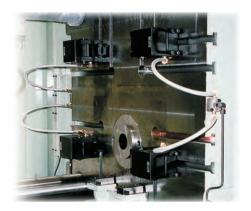
(Including patent right and patent pending as of March 2014)

• Domestic : 110

• International : 250 (USA, EU, Taiwan, South Korea, China, India, Brazil, Mexico, Thailand, Indonesia)



Product Line-Up



DIECAST CLAMPING SYSTEMS

For Diecast Machines

Kosmek Diecast Clamping Systems (KDCS) enable stable die clamping for die casting and magnesium molding machines that are subjected to severe conditions caused by exposure to mold release agents and high temperature.



QUICK MOLD CHANGE SYSTEMS

For Injection Molding Machines

Automatic clamping systems have reduced mold change times and increased production efficiency for plastics manufacturers in a multitude of industries.

We offer a variety of different clamping options, including hydraulically powered clamps, pneumatic clamps with a force multiplying mechanism, and magnetic clamping systems.



QUICK DIE CHANGE SYSTEMS

For Press Machines

Kosmek Quick Die Change Systems are a cost effective way to improve the working environment, allow diversified and small-lot production, and reduce press down time.

Available for a wide range of machines; from large size transfer-presses to smaller high speed presses.



KOSMEK WORK CLAMPING SYSTEMS

Machine Tool Related Products

Our clamping system enables boltless automation making loading and unloading workpieces easier.

The non-leak valve enables the use of hydraulic source and fixtures in a disconnected condition after locking (clamping action).

Hydraulic Clamp

Hydraulic Unit

Operational Control Unit

Cautions Company Profile

Hydraulic Clamp

GKC

GKE GKF

Hydraulic Unit

CTB CTD

CTE

CUE

Air Valve Unit

MV

Operational Control Unit

YMB080

Cautions

Notes on Design Installation Notes Hydraulic Fluid List

Notes on Hydraulic Cylinder Speed Control Circuit Notes on Handling

Maintenance/ Inspection Warranty

Our Products QMCS

> QDCS KWCS

FA•Industrial Robot Related Products

Company Profile

Company Profile

After-Sales Service

History



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Global Network



Asia Detailed Map







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