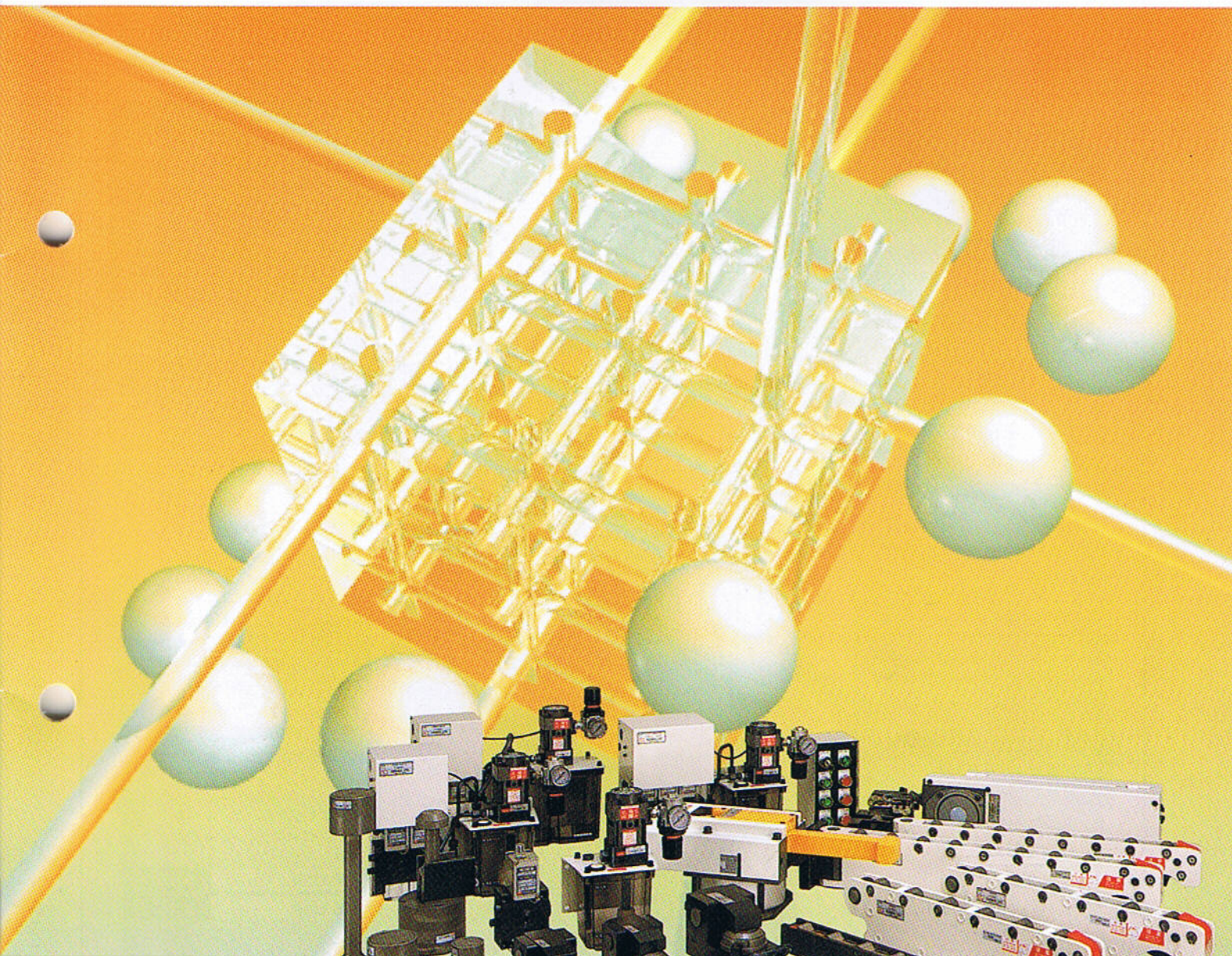


QUICK DIE CHANGE SYSTEMS

# QDCS



**KOSMEK®**



# Quick Die Change System

## Light Duty (C Frame)

### Clamp

Clamps fix the die in position. They lock by hydraulic power and release by spring.

GA Clamp	p. 3 and 4
GB Clamp	p. 5 and 6

### Operation Control Panel

Die change operation is easily controlled from operator panel. Interlocks with press assure safe operation.

p.21 and 22

### Die Lifter

Die lifters install in T- or U-slots in the bolster and lift the die for loading and unloading. Hydraulic and spring types are available.

Hydraulic type	MRA Roller
Spring type	MRB Roller

Refer to CAT.NO.MRA001-\*\*\*-02

### Pre-Roller

Bolster extensions assist moving the die off the press for easy loading and unloading by crane or forklift.

MRC Roller
MRD Roller
MRE and MRF Roller

Refer to CAT.NO.MRA001-\*\*\*-02

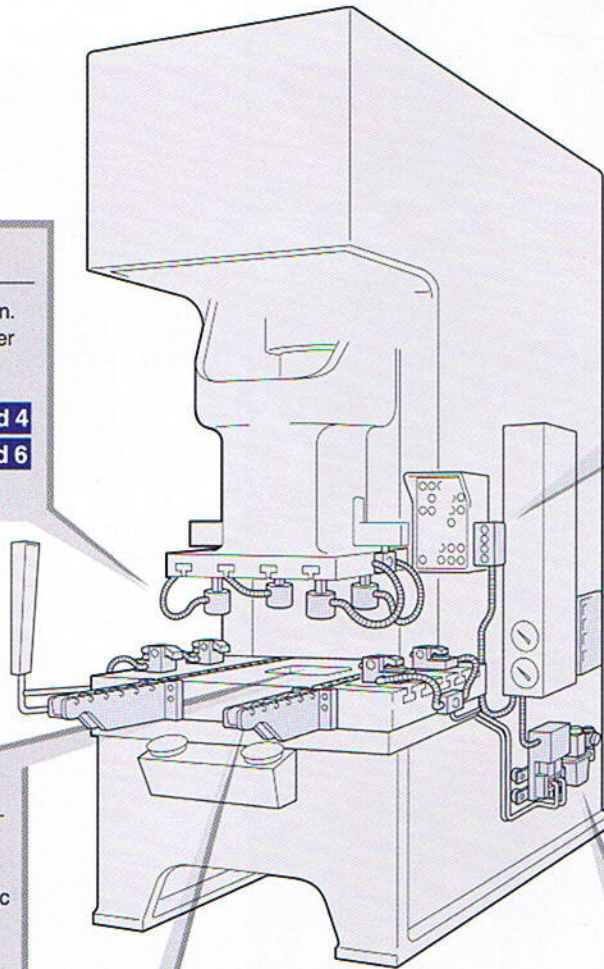
### Hydraulic Power Unit

Compact hydraulic unit consisting of pump, non leak valve, and pressure switch.

CP Unit	p.15
CS Unit	p.16

When installation space is limited, separate type pump and valve units are also available.

CB Unit	p.17
CC Unit	p.18
BC Unit	p.19





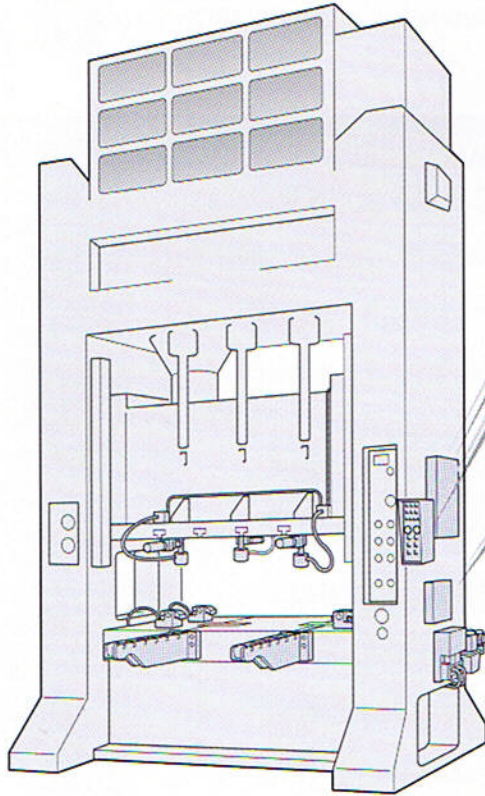
Today's factories are moving to Single Minute Setups, improving the working environment, preparing for diversified and small-lot production, and continuing the quest for cost reduction.

KOSMEK QDCS (Quick Die Change Systems) provide an effective tool for achieving these goals.



## Medium Duty (Straight Side)

QDCS for the gate-shaped press with a large slide surface has a T-groove auto slide type using an air cylinder. You can choose this type according to the press capacity and mold specifications.



### Operation Control Panel

Die change operation is easily controlled from operator panel. Interlocks with press assure safe operation.

**p.21 and 22**

### Air Valve Unit

Air cylinders of GD and GE clamps are controlled with an air valve unit.

**p.20**

### Hydraulic Power Unit

Compact hydraulic unit consisting of pump, non leak valve, and pressure switch.

**CP Unit** **p.15**

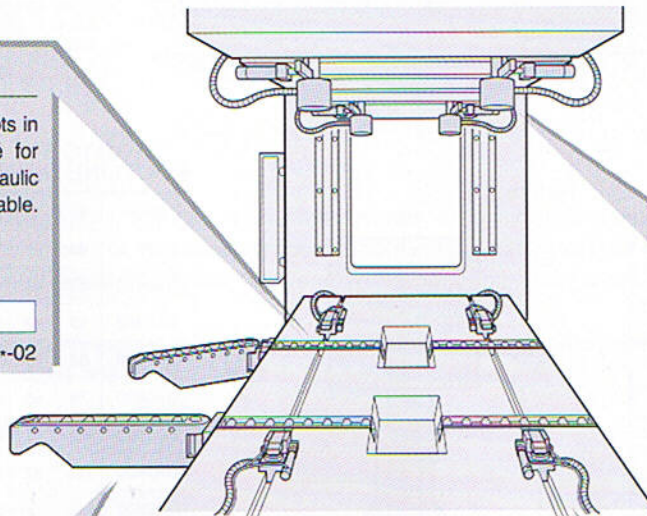
**CS Unit** **p.16**

### Die Lifter

Die lifters install in T-or U-slots in the bolster and lift the die for loading and unloading. Hydraulic and spring types are available.

#### MRA Roller

Refer to CAT.NO.MRA001-02



### GD Clamp

GA clamps combined with air cylinders for automatic positioning.

**p. 7 and 8**

### Pre-Roller

Bolster extensions assist moving the die off the press for easy loading and unloading by crane or forklift.

#### MRC Roller

#### MRD Roller

#### MRE and MRF Roller

Refer to CAT.NO.MRA001-02

### GE Clamp

GB clamps combined with air cylinders for automatic positioning.

**p.9 and 10**

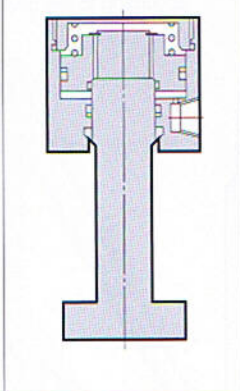


MODEL

# GA CLAMP



## CUTAWAY VIEW



## MODEL CODE

GA 063 0 - HPV - 5 L T\*\*\*

① Design No.      ②      ③      ④

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.

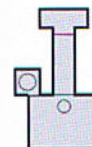
## SPECIFICATIONS

Model	GA0100	GA0160	GA0250	GA0400	GA0630	GA1000	GA1600	GA2500
Clamping Force (kN)	9.8	15.7	24.5	39.2	61.7	98	157	245
Working Pressure (MPa)	24.5 (for rated clamp force)							
Max Working Pressure (MPa)	27.0							
Max Rated Pressure (MPa)	36.8							
Full Stroke (mm)	6					8		
Clamping Stroke (mm)	4					5		
Extra Stroke (mm)	2					3		
Cylinder Cap at Full Stroke (cm <sup>3</sup> )	2.5	5.7	8	13	21	31	54	76
Working Temperature	0 - 70°C (V type is available for 70°C - 120°C)							
Frequency of Use	20 times/day (please contact us for more frequent use.)							
Working Fluid	ISO - VG - 32 or equivalent							
Min T-slot Dimension "a" (JIS) (mm)	8	10	12	16	18	22	28	36
Max T-slot Dimension "a" (JIS) (mm)	20	24	32	42	42		54	

- ① Capacity (See specifications)
- ② Options
  - A : Slide rod type (U-cut)
  - B : Slide rod type (tap)
  - F1 : Fixed type (Embedded type 0250 - 1000)
  - F2 : Fixed type (Flange type)
  - H : Extra height type (Rod material to be manufactured after receiving an order.)
  - P : With proximity switch for die detection (0400 and larger)
  - S1 : Long stroke 12.5 mm
  - S2 : Long stroke 20 mm
  - T : T-slot lock type
  - N : NPT port type
  - V : High temperature type (70 - 120 °C)

\*Following designations are required for "P" type.

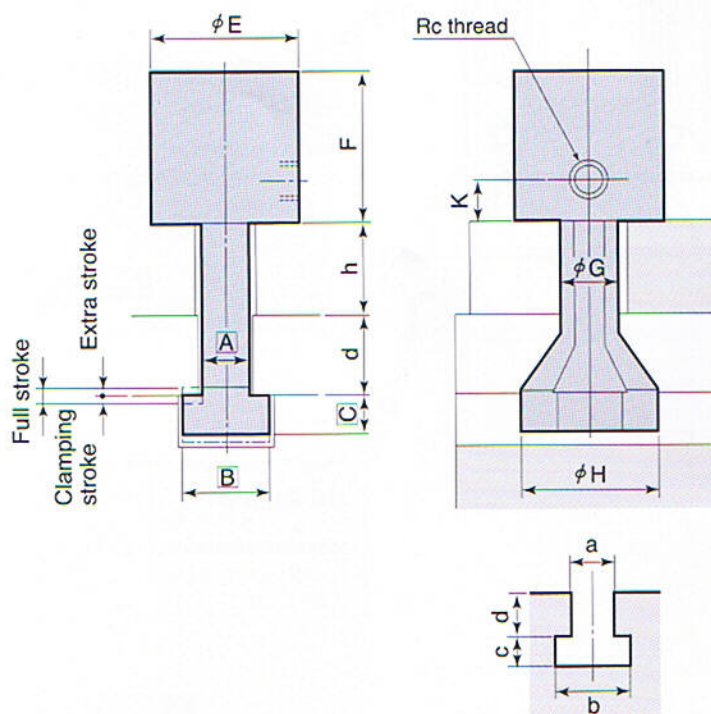
- ③ Switch load voltage (current)
  - 1 : AC100V
  - 2 : AC200V
  - 5 : DC 24V (5 - 40 mA)
- ④ Switch mounting position
  - L : As illustrated
  - R : Reverse of illustration



e.g. GA0400-HV-T11  
 • Clamp capacity 39.2 kN  
 • Extra height type  
 • High temperature type  
 • T11 ⇒ h=50 A=20.5 B=36 C=19 d=60

- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower.
- \*3. Action at low temperature will be slower as fluid viscosity is higher.

## OUTLINE DIMENSIONS



## OUTLINE DIMENSIONS

Model	E	F	G	H	K	MIN.C	Rc	MAX.h+d
GA0100	40	39	12	30	10	5	1/8	60
GA0160	43	48	15	38	12	6	1/8	70
GA0250	53	52	18.5	48	12	7	1/4	80
GA0400	62	58	23.5	58	15	9.5	1/4	90
GA0630	78	65	28.5	68	15	11	1/4	100
GA1000	98	71	38.5	78	15	15	1/4	110
GA1600	126	82	48.5	88	15	19	1/4	120
GA2500	150	100	58.5	98	15	24	1/4	140

- \*1. Clamping strokes and extra strokes shown are standard; Custom strokes are available upon request.
- \*2. Dimensions A, B and C are determined from T-slot dimensions.
- \*3. Specify T-slot dimensions (a, b, c, d) and clamping height (h) when ordering.
- \*4. Clamps with a dimension greater than MAX h+d are optionally available (H type).



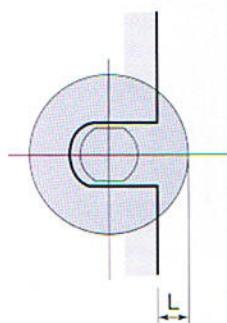
GA type is space efficient and locks in the U-slot of the die.

A / B	F 1	F 2	H	N
Slide rod type : U-slot Slide rod type : tap	Fixed type : Embedded type (0250 - 1000)	Fixed type : Flange type	Extra height type	NPT port type
P	S 1	S 2	T	V
Proximity switch for die detection (0400 and larger)	Long stroke : 12.5 mm	Long stroke : 20 mm	T-slot lock type	High temperature type 70°C - 120°C

〈 Precautions for mounting and operation 〉

- Working pressure should be 24.5 MPa.
- T-slot and clamp surface must be parallel, otherwise the clamp may deform and cause oil leakage.
- Never allow clamp overhang to exceed L (shown below)

● GA CLAMP : ALLOWABLE OVERHANG



Model	L (mm)
GA0100	13
GA0160	14
GA0250	17
GA0400	20
GA0630	26
GA1000	32
GA1600	42
GA2500	50

● OPTION : CLAMP HANGER

**Example**

For upper die

For lower die

2-φ 7Dia  
M6×14bolt  
JIS spring washer

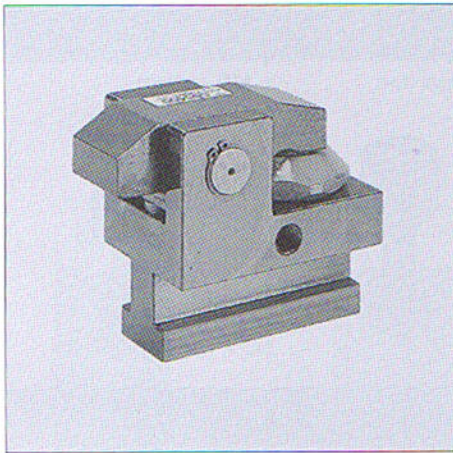
Attached

Model	Dimension			Applicable model	
	A	L	T	T-slot "a"	Clamp Model
GAH221	22	125	3.2	20 - 22	GA0160 - 1000
GAH281	28	125	3.2	24 - 28	GA0250 - 1000

Note) 1. Don't operate the press while clamps are on hangers.  
(Clamp hangers should be used only during die change.)



# MODEL GB CLAMP



## MODEL CODE

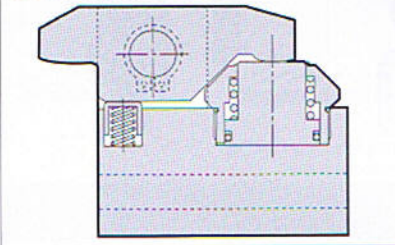
GB 063 0 - KLP - 5 L - T \* \* \*

① ② ③ ④

Design No.

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.

## CUTAWAY VIEW



① Capacity (See specifications)

② Options

- A : Slide rod type (U-cut)
- B : Slide rod type (Tap)
- D : With handle (0630 and larger)
- E : Reinforced body (to be manufactured after receiving an order.)
- H : Extra height type (Body, material to be manufactured after receiving an order)
- J : Low lever type (less than min "h")
- K : Rear port
- L : Wide lever (for U-cut in die)\*1
- N : NPT port
- P : With proximity switch for die detection (0400 and larger)\*2
- T : T-slot lock type
- V : High temperature type (70 - 120°C)
- W : With check valve (1000 and larger)
- Y : For diecast machine

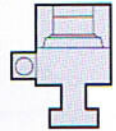
\*1 Always specify U cut dimension of the mold.  
\*2 The following code is required only when "P" is selected from Options.

③ Switch load voltage (current)

- 1 : AC100V
- 2 : AC200V
- 5 : DC 24V (5 - 40mA)

④ Switch mounting position

- L : As illustrated
- R : Reverse of illustration



e.g. GB0630-DP-1R-T111

- Clamp capacity 61.7kN
- with handle
- with proximity switch for die detection AC100V
- Switch position is right side when viewed from rear
- T111⇒h=50 A=20.5 B=35 C=14 D=22.7

\*1. For other fluids, consult us.

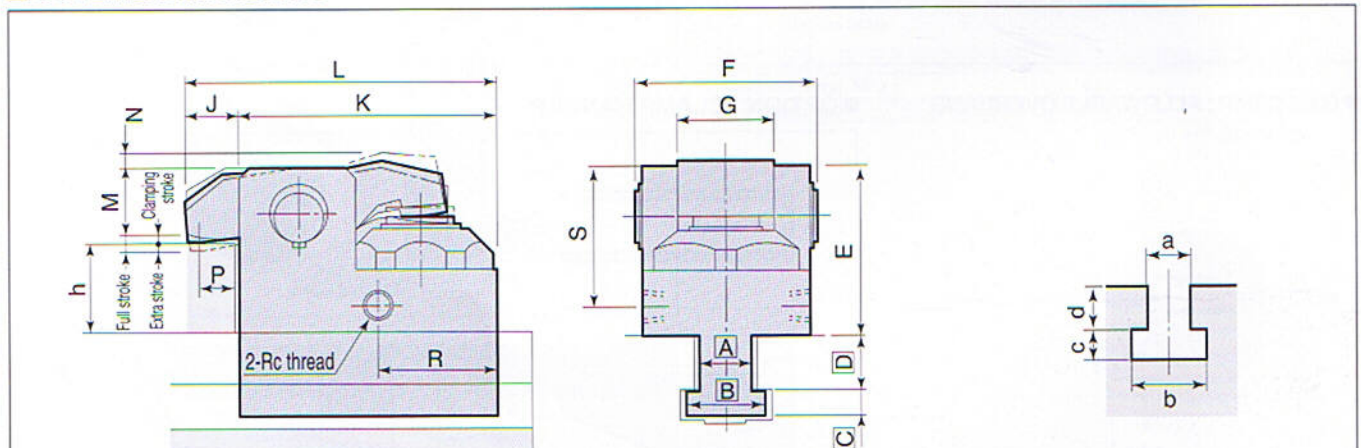
\*2. If fluid viscosity is higher, action will be slower.

\*3. Action at low temperature will be slower as fluid viscosity is higher.

## SPECIFICATIONS

Model	GB0100	GB0160	GB0250	GB0400	GB0630	GB1000	GB1600	GB2500
Clamping Force (kN)	9.8	15.7	24.5	39.2	61.7	98	157	245
Working Pressure (MPa)	24.5 (for rated clamp force)							
Max Working Pressure (MPa)	27.0							
Max Rated Pressure (MPa)	36.8							
Full Stroke (mm)	6	7					8	
Clamping Stroke (mm)	3	3.5					4	
Extra Stroke (mm)	3	3.5					4	
Cylinder Cap at Full Stroke (cm <sup>2</sup> )	2.5	4.8	7.2	11.9	21.6	34.7	55.2	85.9
Working Temperature	0 - 70°C (V type is available for 70 - 120°C)							
Frequency of use	20 times/day (please contact us for more frequent use.)							
Working Fluid	ISO - VG - 32 or equivalent							
Min T-slot dimension "a" (JIS) (mm)	10	12	14	18	22	24	28	36
Max T-slot dimension "a" (JIS) (mm)	20	24	32	42	42	54		

## OUTLINE DIMENSIONS



## OUTLINE DIMENSIONS

Model	MIN.E	F	G	J	K	L	M (h)			MAX.N	P	R	S	Rc	MIN.C	MAX.h
GB0100	44.5	43	20	15	58	73	16.5 (25-1)	21.5 (20-25)	—	5.5	10	33	34.5	1/8	6.5	40
GB0160	51	53	26	18	70	88	17.5 (30-1)	22.5 (25-30)	27.5 (20-25)	6.5	12.5	37	41	1/8	8	40
GB0250	59	63	32	20	84	104	21.5 (34-1)	26.5 (29-34)	31.5 (24-29)	6.5	14	43.5	47	1/4	9.5	50
GB0400	67.5	73	40	23	105.5	128.5	26.5 (35-1)	34.5 (30-35)	39.5 (25-30)	6.5	16	51.5	56	1/4	12	50
GB0630	81	93	50	30	130	160	29.5 (47.5-1)	39.5 (37.5-47.5)	49.5 (27.5-37.5)	8	20	49	69	1/4	14	60
GB1000	108	103	55	30	159	189	44 (60-1)	54 (50-60)	64 (40-50)	8	20	68	95	1/4	16.5	70
GB1600	130	124	60	30	199	229	61 (65-1)	71 (55-65)	81 (45-55)	9	20	73	116	1/4	20	80
GB2500	152	152	73	30	240	270	78 (70-1)	88 (60-70)	98 (50-60)	9.5	20	69.5	135	1/4	23	80

\*1. Clamping strokes and extra strokes shown are standard; Custom strokes are available upon request.

\*2. Dimensions [A], [B], [C] and [D] are determined from T-slot dimensions.

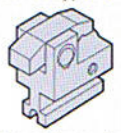
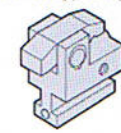
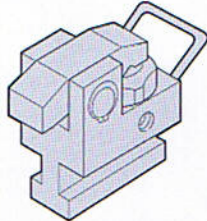
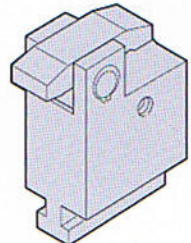
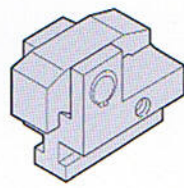
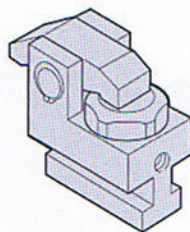
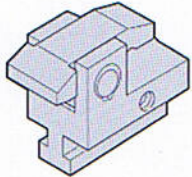
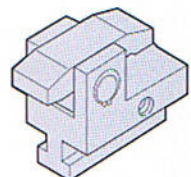
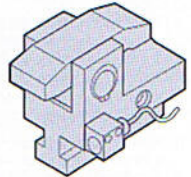
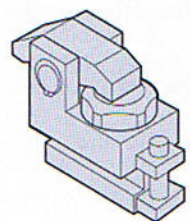
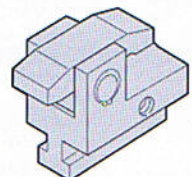
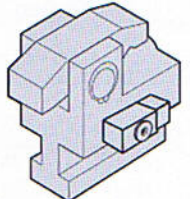
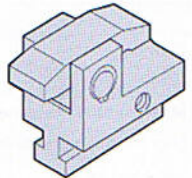
\*3. Specify T-slot dimensions (a,b,c,d) and clamping height (h) when ordering.

\*4. Specify (d) and (h) within 0.1mm

\*5. Clamps with a dimension greater than MAX h are optionally available (H type).



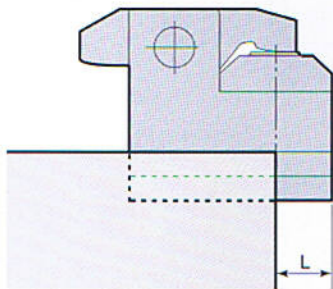
GB type is universal, and requires only a flat ledge on the die.

A / B	D	H	J	K	L
A.Slide rod type: U-slot  B.Slide rod type: tap 	With handle (0630 and larger) 	Extra height type (h greater than std.) 	Low lever (less than min h) 	Rear port type 	Wide lever type 
N	P	T	V	W	E
NPT port 	With proximity switch for die detection (0400 and larger) 	T-slot lock type 	High temperature type (70 - 120 °C) 	With check valve (1000 and larger) 	Reinforced body  For undersize or large tolerance T-slot. 

**Precautions for mounting and operation**

- Working pressure should be 24.5 MPa.
- T-slot and clamp surface must be parallel. Otherwise, the clamp may sustain damage.
- Never allow clamp overhang to exceed L (shown below).

**GB CLAMP: ALLOWABLE OVERHANG**



Model	L (mm)
GB0100	17.5
GB0160	21.0
GB0250	25.0
GB0400	32.0
GB0630	39.0
GB1000	45.0
GB1600	57.0
GB2500	69.5

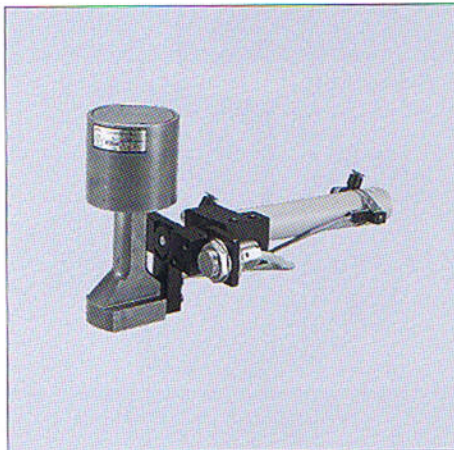
**OPTION: CLAMP HANGER OUTLINE DIMENSIONS**

Model	GBH181	GBH221	GBH281
A	18	22	28
B	21	19	21
H		100	110
W1		60	70
W2		10	15
L		19	25

Note) Don't operate the press while clamps are on hangers. (Clamp hangers should be used only during die change.)



# MODEL GD CLAMP



## MODEL CODE

GD 040 0 - 75 - 5 R - H - T\*\*\*

①                      ②                      ③   ④                      ⑤

Design NO.

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.

- ① Capacity (See specifications)
- ② Slide stroke (See outline dimension)\*1  
75 : Clamp travel distance 75 mm  
125 : Clamp travel distance 125 mm  
\*When determining the travel distance, extra distance must be considered.
- ③ Switch voltage (current)  
1 : AC100V  
2 : AC200V  
5 : DC 24V (5 - 40 mA)
- ④ Switch mounting position  
L : As illustrated  
R : Reverse of illustration
- ⑤ Options  
H : Extraheight type (Rod material to be manufactured after an order placed)  
S1 : Long stroke 12.5 mm  
S2 : Long stroke 20mm  
N : Piping port with NPT \*1  
V : For high temperature (70 - 120°C)

\*1 When "N" is selected from Options, each dimension is described in "inch" in the specifications and other documents. However the slide stroke is shown by mm value as a symbol.

e.g. GD0400-100-5R-H-T111  

- Clamp capacity 39.2 kN
- Slide distance 100 mm
- DC24V
- Switch position as illustrated
- Extra height type
- T111 → h=50 A=20.5 B=36 C=19 d=60

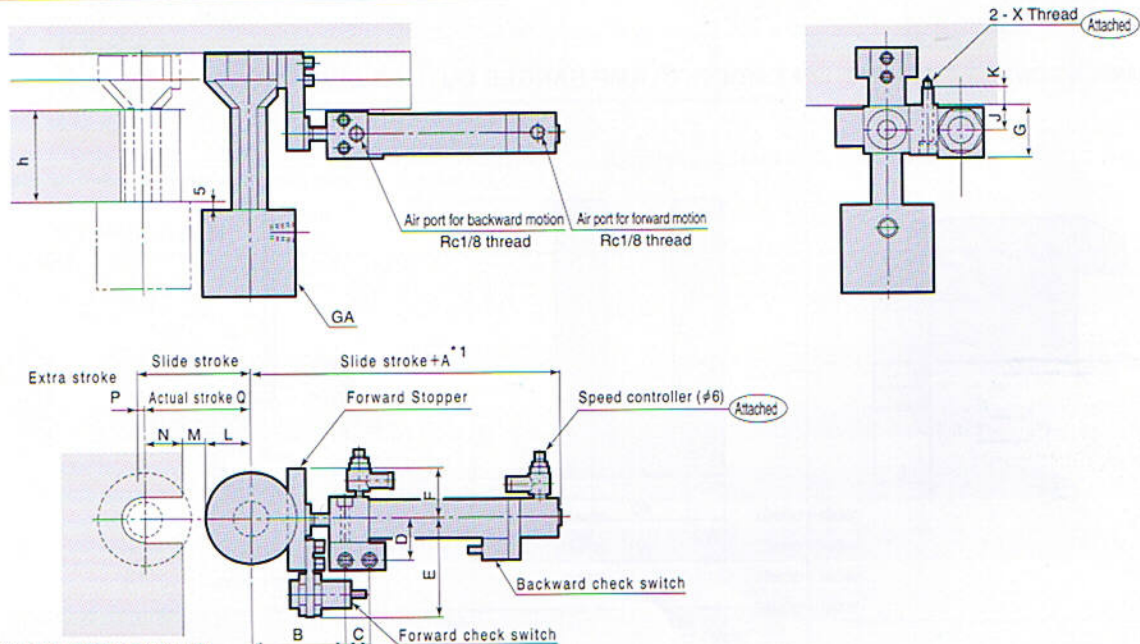
## SPECIFICATIONS

Model		GD0250	GD0400	GD0630	GD1000	GD1600
Clamping Force	(kN)	24.5	39.2	61.7	98	157
Working Pressure	(MPa)	24.5 (for rated clamp force)				
Max Working Pressure	(MPa)	27.0				
Max Rated Pressure	(MPa)	36.8				
Slide Stroke*1	(mm)	75 - 150	100 - 150	100 - 200	125 - 200	
Driving Air Pressure*2	(MPa)	0.39 - 0.49				
Switch Voltage		AC100V / AC200V / DC24V				
Working Temperature		0 - 70°C (V type is available for 70 - 120°C)				
Frequency of Use		20 times/day (please contact us for more frequent use.)				
Working Fluid		ISO - VG - 32 or equivalent fluid				

\*1. If the stroke exceeds the value shown in the specifications, contact us because the dimension "A" in the outline drawing is different.

\*2. Air pressure less than 0.39 MPa may result in malfunction.

## OUTLINE DIMENSIONS



## OUTLINE DIMENSIONS

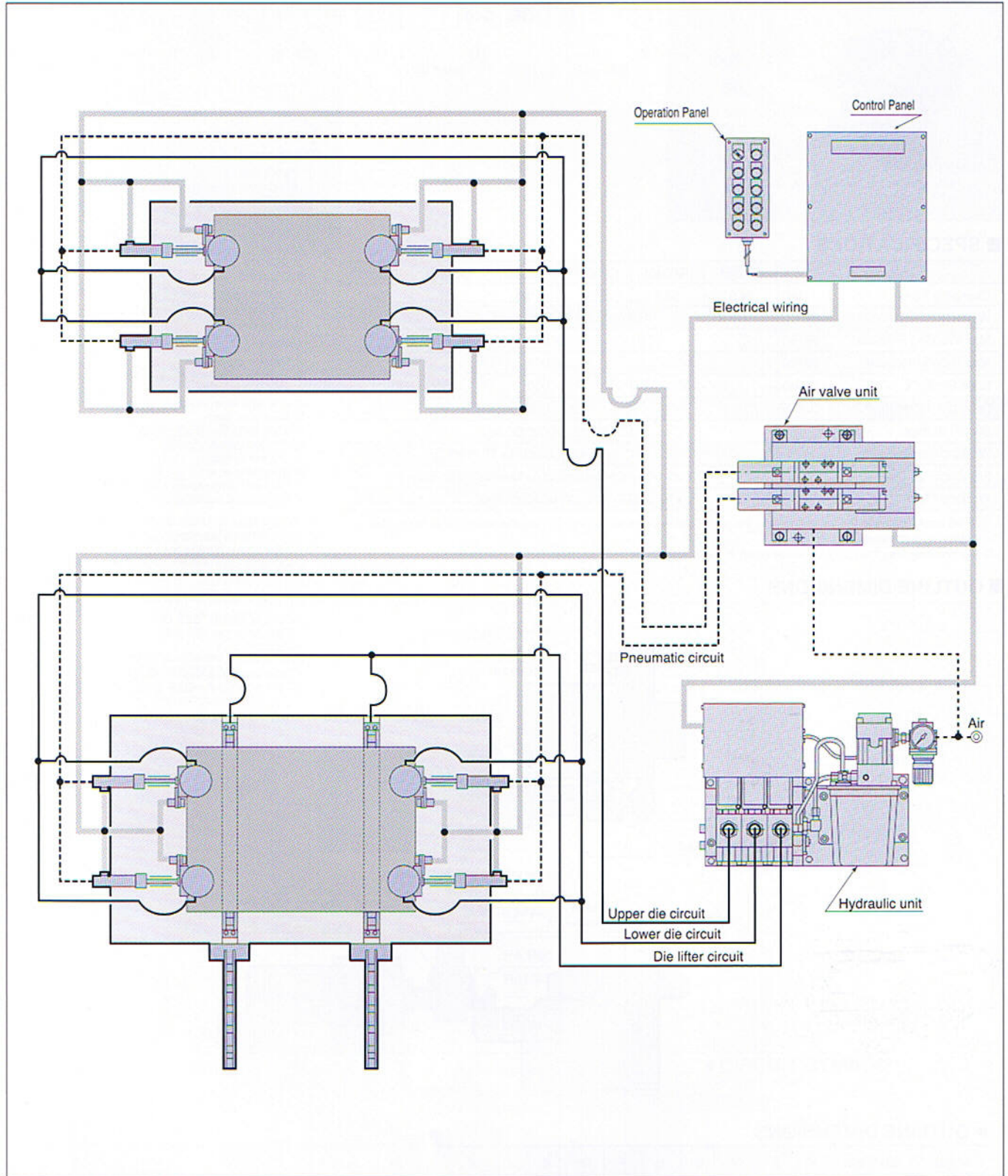
Model	GA Model	A	B	C	D	E	F	G	J	K	X	MIN.	h	Standard Stroke (Semi standard)	L	M	N	P	Q
GD0250	GA0250	124.5	58.5	16	27	64	34	34	16	12	M6	35	75 (100,125,150)	26.5	14	20	14.5	60.5	
GD0400	GA0400	129.5	63.5	16	27	64	34	34	16	12	M6	35	75 (100,125,150)	31	14	25	5	70	
GD0630	GA0630	134.5	68.5	16	27	64	34	34	16	12	M6	35	100 (125,150)	39	16	30	15	85	
GD1000	GA1000	141.5	74.5	20	35	73	43	38	16	16	M8	40	100 (125,150,200)	49	16	30	5	95	
GD1600	GA1600	146.5	79.5	20	35	73	43	38	16	16	M8	40	125 (150,200)	63	17	35	10	115	

Note) Refer to GA CLAMP (p3) for clamp details.



GD is a GA type clamp with air cylinder for automatic positioning.  
It is used for inaccessible areas or at far side of operation.

## ■ TYPICAL LAYOUT

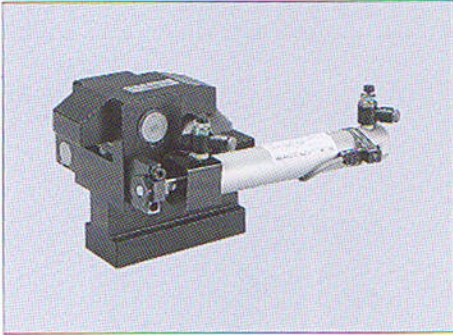


### 〈 Precautions for mounting and operation 〉

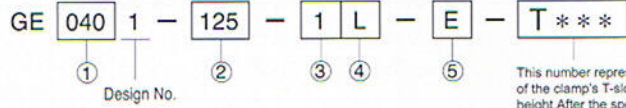
1. Adjust speed controllers so that travel is completed within 2 - 3 seconds.
2. Proximity switch is used for die detections. Each die must have a clear target for the switch.
3. Sliding surfaces should be smooth.



# MODEL GE CLAMP



## MODEL CODE



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.

## SPECIFICATIONS

Model	GE0251	GE0401	GE0631	GE1001	GE1601	GE2501
Clamping Force (kN)	24.5	39.2	61.7	98	157	245
Working Pressure (MPa)	24.5 (for rated clamp force)					
Max Working Pressure (MPa)	27.0					
Max Rated Pressure (MPa)	36.8					
Slide Stroke*1 (mm)	25 - 200		50 - 200		50 - 300	
Driving Air Pressure*2 (MPa)	0.39 - 0.49					
Switch Voltage	AC100V / AC200V / DC24V					
Working Temperature	0 - 70 °C (V type is available for 70 - 120°C)					
Frequency of Use	20times/day (please contact us for more frequent use.)					
Working Fluid	ISO - VG - 32 or equivalent					

\*1. If the stroke exceeds the value shown in the specifications, contact us because the dimension "A" in the outline drawing is different.

\*2. Air pressure less than 0.39 MPa may result in malfunction.

- ① Capacity (See specifications)
- ② Slide stroke (See outline dimension)\*2  
75: Clamp travel distance 75 mm  
180: Clamp travel distance 180 mm  
\*When determining the travel distance, extra distance must be considered.

- ③ Air cylinder load voltage (current)  
1: AC100V  
2: AC200V  
5: DC24V(5 - 40 mA)

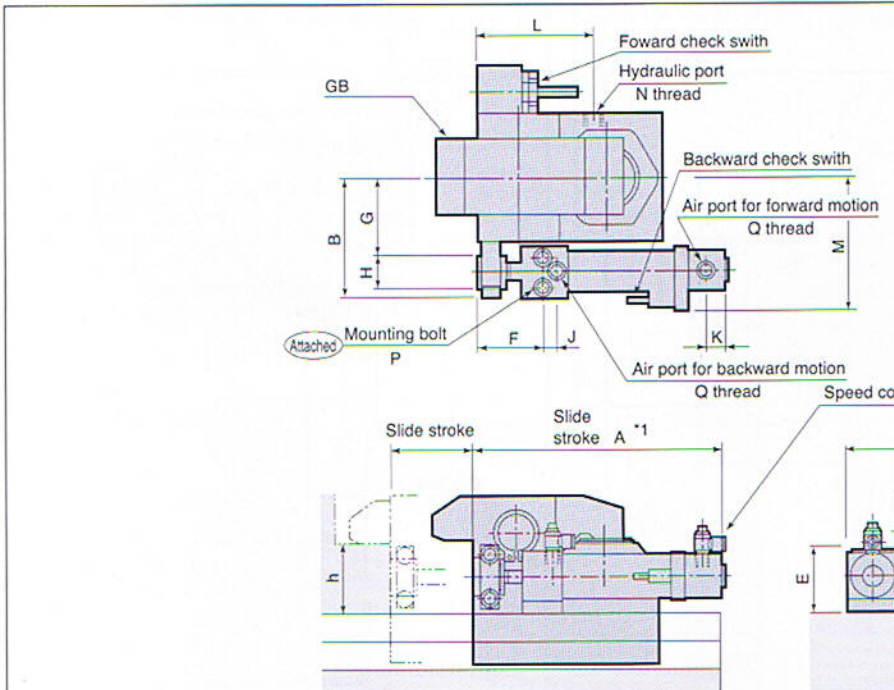
- ④ Switch mounting position  
L: As illustrated  
R: Reverse of illustration

- ⑤ Options  
E: Reinforced body material  
H: High type (Rod material to be manufactured after an order placed)  
J: Low type lever (when lower than minimum height)  
K: Rear side piping  
L: Wide lever (for U cut mold)\*1  
N: Piping port with NPT\*2  
Q: Double cylinder  
S: Special spacer  
V: For high temperature (70 - 120 °C)  
Y: For diecast machine

\*1 Always specify U cut dimension of the mold.

\*2 When "N" is selected from options, each dimension is described in "inch" in the specification and other documents. However the slide stroke is shown by mm value as a symbol.

## OUTLINE DIMENSIONS



- e.g. GE0401-125-1L-L-T111
- Clamp capacity 39.2 kN
  - Slide distance 125 mm
  - AC100V
  - Air cylinder position as illustrated
  - Wide lever type
  - T111 ⇒ h=50 A=20.5 B=35 C=14 D=22.7

## OUTLINE DIMENSIONS

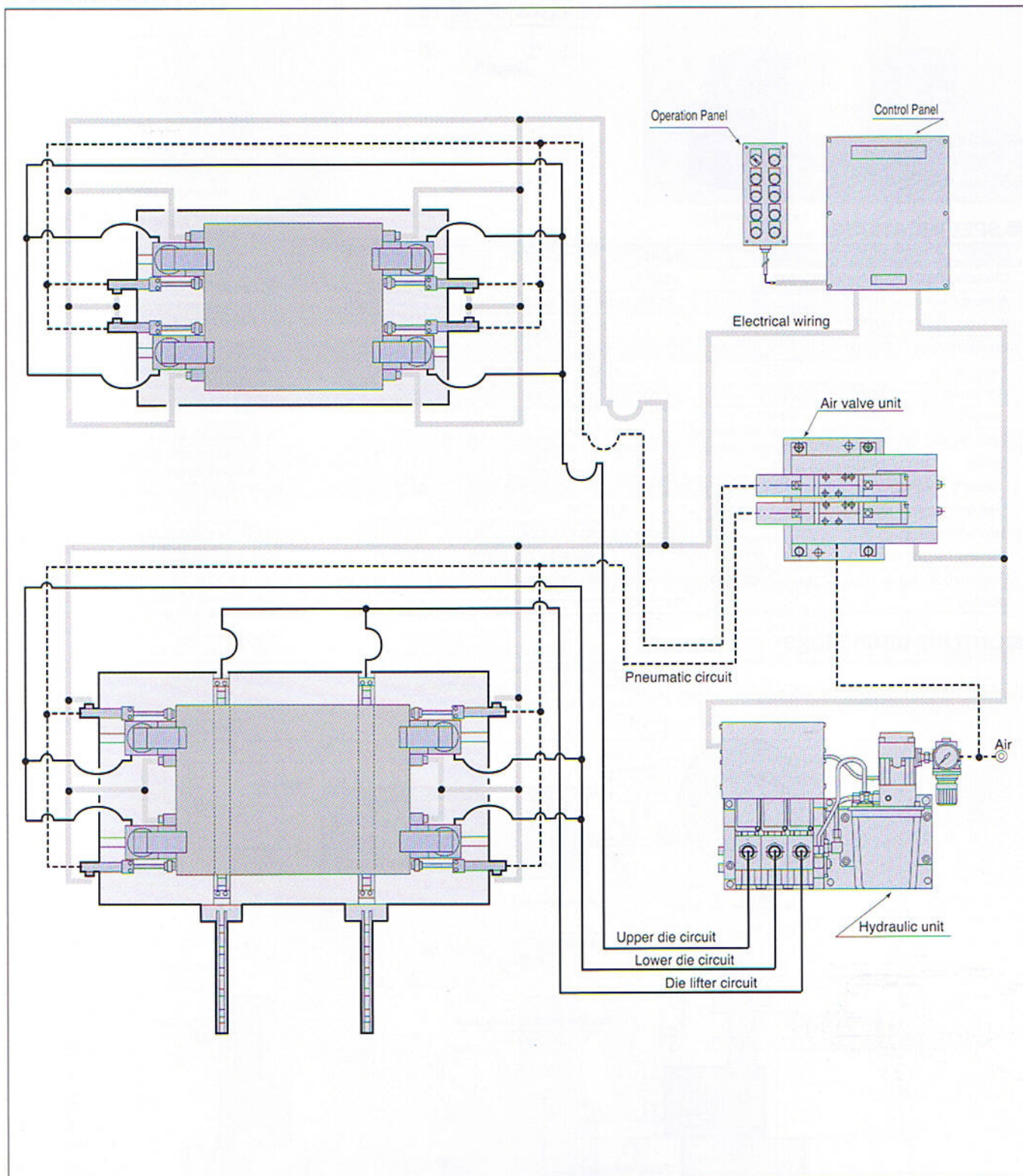
Model	GB Model	A	B	C	D	E	F	G	H	J	K	L	M	N	P		Q	R
															Mounting bolt	Tapping		
GE0251	GB0250	105	60	63.5	59	37	39	39	18	9	12	73	75.5	Rc1/8	M5 × 0.8 × 40	M5 × 0.8 Depth 10		
GE0401	GB0400	105	65	68.5	64	37	39	44	18	9	12	93	80.5		M5 × 0.8 × 40	M5 × 0.8 Depth 10		
GE0631	GB0630	112	81.5	84.5	74	48	45	55	22	10	12	81	96		M6 × 50	M6 × Depth 12	Rc1/8	φ6
GE1001	GB1000	118	92.5	94.5	78.5	54	46	61	24	13	12	91	106.5	Rc1/4	M8 × 55	M8 × Depth 16		
GE1601	GB1600	136	112	116.5	88.5	65	56	74	32	14	12	126	128		M10 × 70	M10 × Depth 20		
GE2501	GB2500	157	137	142	102	78	64	89	41	16	14	170.5	153		M12 × 85	M12 × Depth 24	Rc1/4	φ10

Note) Refer to GB clamp (p5) for clamp details.



GE is a GB clamp with air cylinder for automatic positioning.  
It is used for inaccessible areas at far side of operation.

## ■ TYPICAL LAYOUT

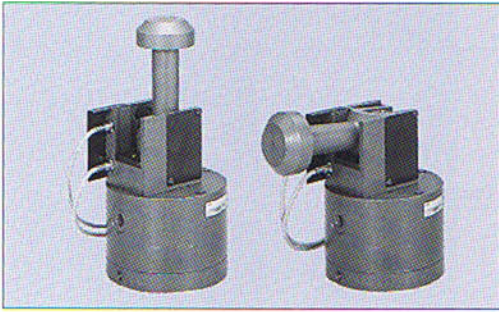


### 〈 Precautions for mounting and operation 〉

1. Adjust speed controllers so that travel is completed within 2 - 3 seconds.
2. Proximity switch is used for die detection. Each die must have a clear target for the switch.
3. 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 proximity switch.
4. Sliding surfaces should be smooth.



# MODEL GN CLAMP



## MODEL CODE

GN 063 0 - 35 - 5 - V

①                      ②                      ③                      ④

Design No.

NON STOCKING ITEM

## SPECIFICATIONS

Model	GN0250	GN0400	GN0630	GN1000	
Clamping Force (kN)	24.5	39.2	61.7	98	
Working Pressure (MPa)	24.5 (for rated clamp force)				
Max Working Pressure (MPa)	27.0				
Max Rated Pressure (MPa)	36.8				
Swing Angle	90°				
Full Stroke (mm)	6	7.5	10	12	
Clamp Stroke (mm)	4	5	7	9	
Extra Stroke (mm)	2	2.5	3		
Cylinder	Lock (cm <sup>3</sup> )	18.6	36	73.9	157.9
	Capacity Release (cm <sup>3</sup> )	27.4	53.5	115.5	241.8
Swing Air Pressure (MPa)	0.39 - 0.49				
Switch Voltage	AC100V / AC200V / DC24V				
Working Temperature	0 - 70 °C (V type is available for 70 - 120 °C)				
Frequency of Use	20 times/day (please contact us for more frequent use.)				
Working Fluid	ISO - VG - 32 or equivalent				

- ① Capacity (See specifications)
- ② Mold thickness (h dimension)\*1  
25 : h dimension 25 mm  
50 : h dimension 50 mm
- ③ Switch load voltage (current)  
1 : AC100V  
2 : AC200V  
5 : DC 24V (5 - 40 mA)
- ④ Options  
N : Piping port with NPT\*1  
V : For high temperature (70 - 120°C)

\*1When "N" is selected from options, each dimension is described in "inch" in the specifications and other documents. However the die thickness is shown by mm value as a symbol.

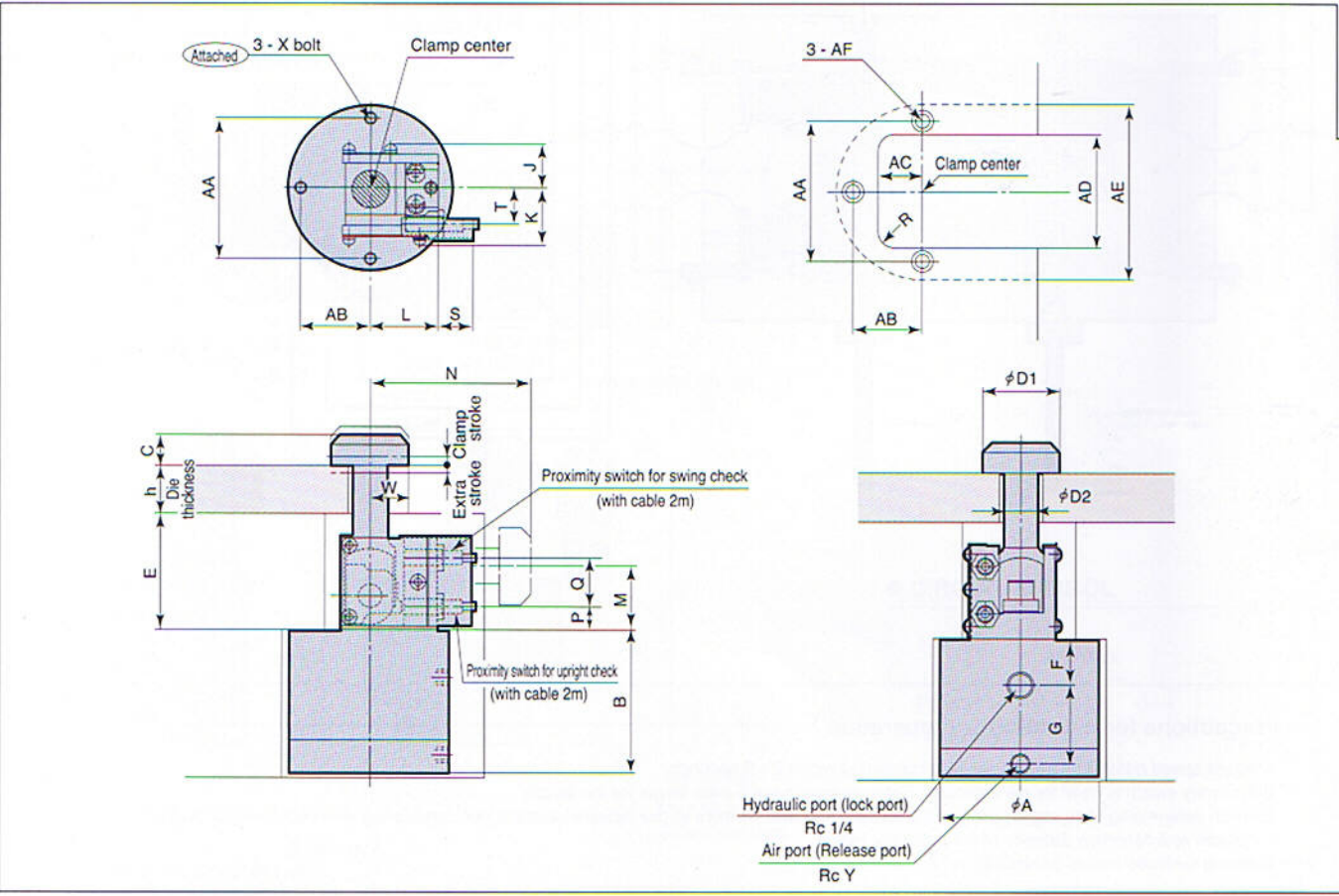
e.g. GN0630-40-2

- Clamp capacity 61.7 kN
- Clamp height 40 mm
- AC200V

**NOTE** All types shall be produced after an order received. If you place an order, ask delivery time in advance.

\*Pressure lower than 0.39 MPa may cause malfunction.

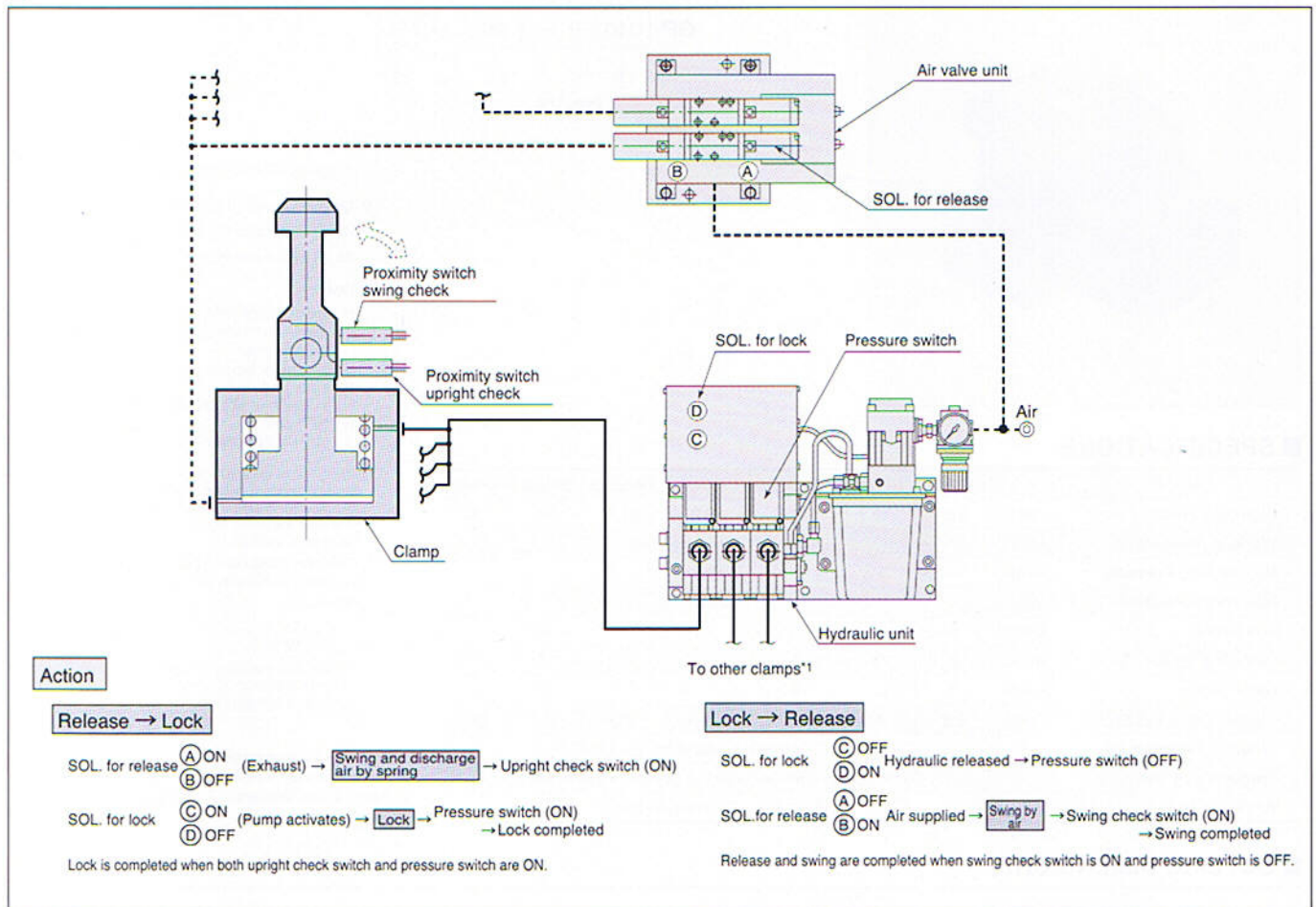
## OUTLINE DIMENSIONS





Clamp rod of the GN clamp swings to avoid interfering with the die when loading or unloading the lower die.

## TYPICAL LAYOUT



## OUTLINE DIMENSIONS

Model	GN0250	GN0400	GN0630	GN1000
A	83	102	122	142
B	71.5	77	90.5	111
C	16	20	25	35
D1	40	50	60	75
D2	18	22	28	34
E	60	75	90	115
F	24	25	26.5	30
G	40	44.5	54	70
J	22.5	26	32.5	40
K	28.5	32	38.5	49
L	35	42	49	60
M	33.5	41	53	67
N	h+58.5	h+74	h+89	h+118
P	16.5	20	24	31
Q	21	26	34	39
S	18	22	24	17
T	18	21	26.5	35
h	min.25 - max.50			
W	20	25	30	37.5
AA	72	86	106	126
AB	36	43	53	63
AC	23	27	35	40
AD	58	67	84	104
AE	90	110	130	150
AF	7 Drill hole Spot facing #11 Depth 7		9 Drill hole Spot facing #14 Depth 9	
R	10	12.5	15	17.5
X	M6		M8	
Y	Rc 1/8		Rc 1/4	
Provided bolts	M6×60 (3pcs)	M8×75 (3pcs)	M8×90 (3pcs)	M8×115 (3pcs)

- \*1. Specify clamping height (h) when ordering.  
\*2. For specifications other than above, consult us.

Note) \*1. Although the GN Clamp is a hydraulic single action clamp, the unit circuit of the clamp is the U circuit because the clamp is controlled by double solenoids. When using the GN Clamp combining with other single action clamps, the clamp circuit should be the G circuit. When using the GN Clamp combining with the MRA rollers, the circuit should be the H circuit. Contact us for further information.

### Precautions for mounting and operation

1. Allowance of die clamping thickness is  $h \pm 0.5\text{mm}$ .
2. Clamp surface must be parallel with clamp mounting surface.
3. Hydraulic pressure for lock should be 24.5 MPa, and pneumatic pressure for release should be 0.39~0.49MPa.
4. Take care to prevent dust, sand, chips, slugs, etc. from entering clamp mechanism.
5. This clamp is not applicable to the upper die (swing rod downward).



# MODEL GP CLAMP

GP is a fixed type clamp that slides on gibs to provide clearance for loading the die. T-slots are not necessary.



## MODEL CODE

GP 040 0 - 25 - H

①                      ②                      ③

Design No.

- ① Capacity (See specifications)
- ② Mold thickness (h dimension)\*1  
25 : h dimension 25 mm  
35 : h dimension 35 mm
- ③ Options  
H : Extra height type (If the "h" dimension is greater than the maximum "h" dimension specified in the catalogue. Build to order)  
J : Low lever type (less than min "h")  
K : Rear port  
L : Wide lever (for U-cut in die)\*2  
N : NPT port\*1  
V : High temperature type (70 - 120°C)

## SPECIFICATIONS

Model	GP0100	GP0160	GP0250	GP0400	GP0630	GP1000	GP1600
Clamping Force (kN)	9.8	15.7	24.5	39.2	61.7	98	157
Working Pressure (MPa)	24.5 (for rated clamp force)						
Max Working Pressure (MPa)	27.0						
Max Rated Pressure (MPa)	36.8						
Full Stroke (mm)	6	7					8
Clamping Stroke (mm)	3	3.5					4
Extra Stroke (mm)	3	3.5					4
Cylinder Cap at Full Stroke (cm <sup>3</sup> )	2.5	4.8	7.2	11.9	21.6	34.7	55.2
Working Temperature	0 - 70°C (V type is available for 70 - 120°C)						
Frequency of Use	20 times/day (Please contact us for more frequent use.)						
Working Fluid	ISO - VG - 32 or equivalent						

- \*1 When "N" is selected from options, each dimension is described in "inch" in the specifications and other documents. However the mold thickness is shown by mm value as a symbol.
- \*2 When the mold has U-cut, the lever width may become insufficient. Be sure to designate U-cut dimension.

e.g. GP0630-40-V  
 • Clamping capacity 61.7kN  
 • Mold thickness 40 mm  
 • For high temperature

- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower.
- \*3. Action at low temperature will be slower as fluid viscosity is higher.

## OUTLINE DIMENSIONS

### OUTLINE DIMENSIONS

Model	GP0100	GP0160	GP0250	GP0400	GP0630	GP1000	GP1600
A	72	90	106	123	153	180	219
B	53	66	78	92	115	129	155
C	8.5	10	12	13	15	18	22
D	15	18	20	26	30	36	46
F	38	48	58	68	88	97	117
G	20	26	32	40	50	55	60
J	15	18	20	23		30	
K	61	70	84	105.5	130	159	199
L	76	88	104	128.5	160	189	229
MAX.N	5.5	6.5	6.5	6.5	8	8	9
P	10	12.5	14	16		20	
Q	12	14.5	20.5	23	24	29.5	33
R	7	7	10	12	49	68	73
S	40.5	47	53	61	69	95	116
T	26	30.5	36.5	41	47.5	60.5	71
X	M8	M10	M12	M14	M16	M20	M24
NPT	1/8			1/4			
MIN.E	49.5	56	65	73	88.5	118	140
M(h)	21.5 (25)	27.5 (30)	31.5 (35)	39.5 (45)	49.5 (55)	64 (70)	81 (85)
	16.5 (30)	22.5 (30)	26.5 (35)	34.5 (40)	39.5 (45)	54 (60)	71 (75)
		17.5 (35)	21.5 (40)	29.5 (40)	29.5 (55)	44 (70)	61 (75)
MIN.h	25	25	30	30	35	50	55
MAX.h	40	40	50	50	60	70	80

### Precautions for mounting and operation

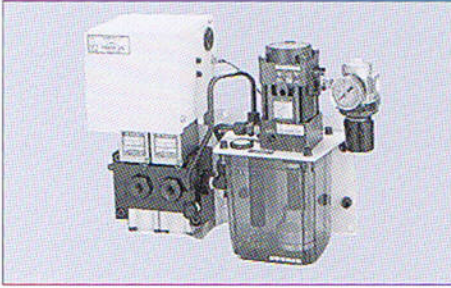
1. Working pressure should be 24.5MPa.
2. Clamps mounting surface and clamping surface must be parallel.
3. Otherwise the clamps may be damaged and fail to operate properly.



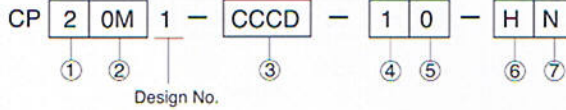
MODEL

# CP UNIT

CP is a compact hydraulic power unit generating 24.5MPa. It includes an AB pump, hydraulic valves, and pressure switches.



## MODEL CODE



## SPECIFICATIONS

Model		CP20M1-□□□□-10	CP20N1-□□□□R-10	
Working Pressure	(MPa)	24.5		
Rated Pressure	(MPa)	36.8		
Tank Capacity	(cm <sup>3</sup> )	2 : 2000	5 : 5000	
Working Temperature		0 - 70°C		
Working Fluid		2.5 min / time : 20 times / day		
Main Components	Pump	Model AB7000-0		
		Set Discharge Pressure	24.5MPa      22.5MPa	
		Discharge Volume Under No Load	1.36 ℓ/min      1.30 ℓ/min	
		Set Air Pressure	0.45MPa      0.41MPa	
	Suction Filter	Model JF1030		
		Filter Element	174 μm (100mesh)	
	Valve	Model BA5011-0      BA5011 0/BA5R11-0		
		Orifice	12.6mm (P→A)      52.8mm (A→R)	
		Operating Pressure Ratio	1 / 62.5 (Pneumatic/Hydraulic)	
		Clamp Circuit	JB2800-M0	
Pump	Purpose/Set Pressure	Check inc. pressure/INC. 17.6MPa		
	Lifter Circuit	JB1000-M0		
Suction Filter	Purpose/Set Pressure	Check dec. pressure/DEC. 2.94MPa		
	Model	-	BR5N11-0	
	Set Pressure	-	24.5 <sup>±0.05</sup> MPa	

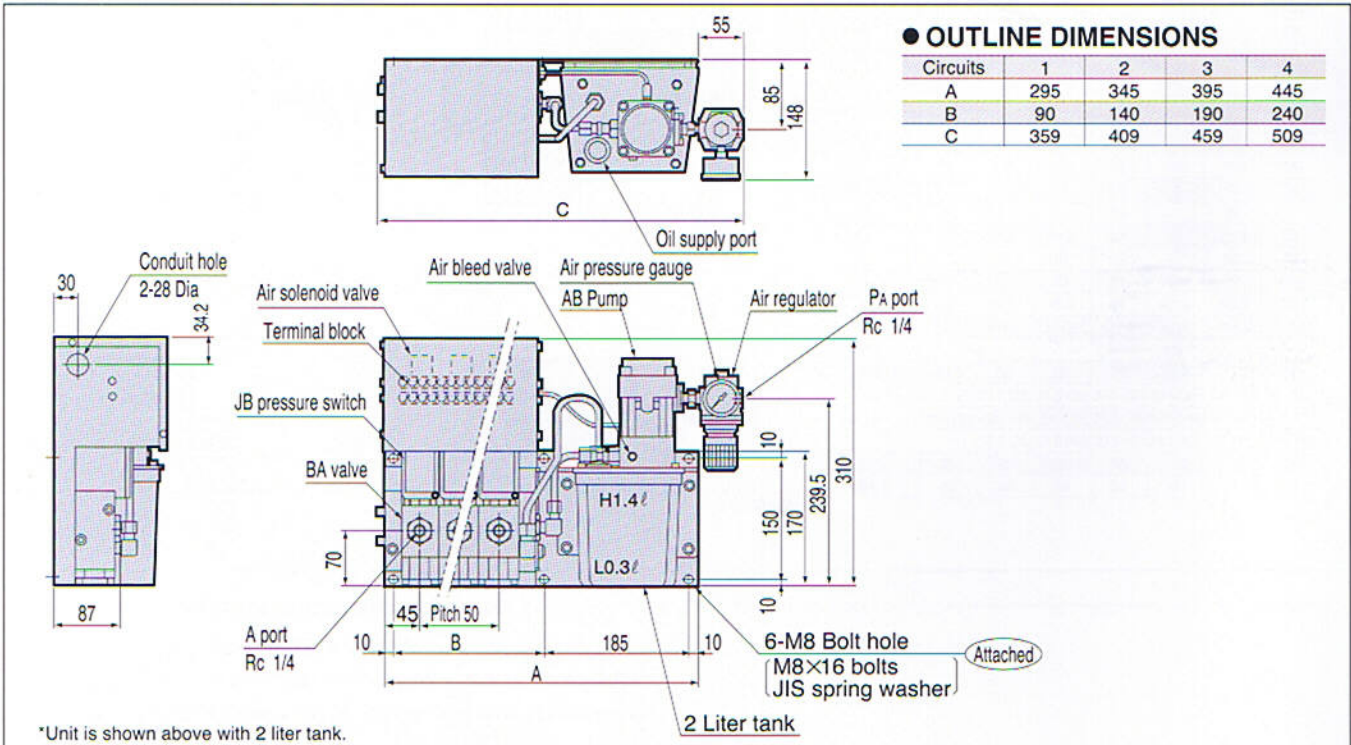
- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower.
- \*3. Action at low temperature will be slower as fluid viscosity is higher.

- \*4. Auto drain type air filter should be used when air supply has much moisture or air supply is at the end of supply line.
- \*5. If hydraulic pressure gauge is used in the circuit, install damper or use gauge containing grease.
- \*6. Leave enough space under unit to remove tank in case oil or suction filter should be changed.

- ① Tank capacity code  
2 : 2 ℓ tank(H.L.-L.L.=1.1ℓ)  
5 : 5 ℓ tank(H.L.-L.L.=3.1ℓ)
- ② Normal pressure code\*1  
0M : 24.5 MPa  
Supply air pressure 0.45 MPa, without temperature compensating valve  
0N : 24.5 MPa  
\*Supply air pressure 0.41 MPa, with temperature compensating valve
- ③ Circuit symbol  
C : Normal open circuit for clamp (single solenoid valve)  
D : Normal close circuit for die lifter (single solenoid valve)  
R : Pressure compensating valve (micro flow relief valve)  
U : Double solenoid circuit for clamp  
V : Double solenoid circuit for die lifter  
G : Normal open circuit for clamp\*2  
H : Normal close circuit for die lifter\*2  
\*2 When the U circuit is commonly used
- ④ Control voltage  
1 : AC100V  
2 : AC200V  
3 : AC110V  
4 : AC220V  
5 : DC 24V
- ⑤ Working Fluid code  
0 : General working fluid  
(Refer to working fluid list in p24) ...Standard  
S : Silicone oil  
G : Water-Glycol (The tank to be made of steel)
- ⑥ Options  
Blank : Standard  
H : With piping seat  
G : With primary pressure gauge
- ⑦ Gauge unit  
Blank : Standard MPa  
N : PSI unit and NPT piping exclusively used in USA  
P : PSI unit and Rc piping exclusively used in USA

Note \*1  
Operating Pressure Code is classified according to the usage of the temperature relief valve.

## OUTLINE DIMENSIONS





MODEL

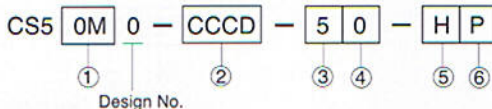
# CS UNIT

The CS unit is a hydraulic unit equipped with the AC pump used for the system requiring a flow rate higher than that of the CP unit.

NON STOCKING ITEM



## MODEL CODE



## SPECIFICATIONS

Model		CS50M0-□□□□-□0	CS50N0-□R□R□R-□0
Working Pressure	(MPa)	24.5	
Rated Pressure	(MPa)	36.8	
Tank Capacity	(cm <sup>3</sup> )	5000	
Working Temperature		0 - 70°C	
Frequency of Use		2.5 min / time : 20 times / day	
Main Components	Pump	AC7000	
	Suction Filter	Model	JF1030
		Filter Element	174 μm (100 mesh)
		Valve	Model: BA5011-0      BA5011-0/BA5R11-0
	Pressure Switch	Orifice	12.6mm <sup>2</sup> (P→A)    52.8mm <sup>2</sup> (A→R)
		Operating Pressure Ratio	1/62.5
	Relief Valve	Clamp Circuit	JB2800-M0
		Purpose/Set Pressure	Check inc. pressure/INC. 17.6MPa
	Relief Valve	Lifter Circuit	JB1000-M0
		Purpose/Set Pressure	Check dec. pressure/DEC. 2.94MPa
Relief Valve	Model	—	BR5N11-0
	Set Pressure	—	24.5 <sup>②,④⑤</sup> MPa

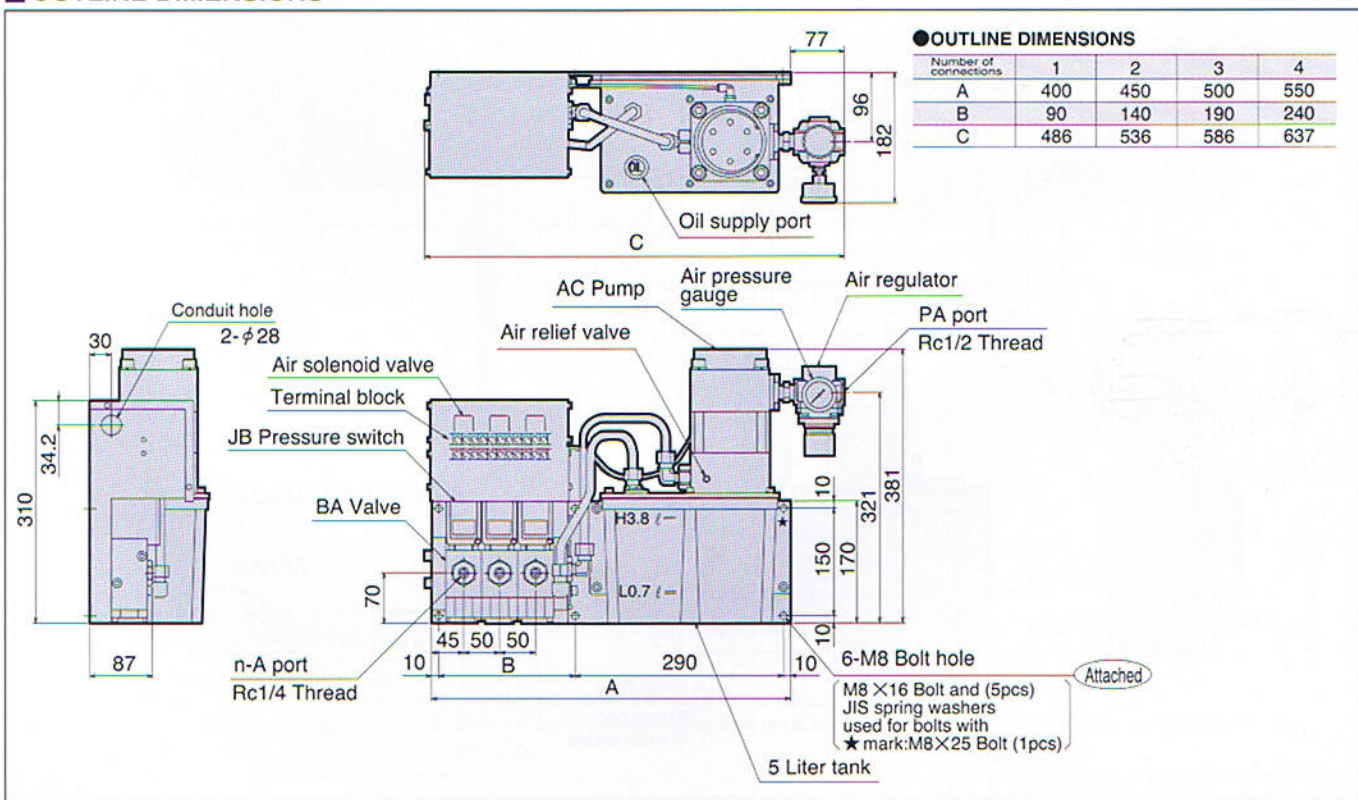
- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower.
- \*3. Action at low temperature will be slower as fluid viscosity is higher.

- \*4. Auto drain type air filter should be used when air supply has moisture.
- \*5. If hydraulic pressure gauge is used in the circuit, install damper or use gauge containing grease.
- \*6. Leave enough space under unit to remove tank in case oil or suction filter should be changed.

- ① Normal pressure code  
 0M : 24.5 MPa  
 Supply air pressure 0.47 MPa, without temperature compensating valve  
 0N : 24.5 MPa  
 Supply air pressure 0.44 MPa, with temperature compensating valve
- ② Circuit symbol  
 C : Normal open circuit for clamp (single solenoid valve)  
 D : Normal close circuit for die lifter (single solenoid valve)  
 R : Pressure compensating valve (micro flow relief valve)  
 U : Double solenoid circuit for clamp  
 V : Double solenoid circuit for die lifter  
 G : Normal open circuit for clamp\*2  
 H : Normal close circuit for die lifter\*2  
 \*2 When the U circuit is commonly used
- ③ Control voltage  
 1 : AC100V  
 2 : AC200V  
 3 : AC110V  
 4 : AC220V  
 5 : DC 24V
- ④ Working Fluid  
 0 : General working fluid  
 (Refer to working fluid list in p24) ... Standard  
 S : Silicone oil  
 G : Water-Glycol (The tank to be made of steel)
- ⑤ Options  
 Blank : Standard  
 H : With piping seat  
 G : With primary pressure gauge
- ⑥ Gauge unit  
 Blank : Standard MPa  
 N : PSI unit and NPT piping exclusively used in USA  
 P : PSI unit and Rc piping exclusively used in USA

Note \*1  
 Operating Pressure Code is classified according to the usage of the temperature relief valve.

## OUTLINE DIMENSIONS



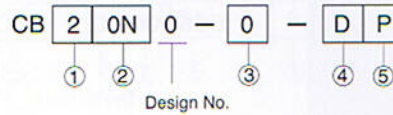


# MODEL CB UNIT

CB is a compact air driven hydraulic power unit generating 24.5MPa. It is used in conjunction with non-leak type valves.



## MODEL CODE



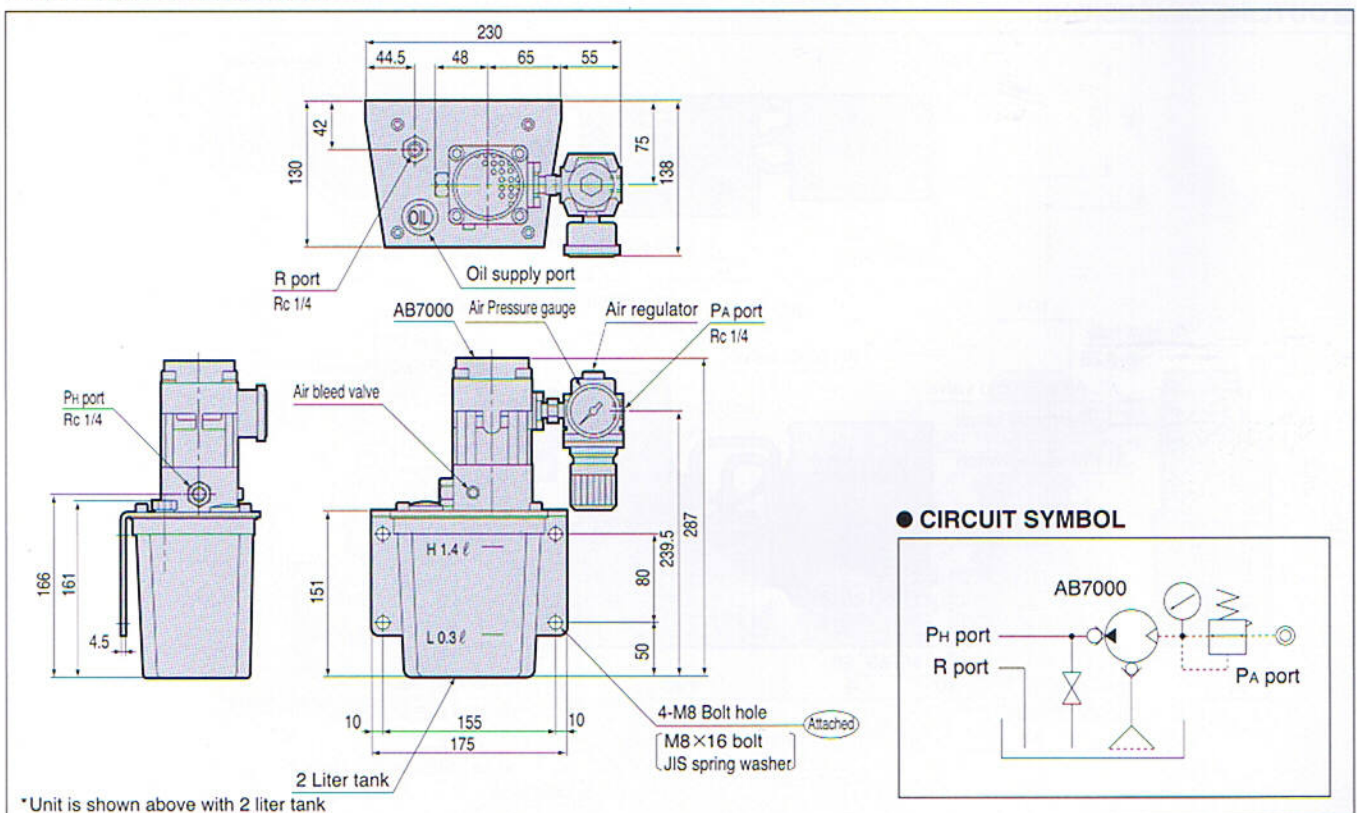
- ① Tank capacity code  
2 : 2 ℓ tank(H.L.-L.L.=1.1ℓ)  
5 : 5 ℓ tank(H.L.-L.L.=3.1ℓ)
- ② Normal pressure code\*1  
0M : 24.5 MPa  
Supply air pressure 0.45 MPa  
0N : 24.5 MPa  
Supply air pressure 0.41MPa, for BC Unit with temperature compensating valve
- ③ Fluid code  
0 : General working fluid  
(Refer to working fluid list in p24)...Standard  
S : Silicone oil  
G : Water-glycol (The tank to be made of steel)
- ④ Options  
Blank : Standard air regulator only  
D : With filter regulator (Automatic drain type)  
Q : With level switch
- ⑤ Gauge unit  
Blank : Standard MPa  
N : PSI unit and NPT piping exclusively used in USA  
P : PSI unit and Rc piping exclusively used in USA

## SPECIFICATIONS

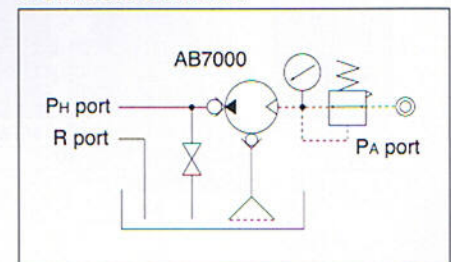
Model		CB□0M0-0	CB□0N0-0
Working Pressure	(MPa)	24.5	
Rated Pressure	(MPa)	36.8	
Tank Capacity	(cm <sup>3</sup> )	2 : 2000	5 : 5000
Working Temperature		0 - 70°C	
Frequency of Use		2.5 min /time : 20 times / day	
Main Components	Model	AB7000-0	
	Pump	Set Discharge Pressure	24.5MPa      22.5MPa
		Discharge Volume under No Load	1.36 ℓ/min      1.30 ℓ/min
		Air Consumption	max. 0.4m <sup>3</sup> (Normal) /min
		Set Air Pressure	0.45MPa      0.41MPa
Suction Filter	Model	JF1030	
	Filter Element	174 μm (100 mesh)	

- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower
- \*3. Action at low temperature will be slower as fluid viscosity is higher.
- \*4. Auto drain type air filter should be used when air supply has moisture.
- \*5. CD pump is not designed for continuous (open circuit) operation.
- \*6. If used valves that have internal leakage, pump will run continuously ,greatly reducing life expectancy.  
We recommend KOSMEK non-leak valves.

## OUTLINE DIMENSIONS



## CIRCUIT SYMBOL





# MODEL CC UNIT

This is a high flow rate air-driven pump unit to be used in combination with a 3-port Non-leak Valve Unit (BC or BH).



## MODEL CODE

CC5 0M 0 - 0 - D P

①                      ②                      ③      ④

Design No.

NON STOCKING ITEM

- ① Normal pressure code\*1  
 0M : 24.5 MPa  
     Supply air pressure 0.47 MPa  
 0N : 24.5 MPa  
     Supply air pressure 0.44 MPa, for BC Unit with temperature compensating valve
- ② Fluid code  
 0 : General working fluid  
     (Refer to working fluid list in p24) ... Standard  
 S : Silicone oil  
 G : Water-glycol (Excluding AC8000 and AC9000)  
     (The tank to be made of steel)
- ③ Options  
 Blank : Standard air regulator only  
 D : With filter regulator (automatic drain type)  
 Q : With level switch
- ④ Gauge unit  
 Blank : Standard MPa  
 N : PSI unit and NPT piping exclusively used in USA  
 P : PSI unit and Rc piping exclusively used in USA

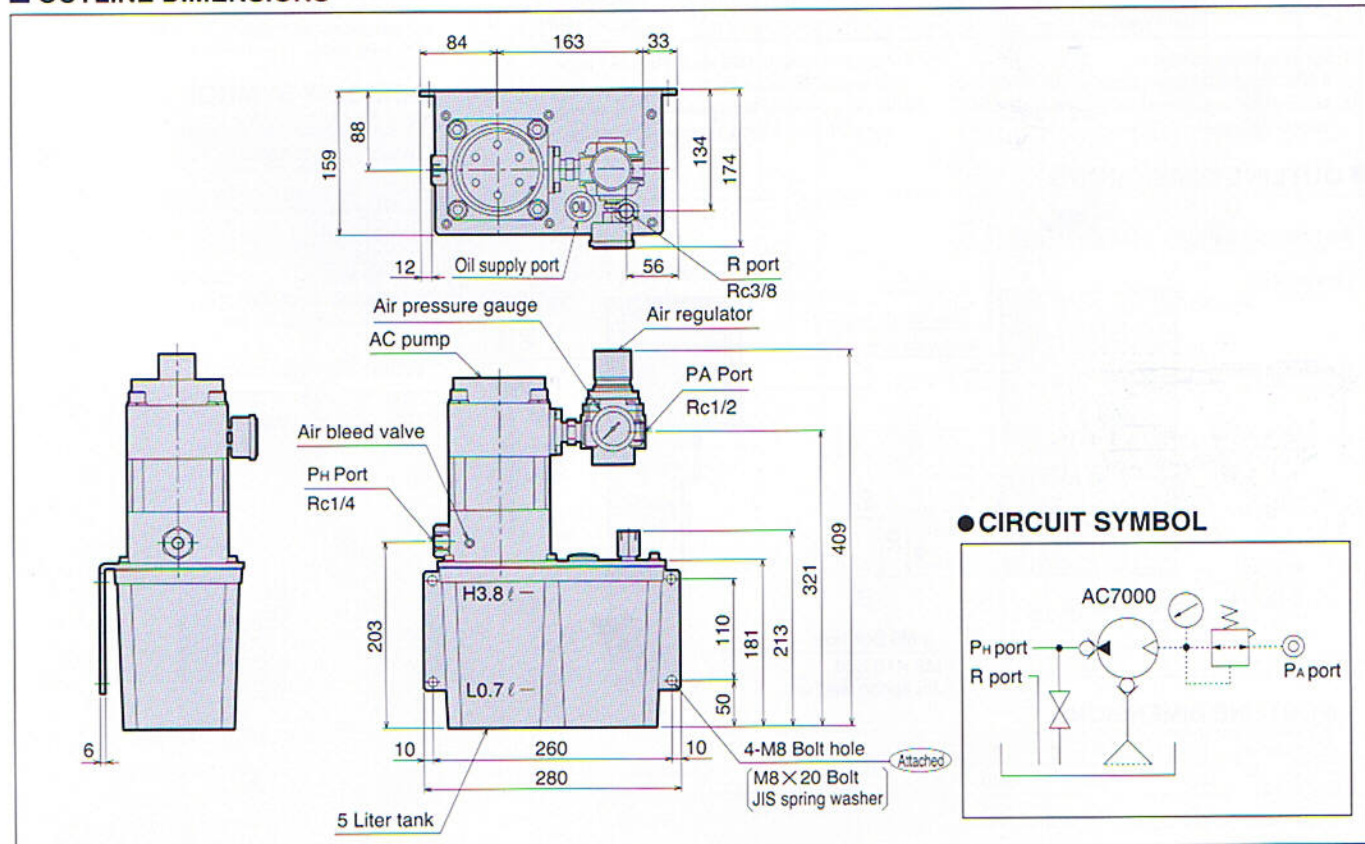
## SPECIFICATIONS

Model		CC50M0-0	CC50N0-0
Working Pressure	(MPa)		24.5
Rated Pressure	(MPa)		36.8
Tank Capacity	(cm <sup>3</sup> )		5000
Working Temperature		0 - 70 °C	
Frequency of Use		2.5 min /time : 20 times / day	
Main Components		AC7000	
Pump	Model		
	Set Discharge Pressure	24.5MPa	22.5MPa
	Discharge Volume under No Load	2.79 ℓ/min	2.70 ℓ/min
Suction Filter	Set Air Pressure	0.47MPa	0.44MPa
	Model	JF1030	
	Filter Element	174 μm (100 mesh)	

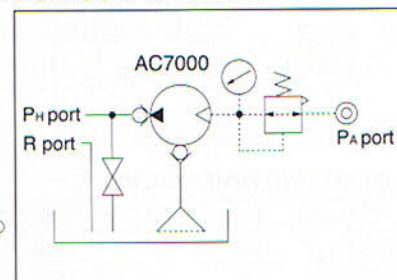
Note\*1  
 Operating Pressure Code is classified according to the usage of the temperature relief valve of the BC unit.

- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower
- \*3. Action at low temperature will be slower as fluid viscosity is higher.
- \*4. Auto drain type air filter should be used when air supply has moisture.
- \*5. CD pump is not designed for continuous (open circuit) operation.
- \*6. If used valves that have internal leakage, pump will run continuously, greatly reducing life expectancy. We recommend KOSMEK non-leak valves.

## OUTLINE DIMENSIONS



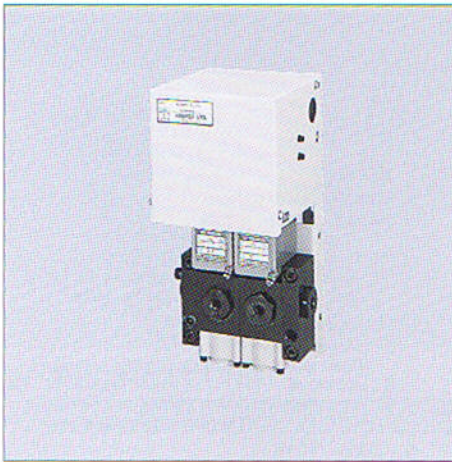
## CIRCUIT SYMBOL





# MODEL BC UNIT

BC is an electrical controlled air-piloted non-leak hydraulic valve.



## MODEL CODE



- ① Normal Pressure Code\*1  
00M : 24.5 MPa (without temperature compensating valve)  
00N : 24.5 MPa (with temperature compensation valve)
- ② Circuit symbol  
C : Normal open circuit for clamp (single solenoid valve)  
D : Normal close circuit for die lifter (single solenoid valve)  
R : Pressure compensating valve (micro flow relief valve)  
U : Double solenoid circuit for clamp  
V : Double solenoid circuit for die lifter  
G : Normal open circuit for clamp\*2  
H : Normal close circuit for die lifter\*2  
\*2 When the U circuit is commonly used
- ③ Control voltage  
1 : AC100V  
2 : AC200V  
3 : AC110V  
4 : DC220V  
5 : DC 24V
- ④ Working Fluid  
0 : General working fluid (Refer to working fluid list in p24) ...Standard  
S : Silicone oil  
G : Water-Glycol
- ⑤ Options  
Blank : Standard  
GR : Provided with primary pressure gauge on the right  
GL : Provided with primary pressure gauge on the left  
H : Provided with piping seat on the left (PH port)
- ⑥ Gauge unit  
Blank : Standard MPa  
N : PSI unit and NPT piping exclusively used in USA  
P : PSI unit and Rc piping exclusively used in USA

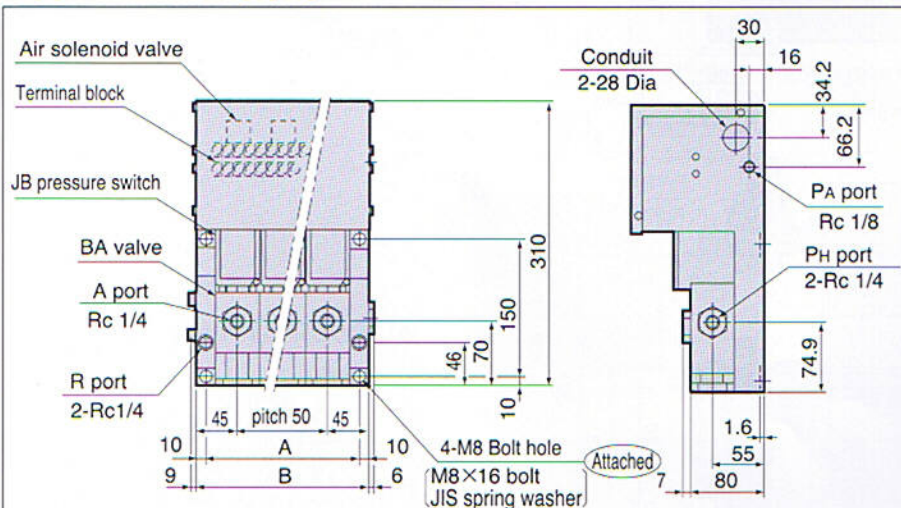
## SPECIFICATIONS

Model		BC00M1-□□□-10	BC00N1-□R□R□R-10	
Working Pressure	(MPa)	24.5		
Rated Pressure	(MPa)	36.8		
Control Voltage		AC100V (60/50Hz)		
Working Temperature		0 - 70°C		
Working Fluid		ISO-VG-32 or equivalent hydraulic fluid		
Frequency of Use		2.5min/time : 20times/day		
Main Components	Valve	Model	BA5011-0	BA5011-0/BA5R11-0
		Orifice	12.6mm <sup>2</sup> (P→A)	52.8mm <sup>2</sup> (A→R)
		Operating Pressure Ratio	1/62.5	
	Pressure Switch	Clamp Circuit	JB2800-M0	
		Purpose/Set Pressure	Check inc.pressure/INC. 17.6MPa	
		Lifter Circuit	JB1000-M0	
	Relief Valve	Purpose/Set Pressure	Check dec.pressure-DEC. 2.94MPa	
		Model	—	BR5N11-0
		Set Pressure	—	24.5 <sup>+24.5</sup> MPa

Note \*1  
The marks of "Normal pressure code" change depending on the existence of the temperature compensating valve shown in "Circuit type" of BC Unit to be used.

- \*1. For other fluids, consult us.
- \*2. If fluid viscosity is higher, action will be slower.
- \*3. Action at low temperature will be slower as fluid viscosity is higher.
- \*4. Auto drain type air filter should be used when air supply has moisture.
- \*5. Working pressure must be kept within working range of valve. Higher pressure will damage the seals.

## OUTLINE DIMENSIONS



### OUTLINE DIMENSIONS

Circuits	2	3	4
A	140	190	240
B	120	170	220

## CIRCUIT SYMBOL

Action Symbol	Normal open (Circuit for clamp)	Normal close (Circuit for lifter)
C	1	—
CC	2	—
CCC	3	—
CCD	2	1
CCCD	3	1

\*Above is only a partial list of available circuits. For other circuit, please consult us.

\*When die lifter circuit only

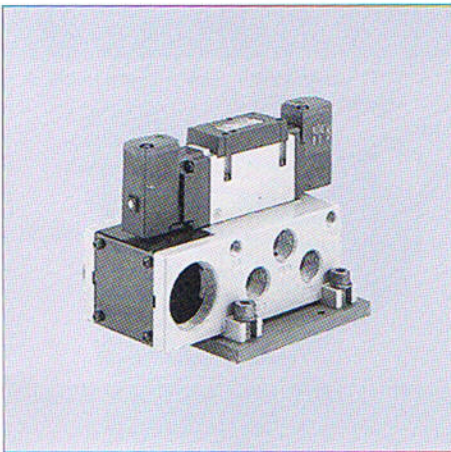
BH unit is available.  
Model : BH00M1-D-0





# MODEL MV VALVE UNIT

MV valve is an air control valve for GD and GE clamps.



## MODEL CODE

MV 302 2 - 3 5 - N

①                      ②                      ③                      ④

Design No.

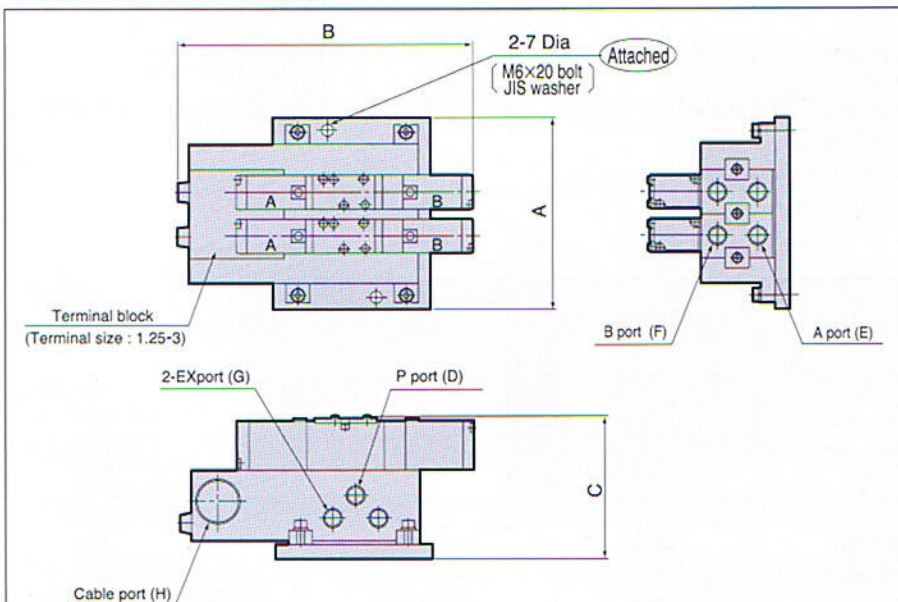
- ① Size Designation  
301 : For small and medium clamps  
302 : For large clamps  
\*Please consult us when a large number of clamps are used
  - ② Number of Control Circuits  
1 : Circuit of upper or lower die only  
2 : 2 circuits; for upper and lower dies or cross circuit  
3 : 3 circuits; for upper die cross circuit and one lower die circuit  
\*Please contact us for other circuits
  - ③ Control voltage  
1 : AC100V  
2 : AC200V  
5 : DC 24V  
\*Please contact us for other voltage
  - ④ Options  
Blank : standard  
N : NPT port \*1
- \*1 When "N" is selected from the options, dimensions are described in inch in documents such as the specifications.

## SPECIFICATIONS

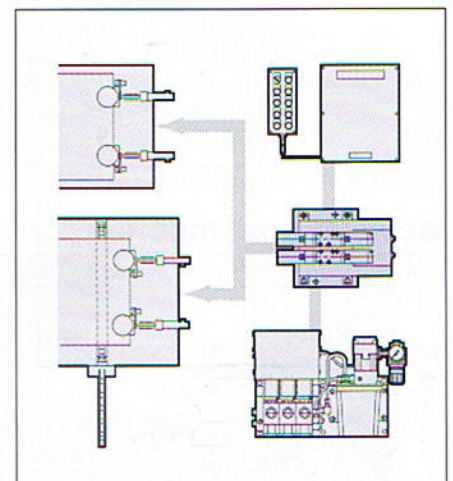
Model	MV3012	MV3022
Type	Metal seal /5 port piloted	
Solenoid Position and Number	2 position double	
Port Size	Rc 1/4	Rc 3/8
Effective Area	15 mm <sup>2</sup>	36 mm <sup>2</sup>
Working Fluid	Air	
Maximum Working Pressure	1.0MPa	
Rated Pressure	1.5MPa	
Temperature of Working Fluid	-10 to +60°C	
Oil Supply	not required	
Protection	dust-proof	
Solenoid Model (SMC Model)	VFS2200	VFS3200

\*Supply clean air through an air filter.

## OUTLINE DIMENSIONS



## TYPICAL LAYOUT



## OUTLINE DIMENSIONS

Model	Circuit	A	B	C	D	E	F	G	H
MV3012-1	1	75	166.5	74	Rc 1/4	Rc 1/4	Rc 1/4	Rc 1/8	G 1/2
MV3012-2	2	120	186.5	90.5				Rc 1/4	G 3/4
MV3012-3	3	150							
MV3022-1	1	90	170.5	102	Rc 3/8	Rc 3/8	Rc 3/8	Rc 3/8	G 1/2
MV3022-2	2	150	181	132	Rc 1/2	Rc 3/8	Rc 3/8	Rc 1/2	G 1 1/4
MV3022-3	3	185							

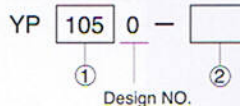
\*Two circuit valve illustrated above.



# OPERATION AND CONTROL PANEL



## MODEL CODE



NON STOCKING ITEM

- ① Control circuit number  
: Refer to circuit configuration list.
- ② Options  
: Contact us.

- e.g. YP1050-N
- Circuit configuration
  - Upper GE clamp
  - Lower GB clamp
  - MRA die lifter
  - Written in English

**NOTE** All types shall be produced after an order received. If you place an order, ask delivery time in advance.

## SPECIFICATIONS

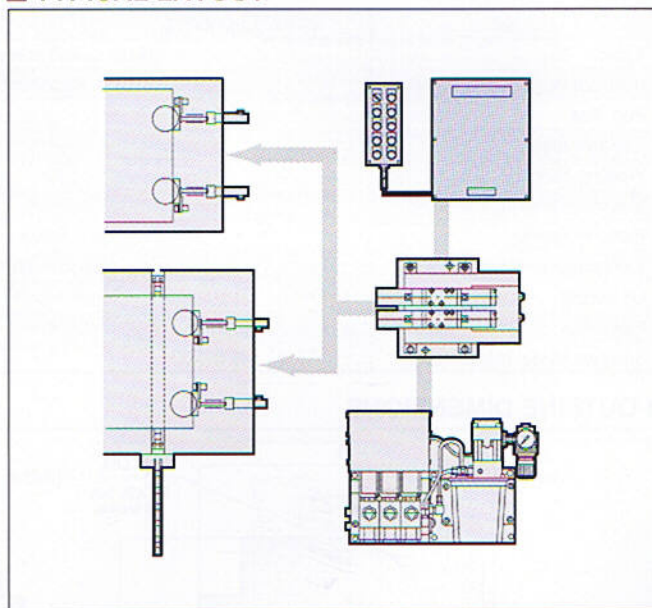
Type	Separate Operator and Control Panel Type	
Power Supply Voltage	AC100V 50/60Hz	
Power Supply Capacity	5A	
Controls	Power	Circuit Protector (in Control Enclosure)
	Die Change Selector	Key Switch
	Each Operation	Illuminated Push Button

## DESCRIPTION OF ACTIONS AND INTERLOCKS

Interlocks (for press operation)	Die Change Mode	OFF	
	Upper Die	Lock (from pressure switch)	
	Lower Die	Lock (from pressure switch)	
	Auto-Slider	Forward End (from forward check switch)	
Interlocks (for clamp operation)	Die Lifter	Down (from pressure switch)	
	Die Change Mode	ON	
	Upper Clamp	Press Slide	Lower Dead Point (from press)
		Die Lifter	Down (from pressure switch)
	Lower Clamp	Die Lifter	Down (from pressure switch)
		Press Slide	Upper Dead Point (from press)
Die Lifter	Lower Clamp	Released (from pressure switch)	

\*When using YP series control panels, press interface should be prepared by customer.

## TYPICAL LAYOUT



## CIRCUIT CONSTRUCTION

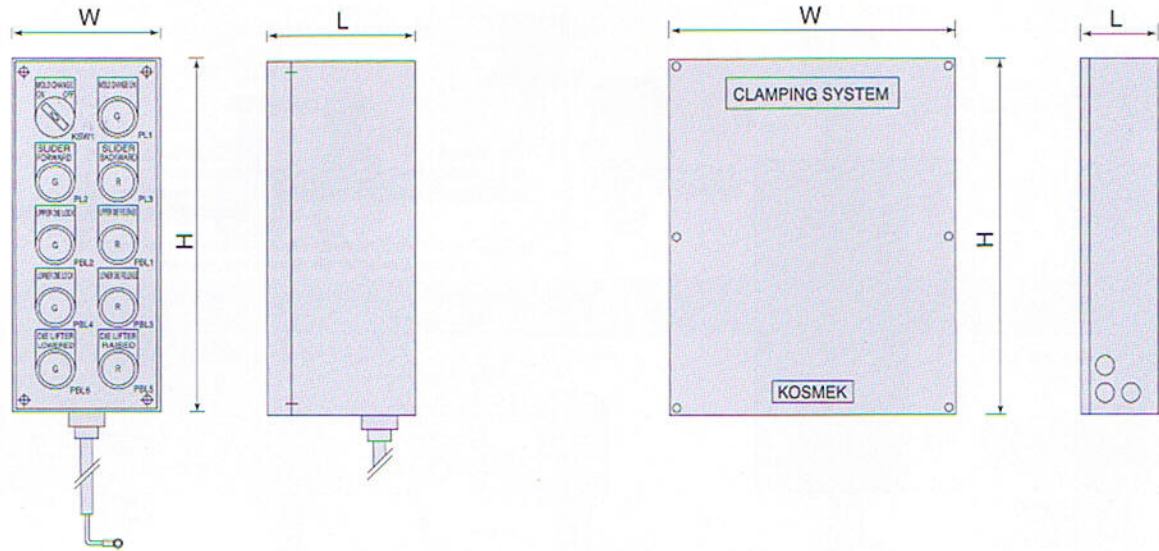
Model	Upper clamp		Lower clamp			Hydraulic Unit Model
	Front	Back	Front	Back	Die lifter	
YP1000		clamp		clamp	—	CC
YP1010		clamp		clamp	○	CCD
YP1020	clamp	clamp+slider		clamp	—	CC
YP1030	clamp	clamp+slider		clamp	○	CCD
YP1040		clamp+slider		clamp	—	CC
YP1050		clamp+slider		clamp	○	CCD
YP1060	clamp	clamp+slider	clamp	clamp+slider	—	CC
YP1070	clamp	clamp+slider	clamp	clamp+slider	○	CCD
YP1080		clamp+slider	clamp	clamp+slider	—	CC
YP1090		clamp+slider	clamp	clamp+slider	○	CCD
YP1100		clamp+slider		clamp+slider	—	CC
YP1110		clamp+slider		clamp+slider	○	CCD

\*Four upper clamps and four lower clamps are standard. For more clamps, consult us.



This control system provides safe operation of clamping systems.  
 Select model according to system specifications.

## ■ OUTLINE DIMENSIONS



### ● Operation · Control Panel (W×H×L)

Model	Operaion Panel	Control Panel	
YP1000	120 × 230 × 120	450 × 350 × 120	
YP1010			
YP1020			
YP1030			
YP1040			
YP1050			
YP1060			450 × 530 × 120
YP1070			
YP1080			
YP1090			
YP1100			
YP1110	120 × 280 × 120		

### ● STANDARD PAINT COLOR

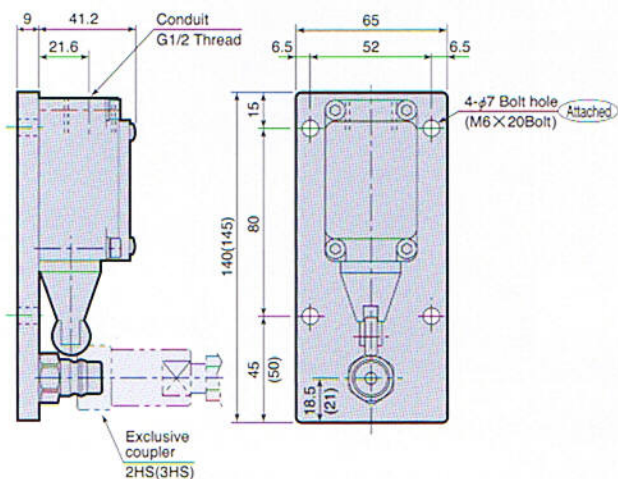
Operator Panel and Control Panel	
Outer	5Y8.4/0.5
Inner	

When specifying paint color,  
 1. Please indicate by Munsell No. or sample color.  
 2. For colors other than standard, an extra charge will be applied.



# ACCESSORIES

## PS/COUPLER SWITCH



( ) shows the dimension of a PS0711

The press is interlocked through electrical signals to ensure the disengagement of the hydraulic hose.

### MODEL CODE

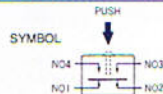
P S 0 1 0 1 - H  
 ① ②  
 Design No.

Application  
 010:2HS(Nitto Koki) for Rc1/4 thread  
 071:3HS(Nitto Koki) for Rc3/8 thread

② Switch manufacturer  
 H:Standard (manufactured by Yamatake)  
 T:Special(manufactured by Omron)

NOTE Types inside shall be produced after an order received. If you place an order, ask delivery time in advance.

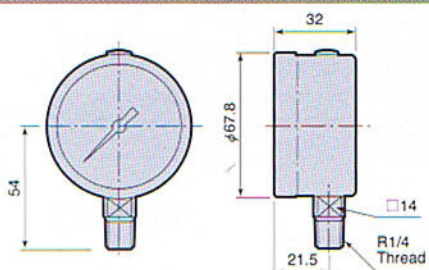
Type	PS0101	PS0711
Limit switch	5LS1-J (Yamatake)	
	10A-125, 250, 480VAC	
Electric rating	0.8A-115VDC	
	0.4A-230VDC	
	0.1A-550VDC	
Circuit type	Two-circuit dual shutoff type (1a1b)	
Compatible coupler type	2HS	3HS



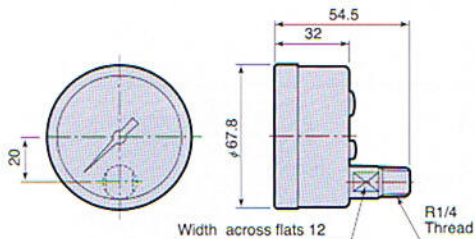
Remarks: Select an applicable coupler having the same specifications as the BK valve.

## JGA and JGB/PRESSURE GAUGE

### JGA



### JGB



### MODEL CODE

J G A 4 0 1 - 0  
 ① ②  
 Design No.

① Type  
 A:Bottom port type  
 B:Back port type

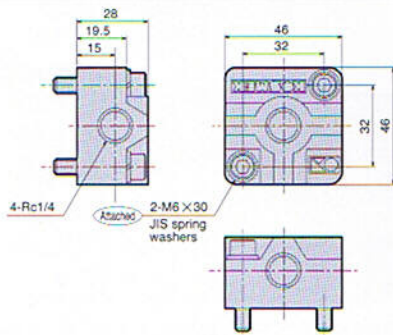
② Maximum indicating pressure  
 40:40.0 MPa

NOTE 1) Products with PSI unit are not available. We recommend you to purchase locally.

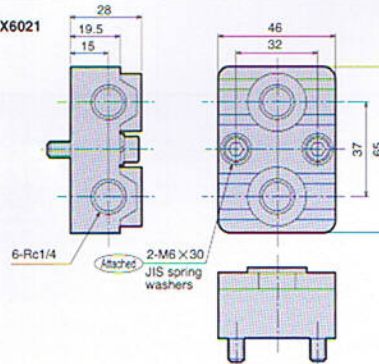
Type	JGA401	JGB401
Maximum range MPa	40.0	
Accuracy	JIS Class 1.6 (Filled with glycerine)	

## JX/MANIFOLD BLOCK

### JX4021



### JX6021





# HYDRAULIC OIL LIST

## RECOMMENDED HYDRAULIC OIL LIST

Suitable oil should be used for KOSMEK hydraulic products to maximize performance and to assure trouble free operation for a long time.

ISO VISCOSITY GRADE : ISO-VG-32

Manufacturer	Abrasion resisting hydraulic oil	General purpose oil
Showa Shell Sekiyu	Tellus Oil 32	Tellus Oil C32
Idemitsu Kosan	Daphne Super Hydraulic 32A	Super Multi 32
Eneos	Super Highland 32	Super Mulpus 32
Cosmo Oil	Cosmo Hydro AW32	Cosmo New Mighty Super 32
JOMO	Hydrax 32	Lathus 32
Esso	Nuto H32	Nuto 32
Mobil	Mobil DTE24	Mobil DTE24 Light
Kygnus	Unit Oil WR32	Unit Oil P32
Fuji Kosan	Fukkol Super Hydrol 32	Fukkol Hydrol DX32
Matsumura Oil	Hydrol AW32	
Sunoco	Sunvis 832	Sunvis 932
Mitsui Oil	Hi-Tech AW32	Hydrax 32
Castrol	Hyspin AWS32	

### Notes for placing an order

- ① Specify the model designation completely.
- ② Some of the model designations of our product have our control number at its end. This number showing a production design lot does not affect compatibility between products. You need not specify this number when placing an order.
- ③ Even if products having different control numbers are delivered at the same time, there exists no problem concerning the compatibility.
- ④ In addition to the products that are described to be manufactured after obtaining an order, some products may be manufactured according to the mold specifications and so on. Contact us for the delivery time.



## Product line

We manufacture and sell, in addition to QMCS, a wide range of systems and products based on non-leak valves. Contact our sales staff for further details.

# QMCS

QUICK MOLD CHANGE SYSTEMS



# KDCS

KOSMEK DIECAST CLAMPING SYSTEMS

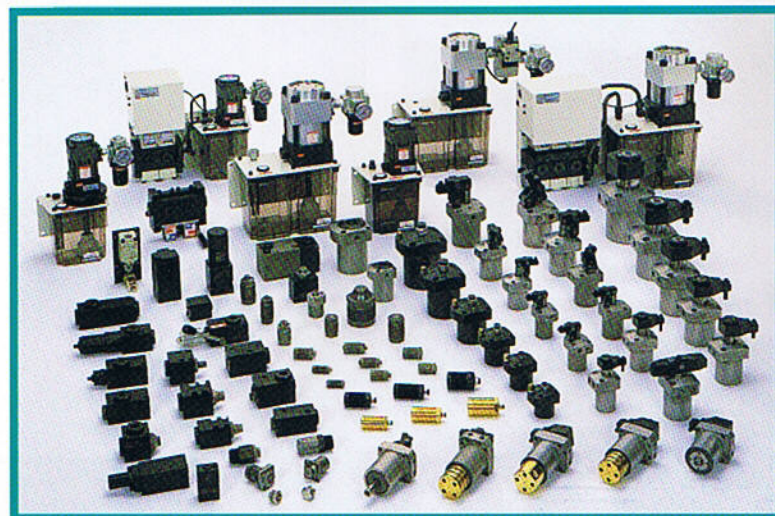


# KWCS

KOSMEK WORK CLAMPING SYSTEMS

Components for hydraulic jig of various machine tools.

L (7MPa) Series  
T (25MPa) Series



# KOSMEK®

HEAD OFFICE: 1-5-2-CHOME,MUROTANI,NISHI-KU,KOBE 651-2241  
TEL.81-78-991-5115 FAX.81-78-991-8787

BRANCH OFFICE: KOSMEK(U.S.A.)LTD.  
1441 BRANDING AVENUE,SUITE 110 DOWNERS GROVE,  
IL 60515 USA  
TEL.630-241-3465 FAX.630-241-3834

- FOR FURTHER INFORMATION ON UNLISTED SPECIFICATIONS AND SIZES, PLEASE CALL US.
- SPECIFICATIONS ON THIS LEAFLET ARE SUBJECTED TO CHANGE WITHOUT NOTICE.



JQA-GMA10823



JAB OS Accreditation R009

บริษัท ยามาโตะ (ประเทศไทย) จำกัด  
Yamato (Thailand) Co., Ltd.  
**yamato**

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A.Klongluang, Pathumthani 12120, Thailand. Fax : (02) 9081429