

OUR PRODUCT



Mold Testing Machine



Mold Flipper 180°



Mold Cooling Channel Cleaning Machine



HMG Die Spotting Press



Electric Permanent-magnetic Chuck



Mold Flipper 90°



Hydraulic Clamps for Quick Die/Mould Change

QDC System-Component of Hydraulic Clamper

COMPONENT OF QUICK DIE CHANGE SYSTEM

Power Unit

Distribution Box

Operational Box

Clampers

Accessory



With the development of industry and the increasing variety of moulded parts produced, the frequency of die mold changing in injection molding machine, punching machine and die casting machine has increased dramatically. How to reduce die mold changing time is a key issue to improve production efficiency. Since 2006, SXKH has worked in this domain, our QDC systems make your production process more flexible, ensure optimum production time and optimize productivity of existing equipment.

Q.D.C System Direct Advantage

Reduce Die Change time

Help producing variety of article with small productive lot

Help reducing inventory

Improve the quality of product

Reduce the labor cost and down time

Q.D.C System Indirect Advantage

Mold standardisation

Enhance operation Safety, improve environment of factory

Reduced wear tear of machine platen

Electronic controlled system

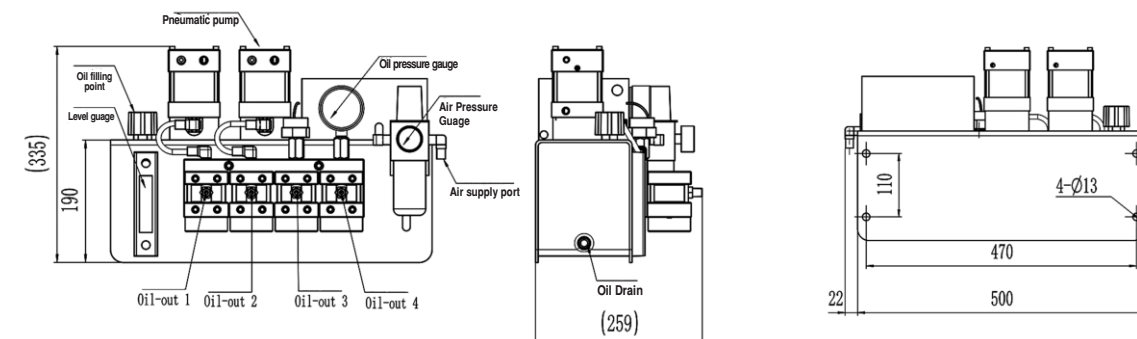
1. Using Omron PLC Control System.
2. PLC communicate Intelligently with machine and multi-layer safety interlock avoiding operational errors.
3. Specific single side die change function, double confirmation avoid operational errors. Equipped with key switch to prevent the operational errors.
4. If machine or die change is abnormal, then clampers starts warning and injection machine stop work automatically.
5. Integrated operation panel, simple operation.
6. Led indicating light, display the state of whole system.



Air Driven Hydraulic Pump Unit

Oil supply system for the whole quick die change system is combination of pneumatic & hydraulic components.

1. This is oil supply system of the whole QDCS, which adopts air-driven pump; double and single pump design for power output.
2. When pump station stops pressurizing, the system is in low pressure state and no energy is consumed.
3. Using patented technology group valve, independent four circuit design, when power off and air off, the system self-lock still keeps the pressure.
4. High quality pneumatic components and seals.



Type No.	B1- 4	B2- 4
General Machinery	50T-1400T Injection Machine	1600T Injection Machine & above
Pressure (MPa)	25	25
Driven by air pressure (MP)	0.5	0.5
No - load flow (L/Min)	2.8	4.2
Oil tank volume (L)	Minimum 3L and maximum 7.5L	

Indication of clampers types

EMG® Die Clampers Types



YM Series



YT Series



KH Series



YK Series

YM 1. Type of Clampers

YM Series - Applied to Platen with T Slot Molding machine and size of molds are variable.
 YT Series - Applied to platen without T Slot Molding machine.
 KH Series - Applied to Injection machine working with Die Change Cart with mechanical Self lock function
 YK Series - Applied to Stamping machine or Vertical Hydraulic press

25 2. Clamping Force

2 : Clamping force for one clamber = 2T 4 : Clamping force for one clamber = 4T
 6 : Clamping force for one clamber = 6T 10 : Clamping force for one clamber = 10T
 16 : Clamping force for one clamber = 16T 25 : Clamping force for one clamber = 25T
 50: Clamping force for one clamber = 50T

AL 3. Optional

Symbol	Name	Picture	Feature	Advantage
None	Standard		Standard type hydraulic clampers	Easy operation, less accessory
P	Proximity Sesnor		With clampers inspection function	Function of inspection for clamber approaching mold
A	Air Cylinder		SMC Automatic cylinders which improve automation; easy to use	Equipped with air cylinder to improve the automation, shorten the time to exchange mold and less labor intensive
L	Self-lock Valve Patent No. ZL 2014 2 0266594.6		Self- lock valve ensure all clampers keeping clamping force under the condition of oil hose broken	Each clamber equipped with a self - lock valve to ensure the clamping force when oil pipe damaged
AL	Air cylinder with self-lock		Most advanced	All above advantage
T	High temperature resistant type		Hydraulic clamber for die casting Machine	High temperature resistance, special seal.

Selection Guide

Step one:

According to machine working requirement choose the type and optionals of clamber

Step two:

Knowing the clamping force of injection machine, confirm the tons, quantity and type of clampers

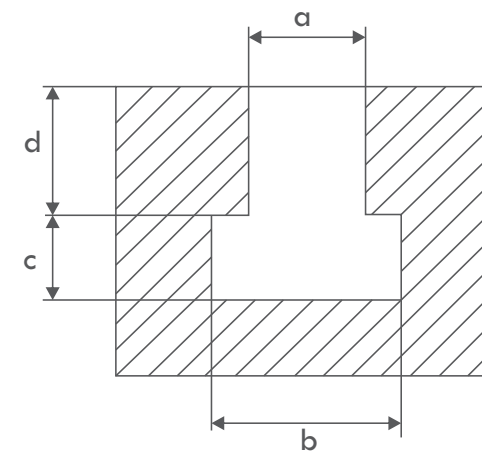
Injection machine clamping force	Fixed Platen	Quantity	Movable Platen	Quantity	Pump Power Unit	Standard mold back platethickness
60-120	YM - 2	4	YM 2	4	B1-4	25
160-250	YM - 4	4	YM 4	4	B1-4	30
280-380	YM - 6	4	YM 6	4	B1-4	30
470-530	YM - 10	4	YM 10	4	B1-4	40
600	YM - 10	6	YM 10	6	B1-4	40
700-900	YM - 16	4	YM 16	4	B1-4	50
1000-1300	YM - 16	6	YM 16	6	B1-4	50
1400	YM - 25	4	YM 25	4	B1-4	60
1600-1850	YM - 25	6	YM 25	6	B2-4	60
2100-2800	YM - 25	8	YM 25	8	B2-4	60
3300-4000	YM - 50	6	YM 50	6	B2-4	60

unit:mm

NOTE : Please confirm with our application Engineering team that the clampers type chosen suits your application or not

Step Three:

Confirm that whether platen T slot size matches the clampers or not



Platen T Slot Size

T Slot Size	YM-2	YM-4	YM-6	YM-10	YM-16	YM-25	YM-50
a	18	22	22	28	28	36	48
b	30+2 0	36+2 0	36+2 0	46+2 0	46+3 0	60+3 0	80+3 0
c	14+1 0	16+1 0	16+1 0	20+2 0	20+2 0	25+2 0	36+2 0
d	19±0.2	25±0.2	25±0.2	32±0.2	32±0.2	41±0.2	48±0.2

unit:mm

Step Four:

Knowing the clamping stroke and mold back plate size

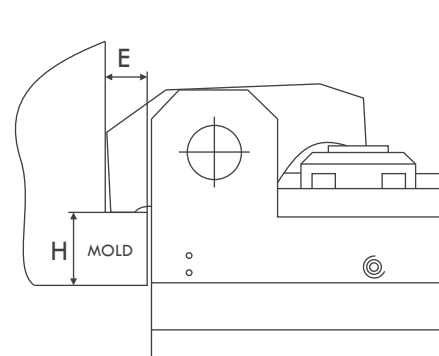
unit : mm

Specification	YM-2	YM-4	YM-6	YM-10	YM-16	YM-25	YM-50
Clamping force (KN)	20	40	60	100	160	250	500
Full stroke (MM)X	8	8	10	10	11	10	10
Die clamping stroke (MM)Y	2.5	2.5	2.5	2.5	3	3	3
Reserved safety stroke (MM)S	5.5	5.5	7.5	7.5	8	7	7
Weight (KG)	2.5	5.5	9	14	23	37	83
Thickness of Standard mold back plate (mm) H	25	30	30	40	50	50	60
Allowance for thickness of mold back plate (mm) H	23~26	28~31	26~31	36~41	45~51	45~51	55~61

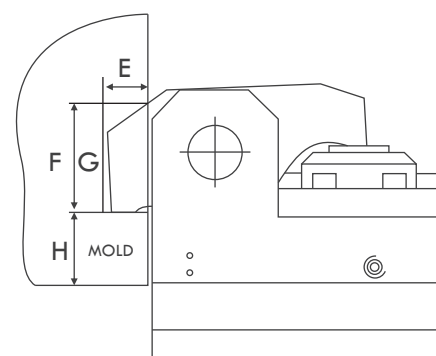
unit : mm

Specification	Standard		Clamp Invagination			
	E	H	E	F	G	H
YM-2	18	23~26				23~26
YM -4	23	28~31				28~31
YM-6	28	26~31				26~31
YM-10	28	36~41				36~41
YM-16	30	45~51				45~51
YM-25	30	45~51				45~51
YM-50	30	55~61				55~61

Note: If clamp invagination, please provide above E,F,G size.



I Shape Mold standard type



Clamp invagination type

YM Series Clampers



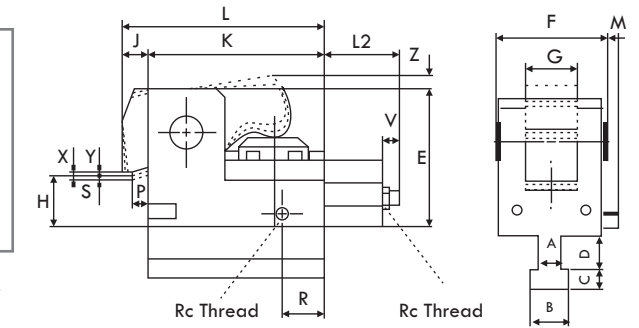
YM Standard type



YM - L self lock type



YM -P with proximity switch type



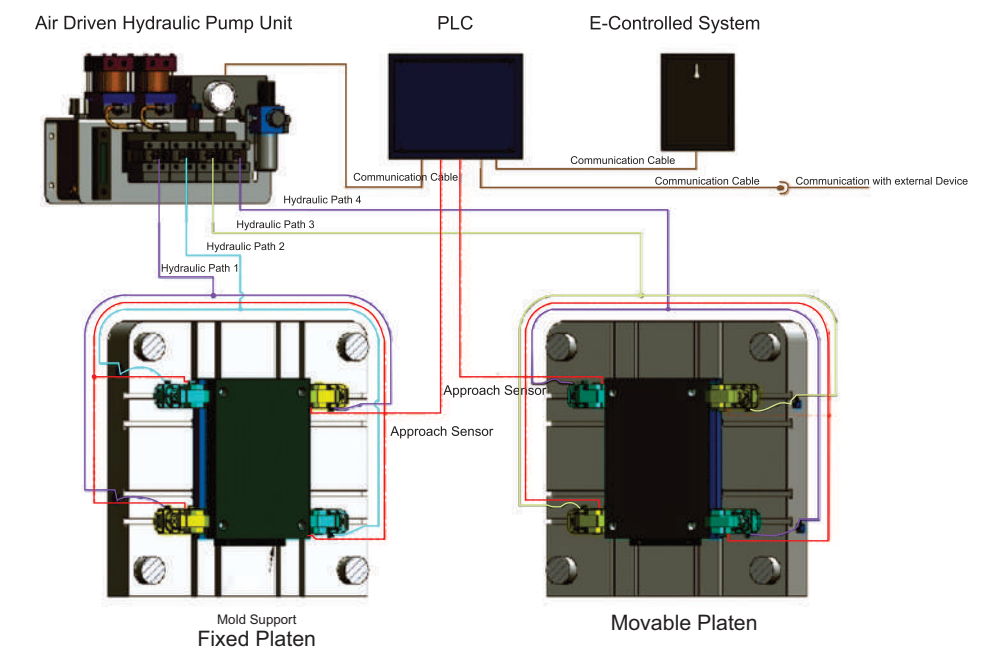
YM External dimension of clampers

unit : mm

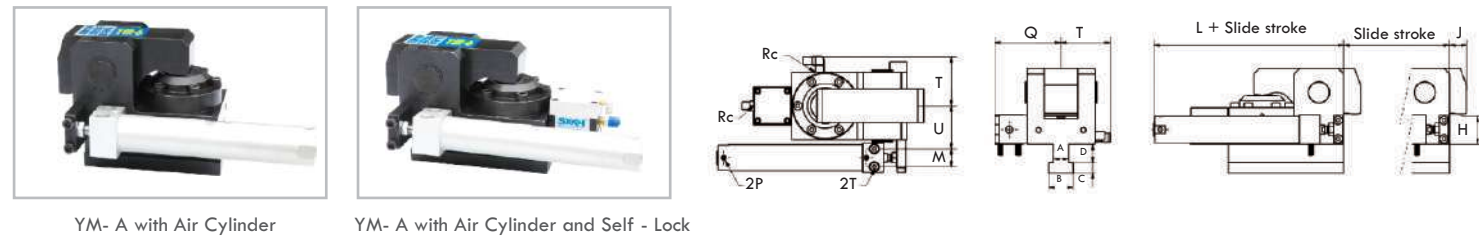
Specification	L	L2	V	K	J	F	M	G	E	N	P	Rc	R	Standard mold back plate	Allowable Back Plate Range
YM2-P	100	-	-	82	18	58	25	28	58	6.7	12.5	1/8	24	25	+1~3
YM4-P	138	-	-	120	23	74	25	40	80	8.6	16	1/8	52	30	+1~3
YM6-PL	160	90	20	135	28	94	25	50	87	8.3	20	1/4	45	30	+1~5
YM10-PL	200	90	20	165	28	106	25	55	108	10	20	1/4	62	40	+1~5
YM16-PL	237	90	20	205	30	128	25	65	135	11	20	1/4	50	50	+1~5
YM25-PL	282	90	20	252	30	160	25	75	150	12	20	1/4	60	50	+1~5
YM50-PL	350	90	20	317	30	220	25	110	180	15	20	1/4	90	60	+1~5

Note: The minimum size of YM-L is 6T, size M is YM-P proximity switch size

Vertical Loading



YM - A and YM - AL Series



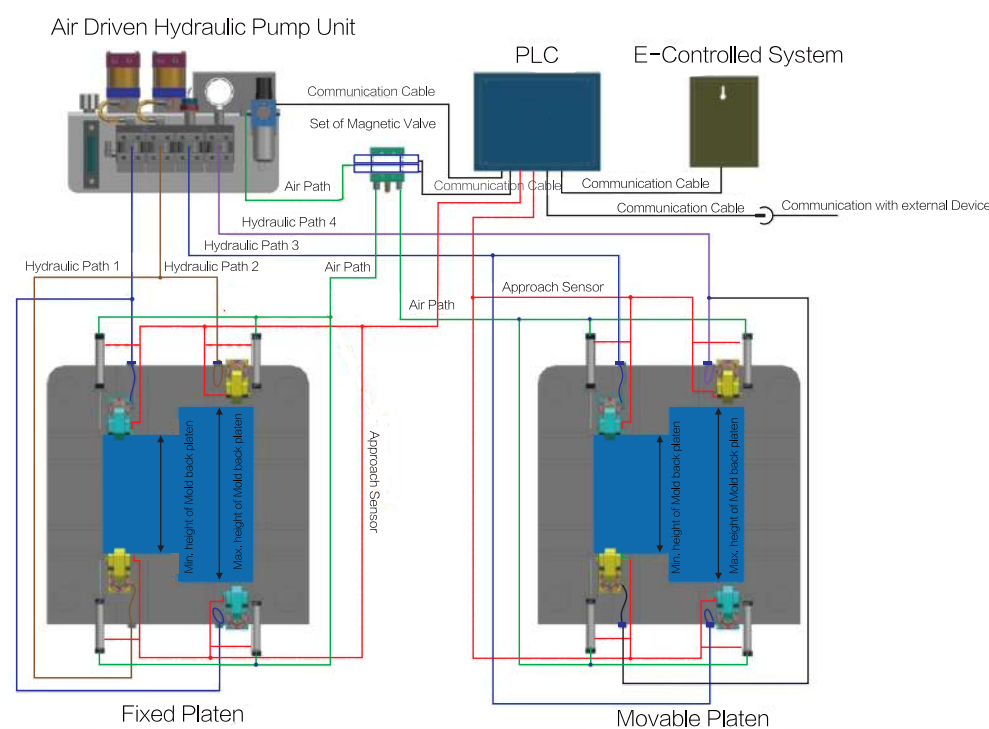
External Dimension

unit:mm

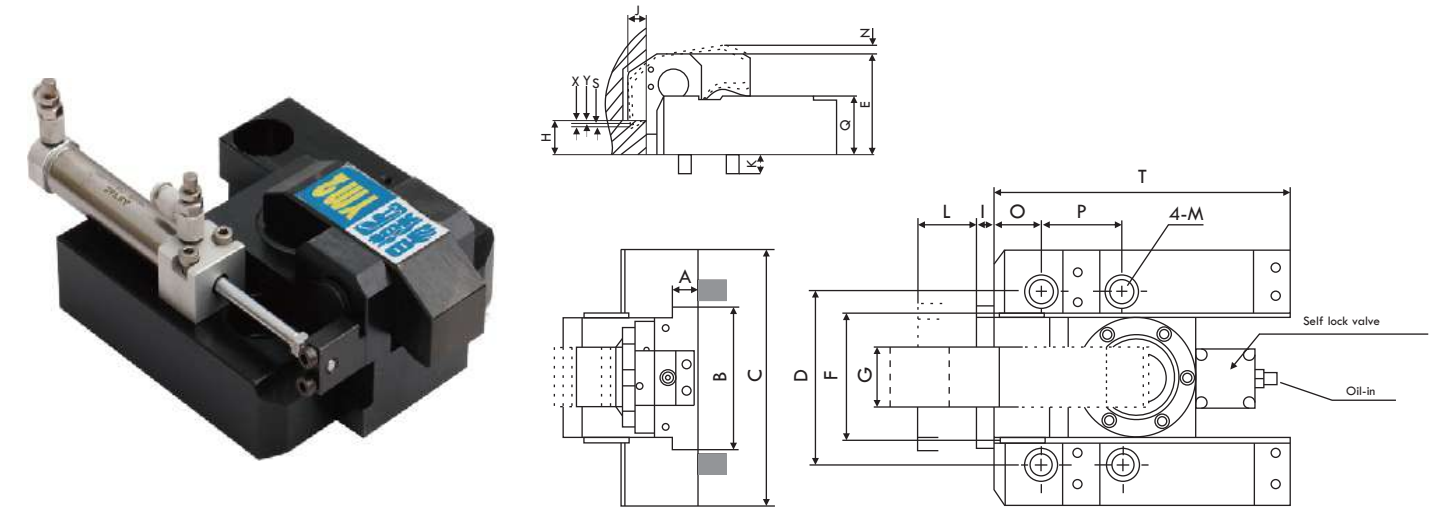
Specification	L	J	Q	T	U	M	2T	RC	2P	Standard mold back plate	Allow Changing Range
YM2-A	80	18	65	48	40	18	M5 x 35	1/8	1/8	25	+1~3
YM4-A	80	23	72	45	47	18	M5 x 35	1/8	1/8	30	+1~3
YM6-AL	119	28	92	69	56	24	M8 x 45	1/4	1/8	30	+1~5
YM10-AL	119	30	100	75	64	24	M8 x 45	1/4	1/8	40	+1~5
YM16-AL	137	30	145	85	74	65	M10 x 55	1/4	1/8	50	+1~5
YM25-AL	160	30	163	97	93	70	M10 x 70	1/4	1/4	50	+1~5
YM50-AL	180	30	235	140	129	92	M16 x 85	1/4	1/4	60	+1~5

Note: Confirm air cylinder stroke according to the length of T slot.

Horizontal Loading



YT Series The Slider Type Hydraulic Clampers



External Dimension*

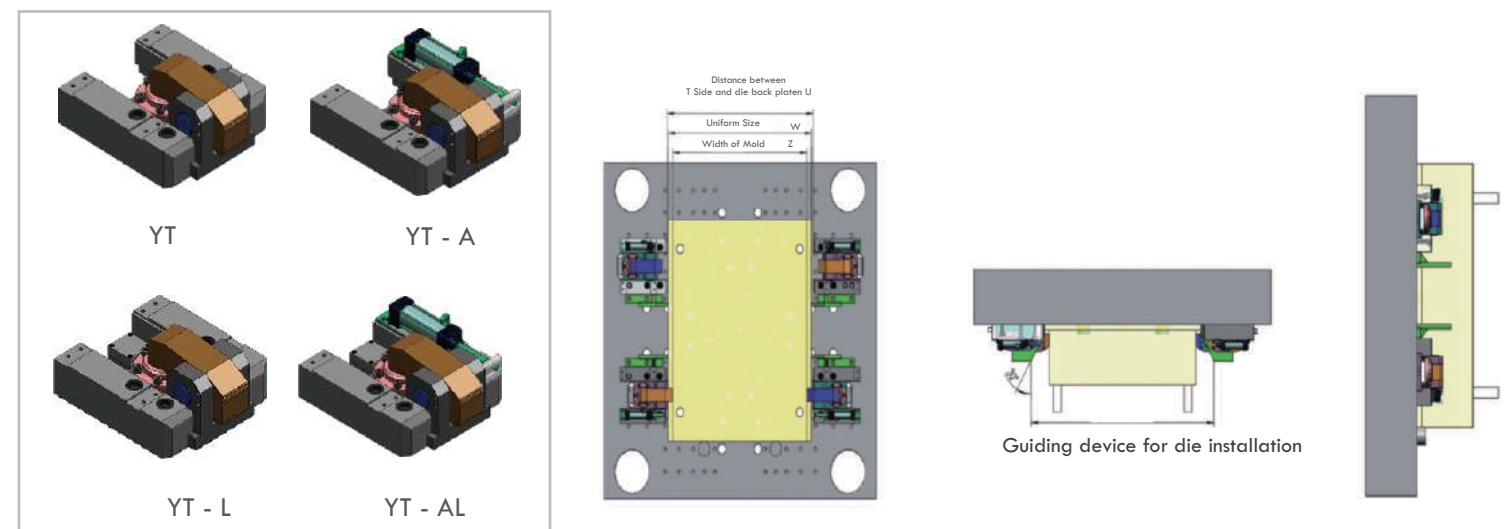
unit:mm

Model	E	B	F	G	J	D	O	P	T	I	M	X	Y	S	H Standard mould base plate	A	C	D	K	L	N	Q	R	V	U	W	Z
YT-2	58	54	28	28	18	98	12	20	105	25	M12x40	8	2.5	5.5	25												
YT-4	80	92	73	40	25	109	12	20	125	30	M16x50	8	2.5	5.5	30												
YT-6	87	110	94	50	28	126	15	30	150	35	M16x50	10	3	7	30												
YT-10	108	130	107	55	30	148	15	35	220	40	M20x50	10	3	7	40												
YT-16	135	142	128	60	30	166	20	40	250	50	M20x60	11	3	8	50												
YT-25	150	174	155	73	30	200	20	50	300	60	M24x80	10	3	7	50												

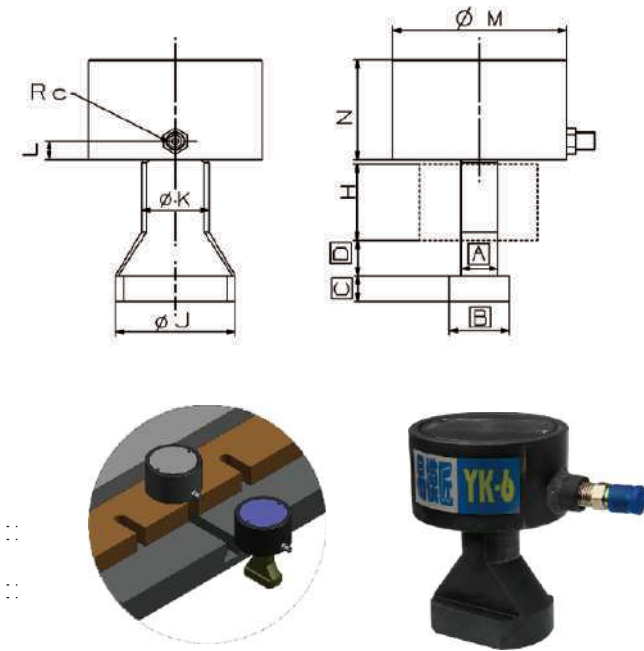
According to the request

Note: H or W size can be customized according to customer's requirement

* Dimension may change according to T Slide/ threaded holes centre distance and Mold Back Plate thickness.



YK	6	—	50
Clamping Force			thickness of mold back plate
2	20 KN		25
4	40 KN		30
6	60 KN		40
10	100 KN		50
16	160 KN		
25	250 KN		



YK Series Specs

Specs	YK2	YK4	YK6	YK10	YK16	YK25
Clamping force (KN)	20	40	60	100	160	250
Full stroke (mm)	8	8	8	8	8	8
Clamping stroke (mm)	4	3	3	3	3	3
Safety stroke (mm)	4	5	5	5	5	5
Volume of the cylinder (cm ³)	6.5	15	22	33	55	55
Weight (kg)	2	3	5	7	8	15

Specs	M	N	Rc	L	K	J	F ≤	H (Standard Die back plate thickness)
YK2	50	55	1/8	12	18	38	15	25 mm
YK4	70	65	1/4	15	25	55	18	30 mm
YK6	80	70	1/4	15	30	64	25	30 mm
YK10	100	75	1/4	15	40	78	30	40 mm
YK16	130	80	1/4	15	50	88	38	50 mm
YK25	150	105	1/4	15	60	98	45	50 mm



CLAMPERS IN USE

- Korean LS1050M**
Injection Machine equipped with 12 YM - 16A type EMG hydraulic clammer
- HAITIAN MA-1600**
Screw holes platen injection Machine equipped with 8 YT-4A type slider hydraulic clammer
- TOSHIBA DZ1300T**
Screw holes platen Injection Machine equipped with YT-16A type of slider hydraulic clammer
- Uzbek SZ100A**
Injection Machine equipped with 8 YM - 16P type Hydraulic Clammer
- LS2800M**
Injection Machine Equipped with 8 KH-50 self-lock type hydraulic clammers, working together with SXXH QDC Cart
- HAITIAN MA33II**
Injection Machine equipped with 12 YM-50AL type hydraulic clammer