

Pascal

Hydraulic mold clamp

Long stroke type slidable hydraulic clamp

model **TYJ**

Clamping stroke
10 mm



Suitable for molds when clamping height
is not compatible.

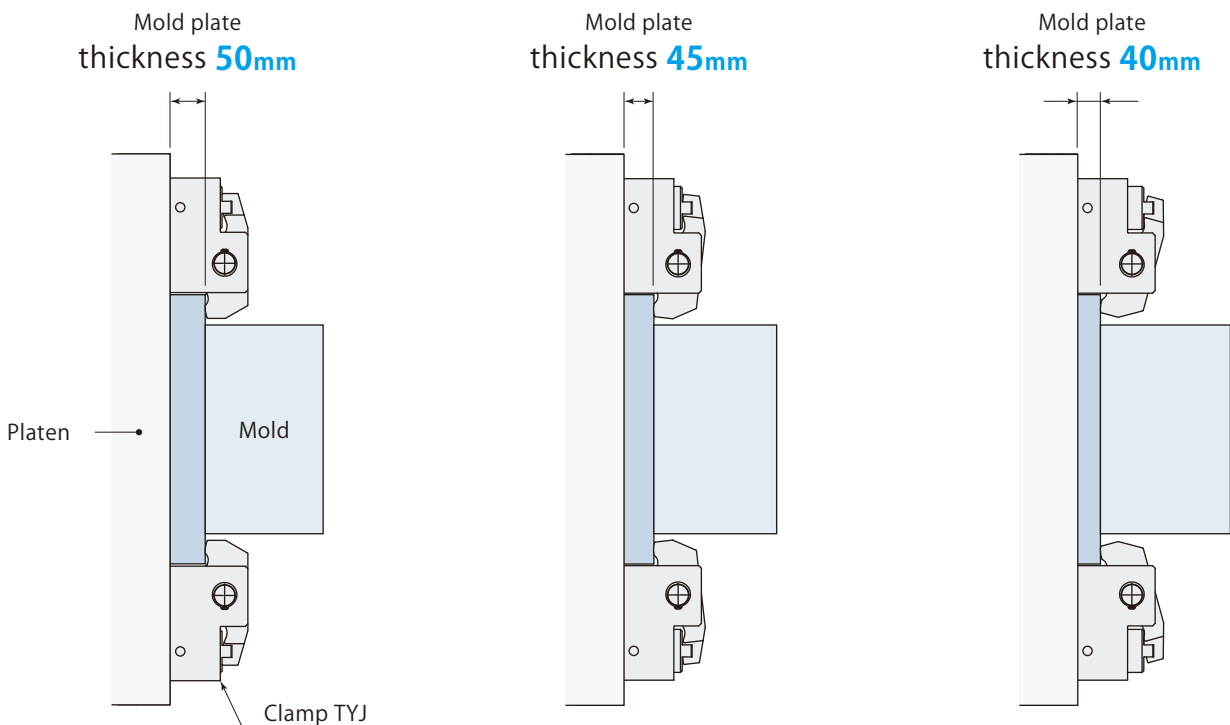


Clamping force 63 kN, 100 kN, 160 kN, 250 kN

Hydraulic clamp Long stroke type TYJ

It is a type of hydraulic clamp that can accommodate **for variations in mold plate thickness**. It has longer clamping stroke in comparison to the standard hydraulic clamp, allowing up to a maximum of 10mm in height difference.

model **TYJ**



● Model designation

TYJ 063

Clamping force	
063	61.7 MPa
100	98 MPa
160	156 MPa
250	245 MPa

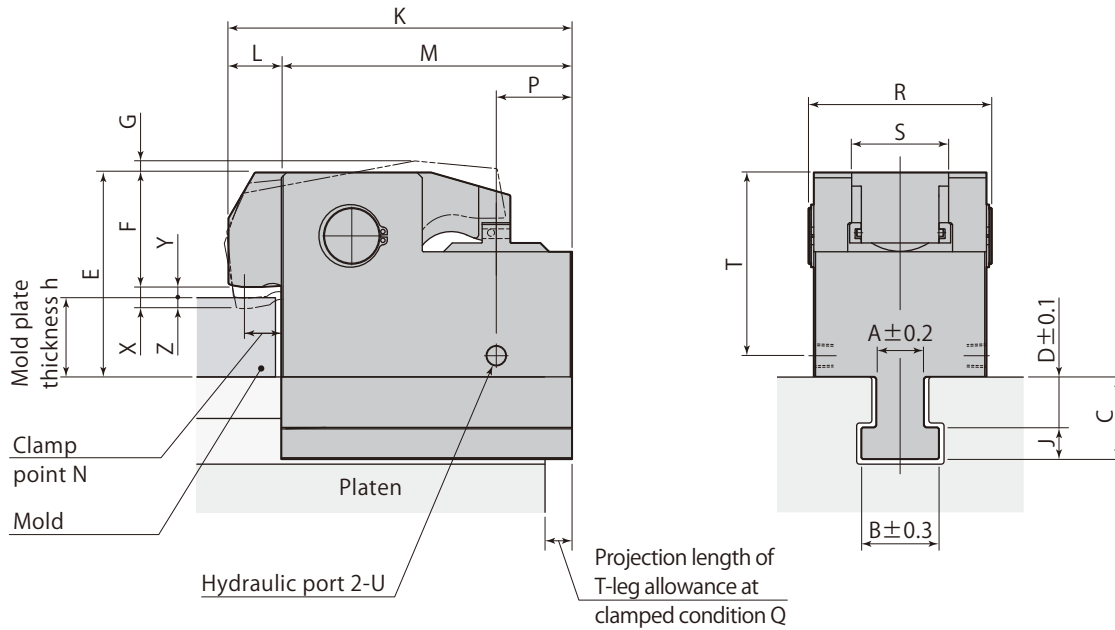
● Specifications

Model		TYJ063	TYJ100	TYJ160	TYJ250
Clamping force (at 24.5 Mpa)	kN	61.7	98	156	245
Full stroke	mm	14	15	16	16
Clamping stroke	mm	1	1	2	2
Safety stroke	mm	13	14	14	14
Cylinder capacity (at full stroke)	cm ³	34	58	97	167
Proof pressure	MPa	30.8			
working hydraulic pressure	MPa	24.5			
Operating temperature	°C	0 ~ 70 (5 ~ 120 for heat proof type)			
Weight	kg	9	15	25	45

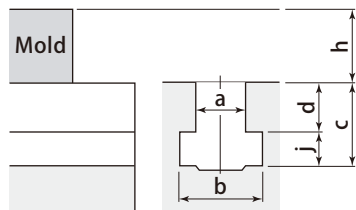
- Safety stroke and clamping stroke shown above are subject to change depending on dimensions of mold and T-slot.
- Weight varies depending on the dimension of clamp T-leg and mold plate thickness h.

Hydraulic clamp Long stroke type TYJ

Dimensions



T-slot dimension and mold plate thickness



- Specify T-slot dimensions (a, b, c, d, j) and mold plate thickness (h).
- For "d" dimension of T-slot
For retrofit : Specify to 0.1 mm
For new machine : Machining tolerance shall be ± 0.2 mm
- Dimensions (A, B, C, D, J) shall be determined according to T-slot dimensions.

mm

Model	TYJ063	TYJ100	TYJ160	TYJ250
Height of lever F	39.5 ($50 \leq h$)	55 ($60 \leq h$)	70 ($60 \leq h$)	96 ($65 \leq h$)
Dimension parenthesis denotes the range of h.	49.5 ($40 \leq h < 50$)	65 ($50 \leq h < 60$)	80 ($50 \leq h < 60$)	106 ($55 \leq h < 65$)
	59.5 ($30 \leq h < 40$)	75 ($40 \leq h < 50$)	90 ($40 \leq h < 50$)	116 ($45 \leq h < 55$)
Max. G	10	10	11	15
K	163	195	232	275
L	30	30	32	35
M	133	165	200	240
N (When h dimension is max.)	18	20	20	22
P	34	43	53	63
Projection length of T-leg allowance at clamped condition Q	34	43	53	63
R	93	104	125	155
S	50	55	60	72
T	78.5	104	120	146
Hydraulic port U	Rc1/4	Rc1/4	Rc1/4	Rc1/4
Min. E	90.5	116	132	163
Full stroke X	14	15	16	16
Clamping stroke Y	1	1	2	2
Safety stroke Z	13	14	14	14
Min. j	15	17	20	27
h (Min. ~ Max.)	30 ~ 60	40 ~ 70	40 ~ 80	45 ~ 85
Min. a	19	23	27	32

- Height of lever F varies according to the dimension of h. The TYJ becomes a **clamp lever low distance type** when h dimension is lower than minimum value.
- The TYJ becomes a **clamp lever high distance type** when h dimension is higher than maximum value. Depending on T-slot dimensions, TYJ can be used more than maximum Q. Contact Pascal for the details.

Hydraulic clamp Long stroke type TYJ

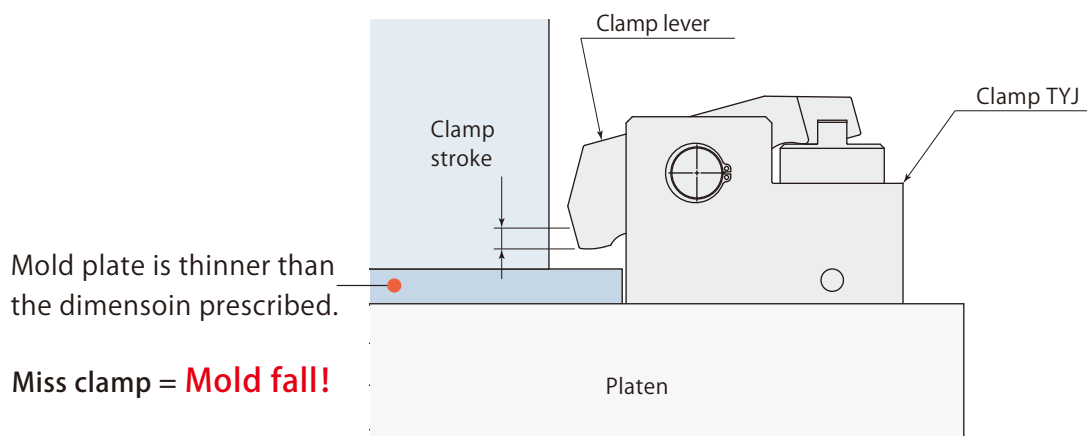
⚠ Caution when using

There is a risk of the mold falling accidentally if the clamp height is out of range when installed. Please do not allow anyone to attempt to operate the machine or to perform maintenance without proper instruction. Only authorized operators with proper training should be permitted to use the clamp. Pascal recommends the standardization of clamping height dimensions when using a hydraulic or pneumatic clamp to ensure that the mold will not fall.

- "Clamp complete " signal is output from a pressure switch of the hydraulic circuit. There is no sensor provided to detect the clearance between the clamp lever and the mold.



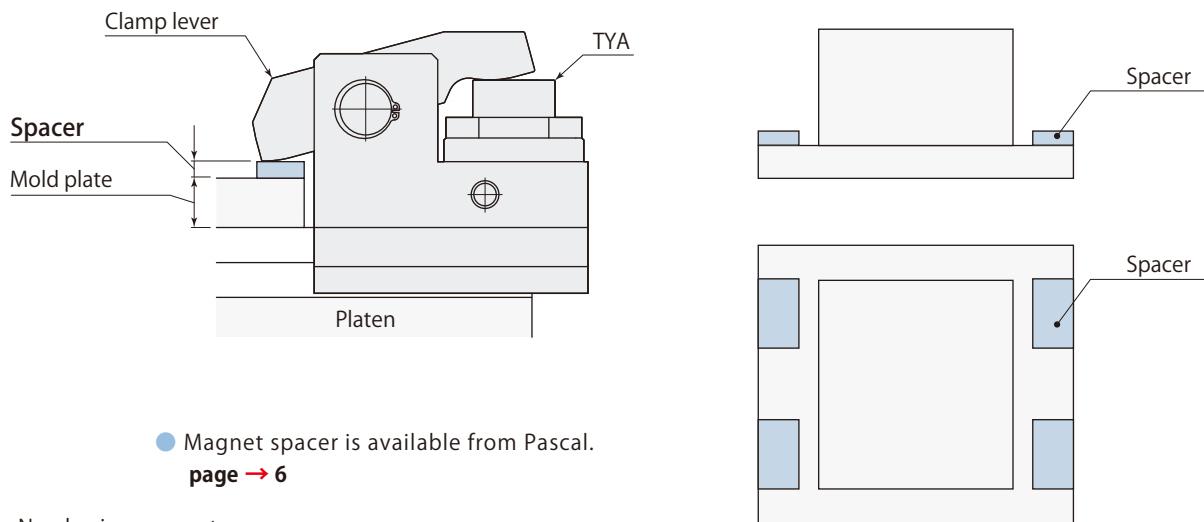
- Mold-fall accident may occur if an operator installs the mold that does not fit the system. Only authorized personnel with proper training should operate the TYJ model because failure to select the appropriate mold could cause an accident.



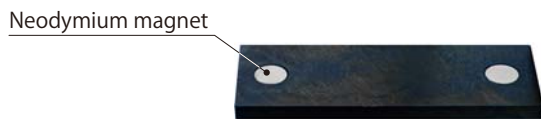
Hydraulic clamp Long stroke type TYJ

Clamping height standardize or introducing magnetic clamp

- Pascal suggests the standardization of clamping height in one dimension by means of a spacer. Without a spacer, an operator's careless mistake could inevitably cause a mold-fall accident.



- Magnet spacer is available from Pascal.
page → 6



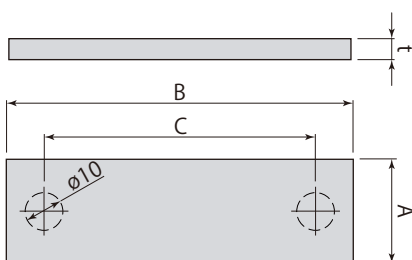
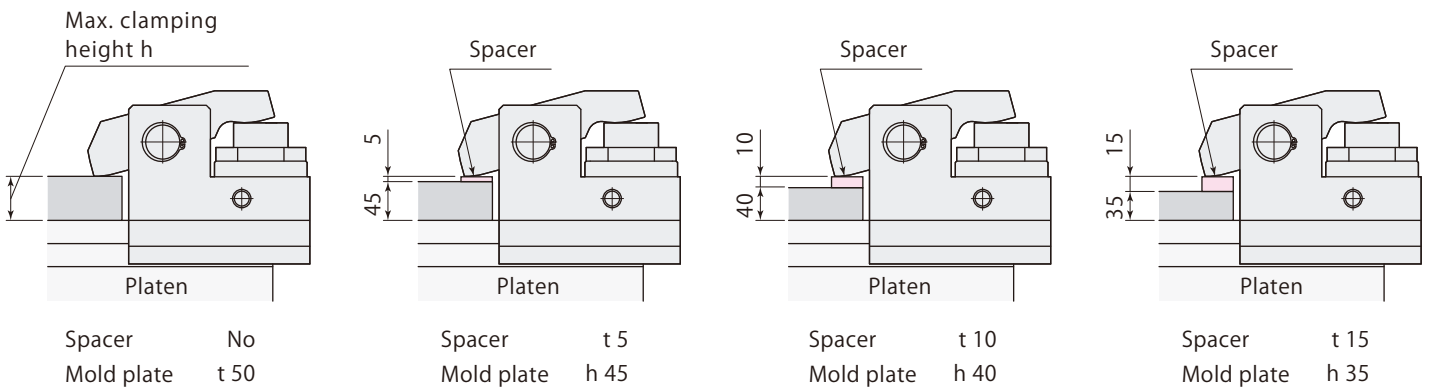
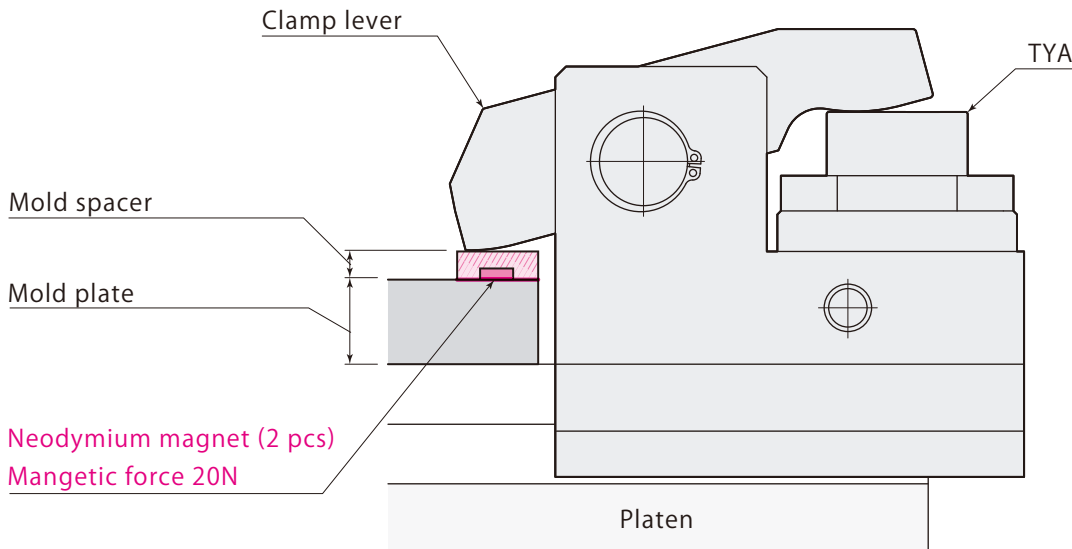
- Pascal also supplies the magnetic clamp to the customers who have the difficulties in standardizing the mold plate thickness. The clamp allows the customers to introduce an automatic system without unifying the clamping height.



Installation example on 3500kN machine

Mold spacer (Magnet spacer)

Unify the clamping height to be one dimension by mounting the spacer at the clamping point.



Model	TYA040	TYA063	TYA100	TYA160	TYA250
A	mm 25	32	32	32	32
B	mm 78	88	88	112	112
C	mm 58	68	68	92	92
t	mm 5, 10, 15	5, 10, 15	5, 10, 15	5, 10, 15	5, 10, 15

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