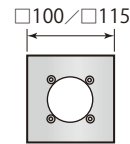
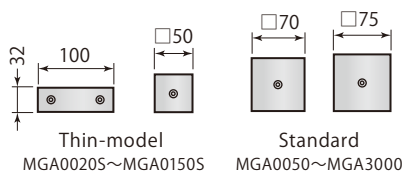


## Mag clamp can clamp the mold strongly optimizing the magnet core layout.

Adopting 4 different size and shape of magnet core, Pascal ideally layouts the core on the clamp plate according to the machine platen size specifically providing the core at the center of the plate so that the plate can rigidly hold the mold.

In order to secure strong and stable clamp force for even a small size of mold, in some models, large size of core is provided at the center of the plate on movable platen. **PAT.**



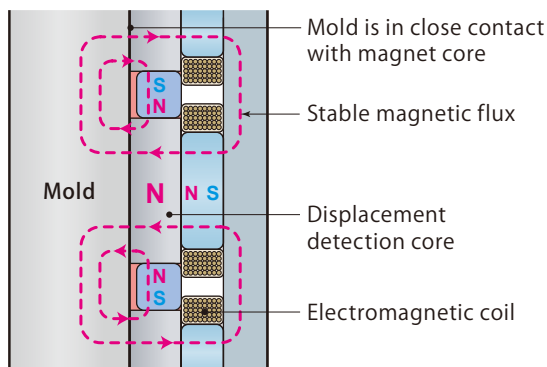
\*Center magnet core is available for model MGA0020S, MGA0140, MGA0160 and MGA0190~MGA1300.

## Displacement detection system (standard) PAT.

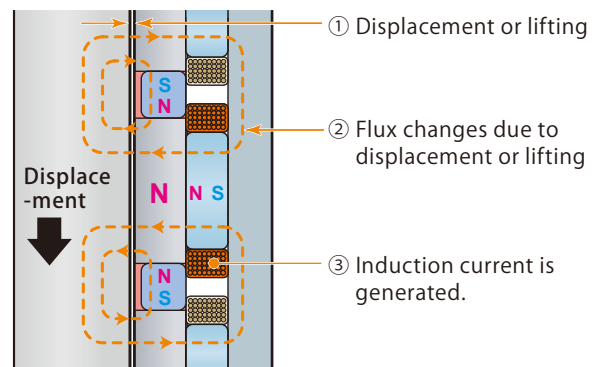
Displacement or lifting of the mold can be detected by the electromagnetic coils built into the magnet core near the center of the clamp plates.

When the mold moves, these electromagnetic coils detect an induction current signal.

### Normal clamping status



### When the mold moves

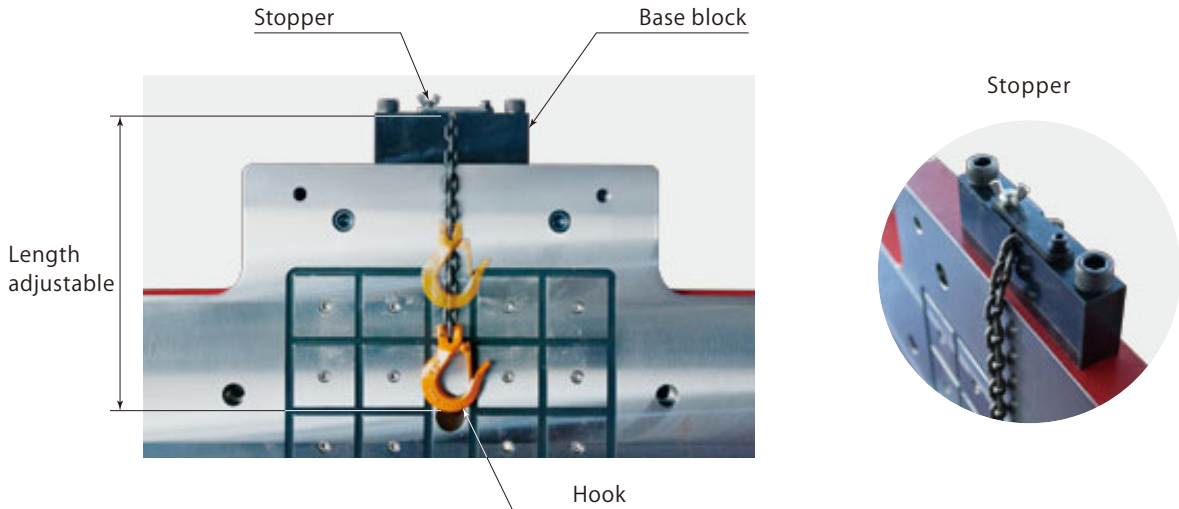


## Clamp force calculation

The clamp force of Mag clamp is determined by the contact area of magnetic core (number of magnet core) with a mold. The force decrease when contact area is decreased by a cutout or holes provided to the mold. In addition to it, operating temperature over 80°C and material of mold plate are also definite factors to have the clamp force decrease. ( Refer to **page → 85** for calculation of rated clamping force. )

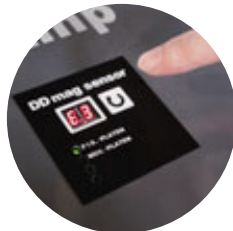
Mold fall protection hook (length adjustable) model MGR (optional) PAT.

The hook which chain length is easily adjustable is also available.



DD Mag clamp (optional)

The clamp with DD sensor which can numerically check the mold. It can detect the clamp force decrease caused by heat, mold base material and a clearance between the mold and magnet core face. Refer to **page → 34**



Check point to prevent mold fall

It is a significant factor in mold-fall to make ejector setting error. Check if stroke and position of ejector pin are correct and no misalignment with pin hole referring to caution plate. The caution plate is available for machine operators.

**Pascal mag clamp**

**Check the following points to avoid the mold to fall.**

- If ejector pin is incorrectly positioned, the mold may be pushed to fall.
- When confirming, lift the mold and move the ejector pin manually.

① Wrong Position

Is the position of ejector pin CORRECT?

② Over-stroke

Isn't the length of ejector pin TOO LONG?

③ Displacement of Pin Hole

Does the mold mount PROPERLY?

Recommended Ejector Setting Value

Ejector force should be less than 1/2 against magnetic clamping force on movable platen side.

Ejector speed should be less than 50 mm/sec.

**Pascal**

PA-2386 (05)-1 2012.12

Caution plate  
Enlarge Refer to **page → 83**