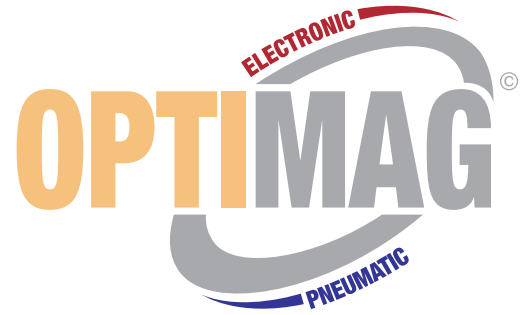


# Electrically Actuated Optimag



The Optimag Electronic gripper is supplied as a modular system in 4 standard sizes. The circular pole configuration ensures that maximum clamping power is applied when the Optimag's working face is covered by a component of the minimum thickness material.

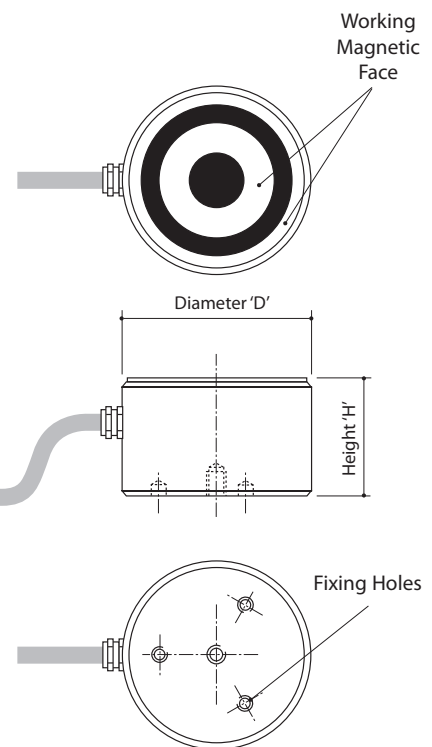
### Standard Pole Configuration

Used for the clamping or lifting of materials with flat smooth surfaces down to a minimum thickness of 10mm. Maximum performance is attained at full saturation of the material dependent on model size. Provides a greater clamping force on thicker materials than the **Optimag** Pneumatic version.

### Fail Safe

This system is the ultimate fail-safe magnet. Power is only required to switch the unit on and off. The **Optimag** houses high performance Neodymium magnets that remain magnetised in the same direction at all times and Alnico magnets that can have their magnetic polarity reversed by an electrical charge. When both magnets are of the same polarity magnetism flows through the working face and clamps the component. Reverse the polarity of the Alnico magnets, the magnetism is diverted internally, and the component is released. The state and performance of the magnet remains fixed indefinitely until the controller is connected to the magnet and operated. If the electricity fails while a load is being held the load stays held.

(Construction and controller information overleaf)



PNEUMATICALLY ACTUATED OPTIMAG SPECIFICATIONS					
Part No	Diameter (D)mm	Height (H)mm	Weight Kgs	Fixings	PCD
ESPM75C	75	45	1.00	3 × M6 × 11	40
ESPM100C	100	52	1.00	3 × M6 × 17	70
ESPM125C	125	65	1.50	3 × M6 × 17	70
ESPM150C	150	65	1.50	3 × M6 × 17	100

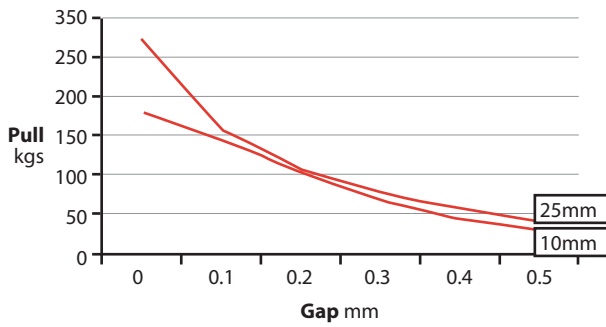
PICK | CLAMP | HOLD | MANIPULATE



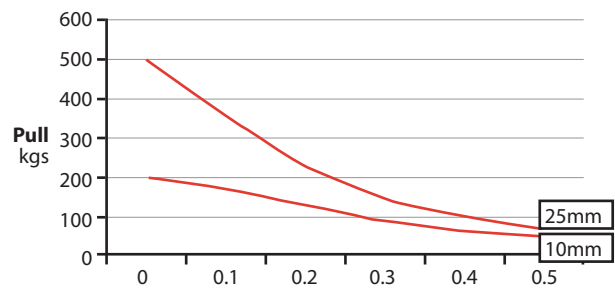
# PERFORMANCE DATA

## Typical Performance on Various Plate Thicknesses

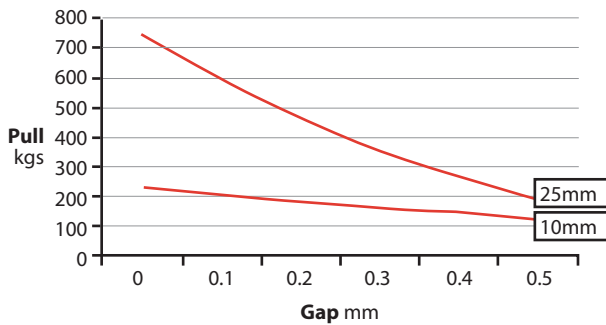
**ESPM75C**



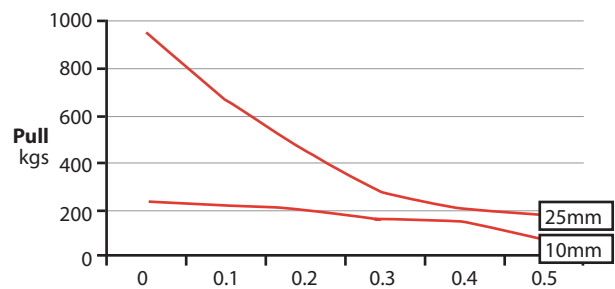
**ESPM100C**



**ESPM125C**



**ESPM150C**



### Control

- Enclosure** Lockable, steel enclosure, powder painted.
- Size** 300mm × 300mm × 165mm  
Supplied to IP65
- Operation** Illuminated push buttons that indicate the magnetic state of the magnet.
- Safety interlock** Current sensing circuits, check and measure the input voltage to the magnets, this will only indicate when the correct value has been supplied.
- Voltage options** Standard voltage is 240 volt / 50hz  
The controller can be operated at 110 volt /50hz but the magnets would be made to order at this voltage
- Current draw** The controller can be supplied as a single or double circuit, dependent on the amount of magnets that are required. The controller has a limit of 40amp per channel.

Max qty of magnets per controller	Size	Single Double	
		75mm dia	28
100mm dia	17	34	
125mm dia	9	18	
150mm dia	7	14	

### Construction

- Outer shell material** Steel
- Finish** Epoxy Powder Paint (Red)
- Max operating temp** 80°C
- Cable connection** Gland to ip65
- Cable type** 0.75mm<sup>2</sup> three core double insulated PVC
- Cable length** 5 metres

Distributed by:



[www.eclipse-magnetics.co.uk](http://www.eclipse-magnetics.co.uk)

### Eclipse Magnetics Limited

Atlas Way  
Atlas North  
Sheffield S4 7QQ  
England

T:+44 (0) 114 225 0600  
F:+44 (0) 114 225 0610  
E:enquiries@eclipse-magnetics.co.uk