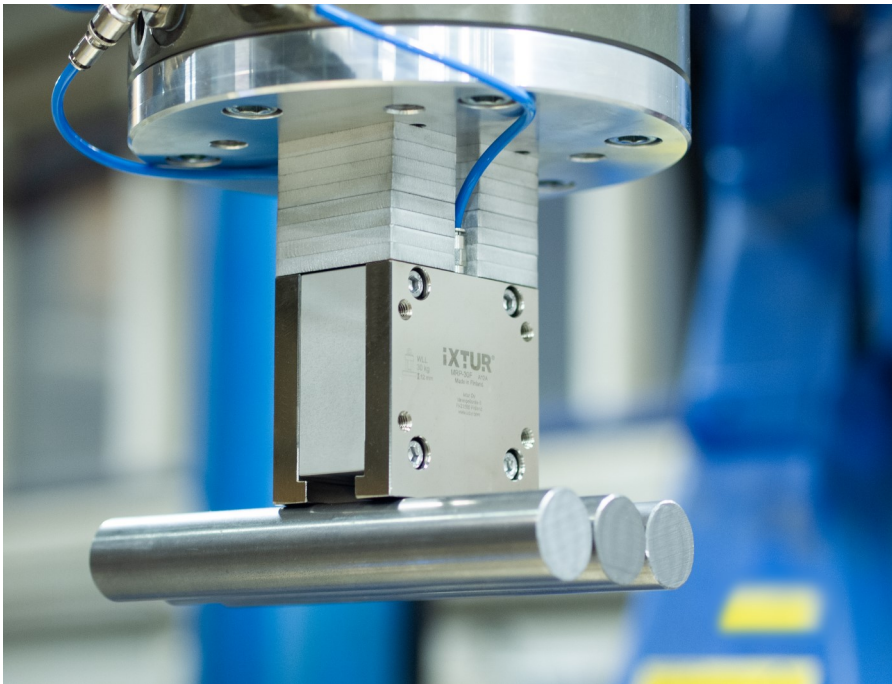


12/2020



Ixtur MRP-30F is a pneumatically controlled neodymium permanent magnet that is suitable for gripping parts with different shapes.

MRP-30F is optimized for loads, which are not in contact with the entire gripping area of the magnet. However, in order to achieve a proper grip, it is necessary to at least partially touch both magnetic poles of the magnet.

MRP-30F does not change its magnetic state in case of loss of compressed air. The compact size of the magnet combined with the strong gripping force provides high versatility.

TECHNICAL SPECIFICATIONS

Lifting capacity WLL [kg]	Gripping capacity [kg] [N]		Residual gripping capacity, max. [kg]	Dimensions L x W x H [mm]	Weight [kg]	Operating temperature [°C]	Air pressure: functional range [bar]	Pneumatic hose outer diameter [mm]	Minimum cycle time [s]
	[kg]	[N]							
30*	90*	880*	4**	80 x 55 x 80	1.9	0 ... 50	5 ... 8	4.0	< 1

* plate thickness \geq 12 mm

** see the paragraph 'Residual gripping capacity' below

Lifting capacity (WLL) is determined with a safety factor of 3.

Ixtur MRP magnets are maintenance-free and have a short cycle time, allowing high production speed and efficient automation.

Residual gripping capacity

The residual gripping capacity, i.e. the gripping capacity when the magnet is OFF, varies depending on the material and structure of the gripped part. In extreme cases, parts up to 4 kg may stay attached. The residual gripping capacity is greatest as long as the part continuously stays in contact with the magnet after the magnet has been turned from ON to OFF. If the amount of residual gripping capacity is critical in the application, pre-testing with the actual part is recommended.



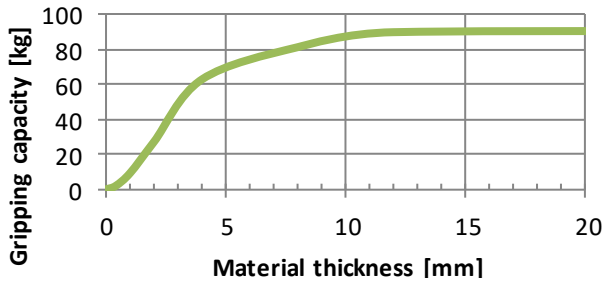
The magnet can be used in various applications: lifters, robot grippers, fixtures, production automation, etc.

More information: www.ixtur.com

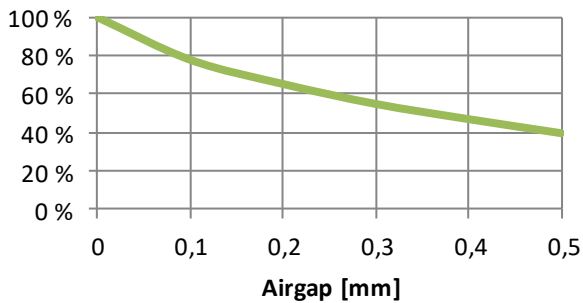
Company • Ixtur Ltd. is a Finnish magnet technology company established in 2010. Ixtur develops and manufactures permanent magnet based lifters, grippers and customer applications for machinery, welding, automation, robotics and material handling. Ixtur is focused on energy-efficient magnet components and applications.

ixTUR®

Gripping capacity vs. material thickness



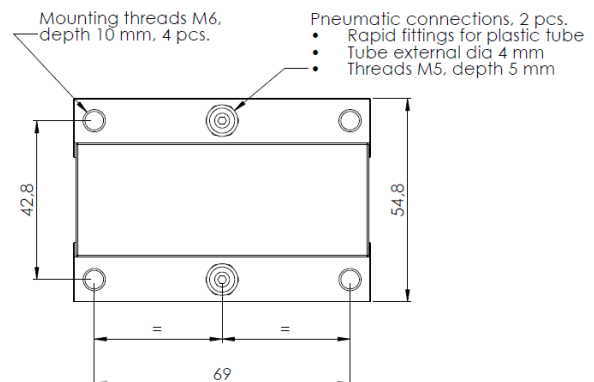
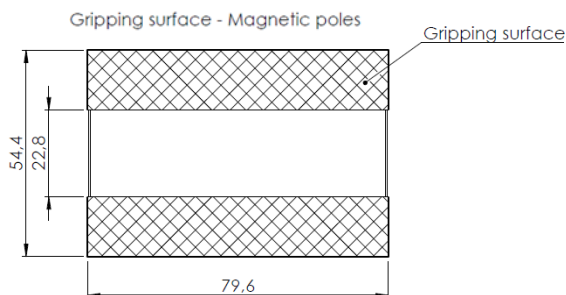
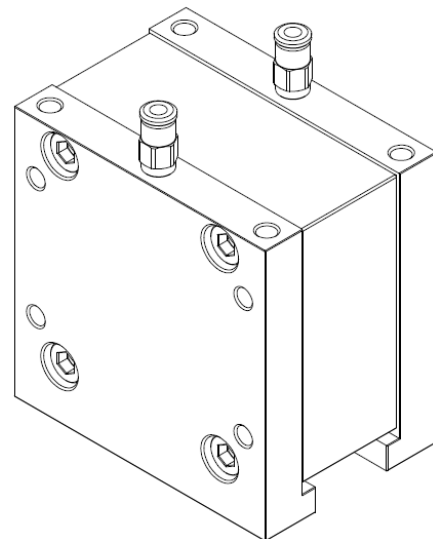
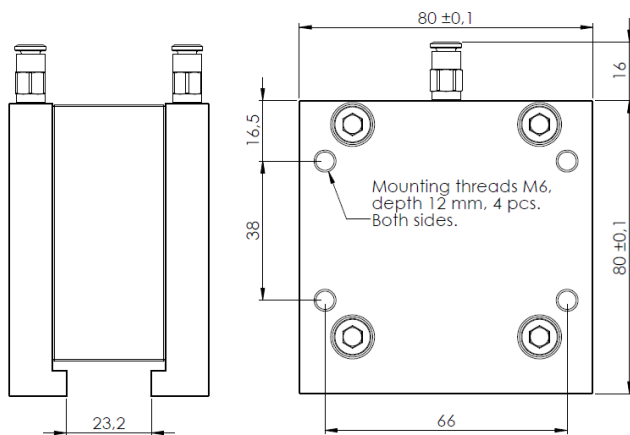
Gripping capacity vs. airgap



Gripping capacity vs. material thickness and airgap

The nominal gripping capacity can be obtained with the material thicknesses stated in the technical specifications table. The magnets can be used also with thinner materials, but have weaker grip, as shown in the graphs on this page. The given gripping capacities are valid for mild steel (S355).

The mounting parts that connect the MRP magnet's side plates together must be made of non-magnetic material e.g. aluminum or stainless steel.



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