



## IXTUR PNEUMATIC MAGNETS

Magnet	Nominal lifting capacity with safety factor of 3	Suitable load diameter	Nominal lifting capacity with round cylinder with safety factor of 3	Max. residual gripping capacity (magnet OFF)	Size ø x H or L x W x H	Weight	Lifting capacity with plate thickness of:			Lifting capacity with flat and thick plate and an airgap of:		
							2 mm	4 mm	8 mm	0.1 mm	0.2 mm	0.4 mm
MAP-6	6 kg <i>t &gt; 4 mm</i>	-	-	0.03 kg	ø 35 x 35 mm	0.19 kg	3.5 kg	6 kg	6 kg	2.7 kg	1.5 kg	0.7 kg
MAP-40	40 kg <i>t &gt; 8 mm</i>	-	-	0.2 kg	ø 65 x 50 mm	0.95 kg	7.2 kg	19 kg	40 kg	26 kg	19 kg	11 kg
MAP-120R	120 kg <i>t &gt; 25 mm</i>	ø > 0 mm	70 kg ø > 200 mm	6 kg	ø 120 x 82 mm	5.8 kg	6.3 kg	20 kg	58 kg	104 kg	92 kg	67 kg
MAP-180	180 kg <i>t &gt; 25 mm</i>	-	-	6 kg	ø 120 x 82 mm	5.8 kg	8.6 kg	27 kg	75 kg	120 kg	92 kg	56 kg
MRP-20NK	20 kg <i>t &gt; 4 mm</i>	ø > 7 mm	13 kg ø > 14 mm	0.1 kg	80 x 55 x 114 mm	2.4 kg	14 kg	20 kg	20 kg	14 kg	8 kg	3.6 kg
MRP-28NK	28 kg <i>t &gt; 12 mm</i>	-	-	1 kg	80 x 55 x 126 mm	2.6 kg	9.7 kg	19 kg	27 kg	14 kg	8 kg	3.9 kg
MRP-30F	30 kg <i>t &gt; 12 mm</i>	-	-	4 kg	80 x 55 x 80 mm	1.9 kg	9 kg	21 kg	27 kg	23 kg	19 kg	14 kg
MRP-31F	31 kg <i>t &gt; 4 mm</i>	-	-	3 kg	80 x 55 x 76 mm	1.74 kg	17 kg	31 kg	31 kg	26 kg	20 kg	10 kg
MRP-31FK	31 kg <i>t &gt; 4 mm</i>	-	-	0.15 kg	80 x 55 x 76 mm	1.74 kg	17 kg	31 kg	31 kg	26 kg	20kg	10 kg
MRP-42K	42 kg <i>t &gt; 12 mm</i>	ø > 20 mm	27 kg ø > 100 mm	1 kg	80 x 55 x 82.5 mm	1.9 kg	11 kg	28 kg	37 kg	29 kg	20 kg	10 kg
MRP-46	46 kg <i>t &gt; 12 mm</i>	ø > 20 mm	30 kg ø > 100 mm	4 kg	80 x 55 x 82.5 mm	1.9 kg	12 kg	31 kg	41 kg	32 kg	22 kg	11 kg
MRP-100NK	100 kg <i>t &gt; 25 mm</i>	ø > 8 mm	120 kg 100 < ø < 300 mm	5 kg	120 x 103 x 140 mm	11 kg	18 kg	73 kg	97 kg	94 kg	83 kg	58 kg
MRP-130F	130 kg <i>t &gt; 25 mm</i>	-	-	40 kg	120 x 103 x 120 mm	9.5 kg	15 kg	39 kg	100 kg	114 kg	102 kg	86 kg
MRP-170	170 kg <i>t &gt; 25 mm</i>	ø > 25 mm	120 kg ø > 120 mm	30 kg	120 x 103 x 140 mm	10.7 kg	15 kg	48 kg	125 kg	153 kg	134 kg	93 kg
MRP-170K	170 kg <i>t &gt; 25 mm</i>	ø > 25 mm	120 kg ø > 120 mm	8 kg	120 x 103 x 140 mm	10.7 kg	15 kg	48 kg	125 kg	153 kg	134 kg	93 kg

### Definition of the terms

**Nominal lifting capacity** is the maximum mass the magnet can lift with a safety factor of 3. The nominal lifting capacity is one third of the nominal gripping capacity.

**Airgap** refers to any non-magnetic material between the magnet's gripping surface and the handled part. Airgap can be caused by e.g. paint, dirt, rust or plastic coating.

**Residual gripping capacity**, i.e. the gripping capacity when the magnet is OFF, varies based on the material and structure of the gripped part. The residual 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. With most of the load shapes, the gripping capacity is only a fraction of the number given in the table above.

*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.*