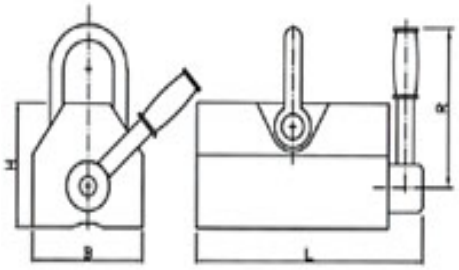
PERMANENT MAGNETIC LIFTER, PML TYPE



Applications:

You can use TOOLIFT permanent magnets as load handling magnets at various workplaces - in production and assembly areas or outdoors. We offer 7 sizes with load capacities from 100 kg to 6000 kg which you can use for both round and flat material in your applications.

Benefits

- Low operating costs
- High level of safety and reliability
- No residual magnetism
- Independent of the mains supply for use anywhere
- Lever control with integrated safety feature to prevent accidental switch-off
- Require little maintenance

Operating principle / Technical details:

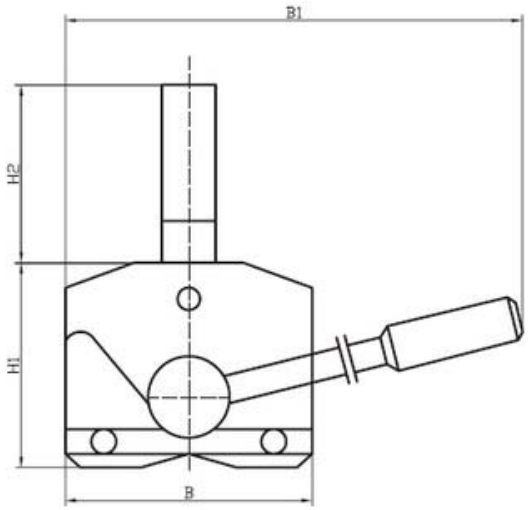
TOOLIFT permanent magnets operate independently of a power supply. Due to the specific arrangement of a group of permanent magnets, the magnet field lines act on the magnet pole and the load, or are deflected in the magnet housing so that the poles are not magnetised. In position "ON", the magnetic field lines are guided via the poles through the load. The magnet is active. In position "OFF", the magnet pole surfaces are neutral and the magnet is therefore switched off. The load lifting magnet consists of individual standardized components. The inside of the magnet comprises the actual magnet system consisting of a reversing magnet system, the magnet assembly and the magnet poles.

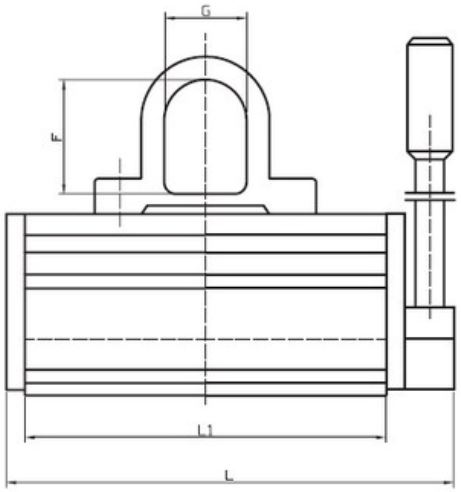
Type	Rated lifting capacity(kg)	Cylindrical lifting capacity (kg)	Max. breakaway force(kg)	B	L	H	R	Operation temperature	N.W. (kg)
PML01	100	30	350	62	92	67	126	＜80	3

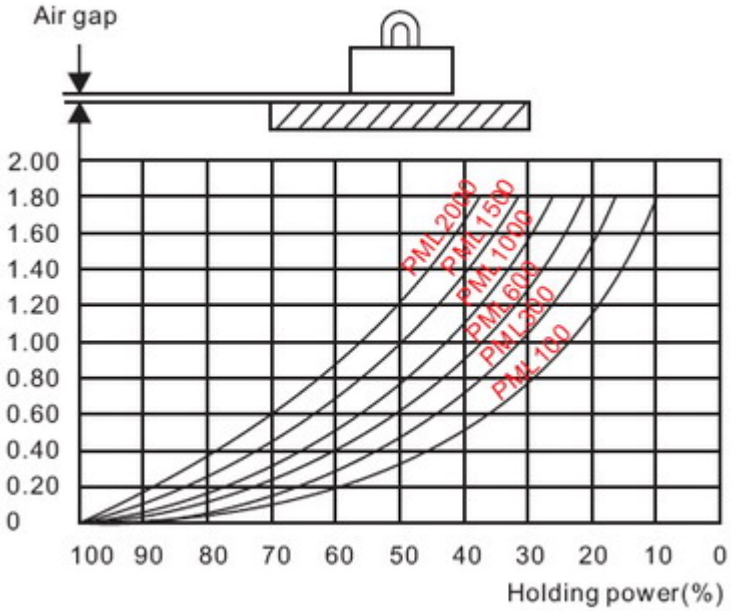
PML03	300	90	1050	92	162	91	155	＜80	10
PML06	600	180	2100	122	232	117	196	＜80	24
PML10	1000	300	3500	176	258	163	285	＜80	50
PML20	2000	600	7000	234	378	212	426	＜80	125
PML30	3000	900	10500	286	458	261	521	＜80	220
PML30	6000	1800	18000	430	600	355	700	＜80	390

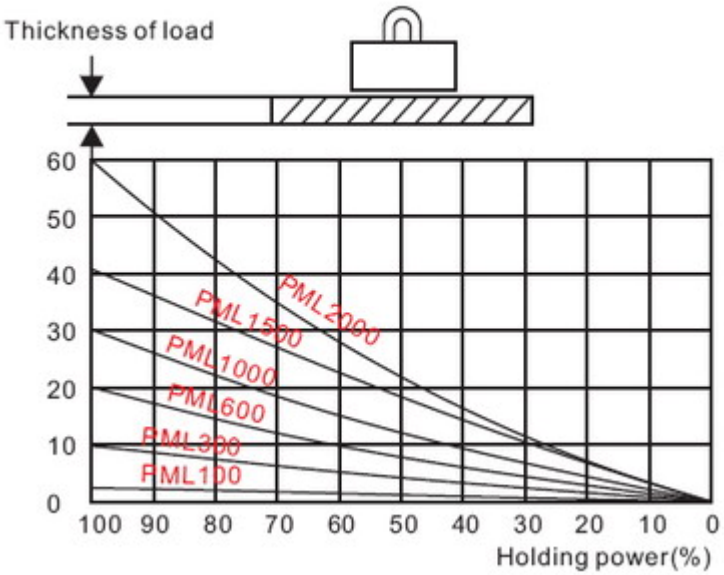
PERMANENT MAGNETIC LIFTER, PML-A TYPE

TOOLIFT permanent magnetic lifter is composed of Nd-Fe-B permanent magnetic material with high performance ferromagnetic system. The handle's movement changes the magnetic force of the ferromagnetic system to achieve adsorption and release to the work piece. There is a steel ring on top of the magnetic lifter for hoisting objects, and a V-shaped groove at the bottom for holding corresponding cylindrical objects.









Unit:mm

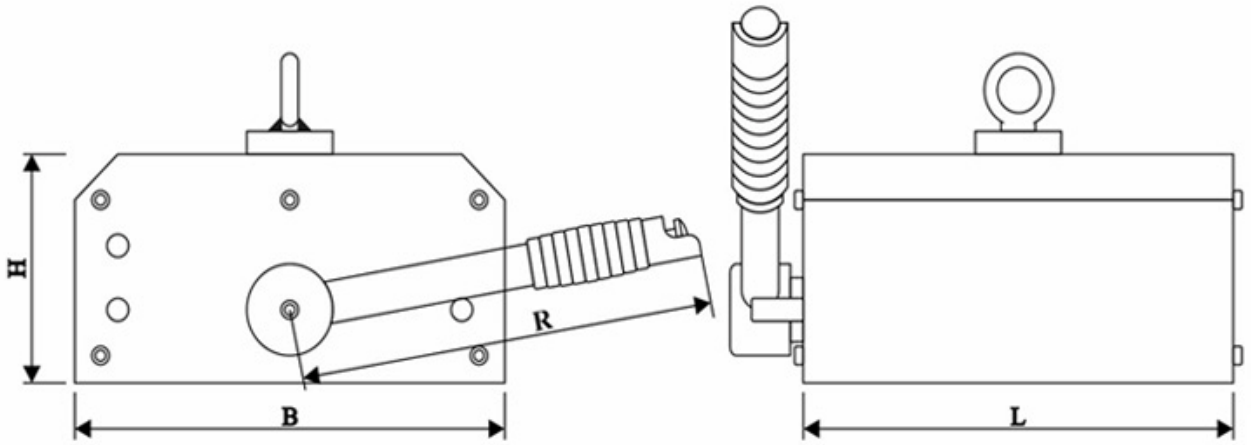
Type	L Length	L1	B Width	H1	H2	B1	F	G	N.W. (kg)
PML100A	120	90	55	60	50	120	35	25	3
PML300A	203	165	87	89	68	223	45	38	10
PML600A	266	226	112	109	86	287	58	45	21
PML1000A	330	290	148	125	95	364	60	52	40
PML1500A	385	330	178	145	118	447	70	65	65
PML2000A	470	420	178	145	118	487	70	65	83

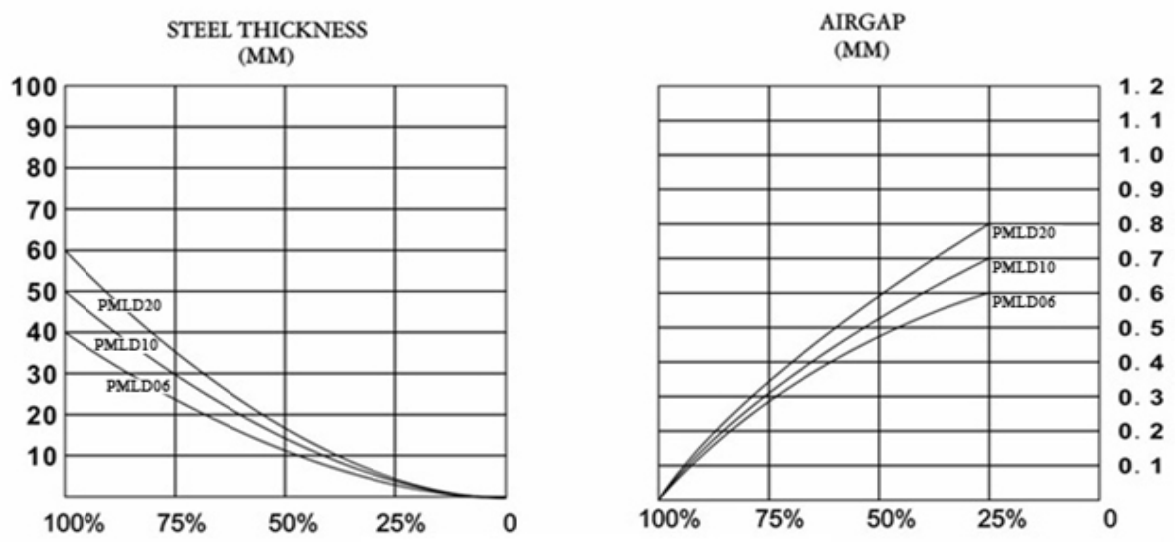
Materials shape	Steel plate			Circular steel products			
Type	Maximum Hangs the lifting capacity (kg)	Minimum thickness (mm)	Maximum length (mm)	Maximum Hangs the lifting capacity (kg)	Maximum diameter (mm)	Maximum length (mm)	Minimum thickness (mm)
PML100A	100	10	1000	50	100	1000	10
PML300A	300	20	1500	150	300	1500	12
PML600A	600	30	2000	300	400	200	20
PML1000A	1000	40	3000	500	450	3000	28
PML1500A	1500	50	3000	750	500	3000	34
PML2000A	2000	60	3000	1000	600	3000	40

PERMANENT MAGNETIC LIFTER, PML-D TYPE

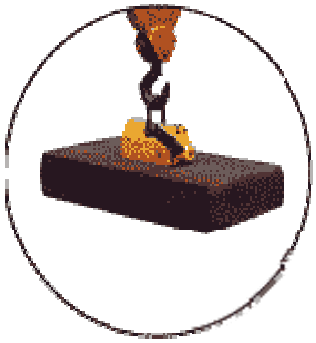
Two-magnetic circuit lifters have strong magnetic path by NdFeb magnetic material. On and off the magnetic path is controlled by turning the manual nozzle. Higher magnetism, less weight and less remaining magnetism when being off, which makes a more reasonable structure. Especially for handle, its new designs enable its damper strength on operating is only 30%-40% compared with the single-magnetic ones. Thin magnetic-inductive material can also be lifted as long as their thickness is more than 5mm. As a result, they are in a more widely use than single-magnetic circuit lifters.

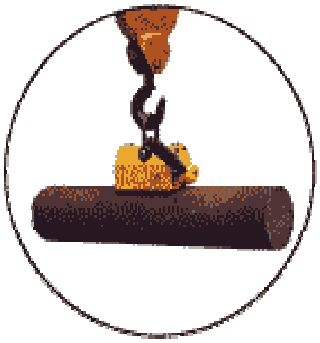
Type	Rated lifting capacity(kg)	Cylindrical lifting capacity (kg)	Max.breakaway force (kg)	B	L	H	R	Operation temperature (℃)	N.W. (kg)
PMLD06	600	200	1800	162	234	78	220	<80	22
PMLD10	1000	300	3000	189	304	87	265	<80	38
PMLD20	2000	600	6000	231	442	107	380	<80	77

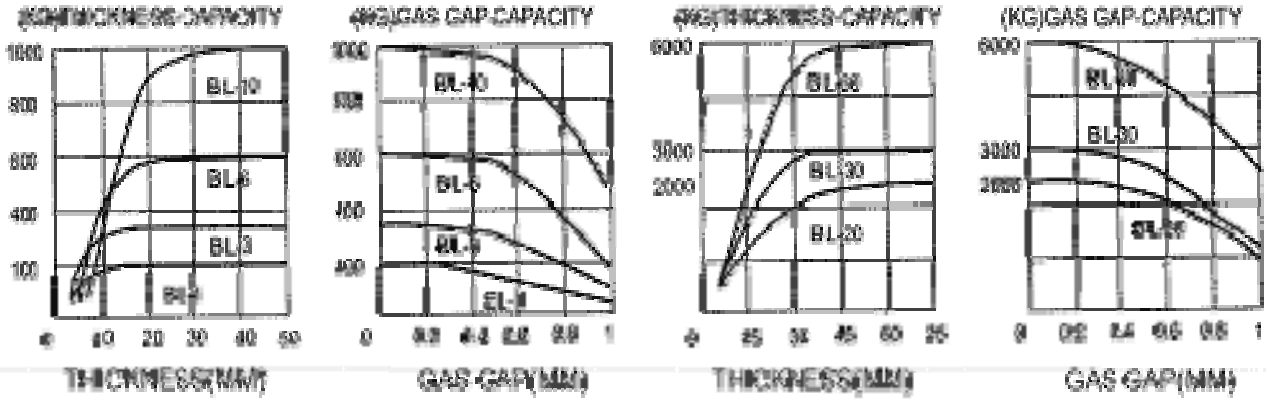




Safety capability curve picture

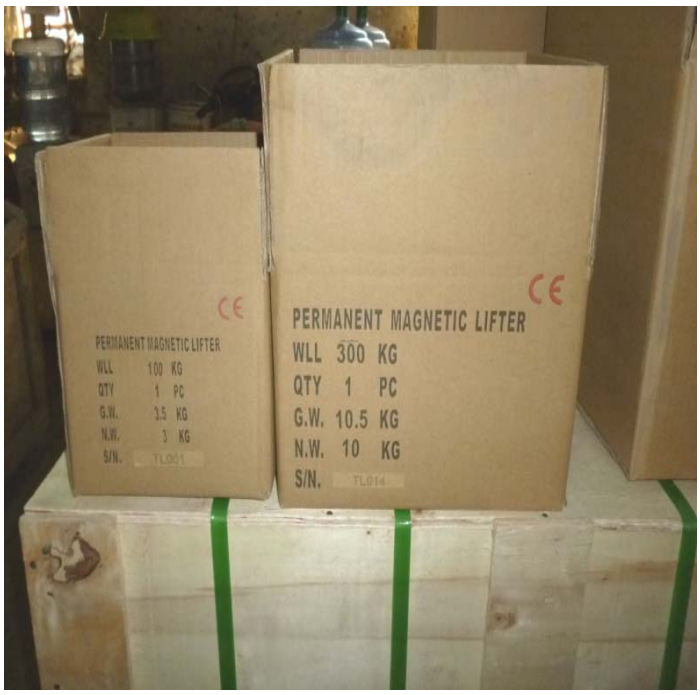






TESTING


PML-10
1000kg
LIFTING MAX
PML-6
600kg
LIFTING MAX


PERMANENT MAGNETIC LIFTER
WLL 100 KG
QTY 1 PC
G.W. 3.5 KG
N.W. 3 KG
S/N.
PERMANENT MAGNETIC LIFTER
WLL 300 KG
QTY 1 PC
G.W. 10.5 KG
N.W. 10 KG
S/N.