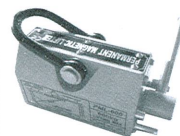


PERMANENT MAGNETIC LIFTER
— USER'S GUIDE —

Load characteristic reference list of permanent magnetic lifters

| Model | Rated lifting capacity (KGF) | Steel plate thickness scope (MM) | Max length of steel plate (MM) |
|----------|------------------------------|----------------------------------|--------------------------------|
| PML-100 | 100 | 5~25 | 500 |
| PML-300 | 300 | 10~30 | 600 |
| PML-400 | 400 | 20~40 | 800 |
| PML-500 | 500 | 25~45 | 900 |
| PML-600 | 600 | 25~50 | 1000 |
| PML-1000 | 1000 | 40~80 | 1300 |
| PML-2000 | 2000 | 50~100 | 1800 |
| PML-3000 | 3000 | 60~120 | 2300 |
| PML-5000 | 5000 | 80~160 | 3000 |
| PML-6000 | 6000 | 85~180 | 3000 |

As to your need, choose the right model of permanent magnetic lifters. Which will help your to handing the most extent. In case of selection of improper Model, sometimes the wrench feels tight (For example, you use large magnetic Lifters to hook thinner steel plates) or sometimes you can't hook the ideal weight (For example, the steel plate thickness not within the hooking scope will lead to that the magnetism can't release entirely).



Contents Instruction



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OPERATING INSTRUCTIONS

NOTE: Please read the Operating Instructions carefully before using this Product. If any doubt remains please contact our company for further details.

1.APPLICATION AND FEATURES

Permanent Magnetic Lifters **Model PML** is mainly used for connecting component and other magnetic material. They are easy for operation, safe in handling, lightly and ingeniously structured. Hence they are widely used as hoisting devices in factories, docks, warehouses and transportation industries. By using them, you can improve your working conditions and increase your working efficiency.

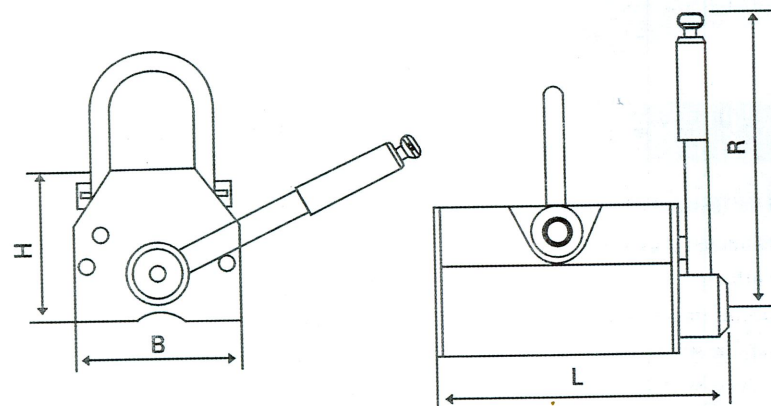
2.CONSTRUCTION AND SPECIFICATION

2.1 Construction : **MODEL PML** Permanent Magnetic Lifter has strong magnetic controlled by turning the manual nozzle. There are shackles on the top of Magnetic component firmly.

2.2 Specifications

| Model | Rated lifting capacity(kg) | Rated Cylindrical lifting capacity(kg) | Max Breakaway force(kg) | Dimensions(mm) | | | | Use temperature (°C) | NW (kg) |
|----------|----------------------------|--|-------------------------|----------------|-----|-----|-----|----------------------|---------|
| | | | | L | B | H | R | | |
| PML-100 | 100 | 30 | 350 | 94 | 62 | 72 | 160 | -40< 80 | 3 |
| PML-300 | 300 | 90 | 900 | 163 | 91 | 95 | 205 | -40< 80 | 9 |
| PML-400 | 400 | 120 | 1200 | 185 | 91 | 95 | 205 | -40< 80 | 11 |
| PML-500 | 500 | 150 | 1500 | 208 | 113 | 115 | 220 | -40< 80 | 18 |
| PML-600 | 600 | 180 | 1800 | 208 | 113 | 115 | 220 | -40< 80 | 19 |
| PML-1000 | 1000 | 300 | 3000 | 265 | 133 | 140 | 250 | -40< 80 | 34 |
| PML-2000 | 2000 | 600 | 6000 | 442 | 153 | 166 | 360 | -40< 80 | 82 |
| PML-3000 | 3000 | 900 | 9000 | 612 | 214 | 217 | 490 | -40< 80 | 120 |
| PML-5000 | 5000 | 1500 | 15000 | 612 | 233 | 286 | 720 | -40< 80 | 290 |
| PML-6000 | 6000 | 1800 | 18000 | 808 | 233 | 286 | 920 | -40< 80 | 385 |

If the above specifications subject to change, we don't notice.



3.OPERATIONS

3.1 During operation, you should clear away the components surface such as rust and burr. The centre line of lifter had better overlap with the centerline of component. Then place the Magnetic Lifting Hoist on the face of component, turn the nozzle from "OFF" to "ON" until "holding". Make sure that the security key on the handle is automatically locked, and then start to hoist.

3.2 During lifting and handing components, overloading is forbidden, Nobody is allowed to pass through under the component held by Magnetic Lifter. Components temperature and ambient temperature shall be between +80 Celsius to -40 Celsius. No strong vibration and impact.

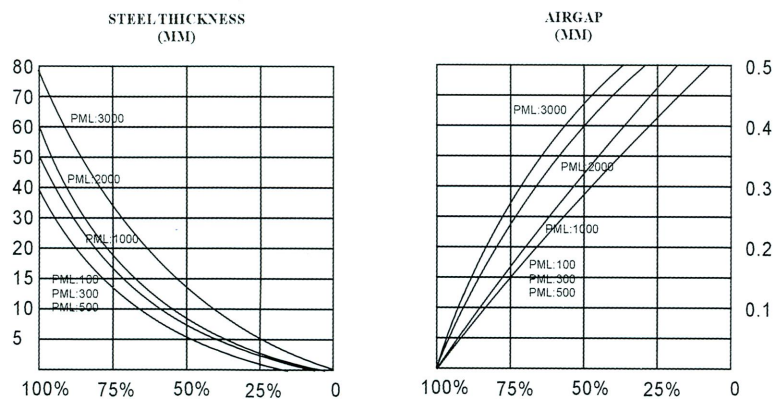
3.3 When lifting and handling cylindrical components, Keeping the cylindrical surfacem contacting the vee slot of lifter on two lines, the actual lifting capacity will generally be 30% of the rated lifting capacity.

3.4 When lifting and handling operation is finished, press down the bottom to disengage the security key from the security pin, then turn the handle "ON" to "OFF" until "Release". The lifter is now in the neutral condition, it can be taken away from the component.

4. Main factors which influence the lifting capacity of permanent Magnetic Lifter.

4.1 Influenced by thickness and surface quality of the component. Before operation, it is necessary to find out the percentage of the steel thickness, lifting capacity according to the thickness of the component and capacity curve (on the following page). If its surface roughness R_a is less than $6.8\mu m$, the lifter surface gap will not exist, the lifting capacity will be 100%. If the surface roughness R_a is above $6.8\mu m$ or even worse, the lifter surface gap should be estimated. Find out the percentage that lifting capacity of the lifter may reach from the air gap lifting capacity curve shown in the performance chart. Combine these two factors and calculating the lifting capacity that the lifter may reach. The curves are on the two sides of lifter.

4.2 Influenced by the composition for steel component. After measurement, if low-carbon steel component is regarded as a reference and the coefficient of lifting capacity is fixed: the coefficient for medium-carbon steel is 0.95; the coefficient for high-carbon steel is 0.90; the coefficient for low-alloy steel is 0.75, and the coefficient for cast iron is 0.50.



Safety capacity curve picture

5. Maintenance and safety notice

5.1 While carrying and using permanent magnetic lifter beware of the bumping and roughness of surface. So as not to influence its property lift-span. After using, the lifter had better be protected by oil.

5.2 Please read the operating instruction carefully and know its property before using this lifter to avoid accident. Please contact our company for further detail.

5.3 Check the quality of the handle button frequently. Make sure that the security key can be moved flexibly and the security pin can be locked firmly.

5.4 When Magnetic Lifting Hoist is not in contact with ferromagnetic, material of component, don't turn the nozzle.

5.5 Maintenance must be strictly according to the instructions by the professional authorized technical personnel.

5.6 Prohibit modifying the products to avoid affecting their safety.

5.7 Must take a test for the capability every year and check the safety of all of the components in order to ensure its use capability.

5.8 If its main body and turning part is damaged so that it can not work, it should be discarded as useless.