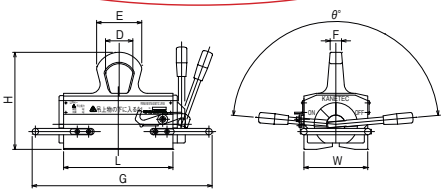
Model LPH PERMANENT MAGNETIC LIFMA*

The new model is released, which is made smaller and lighter, and which handle rotating operation for thinner sheets lighter , and the safety performance is facilitated by which safety stopper is equipped.

All models for steel plates and round steels!!



Precautions for use

The permanent magnetic Lifma LPH Series are not of waterproof construction. Ensure no water will enter or stick to them. Rust and scratches on the attractive face affect the holding power adversely. Repair it periodically.

[Application]

Permanent magnetic type lifting magnets used as a lifting section of cranes and hoists for transportation of steels in warehouses or machining shops or for mounting and dismounting workpieces to and from machine tools. These are suitable for transporting semi-finished products having a flat surface such as machine parts, press dies and plastic molds and for transporting mill scale steel plates and flat steels.

[Features]

- The larger size model, which lifting capacity is improved while it is made smaller and its weight is made lighter, is newly added to release
- By making its handle rotating operation lighter than the conventional type, the ON/OFF operation for thinner sheets, which was difficult particularly with the larger model, is now possible.
- As well as the conventional products, V groove is provided on the attractive face and it respond to various kinds of work pieces such as steel plate, round bar, pipe and so on.
- By making the angle of handle rotation wider, its stability, safety feeling when it is operated, has been improved.
- In addition to handle lock, which has been supplied, safety stopper is equipped as standard specifications. Therefore, double safety performance is facilitated.
- It is easy to move and/or position the Lifma by guards on the both of forward and rear sides.

[mm(in)]

Model	Lifting Capacity		Dimensions								Mass
	Steel Plate	Round Steel	W	L	H	G	D	E	F	θ	
LPH-150	150kg/ 330 lb	100kg/ 220 lb	95(3.74)	110(4.33)	167(6.57)	240(9.44)	39(1.53)	59(2.32)	14(0.55)	130(5.11)	10kg/22.0 lb
LPH-300	300kg/ 661 lb	200kg/ 440 lb	140(5.51)	140(5.51)	191(7.51)	295(11.6)	45(1.77)	78(2.32)	20(0.78)	170(6.69)	19kg/41.8 lb
LPH-600	600kg/1323 lb	400kg/ 881 lb	140(5.51)	240(9.44)	213(8.38)	395(15.5)	60(2.36)	100(3.93)	25(0.98)		30kg/66.1 lb
LPH-1000	1000kg/2205 lb	600kg/1323 lb	180(7.08)	320(12.5)	284(11.1)	505(19.8)	65(2.55)	110(4.33)	30(1.18)	175(6.89)	80kg/176 lb
LPH-1500	1500kg/3307 lb	800kg/1764 lb	180(7.08)	400(15.7)	304(11.9)	585(23.0)	75(2.95)	130(5.11)	30(1.18)		100kg/220 lb
LPH-2000	2000kg/4410 lb	900kg/1984 lb	205(8.07)	500(19.6)	319(12.5)	695(27.3)	80(3.14)	150(5.90)	35(1.37)		130kg/286 lb

※The lifting capacity is indicated by a value that is a third of the maximum holding power (safety factor 3). ※For the lifting standard, see page below.

Lifting standards

■Steel plate lifting standard (Flat steel plates)

[mm(in)]

Thickness	Model (LPH)					
	150	300	600	1000	1500	2000
t6	□750(29.5) 600(23.6)×1300(51.1)	□1250(49.2) 900(35.4)×1700(66.9)	□1250(49.2) 1200(47.2)×1300(51.1)	□1450(57.0) ※ 1500(59.0)×1400(55.1)		
t12	□850(33.4) 600(23.6)×1200(47.2)	□1250(49.2) 900(35.4)×1700(66.9)	□1500(59.0) 1200(47.2)×1900(74.8)	□1600(62.9) 1500(59.0)×1650(64.9)	□1650(64.9) ※ 1500(59.0)×1800(70.8)	□1800(70.8) ※
t25	□650(25.5) 600(23.6)×720(28.3)	□950(37.4) 900(35.4)×1000(39.3)	□1300(51.1) 1200(47.2)×1400(55.1)	□1550(61.0) 1500(59.0)×1600(62.9)	□1700(66.9) 1500(59.0)×1900(74.8)	□1800(70.8)
t50	□500(19.68) 600(23.6)×400(15.7)	□700(27.5) 900(35.4)×550(21.6)	□1000(39.3) 1200(47.2)×800(31.5)	□1300(51.1) 1500(59.0)×1200(47.2)	□1550(61.0) 1500(59.0)×1600(62.9)	□1750(68.8) 1800(70.8)×1700(66.9)
t100	□350(13.7) 600(23.6)×200(7.87)	□450(17.7) 900(35.4)×200(7.8)	□750(29.5) 1200(47.2)×450(17.7)	□1000(39.3) 1500(59.0)×650(25.5)	□1100(43.3) 1500(59.0)×800(31.4)	□1300(51.1) 1800(70.8)×950(37.4)

※…The thinner the thickness of plates are, the harder the handle operation becomes. The return of the handle at the time of release is faster.

■Round steel lifting standard (Round steel)

[mm(in)]

Thickness	Model (LPH)					
	150	300	600	1000	1500	2000
Min. dia	ϕ 40(1.57)×2100(82.6)L	ϕ 50(1.96)×3000(118.1)L	ϕ50(1.96)×3000(118.1)L	ϕ100(3.93)×3000(118.1)L	ϕ100(3.93)×3000(118.1)L	ϕ150(5.90)×3000(118.1)L
Max. dia	ϕ200(7.87)× 300(11.8)L	ϕ400(15.7)× 200(7.87)L	ϕ500(19.6)× 250(9.84)L	ϕ500(19.6)× 300(11.8)L	ϕ500(19.6)× 400(15.7)L	ϕ500(19.6)× 450(17.7)L
Pipe allowable dia※	ϕ40(1.57)~200(7.87)	ϕ50(1.96)~600(23.6)	ϕ50(1.96)~600(23.6)	ϕ100(3.93)~700(27.5)	ϕ100(3.93)~700(27.5)	ϕ150(5.90)~700(27.5)

※…Kindly take note carefully that the capacity varies according to pipe wall thickness. The thinner the thickness of plates are, the harder the handle operation becomes.The return of the handle at the time of release is faster. Oval and bent pipes, even though they are short, are dangerous to lift. The lifting capacity varies according to diameters of round steel. When a workpiece is longer than 3 m, it is dangerous to lift with one unit only. At the maximum diameter, workpieces shorter than the attractive face cannot be lifted.

Important notice : These standards are made as a guide for actual work and do not mean to guarantee the absolute safety. The magnets can not always generate its full holding capacity due to the other factors than those in the above table. Please check them carefully before using these lifting magnets.

■Simple equipment to test the holding power (Special fabrication)

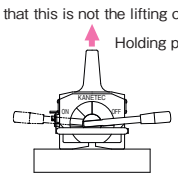
The equipment which is simple manual hydraulic pump type, can measure the holding power of your Lifma.

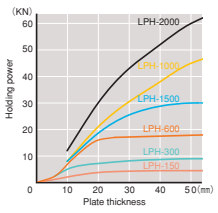
※Special fabrication is required estimate

■Relation between steel plate length and holding power

(Material SS400, surface roughness ▽▽)

※Note that this is not the lifting capacity.

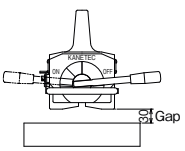


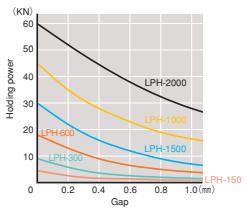


■Relation between gaps and holding power

(Material SS400, thickness 50 mm, surface roughness ▽▽)

※Note that this is not the lifting capacity.





Kindly take note carefully that the capacity of the Lifma changes depending on the thickness of material,clearance between the material and magnet and the quality of the material.