

PM NEOLIFTER 'PR' SERIES

MANUAL PERMANENT MAGNET LIFTER



DESCRIPTION

LIFTON MAGNETS NEOLIFTER PR SERIES

In the series of LIFTON LIFTERS are the Neodymium (NdFeB) permanent magnet based NeoLifters PR Series. All LIFTON lifting magnets are simple to operate and almost maintenance free. High quality and durable materials are used for manufacture of these lifters. The PR series are specifically designed to address the needs of radial and round job lifting. These are designed with an exaggerated V shape to cater to a larger range of diameters of round parts. Consequently, the lifting capacity of the PR range for rounds parts is higher than other lifting magnets.

POINTS TO NOTE

In spite of the excellent properties of LIFTON Lifters, when working with the permanent magnet range a few points must be noted.

SURFACE CORROSION OF WORKPIECE

There is a reduction in the lifting capacity when the surface of the material is painted or coated as the pole plate cannot come in direct contact with the ferrous surface. This distance is called the air-gap. The air-gap size determines the lifting capacity.

SAFETY FACTOR

LIFTON strictly adheres to a safety factor of at least 3:1 for all lifting magnets.

PROPERTIES AND DIRECTIONS OF USE

While the surface condition i.e. the area of contact is very important, in general; a smooth flat surface is good enough. The magnet should always be hung from the centre of the job i.e. used in equilibrium as far as possible.

JOB THICKNESS CHART

The surface condition, temperature, material property of the material to be lifted play just a vital role as the thickness of the job. If there is insufficient thickness of the material, there may be a reduction in overall lifting capacity of the permanent magnet lifter as per the table below.

	THICKNESS (mm)	RATED CAPACITY (Safe Lifting Weight or SWL)							
		5000Kg	3000Kg	2000Kg	1000Kg	500Kg	300Kg	200Kg	100Kg
T1	70	100%							
T2	60	90%	100%						
T3	50	85%	90%	100%	100%				
T4	45	80%	85%	90%		100%			
T5	40	70%	80%	85%	90%				
T6	35	60%	70%	75%	85%	90%			
T7	30	50%	60%	65%	80%		100%		
T8	25	40%	50%	55%	70%	80%			
T9	20	30%	40%	45%	60%	75%	90%	100%	100%
T10	15	20%	30%	35%	50%	60%	70%	90%	90%
T11	10	10%	20%	25%	35%	45%	50%	70%	70%
T12	5	5%	10%	15%	20%	25%	30%	40%	40%

- Testing plate thickness 55mm
- Lifting capacity depends with - Thickness of load - Roughness of job surface - Hardness of material - Contact area of magnet - Temperature of the load

Model	Rated lifting -Flat (kg)	Rated lifting -Round (kg)	Pull-off force (kg)	L (mm)	B (mm)	H (mm)	R (mm)	Weight (kg)
NML-PR-100	100	70	300	125	85	127	145	3.5
NML-PR-300	300	210	900	200	123	179	195	12.5
NML-PR-600	600	420	1800	278	194	246	220	32.5
NML-PR-1000	1000	700	3000	330	279	333	315	80
NML-PR-2000	2000	1400	6000	450	371	444	460	200
NML-PR-3000	3000	2100	9000	525	444	531	735	350

