POWERTEX

GB Instruction for use

POWERTEX

Permanent Lifting Magnet PLM

User Manual

UMPLM20220525GB

POWERTEX Permanent Lifting Magnet PLM 100 kg – 2 ton
Instruction for use (GB) (Original instructions)

These instructions contains all the information required for safe and optimum use of the lifting magnet. Read the instructions carefully and follow the directions. Keep the instruction in a safe place close to the workplace.

On delivery check that the magnet is undamaged and complete. If the equipment is damaged or incomplete, contact your supplier immediately.

The complete delivery consists of:
- POWERTEX Magnet 100 kg, 300 kg, 600 kg, 1 t or 2 t.
- Test certificate
- Operating and maintenance instructions incl. EC Declaration of Conformity

Never use a damaged or incomplete magnet!

The guarantee is not applicable to shortcomings that can be wholly or partially attributed to:
- Failure to comply with the operating and maintenance instructions or use considered as being other than normal user.
- Normal wear.
- Modifications or repairs not performed by us.

In all correspondence regarding your lifting magnet always state the information displayed on the type plate.

Names of the most important parts of the lifting magnet

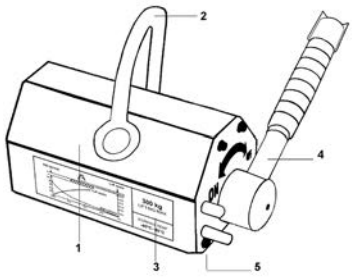
1 Magnet

2 Lifting eye

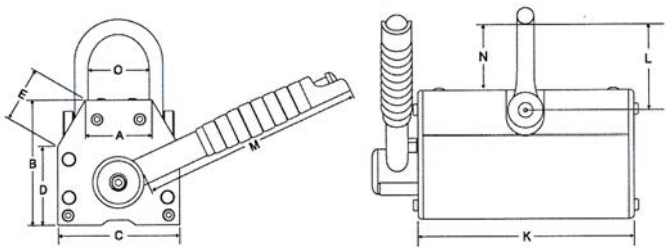
3 Type- and instruction plate

4 Handle

5 Pole shoes



Technical specifications and dimensions



Rated output flat steel	100 kg	300 kg	600 kg	1 ton	2 ton
A mm	29	39	51	64	92
B mm	71	96	118	140	188
C mm	64	88	118	148	188
D mm	47	63	74	90	122
E mm	29	41	57	66	82
K mm	92	165	216	286	397
L mm	54	78	114	126	150
M mm	130	158	199	246	375
N mm	45	63	94	106	120
O mm	31	45	57	73	100
Max. handle turning force kgf	< 4	< 8	< 8	< 16	< 16
Net weight kg.	3	10	20	40	95

Safety
Warning for incorrect operation or action that could have physical injury or damage to the equipment as a result.

Safety instructions

1. Never use this magnet before these instructions have been read and understood.
2. Persons fitted with a pacemaker or other medical equipment should never use the magnet without first consulting a medical specialist.
3. Never remove warning or instruction plates from the magnet.
4. Do always wear safety glasses, gloves, protective footwear and a helmet.
5. Never stand or move under the load.
6. Never transport over or close to people.
7. Never use the magnet as an aid to lifting, supporting or transporting persons.
8. Warn bystanders when beginning to lift and load.
9. To prevent the hook from slipping out of the eye hook we recommend the use of a lifting hook equipped with a safety latch.
10. Ensure that the weight and dimensions of the load to be lifted do not exceed the maximum permitted values.
11. Never use a damaged or poorly operating magnet.
12. Only switch the magnet on when it has been placed on the load.
13. Only switch the magnet off when the load has been placed on a stable surface.
14. Never lift more than one work piece at a time with this magnet.
15. Never leave a hoisted load unattended.
16. The temperature of the load or the surroundings must never exceed 80°C.

Determining the workload limit (WLL)

The workload limit of type 100 = 100 kg.
The workload limit of type 300 = 300 kg.
The workload limit of type 600 = 600 kg.
The workload limit of type 1000 = 1000 kg.
The workload limit of type 2000 = 2000 kg.

The workload limit may become less as a result of:
1. Air gaps between the load and the magnet, caused by paper, dirt, paint, burrs, damage, surface roughness etc. either on the load or the magnet.
2. Thin loads. The thinner the load, the less the lifting capacity.
3. Length and width of the load. Long, wide parts that hang outside the magnet protrusions, resulting in an air gap. This is called the peeling effect.

Never exceed the maximum weight and/or dimensions for the material thickness stated in the table.
Never place the magnet over a large hole or bore.

4. The load material type. In general it applies that: high alloy percentage = low lifting capacity.
Some alloys are non-magnetic (e.g. stainless steel 304).
5. A small contact surface between pole shoes and load. In case the load does not fully cover the pole shoes, the lifting capacity will be reduced by the same percentage.

A workpiece should ideally cover both pole shoes, but if this is not possible always to an equal amount.

6. The magnet must remain fully horizontal during transport.

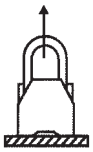
Unsafe applications:

Never lift several workpieces simultaneously (e.g. thin sheets)

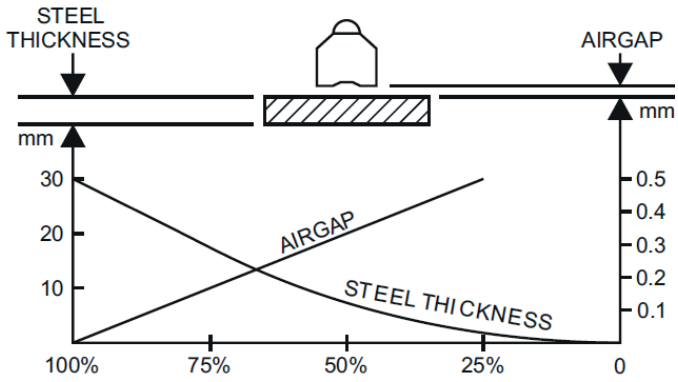
Never lift a load on the smallest side.

Never place the magnet with the long side lengthwise on a flexible workpiece (peeling effect).

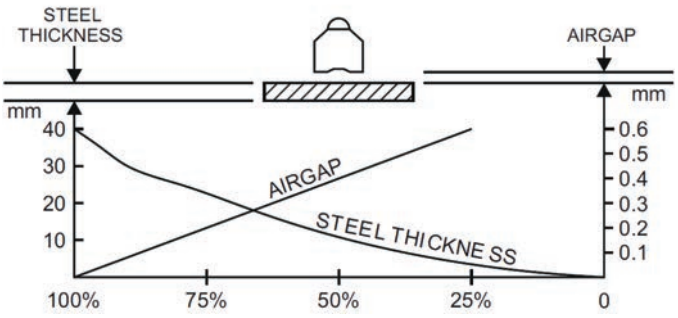
Not approved for vertical side lifting.

Size		
100	100 kg	40 kg
300	300 kg	125 kg
600	600 kg	250 kg
1000	1 t	400 kg
2000	2 t	800 kg

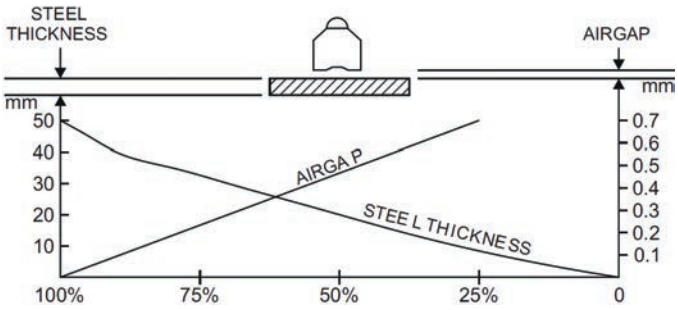
POWERTEX rated output 100 kg



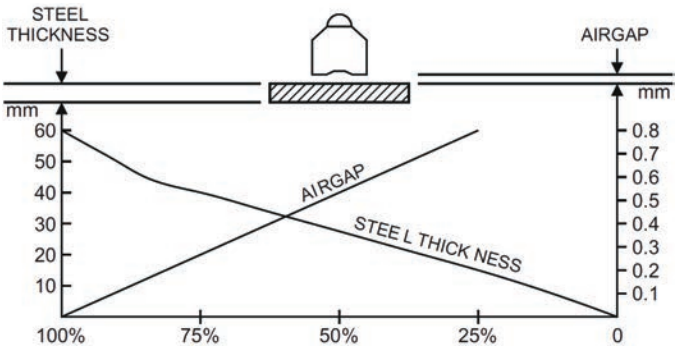
POWERTEX rated output 300 kg



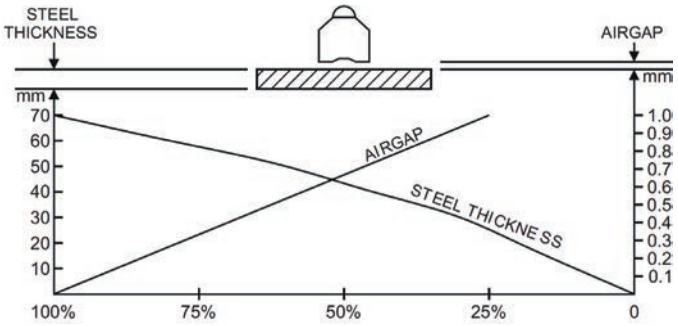
POWERTEX rated output 600 kg



POWERTEX rated output 1 t



POWERTEX rated output 2 t

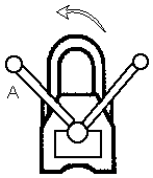


Operation
Read the safety instructions before operating the magnet.

1. Check the condition of the magnet each time before use.
Wipe the pole shoes on the magnet and the contact surface of the workpiece clean. If necessary file off any burrs or irregularities.

2. Place the magnet on the workpiece and position the magnet in such a manner that it remains horizontal during lifting (determine the centre of gravity of the workpiece as accurately as possible).

3. Grasp the handle and switch the magnet on by placing the handle in position A.
Allow the spring pressure to pull the handle back into the locked position.



Check this! Only now the handle can be released.

Never try to switch the magnet ON or OFF while it is sitting on very thin, on non-magnetic material, or in the air.

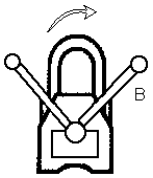
4. Lift the load several centimeters and give the load a firm push to ensure that it is well gripped.

Never stand under the load!

5. Guide the load by holding the corners.
Avoid collisions, swinging and shocks.

Never stand under the load and keep the load horizontal!
Lower the load onto a stable surface.

6. Grasp the handle bal and pull the handle out of its locked position.
Switch the magnet off by placing the handle in position B.
Allow the spring pressure to pull the handle back into the locked position.



Check this! Only now the handle can be released.

Caution: light workpieces may stick to the magnet after it has been switched off!
Never release the handle before same is fully locked.

Inspection and maintenance of the lifting magnet

1. Before use
Check the entire magnet visually. Brush the pole shoes of the magnet and the contact surface of the workpiece clean.
If necessary file off any burrs or irregularities. Do not use the magnet if you have discovered any defects. Check the operation of the handle and locking plate.

2. Weekly
Check the entire magnet, including the hook eye, lifting cover and bolts for deformities, cracks or other defects. If the lifting eye is deformed or more than 10% worn off, it should be replaced. Check the presence and legibility of the type plate and instruction plate.
Check the pole shoes. If they are more than 10% damaged (pits, burrs etc.) the magnet should be returned to your supplier or an authorised agent for regrinding. Lifting capacity is checked following this operation.

3. Annually
Have the lifting capacity of your magnet checked by your supplier or an authorised agent at least once a year.

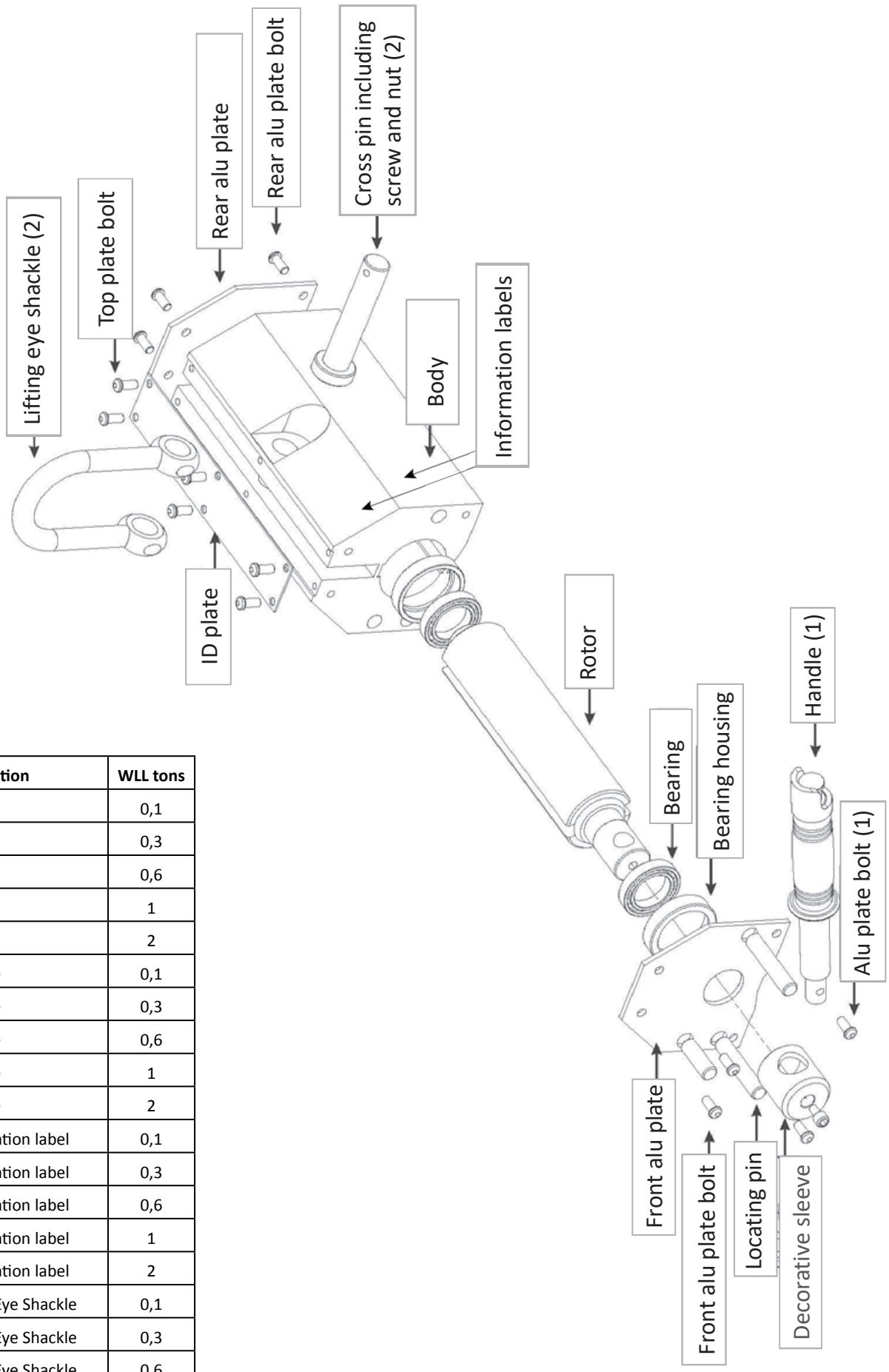
End of use treatment and disposal:
Dissemble product, separating the magnetic material from other components.
Contact your local metal/industrial recycling collector.
For further assistance please contact us.

Disclaimer
We reserve the right to modify product design, materials, specifications or instructions without prior notice and without obligation to others.

If the product is modified in any way, or if it is combined with a non-compatible product/component, we take no responsibility for the consequences in regard to the safety of the product.

EC Declaration of conformity
SCM Citra OY
Asessorinkatu 3-7
20780 Kaarina, Finland
www.powertex-products.com
hereby declares that the POWERTEX product as described above is in compliance with EC Machinery Directive 2006/42/EC & EN 13155.

UK Declaration of conformity
SCM Citra OY
Asessorinkatu 3-7
20780 Kaarina, Finland
www.powertex-products.com
hereby declares that the POWERTEX product as described above is in compliance with the Supply of Machinery (Safety) Regulations 2008 & BS EN 13155.



Description	WLL tons
Handle	0,1
Handle	0,3
Handle	0,6
Handle	1
Handle	2
ID Plate	0,1
ID Plate	0,3
ID Plate	0,6
ID Plate	1
ID Plate	2
Information label	0,1
Information label	0,3
Information label	0,6
Information label	1
Information label	2
Lifting Eye Shackle	0,1
Lifting Eye Shackle	0,3
Lifting Eye Shackle	0,6
Lifting Eye Shackle	1
Lifting Eye Shackle	2

CertMax+

The CertMax+ system is a unique leading edge certification management system which is ideal for managing a single asset or large equipment portfolio across multiple sites. Designed by the Lifting Solutions Group, to deliver optimum asset integrity, quality assurance and traceability, the system also improves safety and risk management levels.

Marking

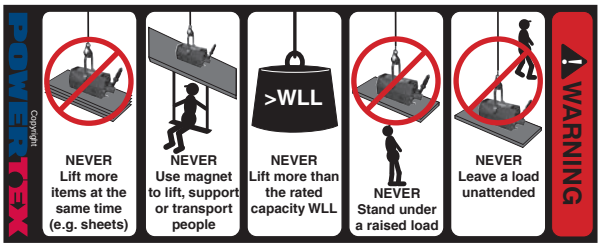
The POWERTEX Permanent Lifting Magnet is equipped with a RFID (Radio-Frequency IDentification) tag, which is a small electronic device, that consist of a small chip and an antenna. It provides a unique identifier for the block.

The POWERTEX Permanent Lifting Magnet is **CE** and **UKCA** marked

Standard: EN 13155

Warning tag

The warning tag shows some specific and important situations, in which you must pay special attention, when using POWERTEX Permanent Lifting Magnet.



User Manuals

You can always find the valid and updated User Manuals on the web.
The manual is updated continuously and valid only in the latest version.

NB! The English version is the Original instruction.

The manual is available as a download under the following link:
www.powertex-products.com/manuals

POWERTEX

www.powertex-products.com