Datasheet UltraLift TP

ECLIPSE MAGNETICS

At A Glance





Our UltraLift TP lifter range has been designed specifically to be used in the safe lifting of ferrous materials in the forms of thin plate and thin pressings.

The performance of these units is application specific. Never exceed the WLL (Working Load Limit) - formerly the SWL (Safe Working Load). The Safety Factor for lifting is 3:1 for this range. Always use LOLER, PUWER, ASME B30.20 and H&S advice.

The UltraLift TP range is used to lift thin ferrous sheets, thin ferrous pressings and ferrous sections all with thicknesses ranging from 5mm thick up to 10mm thick. The WLL/SWL for thin ferrous sheets varies from up to 75kg (165lb) for the TP150 rising to up to 400kg (880lb) for the TP300. Please note that the WLL/SWL varies with sheet thickness. These figures are based on lifting high quality mild steel of the stated sheet thickness with no air gap in the way (see table on next page for further details).

The UltraLift TP Thin Plate lifter can also be used for lifting single sheets from the tops of stacks of sheets due to the design of the magnetic pathways. The TP range is not suitable for the lifting of round bar - please look at the UltraLift + (UltraLift Plus), UltraLift LM and UltraLift E ranges for round bar lifting.

Maintain Health & Safety at all times. Perform a small safety lift first. Lifting performance could vary depending on the application. Performance will vary with air gap, steel shape (steel thickness and/or diameter), steel type (permeability), surface finish and temperature. Lift loads vertically with load not unbalanced, avoiding any sudden movements. Thinner and wider materials may bend/flex risking peel and lift failure - use spreader beams for wider loads and for loads that bend/flex. Do not use any lifter if it appears to be damaged. Inspect the lifter at least annually. We can inspect and service/repair our Lifters for you.

Benefits

- No Power Supply required
 Locking switch handle safety mechanism
- 3:1 Safety Factor for lifting
- Lifts Thin Ferrous Sheet and Pressings
- Can lift a single ferrous sheet from the top of a stack of ferrous sheets

Performance

Magnetic Performance	Up to 400kg (880lb) WLL (SWL) (value varies with thickness) - see next page
Magnet Type	Permanent Magnet Lifter
Temperature Range	-10°C to +40°C (14°F to +104°F)

Suitability

Suitable ProductsFerrous materials (e.g. mild steel)Suitable LocationExample - factory shopfloor / production line

Materials

Magnetic Material	Proprietary Permanent Magnet grade material
Other Parts	Various, including Mild Steel, Aluminium, Plastic

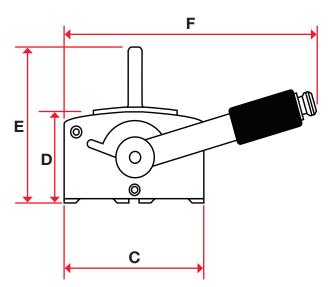
Maintenance

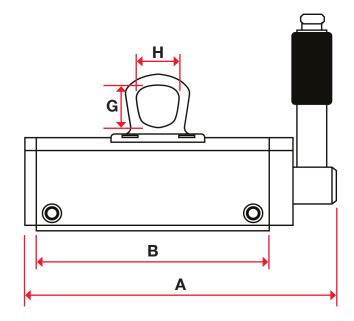
- As part of LOLER, PUWER, ASME B30.20 and H&S advice, you need to regularly inspect Lifters to ensure they are not damaged and are suitable for lifting the parts
- Annual inspection is a minimum requirement
- We can inspect and service / repair our Lifters for you

Alternatives

- UltraLift+ (maximum safety lifting) for thicker ferrous plate and round bar
- UltraLift LM for thicker ferrous plate & round bar (with 90° lift frame variant)
- UltraLift E for thicker ferrous plate and round bar







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										5mm Thin Plate		6mm Thin Plate		8mm Thin Plate		10mm Thin Plate		
Product Number	A	В	Dim c	ensi D	ons (E	(mm) F		н	Self Weight (kg)	Flat Plate WLL / SWL* (kg)	Maximum Material Length (mm)	Units per Pack						
TP150	202	150	101	74	126	181	34	26.7	8	75	1500	100	1500	150	1500	200	1500	1
TP300	352	300	101	74	126	181	34	26.7	15	150	2000	200	2000	300	2000	400	2000	1

* Please note that the Working Load Limit (WLL) is now used instead of Safe Working Load (SWL). The Lifting force values shown include the 3:1 safety factor and have been based on using the stated Thin Plate thicknesses of high magnetic permeability steel with no air gaps. Air gaps, thinner materials and materials with lower magnetic permeability can all reduce the pull force a lifter can actually achieve. Please note that the achievable pull force is reduced when lifting thinner mild steel plate. You must follow LOLER, PUWER, ASME B30.20 and H&S advice. You should always check for a downrate, factor in any downrate to then perform a safety lift, then perform a full lift only after a successful safety lift.

For further assistance, please contact sales@eclipsemagnetics.com

Although we have made every attempt to provide accurate information, we do reserve the right to change any of the information in this document without notice.

We cannot accept any responsibility or liability for any errors or problems caused by using any of the information provided.

Conversions Guide:-

 $1 \text{kg} \approx 2.204 \text{lb} \approx 9.806 \text{N}$ $1 \text{lb} \approx 0.453 \text{kg} \approx 4.448 \text{N}$ $1 \text{N} \approx 0.101 \text{kg} \approx 0.224 \text{lb}$

10mm ≈ 0.393in (≈ ²⁵⁄₆₄in) 1in ≈ 25.4mm

(the above conversion values are rounded down)

