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Translation of Original operating manual

pewag profilift

Weld-on lifting point PLE pewag profilift eta (PLE/N)

Used for welding onto machine parts or truck bodies. Ideal for mounting lifting slings or lashing devices, mind welding instructions! The user must have access to the operating manual until withdrawal of the connecting links from service. The manual is updated continuously and valid only in the latest version.
The manual is available as a download under the following link: www.pewag.com

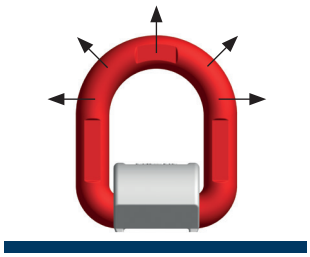
Method of lifting										
No. of legs	1	1	2	2	2	2	3+4	3+4	2	3+4
Angle of inclination	0°	90°	0°	90°	0°–45°	45°–60°	0°–45°	45°–60°	asym-metrical	asym-metrical
Code	**Load capacity[1] [kg]**									
PLE/N 6	1,120	1,120	2,240	2,240	1,500	1,120	2,300	1,600	1,120	1,120
PLE/N 8	2,000	2,000	4,000	4,000	2,800	2,000	4,200	3,000	2,000	2,000
PLE/N 10	3,150	3,150	6,300	6,300	4,400	3,150	6,600	4,700	3,150	3,150
PLE/N 13	5,300	5,300	10,600	10,600	7,400	5,300	11,200	7,900	5,300	5,300
PLE/N 16	8,000	8,000	16,000	16,000	11,300	8,000	16,900	12,000	8,000	8,000
PLE/N 22	15,000	15,000	30,000	30,000	21,000	15,000	31,800	22,500	15,000	15,000

[1] max. transport weight (G)
Safety factor 4

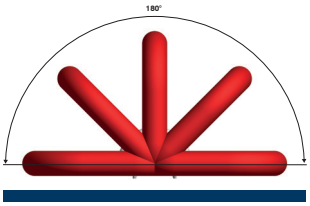
Important: Subject to technical changes!

Intended use

Correct choice of size and number of lashing points has to be observed respective to the weight to be lifted. After welding the red ring must be able to rotate in an area of 180° without jamming (see picture 2). Load only in the specified direction (see picture 1). Temperature: -20 °C to 400 °C.



Picture 1



Picture 2

Information for use

- Lifting points should be used by a competent authorized person.
- Visual inspection before first usage (see maintenance instruction).
- Before every usage check for damages on screw and thread – lifting points must be rotatable and hinged easily.
- Load only in the specified direction (see picture 1) with WLL acc. to table.
- Please note restriction in application for eventually appearing difficulties in load.
- Connected lifting gear (e.g. hook) must be flexible in the ring.
- Lifting points must be stored in a clean and dry area
- The lifting points can also be used as lashing points. Thus the permissible tensile force is the duplicate of the nominal load capacity: LC = 2x load capacity (WLL). This product may only be used for lifting or lashing. Once a lifting point has been used for lashing, it may no longer be used for lifting (and vice versa).

Attention:

- Do not overload lifting points. A falling down load may lead to injuries or death!
- Do not use damaged lifting points (see maintenance instruction) – they can fail in operating conditions – load can fall down!

Limits of use

When lifting points are used in not normal operating conditions (see above) they are only limited applicable.

- Do not use lifting points in connection with acids or bases or their steams. If the application is in a chemical surrounding please ask our technical expert.
- Do not load lifting points when links contact edges.
- Do not lift persons.
- Do not choke hitch.
- If the load distribution is asymmetrical (unequal angle of the legs of the lifting gear) only count 1-leg as bearing (see load table).

When using the following temperature ranges, the working load limit has to be multiplied with the following factors:

- 200 °C to 300 °C reduction factor 0,9 (-10 %)
- 300 °C to 400 °C reduction factor 0,75 (-25 %)

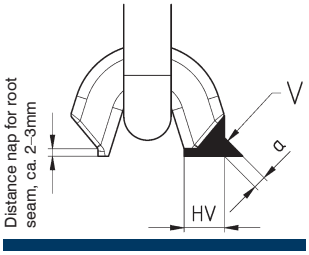
Mounting instruction

Persons welding this product have to be in possession of a valid qualification acc. to EN 287 or EN ISO 9606-1. Basically, the local mandatory regulations of the respective country apply (For USA: Welder is to be qualified acc. to AWS American Welding Society and/or ASME American Society of Mechanical Engineers).
Material: Material of welding part: S355 J2 G3.
Welding condition: The surface of the part to be welded has to be thoroughly cleaned before starting to weld. Damp, dirt, oil, color, tinder, etc. have to be removed.
Attention: Before starting, it's the welder's responsibility to ensure the following: Checking the weldability of the welding point's counterpart (machine, truck, body, etc), strength value and analytical equivalency of the counterpart relative to the pewag part. Counterpart of the lashing device (esp. part, whereas the lashing device is welded onto) must be suitable for desired load impact, so the safety of the complete assembling lies with the welding party.
Any contact between red ring and welding material has to be eliminated. Rules as to DIN EN ISO 14341, have to be applied to the welding process.

Examples of filler metals:
MAG – wire: ISO 14341: G3 Si 1 / AWS A5.18: ER 70 S-6
Stick – electrode: EN ISO 2560 A: E 42 5 B 4 2 H5 or
E 42 6 B 3 2 / AWS A5.1: E7018-1 / AWS 5.5: E8018-G

When welding, the complete profile of the lashing point has to be processed (welded).

Weld seam geometry



	Weld seam Dimension	Length [mm]	Volume [cm³]
PLE 6	HV 8 + ◣ a3	2 x 35	≈ 3,5
PLE 8	HV 9 + ◣ a3	2 x 37	≈ 4,0
PLE 10	HV 10 + ◣ a4	2 x 40	≈ 5,5
PLE 13	HV 14 + ◣ a4	2 x 50	≈ 13,0
PLE 16	HV 17 + ◣ a5	2 x 64	≈ 20,0
PLE 22	HV 24 + ◣ a6	2 x 90	≈ 67,0

- Use only pewag original parts – recognizable by the marking (WLL, manufacturer,...).
- It is not allowed to modify the lifting point, e.g. mechanical changes, heat treatments and surface treatments (galvanising) are prohibited.
- Mount only lifting points free from defects.

Maintenance, Checks, Repair

- An inspection in accordance with the national standards must be carried out annually by a technical expert. If used frequently under a full load these inspections can be implemented regularly. We also recommend a crack test every two years.
- The parts must be free from oil, dirt and rust for inspection and crack test. Adequate cleaning procedures are the ones, which do not overheat, hide failures in surface and cause hydrogen embrittlement or stress crack corrosion.
- During inspection check all parts which can influence safety and function, e.g.:
  - cracks, notches, deformation, noticeable signs of excessive heat.
  - abrasion resp. corrosion of more than 10 % of the cross section.

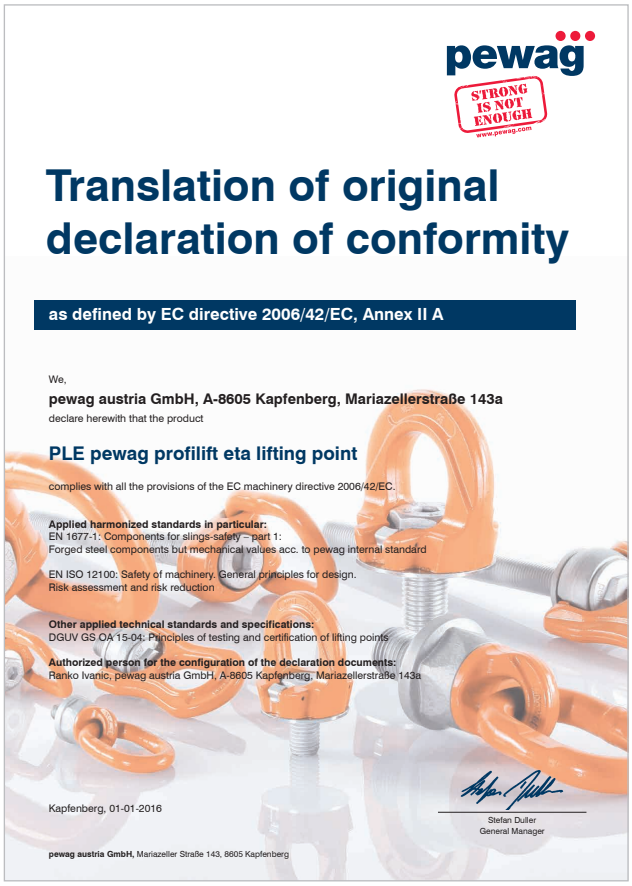
In case of doubt, if the lifting points are damaged, stop using them and have them examined by an expert.

Repairs:

- Maintenance of the lifting points should only be carried out by technical experts.
- If small defects like notches or score marks are visible you can remove them with carefully polishing or filing. After repairs, repairs area must be intergradient, without a sudden change in cross-section. Due to complete elimination of the error may be the cross-section by no more than 5 % decreases.
- Welding procedures and heat treatments are prohibited.

Exact dimensions can be found on our website www.pewag.com under industrial chains/lifting points.

Declaration of conformity



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Translation of original declaration of conformity

as defined by EC directive 2006/42/EC, Annex II A

We,

pewag austria GmbH, A-8605 Kapfenberg, Mariazellerstraße 143a

declare herewith that the product

PLE pewag profilift eta lifting point

complies with all the provisions of the EC machinery directive 2006/42/EC.

Applied harmonized standards in particular:
EN 1677-1: Components for slings-safety – part 1:
Forged steel components but mechanical values acc. to pewag internal standard

EN ISO 12100: Safety of machinery. General principles for design.
Risk assessment and risk reduction

Other applied technical standards and specifications:
DGUV GS OA 15-04: Principles of testing and certification of lifting points

Authorized person for the configuration of the declaration documents:
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Kapfenberg, 01-01-2016

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