pewag lifting solutions

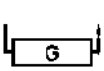
Translation of Original operating manual

pewag winner profilift

PLBW pewag winner profilift beta lifting point

These lifting points are designed for lifting and holding the load considering this manual as well as the national regulations for lifting and holding. Read the manual carefully before using the lifting points. The user must have access to the operating manual until withdrawal of the product 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°	asymm.	asymm.
Code	**Thread**	**Tightening torque**	**Load capacity**[1]									
	[mm]	**[Nm]**	**[kg]**									
PLBW 0,3 t	M8	6	500	300	1000	600	400	300	600	450	300	300
PLBW 0,6 t	M10	10	1000	600	2,000	1,200	800	600	1,300	900	600	600
PLBW 1 t	M12	15	1,300	1,000	2,600	2,000	1,400	1,000	2,100	1,500	1,000	1,000
PLBW 1,3 t	M14	30	2,000	1,300	4,000	2,600	1,800	1,300	2,700	1,900	1,300	1,300
PLBW 1,6 t	M16	50	2,500	1,600	5,000	3,200	2,200	1,600	3,400	2,400	1,600	1,600
PLBW 2 t	M18	70	3,000	2,000	6,000	4,000	2,800	2,000	4,200	3,000	2,000	2,000
PLBW 2,5 t	M20	100	3,500	2,500	7,000	5,000	3,500	2,500	5,300	3,700	2,500	2,500
PLBW 3 t	M22	120	4,500	3,000	9,000	6,000	4,200	3,000	6,300	4,500	3,000	3,000
PLBW 4 t	M24	160	5,500	4,000	11,000	8,000	5,600	4,000	8,400	6,000	4,000	4,000
PLBW 5 t	M27	200	6,500	5,000	13,000	10,000	7,000	5,000	10,500	7,500	5,000	5,000
PLBW 6,3 t	M30	250	7,000	6,300	14,000	12,600	8,800	6,300	13,200	9,400	6,300	6,300
PLBW 8 t	M33	270	9,000	8,000	18,000	16,000	11,000	8,000	16,500	12,000	8,000	8,000
PLBW 10 t	M36	320	11,000	10,000	22,000	20,000	14,000	10,000	21,000	15,000	10,000	10,000
PLBW 12,5 t	M42	400	13,500	12,500	27,000	25,000	17,500	12,500	26,300	18,700	12,500	12,500
PLBW 15 t	M48	600	16,000	15,000	32,000	30,000	21,000	15,000	32,000	22,500	15,000	15,000

[1] max. transport weight (G).
Safety factor 5

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°	asymm.	asymm.
Code	**Thread**	**Fastening torque**	**Load capacity**[1]									
	[inch]	**[lb/ft]**	**[lbs]**									
PLBW U5/16	5/16"-18	4,5	1,100	660	2,200	1,320	900	660	1,400	900	660	660
PLBW U 3/8	3/8"-16	7,5	2,200	1,300	4,400	2,600	1,800	1,300	2,700	1,900	1,300	1,300
PLBW U 7/16	7/16"-14	11	2,800	2,200	5,600	4,400	3,000	2,200	4,600	3,300	2,200	2,200
PLBW U1/2	1/2“-13	13	2.800	2.200	5.600	4.400	3.000	2.200	4.600	3.300	2.200	2.200
PLBW U 9/16	9/16"-12	22	4,400	3,000	8,800	6,000	4,200	3,000	6,300	4,500	3,000	3,000
PLBW U 5/8	5/8"-11	37	5,500	3,500	11,000	7,000	4,900	3,500	7,300	5,200	3,500	3,500
PLBW U 3/4	3/4"-10	74	6,600	5,500	13,200	11,000	7,700	5,500	11,500	8,200	5,500	5,500
PLBW U 7/8	7/8"-9	118	12,000	8,800	24,000	17,600	12,300	8,800	18,500	13,200	8,800	8,800
PLBW U1	1"-8	148	13,000	11,000	26,000	22,000	15,400	11,000	23,000	16,500	11,000	11,000
PLBW U1 1/8	1 1/8"-7	185	14,300	13,500	28,600	27,000	18,900	13,500	28,300	20,200	13,500	13,500
PLBW U1 1/4	1 1/4"-7	200	19,800	17,500	39,600	35,000	24,500	17,500	36,700	26,200	17,500	17,500
PLBW U1 3/8	1 3/8"-6	236	24,000	22,000	48,000	44,000	30,800	22,000	46,200	33,000	22,000	22,000
PLBW U1 1/2	1 1/2"-6	295	25,000	24,000	50,000	48,000	33,600	24,000	50,400	36,000	24,000	24,000

[1] max. transport weight (G).

Attention: Subject to technical changes!

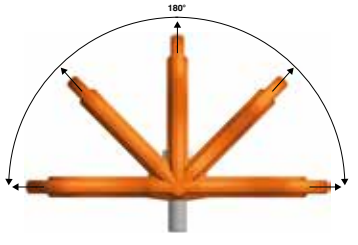
U5/16 to U3/4 safety factor 5
U7/8 to U1 1/2 safety factor 4

Intended use

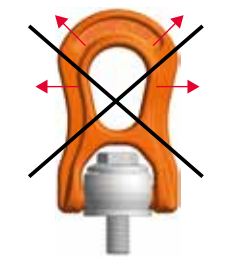
Load capacity: working load acc. to test certificate resp. working load table for various applications.
Admissable operating temperature: -20 °C to 200 °C (please note WLL reduction at high temperature).
Impacts: impacts which occur because of e.g. acceleration during lifting and lowering can be unconsidered.
Other: Lifting points have to be mounted only with the included screw. The body is rotatable 360°, the ring is hinged. Both are positioned with a spring. Before usage they have to be adjusted in the correct direction of tension.



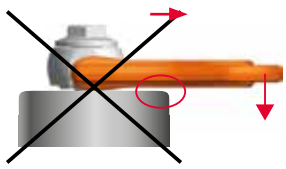
Picture 1: correct



correct



Picture 2: not correct



not correct

Information for use

- Lifting points should be used by a competent authorised 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.

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 rotate lifting points under load.
- 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).

Demanding conditions

Temperature	below -40 °C	-40 °C to -20 °C	-20 °C to 200 °C	200 °C to 300 °C	300 °C to 400 °C	above 400 °C
Load factor	not permissible	0.8	1	0.9	0.75	not permissible
Shock	slight shocks		medium shocks		strong shocks	
Load factor	1		0.7		not permissible	

* use at temperatures below -40 °C and above 400 °C is forbidden!

Mounting instruction

- Mounting only by competent authorized person.
- The equipment, where the lifting points are mounted on, has to meet the requirements of the machinery directive 2006/42/EG.
- Choose adjustment of lifting points so that you have a symmetric load. Center of gravity must be under the lifting point.
- Base material must be so strong that the force induced can be absorbed without deformation.
- Choose lifting point with adequate WLL – see table.
- Screwing area must be flat and provide with a diameter of minimum as big as the supporting surface of the lifting point. Threaded hole with an adequate depth must be in the middle and right angled. Whole screw must be screwed in (blind hole).
- Minimum screw penetration:
  1 x M in steel (M = threadsize e.g.. M20 = 20 mm)
  1,25 x M in cast iron steel
  2 x M in aluminium.
- Threaded hole must be cleaned before screwing.
- For a unique lifting process the screw can be tightened manually by means of a appropiate tool. If the lifting point stays on the load, mount the Screw with the specified tightening torque – see table.
- If necessary (e.g. if vibrations occur) use liquids for securing the thread (please note manufacturer's instructions).
- Make sure before each use that the lifting point is screwed in completely, and the support surface fully touches to the load.
- Make sure that adjustment of lifting points will not lead to a wrong load, e.g if:
  - there is no possibility to align in direction of tension
  - direction of tension is not acc. to picture 1
  - the link contacts edges or surfaces acc. to picture 2.
- Use only pewag original parts – recognizable by stamping (WLL, thread).
- It is not allowed to modify the lifting point, e.g. weldings, heat treatments and surface treatments (galvanising) are prohibited.
- Mount only lifting points that are without defects
- Check used lifting points acc. to service manual before application.
- After mounting lifting points must be rotatable and hinged.

Maintenance, Checks, Repairs

- 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 screw must be taken out from the body.
- 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.

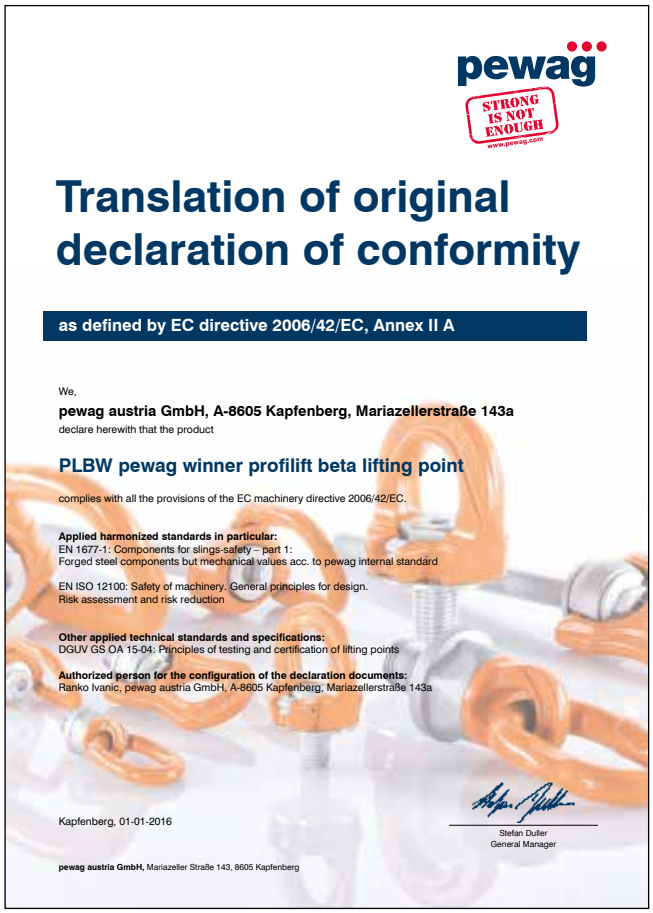
Repairs:

- 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.

Each lifting point PLBW is marked with a unique number.

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

Declaration of conformity



pewag

STRONG IS NOT ENOUGH
www.pewag.com

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

PLBW pewag winner profilift beta 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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