

Translation of Original Operating Manual

pewag winner inox profilift

PLGWI pewag winner inox profilift gamma Supreme / Basic – corrosion-resistant

This operating manual is an integral part of the product. It has to be made available to the operator for the duration of its service life and has to be passed on to the next owner or operator along with the product.

This operating manual is subject to a continuous improvement process; only the most recent version is deemed valid. It is available as a download on www.pewag.com.

This product is designed to be used in compliance with this manual as well as the national regulations for the lifting and holding of loads. It may only be used if the user manual has been fully read and understood.

The colour-highlighted text in this manual indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury. Please read this additional advice carefully.

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pewag winner inox profilift
PLGWI Supreme

pewag winner inox profilift
PLGWI Basic

This operating manual is valid for:
PLGWI pewag winner inox profilift gamma Supreme
PLGWI pewag winner inox profilift gamma Basic
Eye bolt – corrosion-resistant

Size	Thread
PLGWI 2 t	M20



Please read this operating manual carefully before using the product, paying particular attention to the sections on Safety and Mounting.

This product may only be used once all the points in this manual have been fully understood.

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1. Safety guidelines



A wrongly mounted or damaged lifting point as well as improper use can increase the risk of accidents leading to injuries and/or death!

Damaged lifting points (see maintenance instructions) can fail even under normal circumstances – they must not be used.

- Only competent persons are allowed to use this product. They must be familiar with and apply all relevant standards and country-specific regulations
- The user of this product must be in good health. He/she is not allowed to be under the influence of drugs, alcohol or medication
- Please make sure that in the event of an emergency, a rescue plan is available that includes all possible emergencies
- Before use, ensure that the product is in good working order (not deformed, no breaks). Lifting points must be rotatable (aligned in the direction of pull). It is not allowed to make changes or modifications to the product.
- All repairs must be undertaken in accordance with the instructions specified by pewag
- Loading must always take place in the stated direction (fig. 1 under section 2 of this manual), with the maximum load capacity according to table 1 and taking into consideration the operating conditions stated in section 2
- This product is not intended for the lifting or holding of persons

Method of lifting	1		2		2		3+4		3+4		2		3+4	
Number of legs	1		2		2		3+4		3+4		2		3+4	
Angle of inclination	0°		90°		0°-45°		45°-60°		0°-45°		45°-60°		asymm.	

Code	Thread [mm]	Fastening torque [Nm]	Load capacity [kg]									
PLGWI M20	M20	115	3,800	2,000	7,600	4,000	2,800	2,000	4,200	3,000	2,000	2,000

Table 1

Reduction factors			
Temperature	below -40 °C	-40 °C to 280 °C	above 280 °C
Reduction factor	Not permissible	1	Not permissible
Shock loading	Slight shocks	Medium shocks	Strong shocks
Reduction factor	1	0.7	Not permissible

* Use at temperatures below -40 °C and above 280 °C is not permitted!
Table 2

2. Indendet use

Purpose: The pewag PLGWI lifting point is screwed on a load and connecting elements of a lifting chain/device (hooks, shackles) may then be attached to the lifting point to allow the load to be lifted.

Load:

Loading must always take place in the stated direction (fig. 1) with the maximum load capacity according to table 1 and taking into consideration the operating conditions as specified here.

Material: The duplex steel used for the ring, screw and sleeve is highly resistant to pitting, crevice and stress corrosion (PRE(N)-value 34). The locking system is also suitable for most intended uses (PRE(N)-value min.18). For use in highly aggressive environments, we recommend the “Basic” version for manual fastening without locking system. In addition, regular inspections must be performed at shorter intervals.



Fig. 1: Permissible pull directions that occur when used correctly.

Operating temperature: The long-term permitted ambient temperature must be between -40 °C and +280 °C.

Impacts: The lifting point is designed to withstand impacts resulting e.g. from acceleration when lifting and lowering loads.

Other: Use only original parts for the assembling of the lifting point. Please note the reduction factors as specified in table 2. The ring is 360° rotatable and must be aligned in the direction of the pull before loading.

2.1 Limitations of use

- The lifting points must not be used over edges or corners.
- The lifting points must not be rotated under load
- This product must not be used for the lifting or securing of persons
- PLGWI lifting points are not suitable for long-term use with carrying parts in indoor pool areas (see ISER instruction sheet 831)
- If the load distribution is asymmetrical (unequal angle of the legs of the lifting gear), count only 1 leg as bearing. (see load capacities table)

The information provided in this operational manual assumes the absence of particularly dangerous conditions. In such instances, the permissibility and the degree of danger must be discussed with pewag.

2.2 Foreseeable improper operation

- Operation by unskilled persons
- Operation by persons who do not understand the language used in this manual and therefore do not fully understand what they are reading
- Attachment to objects for which no instruction manual or strength verification is present or available
- Attachment of lifting devices for which no instruction manual or inspection based on applicable standards is present or available

2.3 Identification

Each pewag PLGWI lifting point has been stamped with the thread size, the maximum load capacity for adverse load distribution, manufacturer and batch identification. Fig. 2 shows the exact identification details on the product.

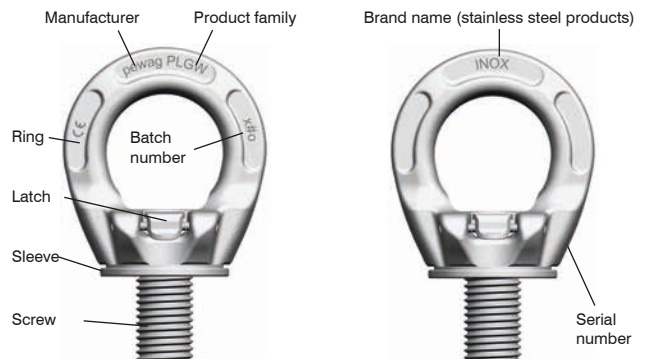


Fig. 2: front side

Fig. 2: back side

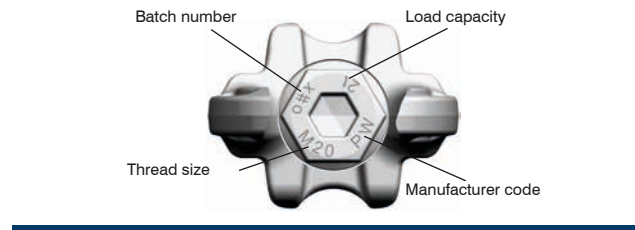


Fig. 2: Component description and location of identification details on product.

3. Mounting Instructions

3.1 General

- Mounting must only be carried out by persons who have received instructions on the safe use of the product and who have the required knowledge and skills for the task
- Choose lifting points that are sufficiently large based on load capacities table 1, depending on the size of your load and the arrangement of the lifting points
- The material of the object to which the lifting points are attached must be able to absorb the applied forces without deformations (safety evidence)
- Choose the layout of the lifting points in a way that ensures the symmetrical distribution of the load and positions the centre of gravity underneath the lifting point(s).
When choosing the position of the lifting points, make sure to avoid incorrect loading, for instance if:
 - There is no possibility to align in the pull direction
 - The pull direction is not in the specified area acc. to fig. 1
- Always check whether any limitations of use apply
- Mount the lifting points in such a way that they may be reached with ease and without obstructions when attaching/removing the connection element. Also make sure that the lifting points are affixed in such a way that no dangerous areas are produced that may endanger the user or prevent correct use (bruising, shearing, trapping or bumping)
- Only original pewag parts may be used – recognisable by the stamping (batch identification mark, thread diameter...)
- The delivery condition may not be changed
It is not permitted to perform welding, heat and/or surface treatments with material-damaging effects
- The thread length must not be shortened
- Always refer to the user manual and mounting instructions for the lifting points used and, where applicable, also for the load to be lifted
- Only use non-defective lifting points
- Used lifting points must be checked according to the maintenance instructions prior to each use (section 4.1 and 4.2)
- Ensure with each use that the lifting point was mounted according to the mounting instructions (section 3.4)
- Do not use any extension during the mounting process
- The attached lifting device (e.g. hook) must be free to move within the ring
- Keep the lifting points clean and dry. Also treat with care after use. Do not drop them carelessly on the floor as this may result in damages to thread or locking system

3.2 Safety measures to be taken by the user

Please refer to the limitations of use and the maximum capacity of the lifting points used. Always wear protective gloves when attaching the lifting device.

Align the lifting point in the expected direction of pull and leave the hazard area before the load is lifted.



Keep a sufficient safety distance during the lifting of the load and ensure that the load has been fully lowered to a stable position before removing the lifting device. Do not overlap lifting points. A falling load may cause injury and/or death!

3.3 Residual risks

Overloading by not respecting the maximum load capacities or due to undue environmental influences (temperature, etc.). Wrong adjustment of the lifting points can also lead to failing, as can the use of non-authorized or damaged parts of the attached lifting device.

3.4 Mounting

The mounting surface must be flat and have a minimum diameter of the width of the lifting point. The thread hole should be in the middle and at a right angle, with enough depth to allow the lifting point to be fully screwed in so that it fully rests on the surface.

- Before screwing in the lifting point, check the thread holes for damages or contamination.
- The minimum screw length is as follows:
 - 1.5 x M in steel ($R_m > 360 \text{ N/mm}^2$);
 - 2 x M in aluminium alloys
 (M = thread size, e. g. M20 = 20 mm)

3.4.1 PLGWI “Supreme” with latches

This lifting point has an easy system for tool-free mounting:

- To screw in the lifting point, fold the latches up so they lie completely flat on the side of the screw (position A – see fig. 3). The latches are held in position by a spring
- Screw the lifting point into the thread of the load until the underside lies completely flat.

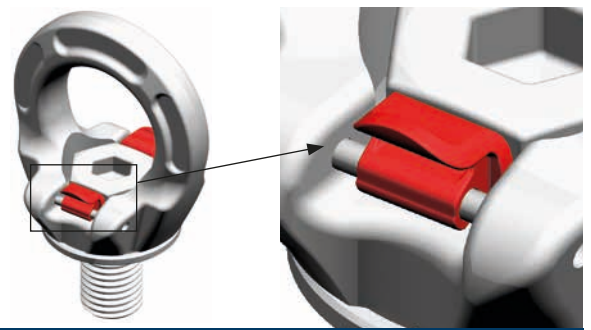


Fig. 3: Position A – both latches are touching the screw. Only permitted during mounting and demounting.

- Tighten the lifting point by hand

- Fold the latches down into position 'B' as shown in fig. 4. The latches are again held in position by the spring. Before hooking in the lifting device, make sure that the latches are in position 'B' and are not touching the screw.

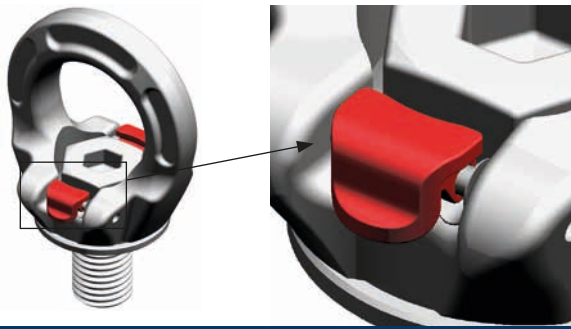


Fig. 4: Position 'B' – none of the latches are touching the screw, the lifting point is only ready to be used in this position.

3.4.2 PLGWI “Basic“ without latches

- This lifting point does not have a tool-free mounting system. The screwing and unscrewing is done using a standard Allen key

After mounting, ensure that there is no risk of improper loading by turning the lifting point towards the expected direction of pull.

If the lifting point is to remain permanently attached to the load, tighten the lifting point with an appropriate tool and to the torque specified in table 1. If necessary (in case of vibrations), secure the thread with a liquid thread lock (e.g. Loctite).

3.5 Demounting

Demounting is carried out by folding the latches to position 'A' (fig. 3) and unscrewing the lifting point. The demounting of PLGW-INOX “Basic” version without latches requires an Allen key. Store the lifting point as specified below in section 5. Protect the thread on the load from damage and contamination by taking appropriate measures.

4. Maintenance, inspection, repairs



The safety of the user is determined by the effectiveness and durability of the equipment. Please carry out regular checks. Damaged lifting points (see maintenance instructions) can fail even under normal circumstances – they must not be used.

- This product must be checked by a competent person at least annually in accordance with all the manufacturer's information. This interval may be shorter, depending on operational conditions and legal regulations. In case of frequent use, a crack test must be performed every 2 years.

- During inspection, all parts need to be checked for damages that could impair safety and function of the product.
- For regular inspections as well as crack tests, all parts must be free from oil, dirt and rust. Appropriate cleaning procedures are procedures that do not overheat, hide surface defects and cause hydrogen embrittlement or stress crack corrosion.

“Competent person“ refers to someone who, in view of his or her expert training and experience, has sufficient knowledge in the field of lifting points and is sufficiently familiar with the relevant national standards and regulations to be able to assess the safe-for-working state of the product as well as its intended use.

4.1 Inspection

Check the following points before each usage:

- Correct selection of lifting points based on the size of the load
- Flawless functioning (ring rotation) and appearance of parts, in particular the threads
- Mounting surface must lie completely flat on the load after mounting
- Latches must be in the 'B' position during use (see section 3.4.1, “Mounting”)
- The ring of the lifting point used must be rotated to face the direction of the pull

Regular inspection:

- Regular inspections must be performed by the manufacturer or a competent person under strict compliance with the manufacturer's information.

4.2 Elimination criteria

- Breakage, deformation, sharp notches and/or cracks of any kind
- Any sign of exposure to high heat
- Noticeable damage of the thread that could impair the correct functioning of the product
- Reasonable doubts on the functionality and/or safety of the lifting points
- Illegible markings
- Wear or excessive corrosion resulting in a cross-sectional reduction more than 10 %.



In case of doubts on functionality and/or safety, the lifting points must be removed from operation!

4.3 Accident and incident procedure

If the lifting device becomes jammed in the ring of the lifting point, do not apply force in order to prevent further damage. If the lifting point becomes deformed (e.g. due to overloading) or other exceptional circumstances apply, the product must immediately be removed from operation and handed to a competent person for inspection/repair.

4.4 Maintenance

- If necessary, clean product with a damp cloth and leave to dry naturally
- The thread may be cleaned using a wire brush

4.5 Repairs

- Repairs may only be carried out by the manufacturer or a competent person
- Welding and heat treatment are not permitted
- If the markings have become illegible, a competent person may replace the screw
- Damaged parts may only be replaced by new, original spare parts
- Inspections and repairs need to be fully documented and remain with the product for the duration of its operating life. A documentation reference sheet can be downloaded at www.pewag.com

Each lifting point is stamped with a unique serial number based on the template
 “JJ/xxxx” “JJ” refers to the year (e.g. 13 for 2013) and “xxxx” is the unique category number.

5. Storage

Store the lifting point after it has been cleaned, dried and protected against corrosion (e.g. lightly oiled). The thread should be protected using an appropriate protective cap. During storage or transportation, make sure the product is not exposed to corrosive, thermal or mechanical influences.

6. Decommissioning

This lifting point is made of metal and is 100 % recyclable. At the end of its service life, the product should be recycled as scrap metal.

7. Declaration of conformity

According to Appendix II A of the Machinery Directive 2006/42/ EC and Machinery Safety Regulations 2010 for lifting devices:

Description/Trade name:

Lifting point PLGWI pewag winner inox profilift gamma

Identification:

Lifting point PLGWI Supreme
 Lifting point PLGWI Basic

Authorised person for the configuration of the declaration documents:

Ranko Ivanic, pewag austria GmbH, 8605 Kapfenberg.

We declare, at our sole responsibility, that the product specified above fulfils the relevant conditions of the Machinery Directive 2006/42/EC and the Machinery Safety Regulations 2010. Any changes that were not approved by pewag shall render this declaration invalid.

The following standards apply:

EN 1677-1, DIN ISO 9001, EN 12100,
 BGR 500 KAP.2.8: 2008-04

An important prerequisite for the commissioning is that this operational instruction manual has been fully read and understood.

Kapfenberg, 2015-07-22

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Technical changes and misprints excepted.