

## **Original operating manual**

## pewag winner profilift

# PLGW-SN pewag winner profilift gamma eye nut – Grade 10

These lifting points are designed considering this manual as well as the national regulations for lifting and holding the load. Read the manual carefully before using the lifting points. 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	6	G		li						
No. of legs	1	1	2	2	2	2	3+4	3+4	2	3+4
Angle of inclination	<b>0</b> °	90°	<b>0</b> °	90°	0°–45°	45°-60°	0°-45°	45°-60°	asymm.	asymm.

Code	Thread [mm]	Load cap	pacity								
PLGW-SN 0,7 t	M12	2.000	700	4.000	1.400	1.000	700	1.400	1.000	700	700
PLGW-SN 1,5 t	M16	4.000	1.500	8.000	3.000	2.100	1.500	3.000	2.200	1.500	1.500
PLGW-SN 2 t	M20	4.500	2.000	9.000	4.000	2.800	2.000	4.200	3.000	2.000	2.000
PLGW-SN 3 t	M24	5.000	3.000	10.000	6.000	4.200	3.000	6.200	4.500	3.000	3.000

Safety factor 4

Attention: Subject to technical changes!

#### Intended use

**Load capacity:** working load limit according to test certificate or working load limit table in the given directions of tension – see picture 1.

Admissible operating temperature:  $-20^{\circ}$  to  $200^{\circ}$  (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 nut. The body is rotatable 360°, and must be aligned in the permitted direction of tension before use.







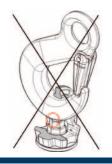
Picture 2: not permitted



### 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
- Load only in the specified direction (see picture 1) with WLL acc. to table
- Make sure before each use that the lifting point is hand tight (by the lock system or a ring spanner)
- Please note restriction in application for eventually appearing difficulties in load
- Bolt must not exceed the nut height. Connected lifting gear (e.g. hook) has to be flexible in the ring (see pic. 3)



Picture 3

- · Lifting points must be stored in a clean and dry area
- PLGW lifting points are not designed to be rotated under load

#### 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 under other conditions than the one mentioned in Intended use (see above), restrictions on used must be applied.

- Do not use lifting points in connection with acids, bases or their steams. For application in chemical environments, please contact our technical service
- Do not load lifting points when they come into contact with corners or sharp edges!
- · Do not lift people!

If the load distribution is asymmetrical (sling legs subtend different angles to the vertical), only load the 2-leg sling with the WLL of a 1-leg sling. In the case of a 3- or 4-leg lifting sling, it is only allowed to load it with a maximum WLL of a 2-leg lifting sling. In case of doubt, it must be supposed that only one of the legs will carry the entire load

## Mounting instruction

Mounting only by competent authorized person.

#### Tool-free assembly and disassembly

The latch in pos.1 does not have any contact with the nut (picture 4)

- The latch is kept in position with a patented spring
- Eye nut is rotatable

The latch in pos. 2 has contact with the nut (picture 5).

- . The latch is kept in position with a patented spring
- Eye nut is not rotatable i.e. the fastening torque is transmitted to the nut and thus the eye nut can be (re)assembled





Picture 4

Picture 5

- The equipment, where the lifting points are mounted on, has to meet the requirements of the Machinery Directive 2006/42/EC
- Choose adjustment of lifting points so that you have a symmetric load. Center of gravity must be under the lifting point
- The threaded bolt or the through-bolt which the lifting points are to be installed to, must have a screw strength class of at least 10.9 (according to DIN EN ISO 898-1)
- The base material must be of sufficient strength that the force induced can be absorbed without deformation.
- Choose lifting points with adequate WLLs see table
- The screwing area must be flat and be provided with a diameter not smaller than the bottom part of the lifting point
   The threaded bolt with adequate height must be in the middle of the screwing area and perpendicular to it to ensure that the nut can be screwed on fully and the entire surface touches the load

#### **Demanding conditions**

Temperature	below -40°C	-40°C to -20°C	-20°C to 200°C	200°C to 250°C	250°C to 300°C	above 350°C	
Load factor	not permissible	0,8	1	0,8	0,75	not permissible	
Shock	slight shocks		medium shocks		strong shocks		
Load factor	1		0,7		not permissible		

<sup>\*</sup> Use at temperatures below -40°C and above 350°C is forbidden!



• Minimum screw penetration:

Code	Thread [mm]	Min. screw penetration [mm]
PLGW-SN 0,7 t	M12	25
PLGW-SN 1,5 t	M16	26
PLGW-SN 2 t	M20	27
PLGW-SN 3 t	M24	34

- Threads must be cleaned before screwing
- · PLGW lifting points can also be fixed with a ring spanner
- If necessary (e.g. if vibrations occur), use liquid thread adhesives (please note manufacturer's instructions)
- Make sure that the adjustment of the lifting point will not lead to improper loading, e.g. if:
  - There is no possibility to align in the direction of tension
  - The direction of tension is not in the foreseen area acc. to picture 1
- After correct mounting of the lifting point move both latches in position 1 according to picture 4 and align the ring in the expected direction of loading.
- Use only pewag original parts recognizable by the marking (WLL, thread)
- It is not allowed to modify the lifting point, e.g. welding, heat treatments and surface treatments (galvanising) are prohibited
- · Mount only lifting points free from defects
- Check used lifting points acc. to maintenance instruction before application
- After assembling, lifting points must be able to rotate properly
- Do not use any extension when assembling

## 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 have to 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 on 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, they
  can be carefully removed by using grinders or files. The repaired area has to merge smoothly without sudden changes of
  the cross-section. When repairing, the cross section must not
  decrease of thickness by more than 5%
- · Welding procedures and heat treatments are prohibited

Each PLGW-SN lifting point 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**

According to Annex II A of the Machinery Directive 2006/42/EG and Machinery Safety Regulation 2010 for lifting devices:

**Description/ Denomination:** Lifting points PLAW pewag winner profilift alpha, PLBW pewag winner profilift beta, PLGW pewag winner profilift gamma, PLGW-SN pewag winner profilift gamma screw nut.

#### Identification:

Lifting points PLAW, lifting points PLBW, lifting points PLGW or lifting points PLGW-SN.

## Authorized person for the configuration of the declaration documents:

Ranko Ivanic, pewag austria GmbH, 8605 Kapfenberg

We declare in our sole responsibility that the product mentioned in this certificate fulfills the relevant conditions of the Machinery Directive 2006/42/EG and that the mentioned standards have been applied. In case of any not by pewag approved changes of the product this declaration gets invalid.

#### The following standards were applied:

EN 16777-1, DIN ISO 9001

It is a precondition to put the product into service that the instruction for use has been read and understood.

Kapfenberg, 2013-02-01

pewag austria GmbH Karl Schmid

#### pewag austria GmbH

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