Translation of Original operating manual

pewag winner profilift

PLDW pewag winner profilift delta 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 [mm]**	**Tightening torque [Nm]**	**Load capacity G [kg]**									
PLDW 0,3 t	M8	10	600	300	1.200	600	400	300	600	400	300	300
PLDW 0,5 t	M10	10	1.200	500	2.400	1.000	700	500	1.000	750	500	500
PLDW 0,7 t	M12	15	1.800	700	3.600	1.400	950	700	1.400	1.000	700	700
PLDW 1 t *	M14	25	2.400	1.000	4.800	2.000	1.400	1.000	2.100	1.500	1.000	1.000
PLDW 1,5 t – M16	M16	30	2.800	1.500	5.600	3.000	2.100	1.500	3.100	2.200	1.500	1.500
PLDW 1,5 t – M18	M18	40	2.800	1.500	5.600	3.000	2.100	1.500	3.100	2.200	1.500	1.500
PLDW 1,8 t	M20	80	2.800	1.800	5.600	3.600	2.500	1.800	3.800	2.700	1.800	1.800
PLDW 2,5 t	M20	80	5.000	2.500	10.000	5.000	3.500	2.500	5.300	3.500	2.500	2.500
PLDW 3,5 t	M24	150	5.000	3.500	10.000	7.000	4.900	3.500	7.400	5.200	3.500	3.500
PLDW 4 t	M24	150	7.000	4.000	14.000	8.000	5.500	4.000	8.400	6.000	4.000	4.000
PLDW 5,3 t	M30	230	7.000	5.300	14.000	10.600	7.400	5.300	11.200	7.900	5.300	5.300
PLDW 6,7 t	M30	230	10.000	6.700	20.000	13.400	9.400	6.700	14.200	10.000	6.700	6.700
PLDW 8 t	M36	450	12.500	8.000	25.000	16.000	11.200	8.000	16.800	12.000	8.000	8.000
PLDW 10 t	M42	600	16.000	10.000	32.000	20.000	14.000	10.000	21.000	15.000	10.000	10.000
PLDW 12 t	M45	600	16.000	12.000	32.000	24.000	16.900	12.000	25.400	18.000	12.000	12.000
PLDW 13 t – M48	M48	600	16.000	13.000	32.000	26.000	18.300	13.000	27.500	19.500	13.000	13.000
PLDW 13 t – M52	M52	600	16.000	13.000	32.000	26.000	18.300	13.000	27.500	19.500	13.000	13.000
PLDW 24 t	M56	800	28.000	24.000	56.000	48.000	33.900	24.000	50.900	36.000	24.000	24.000
PLDW 25 t	M64	800	28.000	25.000	56.000	50.000	35.300	25.000	53.000	37.500	25.000	25.000
PLDW 40 t	M72	1.200	60.000	40.000	120.000	80.000	56.500	40.000	84.800	60.000	40.000	40.000
PLDW 45 t	M80	1.400	60.000	45.000	120.000	90.000	63.600	45.000	95.400	67.500	45.000	45.000
PLDW 55 t – M90	M90	1.500	60.000	55.000	120.000	110.000	77.700	55.000	116.600	82.500	55.000	55.000
PLDW 55 t – M100	M100	1.600	60.000	55.000	120.000	110.000	77.700	55.000	116.600	82.500	55.000	55.000

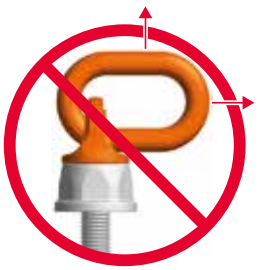
* Special type. Only on request.

Safety factor 4

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 [inch]**	**Fastening torque [ft-lbs]**	**Load capacity G [lbs]**									
PLDW U3/8	3/8"-16	7,5	2.640	1.100	5.290	2.200	1.500	1.100	2.330	1.650	1.100	1.100
PLDW U1/2	1/2"-13	11	3.900	1.500	7.900	3.000	2.100	1.500	3.200	2.300	1.500	1.500
PLDW U5/8	5/8"-11	22	6.100	3.300	12.300	6.600	4.600	3.300	7.000	4.900	3.300	3.300
PLDW U3/4	3/4"-10	60	8.800	4.400	17.600	8.800	6.200	4.400	9.300	6.600	4.400	4.400
PLDW U1	1"-8	110	15.400	8.800	30.800	17.600	12.400	8.800	18.700	13.200	8.800	8.800
PLDW U1 1/4	1 1/4"-7	170	22.000	14.700	44.000	29.500	20.800	14.700	31.300	22.100	14.700	14.700
PLDW U1 1/2	1 1/2"-6	330	27.500	17.600	55.100	35.200	24.600	17.600	37.400	26.400	17.600	17.600
PLDW U1 3/4	1 3/4"-5	440	35.200	22.000	70.500	44.000	31.100	22.000	46.700	33.000	22.000	22.000
PLDW U 2	2"-4,5	440	35.200	27.500	70.500	55.100	38.900	27.500	58.400	41.300	27.500	27.500
PLDW U 2 1/2	2 1/2"-4	600	61.700	39.600	123.400	79.300	56.100	39.600	84.100	59.500	39.600	39.600

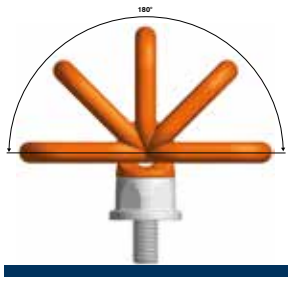
Safety factor 4

Important: Subject to technical changes!

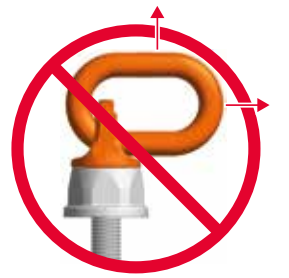
Straight load direction 0°	**Side load direction „allowed“ (ring aligned) 90°**	**Side load direction „not allowed“ (ring not aligned)**
		
Higher load capacity in direction of screw axis (Column „0°“ in load table)	Nominal load capacity perpendicular to screw axis (Column „90°“ in load table)	Not allowed because of unstable condition. Ring could turn suddenly under load – high risk for load and/or people.

Intended use

Load capacity: working load acc. to test certificate resp. working load table for various applications (acc. to picture 1).
Lashing: The lifting points may also be used as lashing points. In this case, the admissible lashing capacity is twice the nominal load capacity. LC in daN = 2x nominal capacity in kg (e. g. nominal load capacity of 4000 kg for lifting -> 8000 daN admissible lashing capacity). 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).
Admissible operating temperature: -40 °C to 200 °C (please note WLL reduction at high temperature).
Impacts: Slight shocks which occur because of e.g. acceleration during lifting and lowering can be unconsidered.
Other: Although the upper part is ball bearing and rotatable 360° before usage you should adjust the ring in the correct direction of tension (picture 1). That applies in particular when lifting with multi leg slings.
With a non-aligned ring (forbidden load acc. to picture 2), the ring holder could turn suddenly under load, and it comes to high risk for the load and/or people.



Pict. 1: permitted


Pict. 2: forbidden

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.

Demanding conditions

Temperature	below -40 °C	-40 °C to 200 °C	200 °C to 300 °C	300 °C to 350 °C	above 350 °C
Load factor	forbidden	1	0.9	0.75	forbidden
Shock	slight shock		medium shocks	strong shocks	
Load factor	1		0.7	forbidden	

- 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!
- May not be rotated continuously under load.
- The transition link may not be impinged by bended stress.

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).

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. Centre 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). No additional elements (such as washers) between the lifting point and the load must be underlaid.
- Minimum screw penetration:
  1 x M in steel (M = thread size 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. Thread must be checked for any damages.
- Screw must be mounted with the specified tightening torque – see table. For single transport process it is allowed to fasten by hand with wrench.
- 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
- 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 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.
- This lifting point may not be loaded with proof force.
- 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, repaired area must be intergradient, without a sudden change in cross-section. Due to complete elimination of the error, the cross-section may be reduced by no more than 5 %.
- Welding procedures and heat treatments are prohibited.

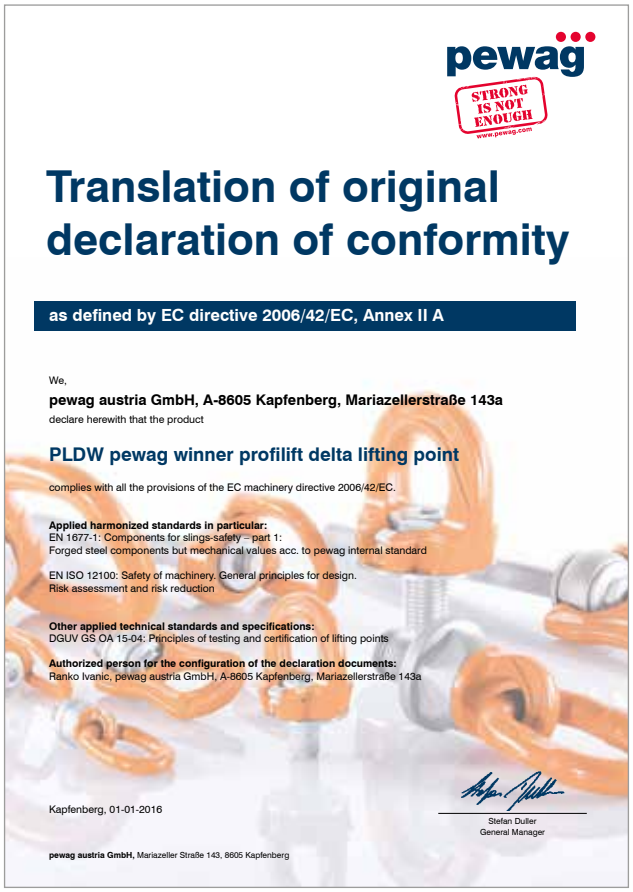
Each lifting point is marked with a unique number.
All tests and repairs must be recorded and kept for the life of the parts.

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

Storage

pewag lifting shall be stored cleaned, dried, protected from corrosion, e.g. lightly oiled. While stored, they must not be exposed to corrosive, mechanical or thermal influences.

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

PLDW pewag winner profilift delta 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:
Ranko Ivanic, pewag austria GmbH, A-8605 Kapfenberg, Mariazellerstraße 143a

Kapfenberg, 01-01-2016

Stefan Duller
General Manager

pewag austria GmbH, Mariazeller Straße 143, 8605 Kapfenberg

BG/00190

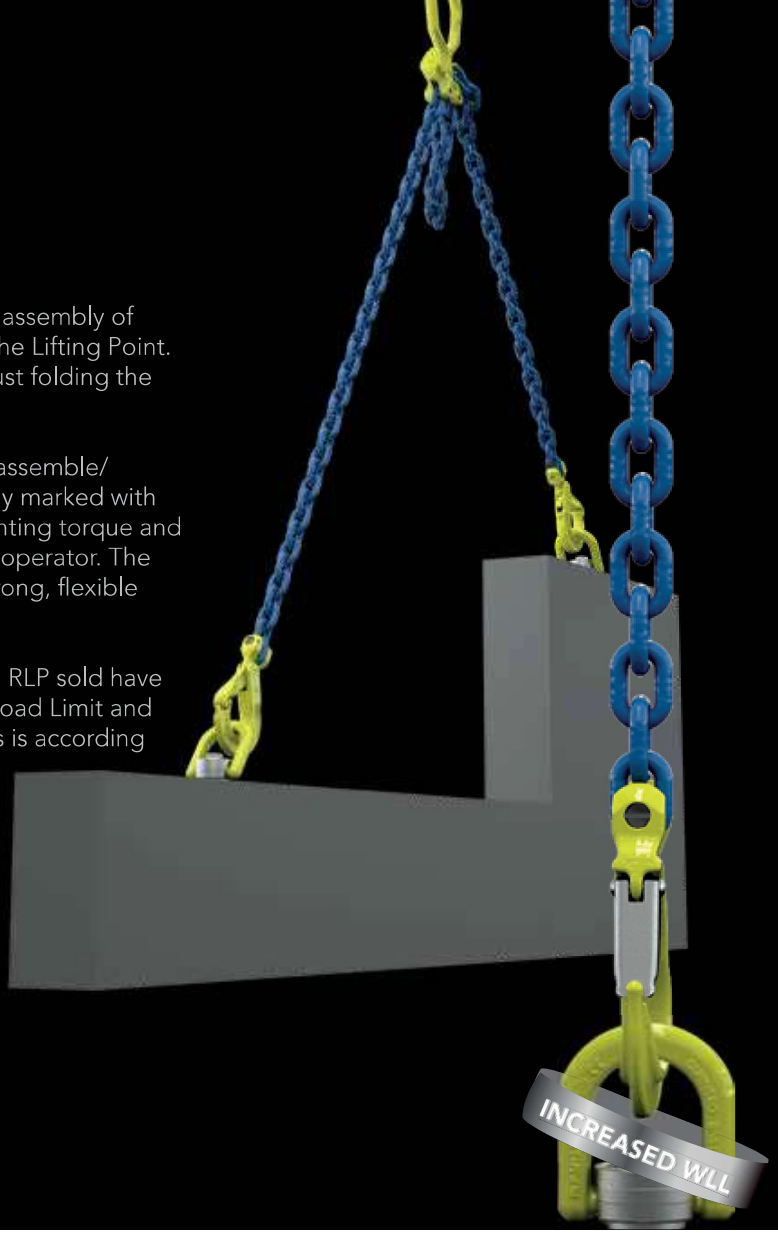
pewag austria GmbH
A-8041 Graz, Gaslaternenweg 4, Phone: +43 (0) 50 50 11-0, Fax: +43 (0) 50 50 11-100
office@pewag.com, **www.pewag.com**

Rotating
Lifting Point - RLP

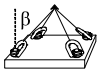
The RLP has a dismountable D-ring to enable assembly of roundsling, master link or hook directly onto the Lifting Point. The disassembly of the RLP is made easy by just folding the D-ring forward and push down.

RLP has a hexagon bolt to make it easy to disassemble/ assemble with a wrench. The bolt is also clearly marked with information such as Working Load Limit, mounting torque and manufacturer ID so it's always available to the operator. The RLP rotates 360° and pivots 180°, making it strong, flexible and reliable.

As with all Gunnebo Industries products, each RLP sold have been proof loaded to 2.5 times the Working Load Limit and visually inspected by a licensed inspector. This is according to our knowledge and experience the most reliable method to detect possible deviations on the product or in the production process. We don't gamble with safety! All Gunnebo Industries Lifting Points are CE-marked.



Working Load Limits* - RLP

Symmetric Load (tonnes)										
No. of legs	*1*	*1*	*2*	*2*	*2 symmetric*		*3 & 4 symmetric*			
Angle ß	0°	90°	0°	90°	0-45°	45-60°	0-45°	45-60°	Tightening torque	Spanner size
RLP - M8 x 1.25 RLP 5/16"-18 UNC	0.8 0.8	0.4 0.4	1.6 1.6	0.8 0.8	0.5 0.5	0.4 0.4	0.8 0.8	0.6 0.6	10 Nm 7 Ft.Lbs	13 mm 1/2"
RLP - M10 x 1.5 RLP 3/8"-16 UNC	1.2 1.2	0.7 0.65	2.4 2.4	1.4 1.3	0.9 0.9	0.7 0.6	1.4 1.3	1.0 0.9	15 Nm 11 Ft.Lbs	13 mm 1/2"
RLP - M12 x 1.75 RLP 1/2"-13 UNC	2.0 2.0	1.2 1.2	4.0 4.0	2.4 2.4	1.6 1.6	1.2 1.2	2.5 2.5	1.8 1.8	27 Nm 20 Ft.Lbs	24 mm 15/16"
RLP - M16 x 2 RLP 5/8"-11 UNC	3.2 3.2	2.0 2.0	6.4 6.4	4.0 4.0	2.8 2.8	2.0 2.0	4.2 4.2	3.0 3.0	60 Nm 44 Ft.Lbs	24 mm 15/16"
RLP - M20 x 2.5 RLP 3/4"-10 UNC RLP 7/8"-9 UNC	5.6 5.0 5.6	2.8 2.5 2.8	11.2 10.0 11.2	5.6 5.0 5.6	3.9 3.5 3.9	2.8 2.5 2.8	5.8 5.2 5.8	4.2 3.7 4.2	90 Nm 66 Ft.Lbs 66 Ft.Lbs	32 mm 1 5/16" 1 5/16"
RLP - M24 x 3 RLP 1"-8 UNC	8.0 8.0	4.6 4.6	16.0 16.0	9.2 9.2	6.4 6.4	4.6 4.6	9.6 9.6	6.9 6.9	135 Nm 100 Ft.Lbs	32 mm 1 5/16"
RLP - M30 x 3.5 RLP 1 1/4"-7 UNC	12.0 12.0	6.0 6.0	24.0 24.0	12.0 12.0	8.4 8.4	6.0 6.0	12.6 12.6	9.0 9.0	270 Nm 200 Ft.Lbs	55 mm 2 1/4"
RLP - M36 x 4 RLP 1 1/2"-6 UNC	14.0 14.0	8.0 8.0	28.0 28.0	16.0 16.0	11.2 11.2	8.0 8.0	16.8 16.8	12.0 12.0	320 Nm 236 Ft.Lbs	55 mm 2 1/4"
RLP - M42 x 4.5 RLP 1 3/4"-5 UNC	16.0 16.0	14.0 14.0	32.0 32.0	28.0 28.0	19.6 19.6	14.0 14.0	29.4 29.4	21.0 21.0	600 Nm 440 Ft.Lbs	75 mm 3"
RLP - M48 x 5 RLP 2" -4.5 UNC	20.0 20.0	16.0 16.0	40.0 40.0	32.0 32.0	22.4 22.4	16.0 16.0	33.6 33.6	24.0 24.0	800 Nm 590 Ft.Lbs	75 mm 3"

** Safety factor 4:1*

Rotating Lifting Point - RLP

Art. no. Standard bolt length	L	Art.no. Long bolt length**	L2	Code	Dimensions in mm B	C	D	L1	M	X	Y	Z	Weight kgs
Z101708	16	Z1017080L	101	RLP-M8 x 1.25	42	35	12	62	8	27	64	Ø40	0.3
Z101710	16	Z1017100L	101	RLP -M10 x 1.5	42	35	12	62	10	27	64	Ø40	0.3
Z101712	25	Z1017120L	120	RLP -M12 x 1.75	57	46	19	88	12	42	91	Ø54	1.0
Z101716	25	Z1017160L	160	RLP-M16 x 2	57	46	19	88	16	42	91	Ø54	1.0
Z101720	36	Z1017200L	200	RLP-M20 x 2.5	83	55	28	110	20	55	133	Ø80	2.9
Z101724	36	Z1017240L	240	RLP-M24 x 3	83	55	28	110	24	55	133	Ø80	2.9
Z101730	58	Z1017300L	300	RLP-M30 x 3.5	114	70	34	148	30	78	182	Ø111	7.1
Z101736	58	Z1017360L	300	RLP-M36 x 4	114	70	34	148	36	78	182	Ø111	7.3
Z101742	81	Z1017420L	301	RLP-M42 x 4.5	149	91	40.4	190	42	99	229	Ø142	14.3
Z101748	81	Z1017480L	301	RLP-M48 x 5	149	91	40.4	190	48	99	229	Ø142	14.5

*** Long bolt supplied with nut and washer.*

Spare parts - Standard length and long length bolts are available as spare parts.

RLP with UNC thread

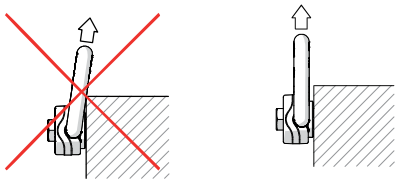
Art. no. Standard bolt length	L	Art.no. long bolt length**	L2	Code	Dimensions in mm B	C	D	L1	X	Y	Z	M inch	Weight kgs
Z101808	16	Z1018080L	101	RLP-5/16"-18 UNC	42	35	12	62	27	64	Ø40	5/16"	0.3
Z101810	16	Z1018100L	101	RLP-3/8"-16 UNC	42	35	12	62	27	64	Ø40	3/8"	0.3
Z101812	25	Z1018120L	120	RLP-1/2"-13 UNC	57	46	19	88	42	91	Ø54	1/2"	1.0
Z101816	25	Z1018160L	160	RLP-5/8"-11 UNC	57	46	19	88	42	91	Ø54	5/8"	1.0
Z101820	36	Z1018200L	200	RLP-3/4"-10 UNC	83	55	28	110	55	133	Ø80	3/4"	2.9
Z101821	36	Z1018210L	240	RLP-7/8"-9 UNC	83	55	28	110	55	133	Ø80	7/8"	2.9
Z101824	36	Z1018240L	240	RLP 1"-8 UNC	83	55	28	110	55	133	Ø80	1"	2.9
Z101830	58	Z1018300L	300	RLP 1 1/4"-7 UNC	114	70	34	148	78	182	Ø111	1 1/4"	7.1
Z101836	58	Z1018360L	300	RLP 1 1/2"-6 UNC	114	70	34	148	78	182	Ø111	1 1/2"	7.3
Z101842	81	Z1018420L	301	RLP 1 3/4"-5 UNC	149	91	40.4	190	99	229	Ø142	1 3/4"	14.4
Z101848	81	Z1018480L	301	RLP 2" -4.5 UNC	149	91	40.4	190	99	229	Ø142	2"	14.7

*** Long bolt supplied with nut and washer.*

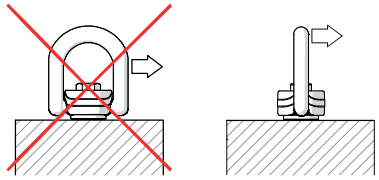
Spare parts - Standard length and long length bolts are available as spare parts.

Disassembly of the RLP is made easy by just folding the D-ring forward and push down.

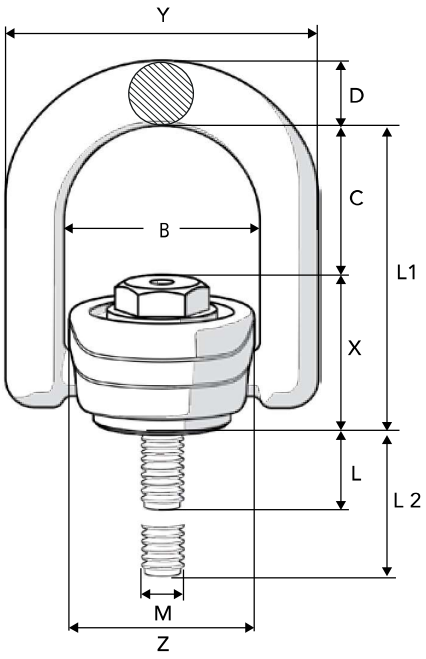
User advice



Make sure the D-ring does not lie against the load surface during lift.



Never side-load the RLP.



Tight space

Limited height ✓

Vertical lift ✓

Angular lift ✓

Vertical rotation under load

Tilting under load ✓

Sensitive load surface

Single part lift ✓

Multiple part lift ✓

Integrated combination (hook or link) ✓

RFID prepared ✓

pewag

STRONG IS NOT ENOUGH
www.pewag.com

Translation of Original operating manual

pewag winner profilift

PLAW pewag winner profilift alpha lifting points

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 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										
Number 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.

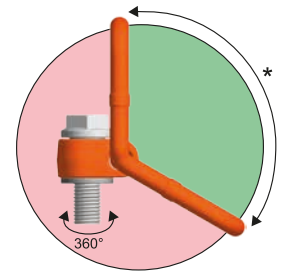
Code	Thread [mm]	Fastening torque [Nm]	Load capacity [1] [kg]									
PLAW 0.3 t	M8	35	300	300	600	600	400	300	600	400	300	300
PLAW 0.63 t	M10	70	630	630	1,250	1,250	850	630	1,300	900	630	630
PLAW 1 t	M12	120	1,000	1,000	2,000	2,000	1,400	1,000	2,100	1,500	1,000	1,000
PLAW 1.5 t	M16	150	1,500	1,500	3,000	3,000	2,100	1,500	3,100	2,200	1,500	1,500
PLAW 2.5 t	M20	170	2,500	2,500	5,000	5,000	3,500	2,500	5,300	3,700	2,500	2,500
PLAW 4 t (/13)	M24	400	4,000	4,000	8,000	8,000	5,600	4,000	8,400	6,000	4,000	4,000
PLAW 6 t	M30	500	6,000	6,000	12,000	12,000	8,500	6,000	12,700	9,000	6,000	6,000
PLAW 7 t *	M36	700	7,000	7,000	14,000	14,000	9,800	7,000	14,800	10,500	7,000	7,000
PLAW 8 t	M36	800	8,000	8,000	16,000	16,000	11,300	8,000	16,900	12,000	8,000	8,000
PLAW 10 t	M42	1,500	10,000	10,000	20,000	20,000	14,000	10,000	21,000	15,000	10,000	10,000
PLAW 15 t	M42	1,500	15,000	15,000	30,000	30,000	21,000	15,000	31,500	22,500	15,000	15,000
PLAW 20 t	M48	2,000	20,000	20,000	40,000	40,000	28,000	20,000	42,000	30,000	20,000	20,000
Code	**Thread [inch]**	**Fastening torque [lb/ft]**	**Load capacity [1] [lbs]**									
PLAW U5/16 *	5/16"-18	25.8	660	660	1,300	1,300	920	660	1,350	950	660	660
PLAW U3/8	3/8"-16	51.6	1,400	1,400	2,800	2,800	1,980	1,400	2,970	2,100	1,400	1,400
PLAW U1/2	1/2"-13	88.5	2,200	2,200	4,400	4,400	3,000	2,200	4,600	3,300	2,200	2,200
PLAW U5/8	5/8"-11	110	3,300	3,300	6,600	6,600	4,600	3,300	6,800	4,800	3,300	3,300
PLAW U3/4	3/4"-10	125	4,400	4,400	8,800	8,800	6,000	4,400	9,200	6,500	4,400	4,400
PLAW U3/4 **	3/4"-10	125	5,500	5,500	11,000	11,000	7,700	5,500	11,600	8,250	5,500	5,500
PLAW U1	1"-8	295	8,800	8,800	17,600	17,600	12,300	8,800	18,400	13,200	8,800	8,800
PLAW U1 1/4	1 1/4"-7	369	13,200	13,200	26,400	26,400	18,700	13,200	27,800	19,800	13,200	13,200
PLAW U1 1/2	1 1/2"-6	590	17,600	17,600	35,200	35,200	24,800	17,600	37,300	26,400	17,600	17,600
PLAW U1 3/4	1 3/4"-5	740	22,000	22,000	44,000	44,000	30,000	22,000	45,000	33,000	22,000	22,000

[1] max. transport weight (G).
* Available upon request only!
** Only valid for type PLAW with sleeve.

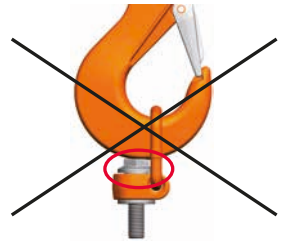
Important: Subject to technical changes!
Savety factor 4

Intended use

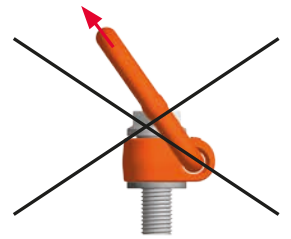
Load capacity: working load acc. to test certificate resp. working load table for various applications.
Admissable operating temperature: -40 °C to 100 °C (please note WLL reduction at high temperature).
Impacts: impacts which occur because of e.g. acceleration during lifting and lowering can be unconsidered.
Other: Lifting points have to be mounted only with the included screw. The body is rotatable 360°, the ring is hinged. The ring is positioned with a spring. Before usage they have to be adjusted in the correct direction of tension.



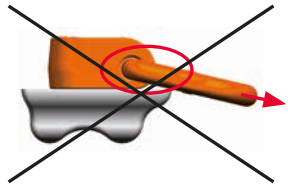
Picture 1: * Permissible range of application (ring must not touch the load)



Picture 2: not allowed



Picture 3: not allowed



Picture 4: not allowed

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 (see picture 2)
- 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)

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

Demanding conditions

Temperature	below -40 °C	-40 °C to 100 °C	100 °C to 200 °C	200 °C to 250 °C	250 °C to 350 °C	above 350 °C
Load factor	not permissible	1	0.85	0.80	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 350 °C is forbidden!

- 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 4
- 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 PLAW 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 device:

Description/ Denomination:
Lifting points pewag winner profilift alpha PLAW

Identification: Lifting points PLAW

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 1677-1, 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
A-8041 Graz, Gaslaternenweg 4, Phone: +43 50 5011-0, Fax: +43 50 50 11-100
office@pewag.com, **www.pewag.com**

VLBG-PLUS

RUD®

VLBG-PLUS – now with up to 45% higher WLL

Up to 45% higher WLL capacity at an average (M8-M30)

360º lifting point rotation
180º pivoting

ICE Bolt made from patented material

Grade 120 providing greater wear resistance

4better lifting

WLL compared / / old / PLUS

Thread	WLL old [t]	WLL PLUS [t]	% more
M8	0.3	0.63	110
M10	0.63	0.9	42
M12	1	1.35	35
M16	1.5	2	33
M20	2.5	3.5	40
M24	4	4.5	13
M30	5	6.7	34

subject to technical modifications

Stamped with RUD Markings

DIN Collared Nut available for RUD Vario Bolt

Variable bolt lengths available

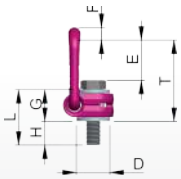
One piece nut for quicker assembly

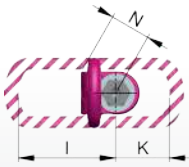
MADE IN GERMANY

Tradition in Dynamic Innovation

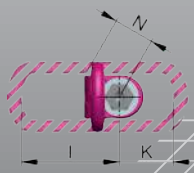
VLBG-PLUS / metric thread

Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
VLBG-PLUS VIP Load ring for bolting PLUS – metric																		
VLBG-PLUS 0.63t M8	0.63	0.3	75	30	54	34	24	40	10	29	11	75	45	40	M8	32	30	8504651
VLBG-PLUS 0.9t M10	0.9	0.32	75	30	54	34	24	39	10	29	15	75	45	44	M10	32	60	8504652
VLBG-PLUS 1.35t M12	1.35	0.33	75	32	54	34	26	38	10	29	18	75	45	47	M12	32	150	8504653
VLBG-PLUS 2t M16	2	0.55	85	33	56	36	30	39	13.5	36	22	86	47	58	M16	38	150	8504655
VLBG-PLUS 3.5t M20	3.5	1.3	110	50	82	54	45	55	16.5	43	32	113	64	75	M20	48	400	8504657
VLBG-PLUS 4.5t M24	4.5	1.5	125	50	82	54	45	67	18	43	37	130	78	80	M24	48	760	8504659
VLBG-PLUS 6.7t M30	6.7	3.3	147	60	103	65	60	67	22.5	61	49	151	80	110	M30	67	1000	8504661
VLBG-PLUS 8t M36	8	6.2	197	77	122	82	70	97	26.5	77	63	205	110	140	M36	87	800	7983553
VLBG-PLUS 10t M42	10	6.7	197	77	122	82	70	94	26.5	77	73	205	110	150	M42	70	1000	7983554
VLBG-PLUS 15t M42	15	10.9	222	95	156	100	85	109	36	87	63	230	130	150	M42	100	1500	7982966
VLBG-PLUS 20t M48	20	11.6	222	95	156	100	95	105	36	87	73	230	130	160	M48	100	2000	7982967





Type	WLL [t]	weight [kg/pc.]	T [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	H [mm]	I [mm]	K [mm]	L [mm]	M	N [mm]	torque [Nm]	Ref. No.
VLBG-PLUS VIP Load ring for bolting PLUS – metric with longer Vario bolt																		
VLBG-PLUS 0.63t M8	0.63	*	75	30	54	34	24	40	10	29	8-76	75	45	37-105	M8	32	30	8600470
VLBG-PLUS 0.9t M10	0.9	*	75	30	54	34	24	39	10	29	10-96	75	45	39-125	M10	32	60	8600471
VLBG-PLUS 1.35t M12	1.35	*	75	32	54	34	26	38	10	29	12-116	75	45	41-145	M12	32	150	8600472
VLBG-PLUS 2t M16	2	*	85	33	56	36	30	39	13.5	36	16-149	86	47	52-185	M16	38	150	8600474
VLBG-PLUS 3.5t M20	3.5	*	110	50	82	54	45	55	16.5	43	20-187	113	64	63-230	M20	48	400	8600476
VLBG-PLUS 4.5t M24	4.5	*	125	50	82	54	45	67	18	43	24-222	130	78	67-265	M24	48	760	8600478
VLBG-PLUS 6.7t M30	6.7	*	147	60	103	65	60	67	22.5	61	30-279	151	80	91-340	M30	67	1000	8600480
VLBG-PLUS 8t M36	8	*	197	77	122	82	70	97	26.5	77	36-223	205	110	113-300	M36	87	800	8600289
VLBG-PLUS 10t M42	10	*	197	77	122	82	70	94	26.5	77	42-273	205	110	119-350	M42	70	1000	8600290
VLBG-PLUS 15t M42	15	*	222	95	156	100	85	109	36	87	42-263	230	130	129-350	M42	100	1500	8600291
VLBG-PLUS 20t M48	20	*	222	95	156	100	95	105	36	87	48-303	230	130	135-350	M48	100	2000	8600292



* = weight depends on design specifics
Dimensions and specifications subject to change

RUD®
www.rud.com.au

Head Office: Brisbane
12 Commerce Place, Larapinta QLD 4110
p 07 3809 1300 f 07 3809 1301
info@rud.com.au

Perth Office
107 Broadway, Bassendean WA 6054
p 08 6278 1788 f 08 6278 4788