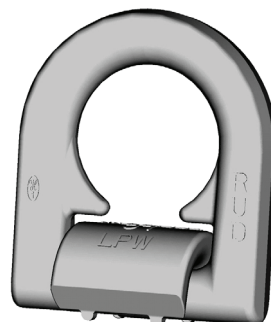


Lashing Point Welding LPW

Safety instructions/User Information

This safety instruction has to be kept on file for the whole lifetime of the product.

Translation of the Original instructions



LPW
Lashing Point Welding



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Herstellererklärung

Hiermit erklären wir (unterstützt durch die Zertifizierung nach ISO 9001), dass die nachfolgend bezeichnete Ausrüstung aufgrund ihrer Konzipierung und Bauart, sowie der von uns in Verkehr gebrachten Ausführung, den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der Europäischen Union entspricht. Bei einer nicht mit uns abgestimmten Änderung der Ausrüstung verliert diese Erklärung ihre Gültigkeit. Weiterhin verliert diese Erklärung ihre Gültigkeit, wenn die Ausrüstung nicht entsprechend den in der Betriebsanleitung aufgeführten bestimmungsmäßigen Fällen eingesetzt wird.

Hinweis: Beim Zurrpunkt angewendete harmonisierte Normen DIN EN ISO 12100 T1 und T2 sowie in Anlehnung an EN 1677.

Bezeichnung der Ausrüstung:

Zurrpunkt

Type:

Lashing Point Welding - LPW

Herstellerzeichen:



Declaration of the manufacturer

We hereby declare (supported by ISO 9001 certification), that the following described equipment based on the concept and design as well as the by us manufactured type corresponds to the current valid Health- and Safety Requirements of the EC. This declarations becomes invalid in case of any modifications not agreed upon with us. Furthermore this declaration becomes invalid if the equipment is not used according to this prescription.

Hint :Utilized harmonized standards for this Lashing Point DIN EN 12 100 T1 and T2 as well as EN 1677.

Designation of the equipment:

Lashing point

Type:

LPW

Manufacturer's sign:



User Instructions

1. Usage only by authorized and trained persons.
2. Before each usage please check the Lashing Points in regard of cracks within the weld seam, strong corrosion, wear, deformations etc.
3. The material construction to which the Lashing Point will be attached should be of adequate strength to withstand forces. The contact areas must be free from dirt, oil, colour etc. The material of the forged welding block is S355J2+N (St52-3, 1.0577+N), B:S:4360.50 D or AISI 1019

4. The quantity and the arrangement of the Lashing Points on vehicles have to be determined acc. EN 12640 or EN 75410 (for RoRo traffic; Roll-on - Roll-off) as long as the vehicles are not designated acc. their design and mechanism for the transport of specific goods with special demands for load securing. The Lashing Points shall be arranged as wide as possible to use the full loading area and they should not protrude in steady position.

Execute the position of the Lashing Points with the load in such a way that unacceptable stress like twisting or tilting will be avoided.

Warning: Lashing Points must not be used for Lifting of loads.

5. Determine the required, permitted Lashing Capacity acc. EN 12 195-1 „Load securing devices on road vehicles“ - calculation of Lashing Capacities and acc. VDI 2700. **RUD-Lashing Points are marked at the welding block with the permitted lashing capacity „LC“ in daN.**

6. The Lashing device must be free moveable within the LPW. During hang up and unhinge of the lashing devices there must no crush, cutting or traps occur for the handling.

7. Suitability of temperature use: RUD-Lashing points LPW are suitable for the temperature range from -20°C up to 400°C. For the use within the following temperature range, the WLL must be reduced by the following factors:
 200°C up to 300°C: by -10 % and
 300°C up to 400°C: by -25 %

The Lashing points LPW can be stress-relieved one-time in an unloaded condition, together with the load (e.g. welded construction): Temperature < 600°C (1100°F)
 The evidence of the suitability of the used weld metal must be mentioned by the respective filler material manufacturer.

8. Please make Lashing Point easy visible by using a contrasting colour as paint.

9. The weld seam arrangement „continuous HV-weld seam“ fullfills the requirements acc. to DIN 18 800 (structural steel works). At structural steel constructions in outdoor usage or especially when corrosion endanger occurs, the weld seams must only be carried out as circulating , shut fillet weld seams.

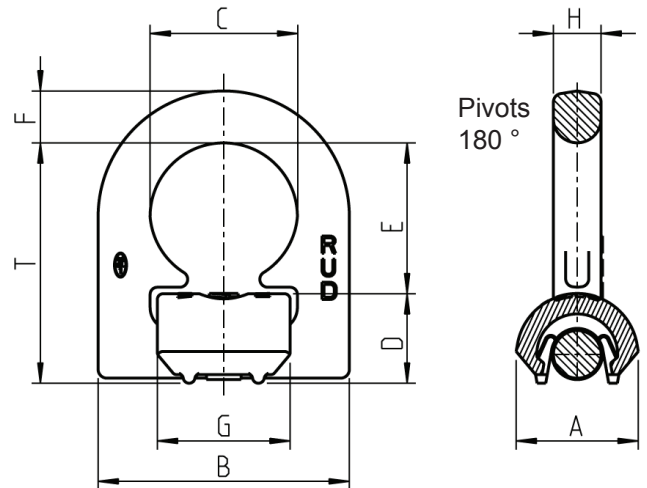
10. The distance lugs assist in achieving the correct air gap for the root of seam weld (approx. 3 mm, or 1/8“) Lugs must not be removed!

11. After welding, or sooner if conditions dictate, an annual inspection should be undertaken by a authorized person to check the continuance of the appropriateness.

Inspection criteria concerning paragraph 2 and 11:

- Completeness of Lashing Point
- Complete and readable marking of Lashing Capacity as well as manufacturer sign
- Deformation at supporting structures like Basic Components and Lashing Rings
- Mechanical damage like strong notches, particularly in areas with tensile stress
- Reduction of cross sectional diameter caused by wear > 10 %
- strong corrosion (pittings)
- Cracks on supporting structures
- Cracks or any other damage of the weld seam

Warning: Failure to read, understand and follow the instructions, Lashing Capacity and specifications in this and other RUD publications could result in serious injury or property damage!



| Type | perm. LC daN | weight kg | A | B | C | D | E | F | G | H | T | Part.-No.: | | | | |
|-----------|--------------|-----------|----|-----|-----|----|-----|----|----|------|-----|--------------|--------------------|---------|---------------|---------|
| | | | | | | | | | | | | LPW complete | LPW without spring | D-Ring | welding block | spring |
| LPW 3000 | 3000 | 0.35 | 33 | 66 | 38 | 25 | 40 | 14 | 33 | 13.5 | 65 | 7992225 | 7993142 | 7992056 | 7991566 | 7102228 |
| LPW 5000 | 5000 | 0.47 | 36 | 77 | 45 | 27 | 48 | 16 | 40 | 13.5 | 75 | 7994831 | 7995430 | 7994848 | 7994850 | 7102228 |
| LPW 8000 | 8000 | 0.8 | 42 | 87 | 51 | 31 | 52 | 18 | 46 | 16.5 | 83 | 7992226 | 7993143 | 7992057 | 7991568 | 7102232 |
| LPW 13400 | 13400 | 1.9 | 61 | 115 | 67 | 44 | 73 | 24 | 60 | 22.5 | 117 | 7992227 | 7993144 | 7992058 | 7991569 | 7102236 |
| LPW 20000 | 20000 | 2.9 | 75 | 129 | 67 | 55 | 71 | 27 | 60 | 26.5 | 126 | 7992228 | 7993145 | 7992059 | 7991570 | 7102133 |
| LPW 32000 | 32000 | 6.8 | 95 | 190 | 100 | 69 | 105 | 40 | 90 | 27 | 174 | - | 7992229 | 7992060 | 7991572 | - |

The welding should only be carried out by an authorized welder according to DIN EN ISO 9606-1 or AWS Standards.

Welding sequence:

- Start tacking in the center of the welding block.
- Welding in stringer beads
- Before carrying out roof weld (top run), carefully clean root of seam.
- The whole welding should be carried out at the same temperature. Do not interrupt welding.
- Warning: Do not weld at the quenched and tempered load ring!

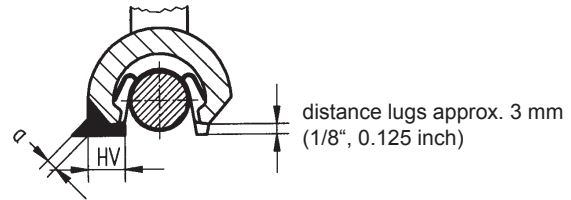
| | weld seam | | |
|-----------|------------|-----------|--------------------------|
| | size | length | volume |
| LPW 3000 | HV 5 + a3 | 2 x 33 mm | ca. 1.1 cm ³ |
| LPW 5000 | HV 7 + a3 | 2 x 40 mm | ca. 2.6 cm ³ |
| LPW 8000 | HV 8 + a3 | 2 x 46 mm | ca. 3.2 cm ³ |
| LPW 13400 | HV 12 + a4 | 2 x 60 mm | ca. 8.7 cm ³ |
| LPW 20000 | HV 16 + a4 | 2 x 60 mm | ca. 15.5 cm ³ |
| LPW 32000 | HV 25 + a6 | 2 x 90 mm | ca. 56 cm ³ |

chart 2

arrangement of weld:



Distance lugs for root of seam weld



Welding method:

| Europe, USA, Asia, Australia, Africa | |
|---|--|
| | Baustähle, niedrig legierte Stähle EN 10025 Mild steels, low alloyed steel |
| MIG / MAG (135) Gas shielded wire welding (135) | DIN EN ISO 14341: G4Si1 (G3Si1) p.ex. PEGO G4Si1 |
| E-Hand Gleichstrom (111, =) Stick Electrode direct current | DIN EN ISO 2560-A: E 42 6 B 3 2 H10 DIN EN ISO 2560-A: E 38 2 B 1 2 H10 p.ex. PEGO B Spezial* / PEGO BR Spezial* |
| E-Hand (Wechselstrom 111, ~) Stick Electrode alternating current | DIN EN ISO 2560-A: E 38 2 RB 1 2 DIN EN ISO 2560-A: E 42 0 RC 1 1 p.ex. PEGO RC 3 / PEGO RR B 7 Alternativ: DIN EN ISO 3581: E 23 12 2 L R 3 2 p.ex. PEGO 309 MoL |
| WIG (141) TIG Tungsten arc welding | DIN EN ISO 636-A: W 3 Si 1 (W2 Si 1) DIN EN ISO 636-A: W 2 Ni 2 p.ex. PEGO WSG 2 / PEGO WSG2Ni2 |

chart 3 * Attend to drying specifications

Attend to the process specifications of the welding additives

| Type | rem. LC lbs | weight lbs | A | B | C | D | E | F | G | H | T | LPW | |
|-----------|-------------|------------|----------|----------|----------|----------|----------|---------|----------|---------|---------|----------|----------------|
| | | | | | | | | | | | | complete | without spring |
| LPW 3000 | 6600 | 0.77 | 1 5/16" | 2 19/32" | 1 1/2" | 1" | 1 9/16" | 9/16" | 1 5/16" | 17/32" | 2 9/16" | 7992225 | 7993142 |
| LPW 5000 | 11000 | 1.03 | 1 13/32" | 3 1/32" | 1 3/4" | 1 1/16" | 1 7/8" | 5/8" | 1 19/32" | 9/16" | 3" | 7994831 | 7995430 |
| LPW 8000 | 17600 | 1.75 | 1 21/32" | 3 7/16" | 2" | 1 7/32" | 2 1/16" | 23/32" | 1 13/16" | 21/32" | 3 1/4" | 7992226 | 7993143 |
| LPW 13400 | 29500 | 4.2 | 2 13/32" | 4 1/2" | 2 5/8" | 1 3/4" | 2 7/8" | 61/64" | 2 3/8" | 7/8" | 4 5/8" | 7992227 | 7993144 |
| LPW 20000 | 44000 | 6.4 | 2 15/16" | 5" | 2 5/8" | 2 1/8" | 2 13/16" | 1 1/16" | 2 3/8" | 1 3/64" | 5" | 7992228 | 7993145 |
| LPW 32000 | 70400 | 15 | 3 3/4" | 7 1/2" | 3 15/16" | 2 23/32" | 4 1/8" | 1 9/16" | 3 9/16" | 1 1/16" | 6 7/8" | - | 7992229 |

chart 4