

# Lashing Point Welding

## LPW

### Safety instructions

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

### Translation of the Original instructions



## Lashing Point Welding - LPW



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RUD-Art.-Nr.: 7993141-EN / 06.019



### Herstellereklärung

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 aufgezeigten 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 EU. 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

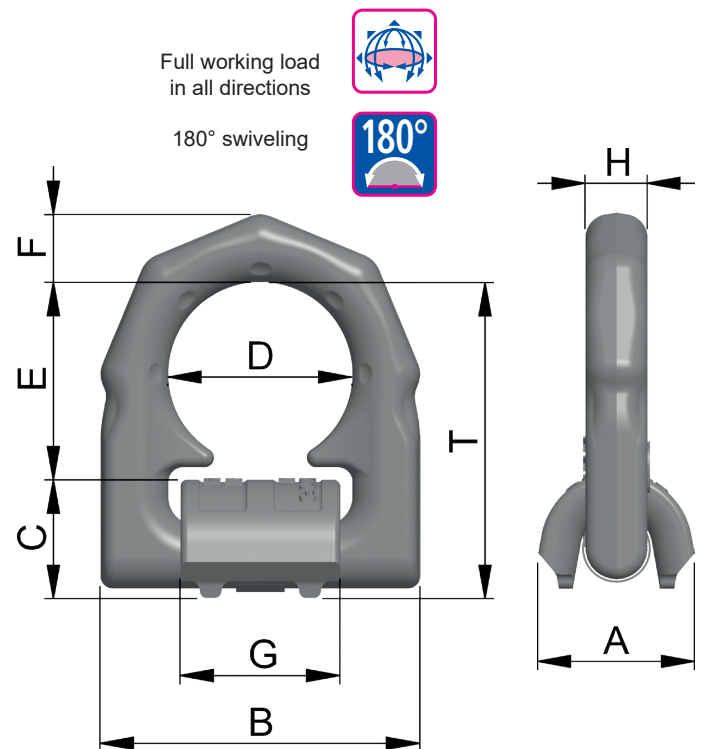
- Usage only by authorized and trained persons.
- Before each usage please check the Lashing Points in regard of cracks within the weld seam, strong corrosion, wear, deformations etc.
- The material construction to which the Lashing Point will be attached should be of adequate strength to withstand forces. 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
- 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.  
**Attention: In general, lashing points must not be used for lifting!**
- 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.**
- 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.
- 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.
- Please make Lashing Point easy visible by using a contrasting colour as paint.

- The weld seam arrangement „continous HV-weld seam“ fulfils 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.
- 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!
- 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 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	LC [daN]	weight [kg/pc.]	A	B	C	D	E	F	G	H	T	LPW complete	LPW without spring	D-Ring	welding block	spring
LPW 3000	3000	0.35	33	66	25	38	40	14	33	13,5	65	7992225	7993142	7906588	7991566	7102228
LPW 5000●	5000	0.47	36	77	27	45	48	16	40	13,5	75					
LPW 5000	5000	0.53	38	77	28	45	47	16	40	16	75	7994831	7995430	7906589	7907597	7102232
LPW 8000	8000	0.8	42	87	31	51	52	18	46	16,5	83	7992226	7993143	7906590	7991568	7102232
LPW 13400	13400	1.9	61	115	44	67	73	24	60	22,5	117	7992227	7993144	7906591	7991569	7102236
LPW 20000	20000	2.9	75	129	55	67	71	27	60	26,5	126	7992228	7993145	7906592	7991570	7102133
LPW 32000●	32000	7.1	95	190	69	100	105	40	90	27	174					
LPW 32000	32000	7.1	96	192	70	100	106	40	90	26	176	7906781	7992229	7906593	7906780	7906639

Chart 1 dimension [mm]

● = Model in round design (up to April 2017) - Discounted part

Subject to technical alterations

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!

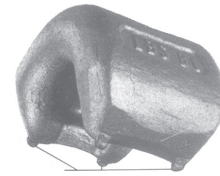
	weld seam		
	size	length	volume
LPW 3000	HV 5 + a3	2 x 33 mm	ca. 1.1 cm <sup>3</sup>
LPW 5000	HV 7 + a3	2 x 40 mm	ca. 2.6 cm <sup>3</sup>
LPW 8000	HV 8 + a3	2 x 46 mm	ca. 3.2 cm <sup>3</sup>
LPW 13400	HV 12 + a4	2 x 60 mm	ca. 8.7 cm <sup>3</sup>
LPW 20000	HV 16 + a4	2 x 60 mm	ca. 15.5 cm <sup>3</sup>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

Chart 3

Welding method + Welding filler metals:	Europe, USA, Asia, Australia, Africa
MIG / MAG (135) Gas shielded wire welding (135)	DIN EN ISO 14341: G4Si1 (G3Si1) Z.B. PEGO G4Si1
E-Hand Gleichstrom (111, =) Stick Electrode direct current Poste à souder à courant conting	DIN EN ISO 2560-A: E 42 6 B 3 2 H10 DIN EN ISO 2560-A: E 38 2 B 1 2 H10 z.B. PEGO B Spezial*/ PEGO BR Spezial*
E-Hand (Wechselstrom 111, ~) Stick Electrode alternating current Poste à souder à courant alternatif	DIN EN ISO 2560-A: E 38 2 RB 1 2 DIN EN ISO 2560-A: E 42 0 RC 1 1 z.B. PEGO RC 3 / PEGO RR B 7 Alternativ: DIN EN ISO 3581: E 23 12 2 L R 3 2 z.B. PEGO 309 MoL
WIG (141) TIG Tungsten arc welding Soudures au tungstène	DIN EN ISO 636-A: W 3 Si 1 (W2 Si 1) DIN EN ISO 636-A: W 2 Ni 2 z.B. PEGO WSG 2 / PEGO WSG2Ni2

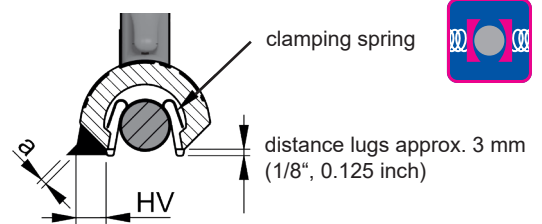
Chart 2

Attend to the process specifications of the welding additives.



distance lugs for root welding

**arrangement of weld:**



Type	LC [lbs]	weight [lbs/pc.]	A	B	C	D	E	F	G	H	T	LPW complete	LPW without spring
LPW 3000	6600	0.77	1 5/16"	2 5/8"	63/64"	1 1/2"	1 9/16"	9/16"	1 5/16"	9/16"	2 9/16"	7992225	7993142
LPW 5000●	11000	1.06	1 27/64"	3 1/32"	1 1/16"	1 25/32"	1 7/8"	5/8"	1 9/16"	9/16"	2 15/16"		
LPW 5000	11000	1.16	1 1/2"	3 1/32"	1 1/8"	1 25/32"	1 7/8"	5/8"	1 9/16"	5/8"	2 15/16"	7994831	7995430
LPW 8000	17600	1.76	1 21/32"	3 7/16"	1 7/32"	2"	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"	1 3/4"	2 5/8"	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 1/8"	2 5/8"	2 13/16"	1 1/16"	2 3/8"	1 3/64"	5"	7992228	7993145
LPW 32000●	70400	15.6	3 3/4"	7 1/2"	2 23/32"	3 15/16"	4 1/8"	1 9/16"	3 9/16"	1 1/16"	6 7/8"	-	
LPW 32000	70400	15.6	3 25/32"	7 9/16"	2 3/4"	3 15/16"	4 3/16"	1 9/16"	3 9/16"	1"	6 15/16"	7906781	7992229

chart 4

● = Model in round design (up to April 2017) - Discounted part

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