

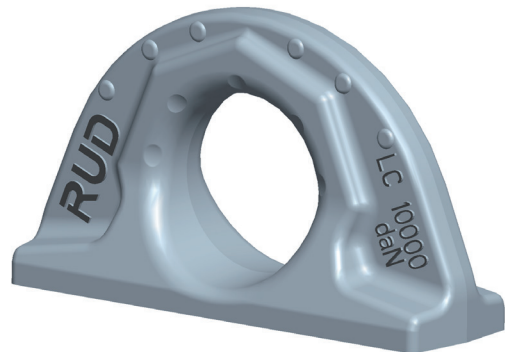
Weld-On Lashing Point - loadable from any side >L-ABA <



Safety instructions

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

Translation of the original safety instruction



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RUD-Art.-Nr.: 7901725-EN / V04 / 04.024

> L-ABA <
Lashing-ABA

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 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 - L-ABA

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: Lashing Point Welding - L-ABA

Manufacturer's sign:





Before initial usage of the RUD weld-on lashing point L-ABA, please read carefully the safety instructions. Make sure that you have understood all subjected matters. Non-observance can lead to serious personal injuries and material damage and eliminates warranty.

1 Safety instructions



ATTENTION

Wrong assembled or damaged weld-on lashing points L-ABA as well as improper use can lead to injuries of persons and damage of objects. Please inspect all lashing points before each use.

- Remove all body parts (fingers, hands, arms, etc.) out of the hazard area (danger of crushing or squeezing) during the lashing process.
- RUD weld-on lashing points L-ABA must only be used by instructed and competent persons considering DGUV-rules 109-017, and outside Germany noticing the country specific statutory regulations.
- No technical alterations must be implemented on the L-ABA.
- No people may stay in the danger zone.
- Damaged or worn L-ABA must never be utilised.

2 Intended use of the L-ABA

RUD-lashing points L-ABA must only be used to attach lashing means.

Lashing points must not be used for lifting loads.

Loading from any side is permitted.

RUD weld-on lashing points L-ABA must only be used in the hereby described operation purpose.

3 Assembly- and instruction manual



HINT

The manufacturer RUD guarantees the overall conformity of the L-ABA only after complete and correct implementation of the assembly and welding specifications!

3.1 General information

- Capability of temperature usage:
When used at higher temperatures the LC (Lashing Capacity) of the lashing point must be reduced as follows:

-40°C up to 200°C	→ no reduction
200°C up to 300°C	→ minus 10 %
300°C up to 400°C	→ minus 25 %

Temperatures exceeding 400°C are prohibited!

The lashing points L-ABA can be stress-relieved one-time in an unloaded condition, together with the connected component (e.g. welded construction):

Temperature < 600°C / 1100°F (one hour maximum)

- RUD weld-on lashing points L-ABA must not be used with aggressive chemicals such as acids, alkaline solutions and their vapours.
- The reuse of cut-off L-ABAs is not permitted.
- It is recommended, that the places where the lashing points are fixed should be marked with colour.

3.2 Hints for the assembly

Basically essential:

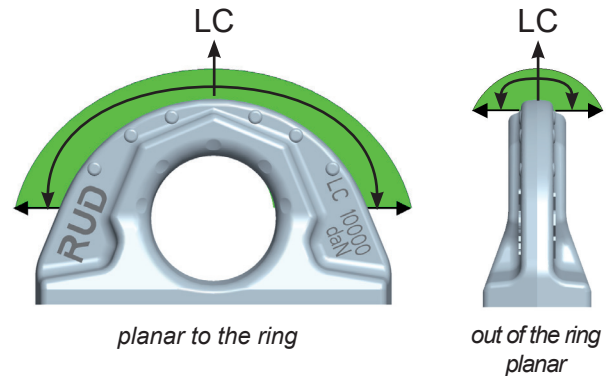
- The material construction to which the lifting point will be attached should be of adequate strength to withstand forces during lifting without deformation. The weld-on material must be suitable for welding and the contact areas must be free from impurities, oil, colour, ect. The material of the forged welding block is 1.6541 (23Mn-NiCrMo52)
- The position of the lashing points must be carried out in regard to the lashing means in such a way that unintended movement like turning or flipping of the load will be avoided.
- Consider the die ISO 15818 „Earth-moving machinery - Lifting and tying-down attachment points“.
- Determine number and position of the lashing points at vehicles according to EN 12640 resp. DIN 75410 (for RoRo-transportation acc. to EN 29367), unless the vehicles are not determined due to their design and construction for transporting specific goods with special requirements in regard of load securing.
- Determine the required, permitted Lashing Capacity acc. EN 12195-1 „Load restraining on road vehicles - Safety - Part 1: Calculation of securing forces“, acc. VDI 2700-2 „Securing of loads on road vehicles“ and acc. ISO 15818.



HINT

The Lashing Points should be arranged (depending on use) as wide as possible to use the full loading area and they should not protrude in steady position.

- Please position the weld-on lashing points L-ABA in the direction of pull (compare to Pic. 1 Permitted direction of pull).



Pic. 1: Permitted direction of pull

- Check finally the correct assembly (see chapter 4 Inspection / repair / disposal).

3.3 Hints for the welding

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



HINTS

A plan welding surface must be guaranteed. Weld all seams in the same temperature.

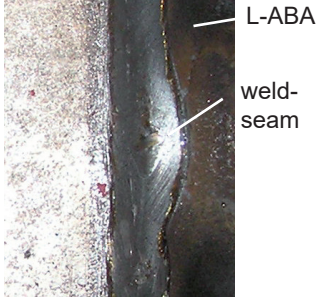
1. Fasten provisionally, resp. start welding in the middle of the plate.
2. Before the closure weld is carried out, make sure that the bottom and all interlayers are cleaned carefully. Remove all visible flaw spots of the root and at the interlayers.

- Weld fillet weld continuous at the base plate of the lifting point.



HINT

Due to the (forged) shape of the L-ABA (sizes 2,000 - 20,000 daN), there will be a weld-seam changeover in the marked area (see Pic. 2 and Pic. 3). This has no impact on the strength of the construction part!



Pic. 2: weld-seam



Pic. 3: area of the weld-seam changeover

- Please check by a competent person after welding the ongoing usage of the weld-on lashing point (see chapter 4 Inspection / repair / disposal).



HINT

By the position of the weld-seam (continuous fillet weld seam) the following requirements will be observed: DIN 18800 steel constructions requires: at outdoor buildings or when strong corrosion must be expected weld seams must be carried out as continuous fillet weld seams.

3.4 User instructions

- Check frequently and before each initial operation the whole weld-on lashing point L-ABA in regard of linger ability as a lashing mean, regarding corrosion, wear, deformation etc. (see chapter 4 Inspection / repair / disposal).



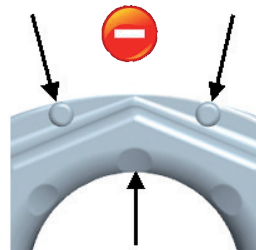
ATTENTION

Wrong assembled or damaged weld-on lashing points L-ABA as well as improper use can lead to injuries of persons and damage of objects. Please inspect all lashing points before each use

- Please check carefully the wear indicator markings of the weld-on lashing point (see Pic. 4):



Usage permitted:
no wear marks visible



Use prohibited: Replacement criteria reached. Material all the way down to the wear lenses has gone

Pic. 4: Wear indicators

- Please note that the lashing mean must be free moveable within the weld-on lashing point L-ABA. When lashing means (lashing chains) are hinged or unhinged, no pinching, shearing or joint spots must occur during the handling.
- Avoid damage of lashing means resulting from sharp edges.
- Lashing points must not be used for lifting loads.
- If possible, leave the immediate danger zone.

4 Inspection / repair / disposal

4.1 Hints for periodical inspections

The operator must determine and specify the nature and scope of the required tests as well as the periods of repeating tests by means of a risk assessment (see section 4.2 and 4.3).

The continuing suitability of the lashing point must be checked at least 1x year by an expert.

Depending on the application conditions, e.g. when used frequently or if there is a higher level of wear or corrosion, it may be necessary to carry out inspections at intervals of less than a year. This inspection is also absolutely necessary after damage and special incidents.

The inspection cycles must be specified by the operator.

4.2 Test criteria for the regular visual inspection by the user

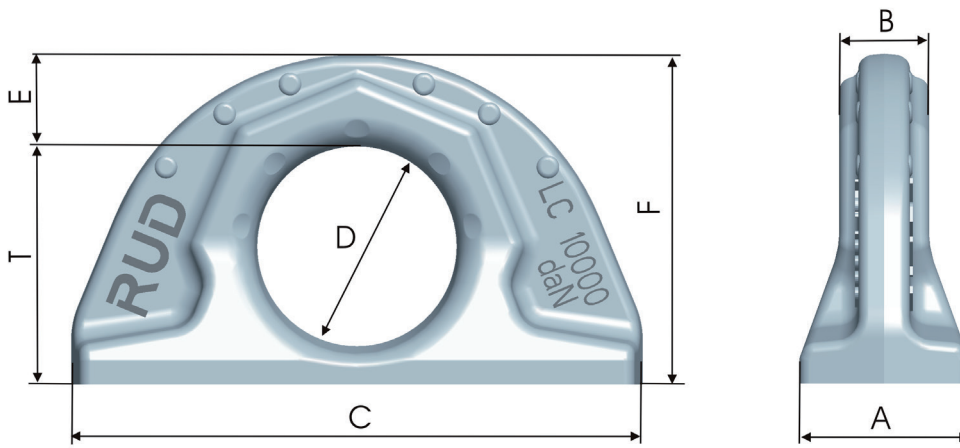
- Completeness of the lashing point
- Complete and readable marking of Lashing Capacity as well as manufacturer sign
- Deformation at load bearing components like base body
- Mechanical damage, like strong notches, especially in areas where tensile stress occurs

4.3 Additional test criteria for the competent person / repair worker

- Reduction of cross-section due to wear >10 % (see Pic. 4 Wear indicators)
- Evidence of corrosion (Pitting)
- further checks may be required, depending on the result of the risk assessment (e.g. testing for cracks in load-bearing parts).

4.4 Disposal

Dispose worn out components / attachments or packaging according to the local waste removal requirements.



Pic. 5: Dimensioning

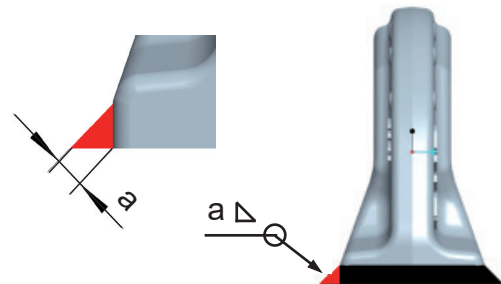
Type	Lashing LC [daN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	weight [kg/pc]	Ref,no,
L-ABA 2,000 daN	2,000	22	12	70	32	12	50	38	0,2	7909394
L-ABA 3,200 daN	3,200	30	16	100	35	16	57	41,5	0,44	7902667
L-ABA 6,400 daN	6,400	41	23	137	50	21	80	59	1,1	7902668
L-ABA 10,000 daN	10,000	51	27	172	60	27,5	99	71,5	2,3	7901722
L-ABA 20,000 daN	20,000	70	38	228	80	35	130	95	5,3	7901723

Table 1: Dimensioning

Subject to technical alterations

Type	size filled weld	length	volume
L-ABA 2,000 daN	a = 3	177 mm	1,593 cm ³
L-ABA 3,200 daN	a = 4	251 mm	4,016 cm ³
L-ABA 6,400 daN	a = 6	344 mm	12,38 cm ³
L-ABA 10,000 daN	a = 7	431 mm	21,1 cm ³
L-ABA 20,000 daN	a = 8	576 mm	36,86 cm ³

Table 2: weld seam



Pic. 6: Welding seam position

	Europe, USA, Asia, Australia, Africa
	Mild steels, low alloyed steel EN 10025-2
MIG / MAG (135) Gas shielded wire welding	DIN EN ISO 14341: G4Si1 (G3Si1) z.B. 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 z.B. 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 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 (141)) Tungsten arc welding	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

Table 3: Welding procedure and Welding filler metals



HINT

Please note the corresponding user hint in regard of the welding filler materials and the drying requirements*.