

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



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 safety instruction



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> 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 aufgeführten bestimmungsmäßigen Fällen eingesetzt wird.

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


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.

Bezeichnung der Ausrüstung:
Zurrpunkt

Type: Lashing Point Welding - L-ABA

Herstellerzeichen: 

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 when load drops. Please inspect all lashing points before each use.

RUD weld-on lashing points L-ABA must only be used by instructed and competent persons considering BGR 500, 2.8 (DGUV rules 100-500), and outside Germany noticing the country specific statutory regulations.

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

3.1 General information

- Capability of temperature usage:
When used at higher temperatures the working load limit (WLL) 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 load (e.g. welded construction):

Temperature < 600°C (1100°F)

- RUD weld-on lashing points L-ABA must not be used with aggressive chemicals such as acids, alkaline solutions and their vapours.
- Please mark mounting position of lifting point with a coloured contrast paint for better visibility.

3.2 Hints for the assembly

Basically essential:

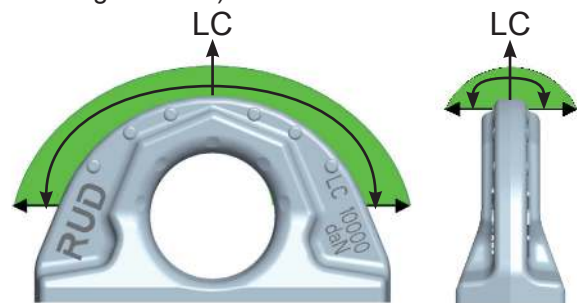
- The material construction to which the lifting point will be attached should be of adequate strength to withstand forces during lifting without deformation. The weld-on material must be suitable for welding and the contact areas must be free from impurities, oil, colour, ect. The material of the forged welding block is 1.6541 (23MnNiCrMo52)
- 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.
- 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.
- Position lashing points as much as possible at the outside width of the loading platform.



HINT

The lashing points must not protrude in rest position over the loading platform level.

- Determine the necessary lashing capacity of each lashing point acc. to EN 12195-1 "Load securing devices on road vehicles" - "Calculation of lashing forces" and VDI 2700 "Load securing of road vehicles."
- Please position the weld-on lashing points L-ABA in the direction of pull (compare to picture 1, permitted loading direction)



Pic. 1: Permitted loading directions

- Check finally the correct assembly (see chapter 4, *Inspection criteria*)

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.

1. Fasten provisionally, resp. start welding in the middle of the plate.
2. Weld fillet weld continuous at the base plate of the lifting point.



HINT

Weld all seams in the same temperature.



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 3). This has no impact on the strength of the construction part!



Pic. 2: weld-seam



Pic. 3: area of the weld-seam changeover

3. Please check by a competent person after welding the ongoing usage of the weld-on lashing point (see chapter 4, *Inspection criteria*).



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 lifting mean, regarding corrosion, wear, deformation etc. (see chapter 4, *Inspection criteria*).



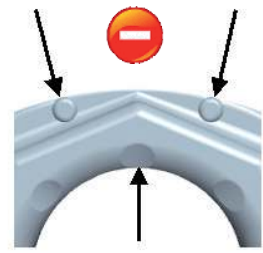
ATTENTION

Wrong positioned or damaged weld-on lashing points as well as improper use can lead to injuries of persons and damage at property, when load falls down. Please check all lashing points carefully before every usage.

- Please check carefully the wear indicator markings of the weld-on lashing point (see picture 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.

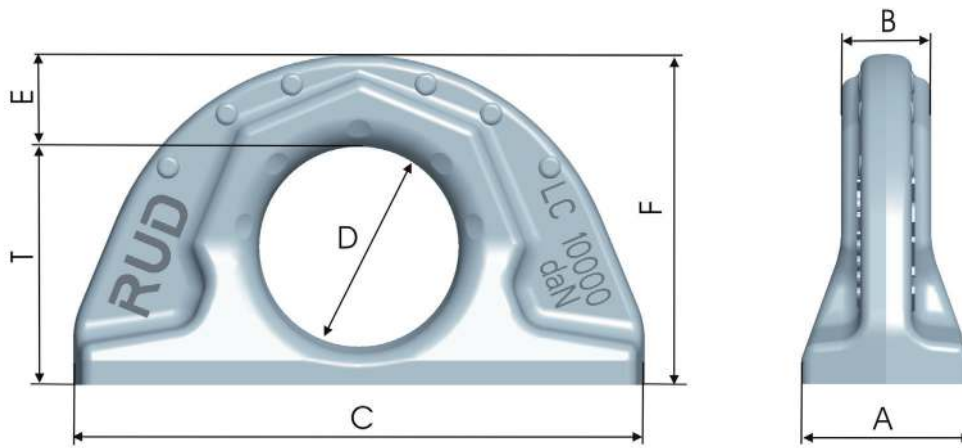
3.5 Hints for regular inspection

In time periods complying to the need or usage, a technical expert must control at least once a year the appropriateness of the anchor point. This inspection must also be done after each event of damage or special incident.

4 Inspection criteria

Observe and control the following points before each initial operation, in regular time intervals, after the assembly and after special incidents:

- 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
- Reduction of cross-section due to wear >10 % (see picture 4, wear indicator markings)
- Evidence of corrosion (Pitting)
- Evidence of cracks
- Cracks or other damages at weld seam



Pic. 5: Dimensioning

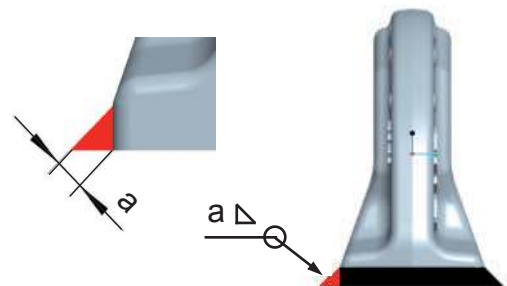
Type	Lashing LC [daN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	weight [kg/pc]	Ref,no,
L-ABA 2,000 daN	2,000	22	12	70	32	12	50	38	0.2	7909394
L-ABA 3,200 daN	3,200	30	16	100	35	16	57	41.5	0.44	7902667
L-ABA 6,400 daN	6,400	41	23	137	50	21	80	59	1.1	7902668
L-ABA 10,000 daN	10,000	51	27	172	60	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 cm³
L-ABA 3,200 daN	a = 4	251 mm	4.016 cm³
L-ABA 6,400 daN	a = 6	344 mm	12.38 cm³
L-ABA 10,000 daN	a = 7	431 mm	21.1 cm³
L-ABA 20,000 daN	a = 8	576 mm	36.86 cm³

Table 2: weld seam



Pic. 6: Welding seam position

	Europe (DE, GB, FR,) structural steel, low alloyed steel	USA, Canada
MAG / MIG (135)	ISO 14341: G4 Si 1 f.e. Castolin 45250	ISO 14341: G4 Si 1 AWS A 5.18 : ER 70 S-6 f.e. Eutectic MIG-Tec A88
E-Hand = Direct Current (DC) (111)	EN ISO 2560-A - E 42 6 B 3 2; EN ISO 2560-A - E 38 2 B 12 H10 f.e.Castolin 6666 * Castolin 6666N	AWS A 5.5 : E 8018-G * AWS A 5.1 : E 7016 * f.e. Eutectic Castolin 6666 / 6666N / 35066
E-Hand ~ Alternating Current (AC) (111)	ISO 14343 A: G 18.8.Mn DIN 8555: E- 8-UM-200-400 CKZ f.e. Castolin 640 Castolin 33033	DIN EN 1600: E23 12 2 LR 12 AWS A 5.4 : E 309 Mo L-16 f.e. Castolin 33700 CP
WIG (141)	ISO 636: W3 Si 1 f.e. Castolin 45255W	ISO 636: W3 Si 1 AWS A 5.18 : ER 70 S-G f.e. Eutectic TIG-Tec-Tic A 88

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*.