

Lashing point Load Ring weldable > LRBS-FIX <



Safety instructions

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

Translation of the original safety instruction



Lashing point
Load Ring weldable
LRBS-FIX



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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: Load Ring Welding - LRBS-FIX

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: Load Ring Welding - LRBS-FIX

Manufacturer's sign:



Before initial usage of the RUD-LRBS-FIX, 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



VORSICHT

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.

- The lashing points must not protrude in rest position over the loading platform level.
- RUD-lashing points LRBS-FIX must only be used by instructed and competent persons considering BGR 500, and outside Germany noticing the country specific statutory regulations.

2 Intended use of the LRBS-FIX

RUD-lashing points LRBS-FIX must only be used to attach lashing means.

Lashing points must not be used for lifting loads.

RUD-lashing points must only be used in the hereby specified case of operation.

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 lifting point must be reduced as follows:
 - -20°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!
- RUD-Lashing points LRBS-FIX 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.

- LRBS-FIX includes a protected positioned clamping spring, inside the weld-on block. The spring holds the weld-on blocks together with the ring and creates at the same time a radial clamping function.
- RUD-lashing points LRBS-FIX are clearly marked at the suspension ring with the permissible Lashing capacity „LC“ in daN.
- LRBS-FIX will be delivered as a complete assembled unit.

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 dirt, oil, colour, ect.
The material of the forged welding block is: S355J2+N (1.0577+N (St52-3))
- 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."
- Check finally the correct assembly (see chapter 4, test criteria).

3.3 Hints for the welding

The welding should only be carried out according to EN 287 or AWS Standards by an authorized and certified welder.

Verification of the used weld-on material must be checked with the supplier of the welding electrodes.



HINTS

- *Never weld at the quenched and tempered ring!*
- *Weld all seams at the same temperature.*

1. Check before initial appending of the LRBS-Fix, the position of the weld-on blocks to each other, that means the base area must be at the same level.
2. Append weld-on blocks.
3. Check function of the ring. The ring must be able to pivot 180°. If necessary please correct.
4. Remove any welding mistakes and dirt at the root weld before applying the cover weld seams.
5. Weld blocks on.
Choose type of weld seam and size according to picture 2 and chart 2.
6. Please check by a competent person after welding the ongoing usage of the weld-on lifting point (see chapter 4, test criteria)



HINT:

By the position of the weld-seam (HY-weld circumferential) 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

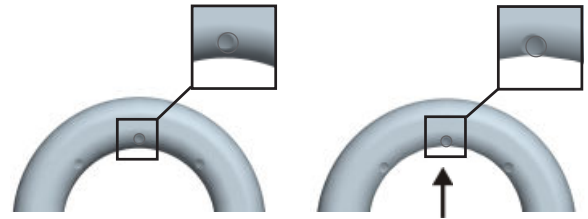
- Check frequently and before each initial operation the whole lashing point in regard of linger ability as a lashing mean, regarding corrosion, wear, deformation etc. (see chapter 4, test criteria).



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 1):



Usage permitted:

no wear marks visible

Use prohibited:

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

Picture 1: Wear indicators

- Please note that the lashing mean must be free moveable in the LRBS-FIX. When lashing means (f.e. lashing chain) 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 lashing point. This inspection must also be done after each event of damage or special incident.

4 Inspection criteria

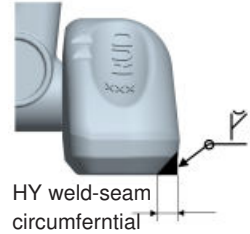
Observe and control the following points before each initial operation, in regular time intervals, after the assembly and after special incidents.

- 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 and Ring.
- Mechanical damage, like strong notches, especially in areas where tensile stress occurs.
- Reduction of cross-section due to wear >10 %
- Evidence of corrosion (pitting)
- Evidence of cracks
- Cracks or other damages at weld seam

	Europe (DE, GB, FR,) Structural steel, Low alloyed steel	USA, Canada
MAG / MIG (135) GAS SHIELDED WIRE WELDING	ISO 14341: G4 Si 1 z.B. Castolin 45250	ISO 14341: G4 Si 1 AWS A 5.18 : ER 70 S-6 z.B. Eutectic MIG-Tec A88
E-Hand Gleichstrom = (111) Stick Electrode Direct Current (DC)	EN ISO 2560-A - E 42 6 B 3 2; EN ISO 2560-A - E 38 2 B 12 H10 z.B. Castolin 6666 * Castolin 6666N *	AWS A 5.5 : E 8018-G AWS A 5.5 : E 7016 EN ISO 2560-A - E 42 6 B 3 2; EN ISO 2560-A - E 38 2 B 12 H10; z.B. Eutectic 6666 / 35066 CP*
E-Hand ~ Wechselstrom (111) Stick Electrode Alternating Current	EN ISO 2560-A - E 38 0 RR 1 2 EN ISO 2560-A - E 42 0 RR 1 2 z.B. Castolin 6600 / Castolin 35086 no-load-voltage35-48 (max.) V	AWS A 5.1 : E 6013 EN ISO 2560-A - E 38 0 RR 1 2 EN ISO 2560-A - E 42 0 RR 1 2 z.B. Eutectic Beauty Weld II
WIG (141) TIG - Tungsten Arc Welding	ISO 636: W3 Si 1 z.B. Castolin 45255W	ISO 636: W3 Si 1 AWS A 5.18 : ER 70 S-6 z.B. Eutectic TIG-Tec-Tic A 88



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

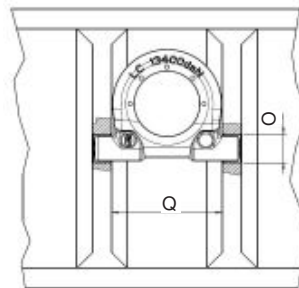


Picture 2:
HY-weld seam

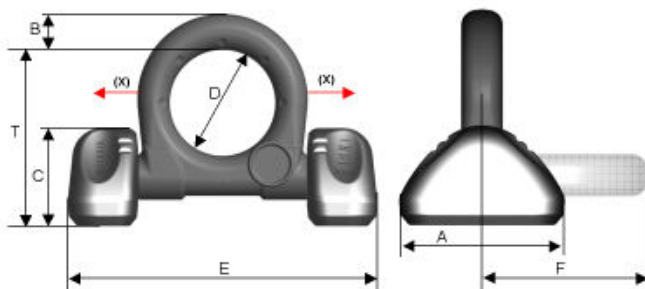
Chart 1: Welding procedure + Welding filler metals

Type	Size	Length	Volume
LRBS-FIX 8000	HY 3	2 x 154 mm	approx. 1.4 cm ³
LRBS-FIX 13400	HY 5	2 x 214 mm	approx. 5.35 cm ³
LRBS-FIX 20000	HY 6	2 x 252 mm	approx. 9 cm ³
LRBS-FIX 32000	HY 9	2 x 341 mm	approx. 27 cm ³

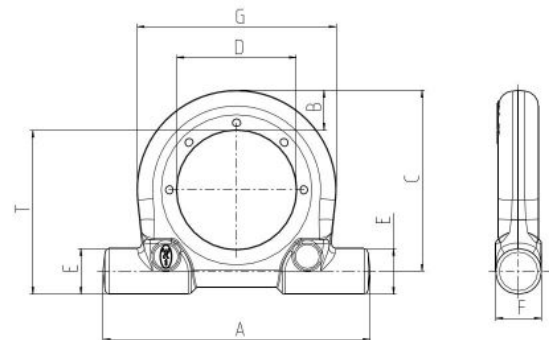
Chart 2: Weld seam (weld-on block)



Picture 3:
Lashing Ring is integrated in the design



Picture 4: Dimensioning LRBS-FIX complete



Picture 5: Dimensioning Lashing Ring

Type	LC [daN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	T [mm]	weight [kg/pc.]	Ref.-no.
LRBS-FIX 8000	8000	60	14	39	48	132	69	74	0.93	7999303
LRBS-FIX 13400	13400	88	20	50	60	167	91	97	2.2	7999304
LRBS-FIX 20000	20000	100	22	60	65	191	100	108	3.7	7999305
LRBS-FIX 32000	32000	130	30	72	90	267	134	140	8.0	7999306

Chart 3: Dimensioning LRBS-FIX

Type Lashing Ring	LC [daN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm]	F [mm]	G [mm]	T [mm]	O [mm]	Q [mm]	weight [kg/pc.]	Ref.-no.
Lashing Ring 8000	8000	107	14	69	48	17	18	76	63.5	19 ^{+0.5}	77 ⁺¹	0.38	7902251
Lashing Ring 13400	13400	134	20	91	60	23	23	100	82.5	25 ^{+0.5}	101 ⁺¹	0.96	7902252
Lashing Ring 20000	20000	152	22	100	65	28	29	105	92	30 ^{+0.5}	106 ⁺¹	1.46	7902331

Chart 4: Dimensioning LRBS Lashing Ring

Subject to technical alterations