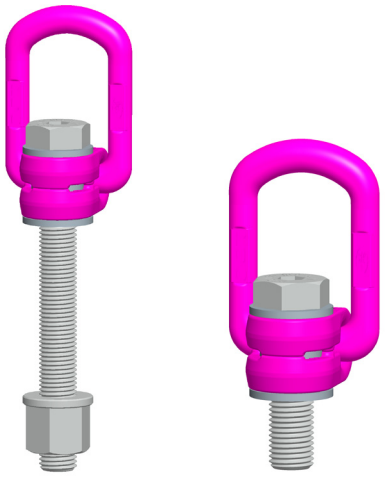
Lashing Point
Load Ring for bolting
>L-VLBG<

EN

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 in pink - boltable
L-VLBG

RUD Ketten
Rieger & Dietz GmbH u. Co. KG
73428 Aalen
Tel. +49 7361 504-1370
Fax +49 7361 504-1460
sling@rud.com
www.rud.com

RUD-Art.-Nr.: 7905803-EN / 11.015

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: Zurrpunkt Lastbock-Gewinde L-VLBG

Herstellerzeichen:

Declaration of the manufacturer

We hereby declare (supported by certification as per ISO 9001) that the equipment, as mentioned below, corresponds to the appropriate, basic requirements of safety and health of the corresponding European Union in the design as it is sold by us because of its design and construction. In case of any modification of the equipment, not being agreed upon with us, this declaration becomes invalid. Furthermore, this declaration will become invalid if the equipment is not used according to the prescriptions mentioned in the manual.

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 for bolting L-VLBG

Manufacturer‘s sign:

Please read user instruction before initial operation of the bolt-on lashing load ring (subsequently named L-VLBG). Make sure that you have comprehend 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 L-VLBG as well as improper use can lead to injuries of persons and damage of objects.
Please inspect all lashing points before each use.

- RUD-lashing points L-VLBG must only be used by instructed and competent persons and outside Germany noticing the country specific statutory regulations.
- The lashing points must not protrude in rest position over the loading platform level.
- L-VLBG must be rotatable 360° when installed.

2 Intended use

RUD-L-VLBG must only be used for the assembly of the load or at load accepting means

RUD-L-VLBG must only be used for lashing of loads and must not be used for lifting of loads.

RUD-L-VLBG must only be used up to the max. prescribed LC (=Lashing capacity).

RUD-L-VLBG must only be used in the here described usage purpose.

3 Assembly- and instruction manual

3.1 General information

- Effects of temperature:
  Due to the DIN/EN bolts that are used in the L-VLBG, the working load limit must be reduced accordingly:

  -40°C to 100°C --> no reduction
  100°C to 200°C minus 15 % (212 to 392°F)
  200°C to 250°C minus 20 % (392 to 482°F)
  250°C to 350°C minus 25 % (482 to 662°F)
  Temperatures above 350°C (662°F) are not permitted.

  Please observe the maximum usage temperature of the supplied nuts (optionally):

  - Clamping nuts according to DIN EN ISO 7042 (DIN 980) must only be used up to +150°C at the max (302°F).
  - Collar nuts according to DIN 6331 can be used up to +300°C. Please note also the reduction factors (572°F).

- RUD-Lifting points must not be used under chemical influences such as acids, alkaline solutions and vapours e.g. in pickling baths or hot dip galvanising plants. If this cannot avoided, please contact the manufacturer indicating the concentration, period of penetration and temperature of use.
- The places where the lashing points are fixed should be marked with colour
- RUD L-VLBG lashing points are delivered with a 100 % crack tested bolt (length up to Lmax please see table 1).
- When using your own bolts, the bolts have to be 100 % crack tested.

HINT
The min. quality of the hexagon bolt has to be 10.9 accord. EN 24014 (DIN 931) with the nominal diameter. For replacement the bolt can be easily hammered out.
The disassembly and the exchange of parts must only be carried out by a competent person.

Versions

- RUD supplies the Vario length complete with a washer and crack-detected nut corresponding to DIN EN ISO 7042 (DIN 980) or will be supplied with a crack inspected collar nut acc. to DIN 6331.

3.2 Hints for the assembly

Basically essential:

- The material construction to which the lashing point will be attached should be of adequate strength to withstand forces during lifting without deformation. The German testing authority BG/DGUV, recommends the following minimum for bolt lengths:
  1x M in steel (minimum quality S235JR [1.0037])
  1,25x M in cast iron (f.e. GG 25)
  2 x M in aluminium alloys
  2,5 x M in aluminium-magnesium alloys
  (M = diameter of RUD lashing point, f.e. M 36)
- 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.
- The lashing points must not protrude in rest position over the loading platform level.
- 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.

ATTENTION
Lashing points must not be used for lifting loads.

- RUD-lashing points L-VLBG are clearly marked at the ring with the permissible Lashing capacity „LC“ in daN.
- A plane bolt-on surface (ØD, table 1) with a perpendicular thread hole must be guaranteed.
  The thread must be carried out acc. to DIN 76 (countersink max. 1.05xd).
  Tapped holes must be machined deep enough so that the bearing surface of the lifting point will be supported.
- For a singular transporting action at a short transporting route hand tightening with a flat wrench is sufficient (bottom flange of the L-VLBG must sit properly at bearing surface). At other installations the L-VLBG must be tightened with the appropriate torque values acc. to table 1.
- L-VLBG must be rotatable 360° when installed.
- With shock loading or vibrations, especially at through hole fixtures with a nut at the end of the bolt, accidential release can occure.
  Securing possibilities: Observe torque moment, use liquid securing glue f.e. Loctite (can be adapted to the usage, observe manufacturer hints) or assemble a form closure bolt locking device f.e. a castle nut with cotter pin, locknut etc.
- Finally check the proper assembly (see chapter 4 *Inspection criteria*).

3.3 User instructions

3.3.1 General information for the usage

- 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, *Inspection criteria*).

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

- Adjust to the direction of pull, before attaching to the lashing means. The load ring should be free movable and must not touch edges.
- Only one lashing mean must be attached to the suspension ring of the L-VLBG.
- All fittings connected to the L-VLBG should be free moving. When connecting and disconnecting the lashing means (lashing chain) pinches and impacts should be avoided.
- Damage of the lashing means caused by sharp edges should be avoided as well.

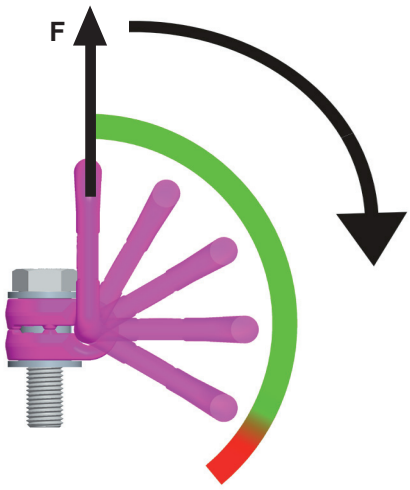
3.4 Hints for regular inspection

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 (see chapter 4 *Inspection criteria*).
Depending on the usage conditions, f.e. frequent usage, increased wear or corrosion, it might be necessary to check in shorter periods than one year. This inspection must also be done after each event of damage or special incident.

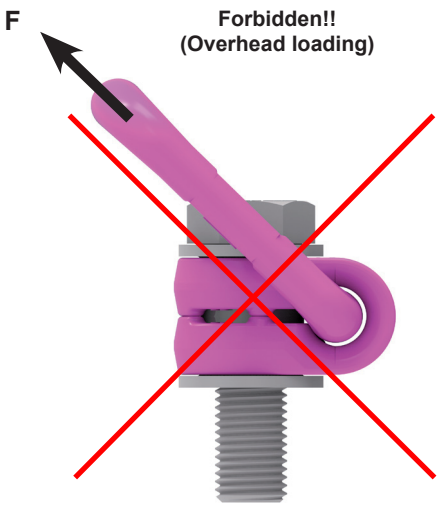
4 Inspection criteria

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

- Ensure correct bolt- and nut size, bolt quality grade and engagement length
- Ensure compatibility of bolt thread and tapped hole --> control of the torque
- 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, load ring and bolt.
- Mechanical damage, like strong notches, especially in areas where tensile stress occurs
- Wear should be not more than 10 % of cross sectional diameter.
- Evidence of corrosion.
- Evidence of cracks.
- Damage at the bolt, nut and/or thread.
- The body of the L-VLBG must be free to rotate.



Pic. 1: Permissible load direction
until conatct with loading platform occurs



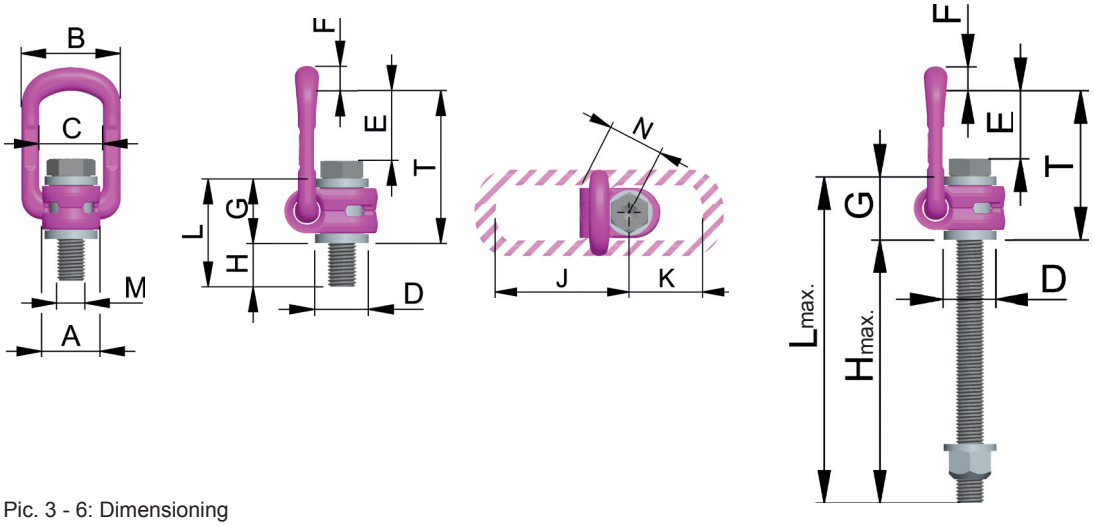
Pic. 2: Overhead loading

Type	lashing LC [daN]	weight [kg]	A	B	C	D	E	F	G	H Stand.	H max.	J	K	L Stand.	L max.	M	N	SW	ISK	T	torque	Ref.-No. Standard	Vario
L-VLBG M36	16.000	6.2	77	122	82	70	97	26.5	77	63	223	205	110	140	300	36	87	55	22	197	800 Nm	7904778	8600778

Table 1: Dimensioning [mm]

Subject to technical alterations

SW = wrench size
ISK = internal hexagon



Pic. 3 - 6: Dimensioning