



Lifting eye bolt

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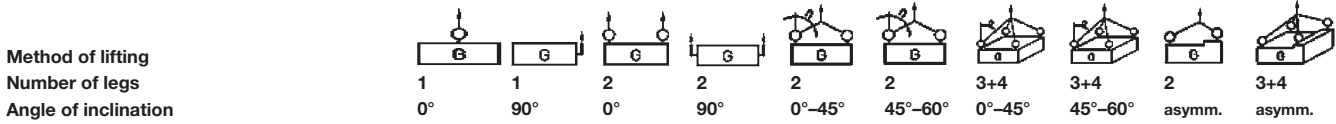
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1. Lifting points "Lifting eye bolt Z 725 / . . ."

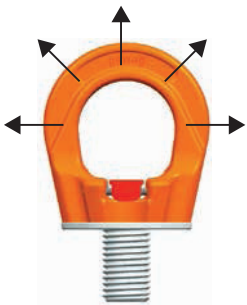
The lifting points are designed considering this manual as well as the national regulations for lifting and holding the load. Read the manual carefully before using the lifting points.

The user must have access to the operating manual until withdrawal of the connecting links from service. The manual is updated continuously and valid only in the latest version.

The manual is available as a download under the following link: www.hasco.com



No.	Thread [mm]	Fastening torque [Nm]	Load capacity [kg]									
			1.000	300	2.000	600	400	300	600	400	300	300
Z 725 / 8	M8	Can be tightened manually	1.500	500	3.000	1.000	700	500	1.000	700	500	500
10	M10		2.000	700	4.000	1.400	1.000	700	1.400	1.000	700	700
12	M12		4.000	1.500	8.000	3.000	2.100	1.500	3.000	2.200	1.500	1.500
16	M16		5.000	2.300	10.000	4.600	3.200	2.300	4.800	3.400	2.300	2.300
20	M20		6.500	3.200	13.000	6.400	4.500	3.200	6.700	4.800	3.200	3.200
24	M24		12.000	4.900	24.000	9.800	6.900	4.900	10.300	7.300	4.900	4.900
30	M30		15.000	7.000	30.000	14.000	9.800	7.000	14.700	10.500	7.000	7.000
36	M36		22.000	9.000	44.000	18.000	12.600	9.000	18.900	13.500	9.000	9.000
42	M42		30.000	12.000	60.000	24.000	16.800	12.000	25.000	18.000	12.000	12.000
48	M48											



Picture 1: permitted



Picture 2: not permitted

2. Intended use

Load capacity

Working load limit according to test certificate or working load limit table in the given directions of tension – see picture 1

Admissible operating temperature

-40 °C to 200 °C (please note WLL reduction at high temperature).

Impacts

Impacts which occur because of e.g. acceleration during lifting and lowering can be unconsidered.

Other

Lifting points have to be mounted only with the included screw. The body is rotatable 360° and must be aligned in the permitted direction of tension before use.

Demanding conditions

	below -40 °C	-40 °C to 200 °C	200 °C to 250 °C	250 °C to 350 °C	above 350 °C
Temperature	below -40 °C	-40 °C to 200 °C	200 °C to 250 °C	250 °C to 350 °C	above 350 °C
Load factor	not permitted	1	0,8	0,75	not permitted
Shock	slight shocks	medium shocks	medium shocks	strong shocks	strong shocks
Load factor	1	0,7	0,7	not permitted	not permitted

* use at temperatures below -40 °C and above 350 °C is forbidden!

3. Information for use

- Lifting points should be used by a competent authorised person
- Visual inspection before first usage (see maintenance instruction)
- Before every usage check for damages on screw and thread – lifting points must be rotatable
- Load only in the specified direction (see picture 1) with WLL acc. to table
- Make sure before each use that the lifting point is hand tight (by the lock system or an Allen key)
- Please note restriction in application for eventually appearing difficulties in load
- Connected lifting gear (e.g. hook) must be flexible in the ring
- Lifting points must be stored in a clean and dry area
- Lifting points are not designed to be rotated under load

Attention:

- Do not overload lifting points. A falling down load may lead to injuries or death!
- Do not use damaged lifting points (see maintenance instruction) – they can fail in operating conditions – load can fall down!

4. Limits of use

When lifting points are used under other conditions than the one mentioned in Intended use (see above), restrictions on used must be applied.

- Do not use lifting points in connection with acids, bases or their steams.
For application in chemical environments, please contact our technical service
- Do not load lifting points when they come into contact with corners or sharp edges!
- Do not lift people!
- If the load distribution is asymmetrical (unequal angle of the legs of the lifting gear) only count 1-leg as bearing (see load table)

5. Mounting instruction

Mounting only by competent authorized person.

This lifting point has a simple system for tool-free installation:

- To screw the lifting point you fold up the two latches so that they rest completely on the side surfaces of the screw (position ‚A‘ - see picture 3). The latches are held by a spring in this position.
- Screw in the lifting point until the entire bottom surface touches the load
- Tighten the lifting point manually • Now fold the two latches down to position ‚B‘ as visible in picture 4. In this position, the latches are also held by the spring in this position



Picture 3: Supreme dis-/assembly



Picture 4: Supreme rotatable

After installation, make sure that it cannot lead to a wrong load by turning the ring in the expected direction of tension.

5. Mounting instruction (Cont.)

- The equipment, where the lifting points are mounted on, has to meet the requirements of the Machinery Directive 2006/42/EC
- Choose adjustment of lifting points so that you have a symmetric load. Center of gravity must be under the lifting point
- The base material must be of sufficient strength that the force induced can be absorbed without deformation
- Choose lifting points with adequate WLLs – see table
- The screwing area must be flat and be provided with a diameter not smaller than the bottom part of the lifting point. The threaded hole with adequate depth must be in the middle and in a square to ensure that the screw can be screwed in correctly (blind hole)
- Minimum screw penetration: 1 x M in steel (M = thread size e.g. M20 = 20 mm), 1,25 x M in cast steel
2 x M in aluminum
- Threaded hole must be cleaned before screwing
- Lifting points can also be fixed with an Allen key
- If necessary (e.g. if vibrations occur), use liquid thread adhesives (please note manufacturer's instructions)
- Make sure that the adjustment of the lifting point will not lead to improper loading, e.g. if:
 - There is no possibility to align in the direction of tension
 - The direction of tension is not in the foreseen area acc. to picture 1
- Use only pewag original parts – recognizable by the marking (WLL, thread)
- It is not allowed to modify the lifting point, e.g. welding, heat treatments and surface treatments (galvanising) are prohibited. Also shortening of screw is forbidden
- Mount only lifting points free from defects
- Check used lifting points acc. to maintenance instruction before application
- After assembling, lifting points must be able to rotate properly
- Do not use any extension when assembling

6. Maintenance, Checks

- An inspection in accordance with the national standards must be carried out annually by a technical expert. If used frequently under a full load these inspections can be implemented regularly. We also recommend a crack test every two years. The screw must be taken out from the body
- The parts must be free from oil, dirt and rust for inspection and crack test. Adequate cleaning procedures are the ones, which do not overheat, hide failures on surface and cause hydrogen embrittlement or stress crack corrosion
- During inspection check all parts which can influence safety and function –
e.g.: - BCracks, notches, deformation
 - noticeable signs of excessive heat
 - Abrasion resp. corrosion of more than 10 % of the cross section

In case of doubt, if the lifting points are damaged, stop using them and have them examined by an expert.