

GRR8
INDUSTRIES



lifting points
non-rotating



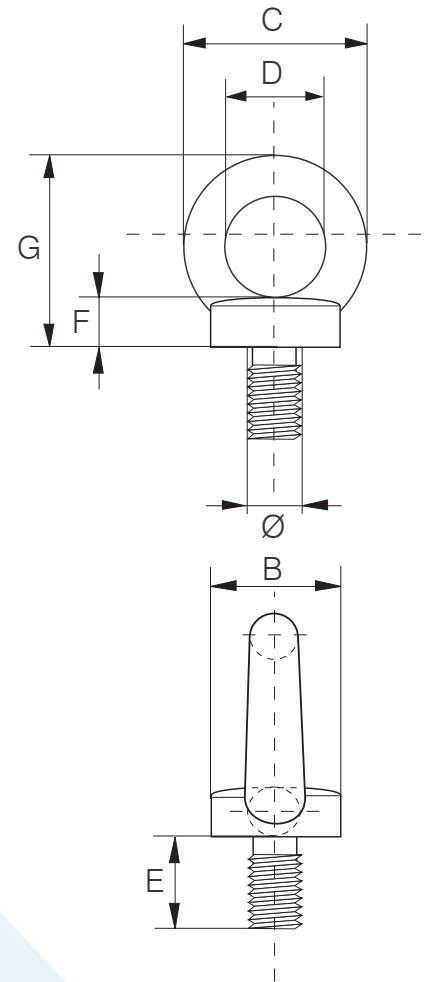
labour

Department:
Labour
REPUBLIC OF SOUTH AFRICA

Eye bolts - drop forged

made to DIN580 specifications

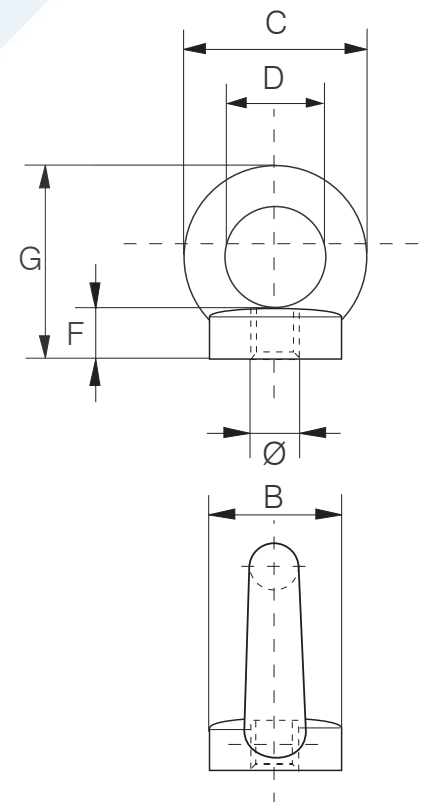
Thread Ø	WLL	B	C	D	E	F	G	Weight 100pcs
[mm]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgs]
6	0.07	17	28	16	13	6	34	3.0
8	0.14	20	36	20	13	6	36	6.0
10	0.23	25	45	25	17	8	45	10.3
12	0.34	30	54	30	20.5	10	53	17.7
14	0.49	35	63	35	27	12	60	27.7
16	0.70	35	63	35	27	12	62	28.0
20	1.20	40	72	40	30	14	71	42.4
22	1.50	45	81	45	35	14	80	67.0
24	1.80	50	90	50	36	18	90	83.4
30	3.60	65	108	60	45	22	109	166.0
36	5.10	75	126	70	54	26	128	265.0
39	6.1	75	126	70	54	26	130	334.0
42	7.0	85	144	80	63	30	147	403.0
45	8.0	85	144	80	63	30	150	521.0
48	8.6	100	166	90	68	35	168	632.0



Eye nuts - drop forged

made to DIN582 specifications

Thread Ø	WLL	B	C	D	F	G	Weight 100pcs
[mm]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgs]
6	0.07	20	36	20	8.5	34	4.2
8	0.14	20	36	20	8.5	36	5.2
10	0.23	25	45	25	10	45	9.4
12	0.34	30	54	30	11	53	16.0
14	0.49	35	63	35	13	60	22.0
16	0.70	35	63	35	13	62	24.0
20	1.20	40	72	40	16	71	35.2
22	1.50	45	81	45	18	80	58.0
24	1.80	50	90	50	20	90	70.6
33	4.30	65	108	60	25	110	170.0
36	5.10	75	126	70	30	128	208.0
39	6.10	75	126	70	30	130	260.0
42	7.0	85	144	80	35	147	311.0
45	8.0	85	144	80	35	150	407.0
48	8.6	100	166	90	40	168	502.0



material: C15

finish: Electro galvanised

Eye bolts - stainless steel

AISI 316

Thread Ø	WLL	B	C	D	E	F	G	Weight 100pcs
[mm]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgs]
6	0.07	17	28	16	13	6	34	3.0
8	0.14	20	36	20	13	6	36	6.0
10	0.23	25	45	25	17	8	45	10.3
12	0.34	30	54	30	20.5	10	53	17.7
14	0.49	35	63	35	27	12	60	27.7
16	0.70	35	63	35	27	12	62	28.0
20	1.20	40	72	40	30	14	71	42.4
22	1.50	45	81	45	35	14	80	67.0
24	1.80	50	90	50	36	18	90	83.4

Eye nuts - stainless steel

AISI 316

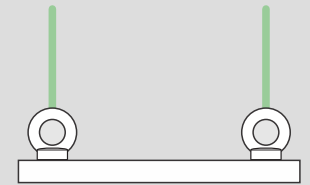
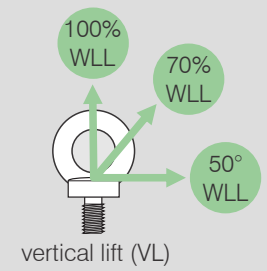
Thread Ø	WLL	B	C	D	F	G	Weight 100pcs
[mm]	[t]	[mm]	[mm]	[mm]	[mm]	[mm]	[kgs]
6	0.07	20	36	20	8.5	34	4.2
8	0.14	20	36	20	8.5	36	5.2
10	0.23	25	45	25	10	45	9.4
12	0.34	30	54	30	11	53	16.0
16	0.70	35	63	35	13	62	24.0
20	1.20	40	72	40	16	71	35.2
22	1.50	45	81	45	18	80	58.0
24	1.80	50	90	50	20	90	70.6

Markings

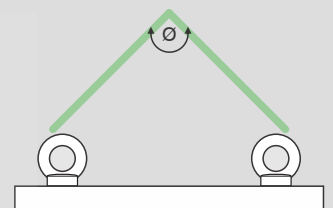
All drop forged eye bolts and eye nuts come standard with the following markings:

1. material grade
2. thread size
3. working load limit
4. manufacturer's mark

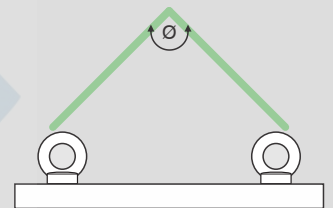
reduction of WLL
with applicable angles



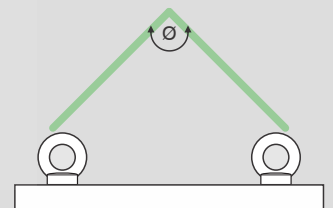
WLL = VL x 2



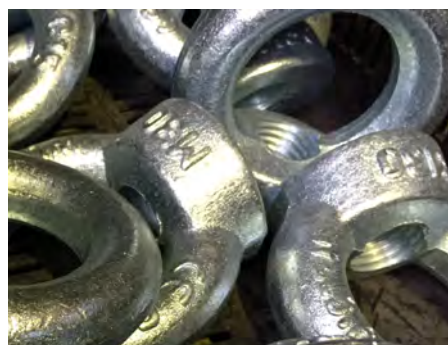
WLL = PV x 0.63



WLL = PV x 0.40



WLL = PV x 0.25



Weldable lifting point with spring

Working load limit	Break load	Inside width	Outside length	Material diameter
[t]	[t]	[mm]	[mm]	[mm]
1.0	4.0	41.0	78.0	13.0
2.0	8.0	42.0	88.0	14.0
3.0	12.0	45.0	94.0	17.0
5.0	20.0	55.0	118.0	22.0

material: G8

finish: Powder coated yellow

factor of safety 4:1



This lifting point is ideally suitable for lifting and lashing applications such as excavators, low loaders, lifting beams and other metal objects.

This product has a rated working load limit but is subject to the correct welding procedure being carried out by a suitably qualified welder.



This information is of a general nature only covering the main points for the safe use and maintenance of eye bolts and eye nuts which comply with DIN580 and DIN582.

ALWAYS:

- Store and handle eye bolts correctly.
- Inspect eye bolts before use and before placing into storage.
- Select the type pattern eye bolt for the application.
- Ensure that the eye bolt and tapped hole threads are compatible and strong enough for the load.
- Correctly align the plane of the eye using spacers where necessary.
- Ensure that the collar is fully seated when hand tight.

NEVER:

- Use tommy bars, grips or wrenches to tighten eye bolts.
- Use dynamo eye bolts for angular loading.
- Use a single eye bolt to lift a load that is free to rotate.
- Reeve slings through the eyes, links or shackles fitted to pairs of eye bolts.
- Force hooks or other fittings into the eye; they must fit freely.
- Shock load eye bolts.

Selecting the Correct Eye bolt

Eye bolts are available in three standard types, eye bolt with link, collar eye bolt and dynamo eye bolt. Select the eye bolt to be used and plan the lift taking the following into account:

Type of eye bolt - eye bolt with link for all general purpose applications, collar eye bolt for most general duties, dynamo eye bolt only where a truly axial load is guaranteed. (A collar eye bolt fitted with a link through the eye must always be considered as a collar eye bolt and not as an eye bolt with link.)

Capacity - (rating eye bolts for angular loading) It is necessary to reduce the WLL when not using an eye bolt at 0° (see reduction of WLL with applicable angles on page 3 for details.)

Storing and Handling Eye bolts

Never return damaged eye bolts to storage. They should be dry, clean and protected from corrosion. Care must be taken to protect threads from damage whilst in store. Where possible use removable plugs to exclude debris from tapped holes.

Using Eye bolts Safely

Do not attempt lifting operations unless you understand the use and limitations to use of the equipment, the slinging procedures and the mode factors to be applied.

Do not use defective eye bolts. Check the thread of both the eye bolt and hole, ensure they are compatible, fully formed, of sufficient length, undamaged and clear of any debris which may prevent proper engagement.

Ensure the contact surface around the hole is flat, clean and perpendicular to the thread axis. Tighten the eye bolt down firmly by hand. The eye must be in the correct plane and the collar must sit evenly on the contact surface. Use spacers but do not machine the collar or over tighten to achieve this.

A hook may be engaged directly into the eye of a dynamo eye bolt or the link of an eye bolt with link. Collar eye bolts must be fitted with a shackle or link to accept hooks. The hooks must fit freely so do not wedge or force them into position.

Never reeve a sling through the eyes, links or shackles fitted to eye bolts used in pairs as this will impose a severe resultant load to the eye bolts.

Dynamo eye bolts must only be used for axial loading. When using eye bolts with multi-leg slings, use eye bolts with links or collar eye bolts taking care to de-rate them correctly for angular loading conditions.

Where a single eye bolt is used, use a swivel or swivel hook to prevent the eye bolt unscrewing.

In-service Inspection and Maintenance

Maintenance requirements are minimal. Keep eye bolts clean, protect from corrosion and protect threads from damage. Do not attempt to straighten bent eye bolts or re-cut threads.

Regularly inspect eye bolts and, in the event of the following defects, refer the eye bolt to a Competent Person for thorough examination: illegible markings; distortion; worn, or bent shanks and threads; incomplete or incorrectly formed threads; damaged eyes; nicks, gouges, cracks, corrosion or other defects.

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