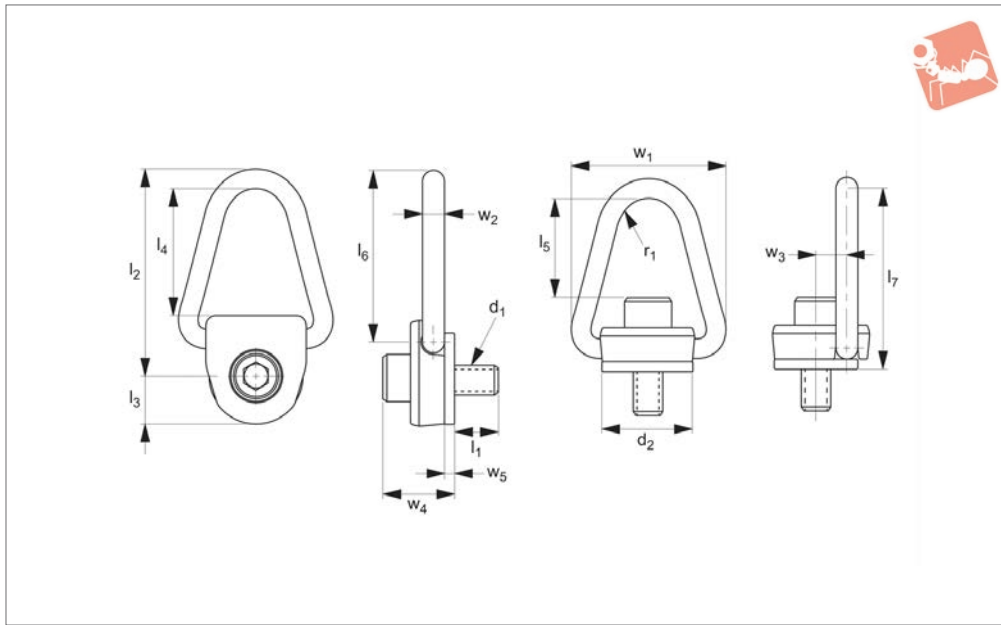




Load Rings - Side Pull - Male

metric - coarse

Load Rings & Eye Bolt



63601

LOAD RINGS & EYE BOLT

Material

Alloy steel, black oxide finish.

ASTM1444.

Important Notes

Min. design safety factor 5:1, any direction. Self aligning direction of load.

Rotates 360° under load.

tl= recommended torque load (Nm).

Always follow safety instructions.

Technical Notes

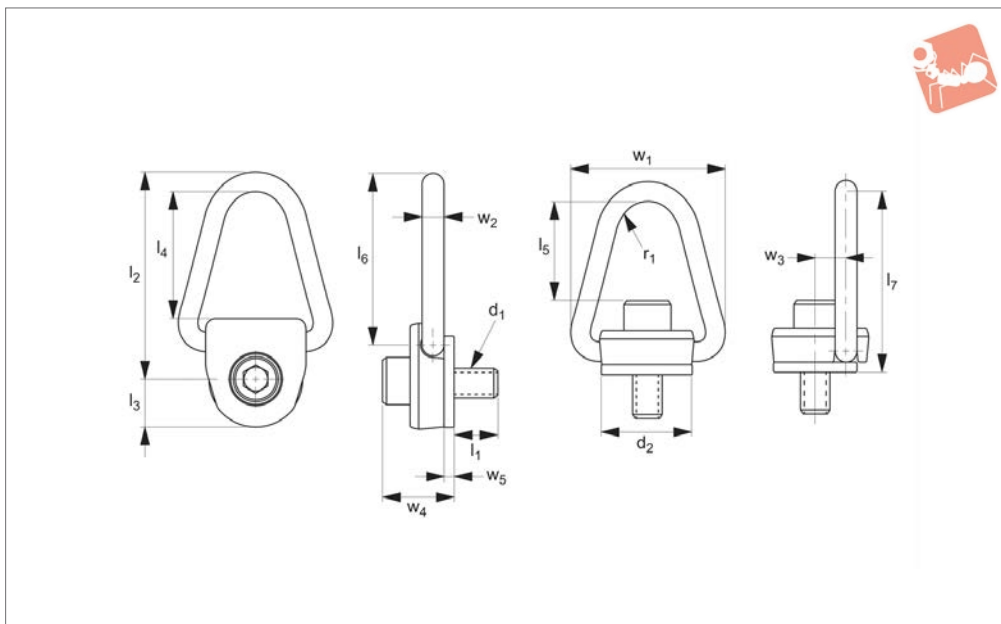
Magnetic particles inspected per

Order No.	Rated load tonnes (t)	d ₁	l ₁	d ₂	l ₂	l ₃	l ₄	l ₅	Weight kg
63601.W0081	0.40	M 8x1,25	14	56	130	32	81	73	0.93
63601.W0101	0.45	M10x1,50	24	56	130	32	81	71	0.96
63601.W0121	1.05	M12x1,75	37	56	130	32	81	69	0.96
63601.W0161	1.90	M16x2,00	37	56	130	32	81	65	1.01
63601.W0200	2.20	M20x2,50	37	56	130	32	81	61	1.07
63601.W0201	3.00	M20x2,50	39	79	171	41	106	83	2.73
63601.W0241	4.20	M24x3,00	43	79	171	41	106	79	2.78

Order No.	l ₆	l ₇	r ₁	w ₁	w ₂	w ₃	w ₄	w ₅	tl Nm
63601.W0081	108	120	19	99	13	22	34	5	9.5
63601.W0101	108	120	19	99	13	22	36	5	16.0
63601.W0121	108	120	19	99	13	22	38	5	37.0
63601.W0161	108	120	19	99	13	22	42	5	80.0
63601.W0200	108	120	19	99	13	22	46	5	135.0
63601.W0201	143	159	22	133	19	32	57	8	135.0
63601.W0241	143	159	22	133	19	32	61	8	311.0



63602



Material

Alloy steel, black oxide finish.

Technical Notes

Magnetic particles inspected per ASTM1444.

Tips

Min. design safety factor 5:1, any direction. Self aligning direction of load.

Rotates 360° under load.

tl= recommended torque load (ft - lbs).

Important Notes

All dimensions in imperial.

Always follow safety instructions.

Order No.	Rated load lb	d ₁ UNC	l ₁	d ₂	l ₂	l ₃	l ₄	l ₅	Weight lb
63602.W0311I	800	5/16-18	0.479	2-3/16	5-1/8	1-1/4	3-3/16	2-57/64	2.05
63602.W0371I	1000	3/8-16	0.479	2-3/16	5-1/8	1-1/4	3-3/16	2-27/32	2.12
63602.W0501I	2500	1/2-13	0.979	2-3/16	5-1/8	1-1/4	3-3/16	2-45/64	2.12
63602.W0631I	4000	5/8-11	0.979	2-3/16	5-1/8	1-1/4	3-3/16	2-59/64	2.22
63602.W0751I	5000	3/4-10	1.229	2-3/16	5-1/8	1-1/4	3-3/16	2-15/16	2.34
63602.W0752I	7000	3/4-10	1-1/4	2-3/16	6-3/4	1-5/8	4-3/16	4	6.01
63602.W0881I	8000	7/8-9	1-1/4	2-3/16	6-3/4	1-5/8	4-3/16	3-7/8	6.13
63602.W1001I	10000	1-8	1-1/2	2-3/16	6-3/4	1-5/8	4-3/16	3-3/4	6.20

Order No.	l ₆	l ₇	r ₁	w ₁	w ₂	w ₃	w ₄	w ₅	tl ft-lb
63602.W0311I	4-1/4	4-23/32	3/4	3-7/8	1/2	7/8	1-21/64	7/32	7
63602.W0371I	4-1/4	4-23/32	3/4	3-7/8	1/2	7/8	1-25/64	7/32	12
63602.W0501I	4-1/4	4-23/32	3/4	3-7/8	1/2	7/8	1-17/32	7/32	28
63602.W0631I	4-1/4	4-23/32	3/4	3-7/8	1/2	7/8	1-41/64	7/32	60
63602.W0751I	4-1/4	4-23/32	3/4	3-7/8	1/2	7/8	1-25/32	7/32	100
63602.W0752I	5-5/8	6-1/4	7/8	5-1/4	3/4	1-1/4	2-1/4	5/16	100
63602.W0881I	5-5/8	6-1/4	7/8	5-1/4	3/4	1-1/4	2-3/8	5/16	160
63602.W1001I	5-5/8	6-1/4	7/8	5-1/4	3/4	1-1/4	2-1/2	5/16	230



Heavy duty safety hoist rings are stronger than competitive lifting devices, providing better value while delivering the quality and safety only the best design and manufacture can achieve.

- Manufactured from high strength alloy steel.
- One piece body and shouldered d-ring element.
- Just 6 component parts for increased safety.

The patented shoulder pin used in our heavy duty safety hoist rings allows for rotation of the pin, without shearing of any retaining dowel pin which is so often used in the construction of other competitive hoist rings. This unique design element enables disassembly of our hoist rings for inspection, compliance testing and reassembly.

General maintenance and care

Improper maintenance and inspection of your hoist ring could result in damaged equipment, personal injury or even death. In order to ensure maximum safety please read, understand and follow these maintenance and inspection guidelines prior to using any lifting hoist ring.

- When not in use, store hoist rings carefully to prevent corrosion or accidental damage.
- Do not remove the installation and safety tag from the lifting device. Ensure the identification tag remains legible during the life to the lifting device.

Maintenance

Visually inspect the lifting device prior to any use. Frequency of inspection should increase with the frequency of use, severity of service conditions and the more safety critical the use of the device. Discontinue use of any lifting device if inspection identifies any of the following:

- Missing identification tags.
- Indications of heat damage.
- Excessive corrosion or pitting.
- Damaged or missing load bearing components.
- Excessive nicks or gouges.
- Excessive thread damage.
- Evidence of unauthorised welding or modification.
- Lack of ability to swivel 360° or pivot 180°.

Inspection

Important installation and operation instructions

Installation

- Ensure thread has been tapped perpendicular to the mounting surface. Mounting surface should be flat to provide full 360° flush seating for the hoist ring.
- For installation in ferrous metal ensure bolt is tightened to the full torque load +0-20% (as specified on the product data sheet).
- To ensure the 5:1 design safety factor we recommend the ultimate tensile strength of the mating material to be min. 80,000 psi.
- For weaker mating material consider using longer bolts or through hole mounting with a nut and washer on the back side. To prevent stripping the mating thread, lower torque values (down to half the stated value) may be considered in temporary installations.
- On completion of installation check the lifting ring can swivel and pivot freely in all directions.
- Use at temperatures between -30°C and +200°C

Safety notes

- Never exceed the working load limit.
- Visually inspect the hoist ring for damage before each use.
- Loosening of the a bolt may develop after prolonged service, it is advisable to periodically retighten to the specified torque value.
- Apply lifting loads gradually to avoid shock loads.
- Use of free fit spacers between the lifting ring bush flange and the mounting surface is not recommended.
- Do not over size hooks nor use attachment methods which spread the ring.
- It is important to align the lifting ring with ~the direction of the load.
- Do not attach guidelines to hoist rings.
- Do not leave a gap between lifting ring bushing and mounting surface.
- Never allow personnel to walk underneath a suspended load.

It is very important for you to read and comply with these installation and safety notes prior to use or any lifting device.



Formula to calculate the load per lifting ring

$$F = \frac{W}{N \sin A}$$

F = force on each hoist ring
 N = number of hoist rings
 A = lifting angle
 W = total weight

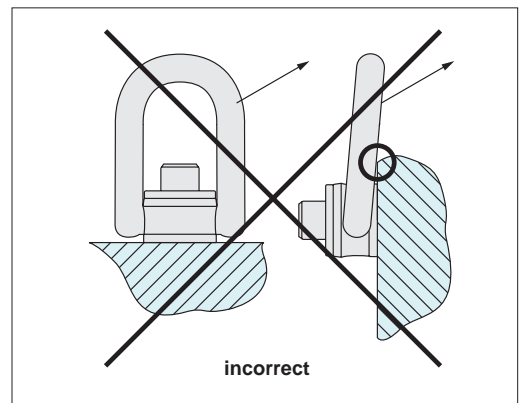
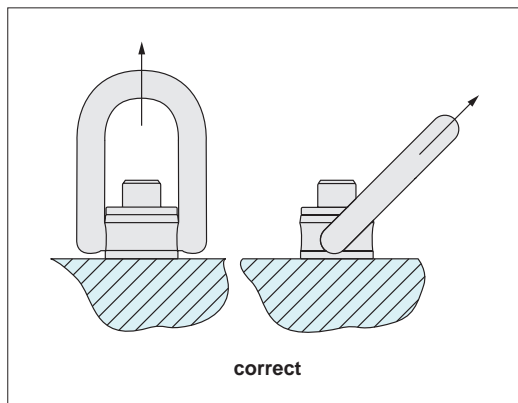
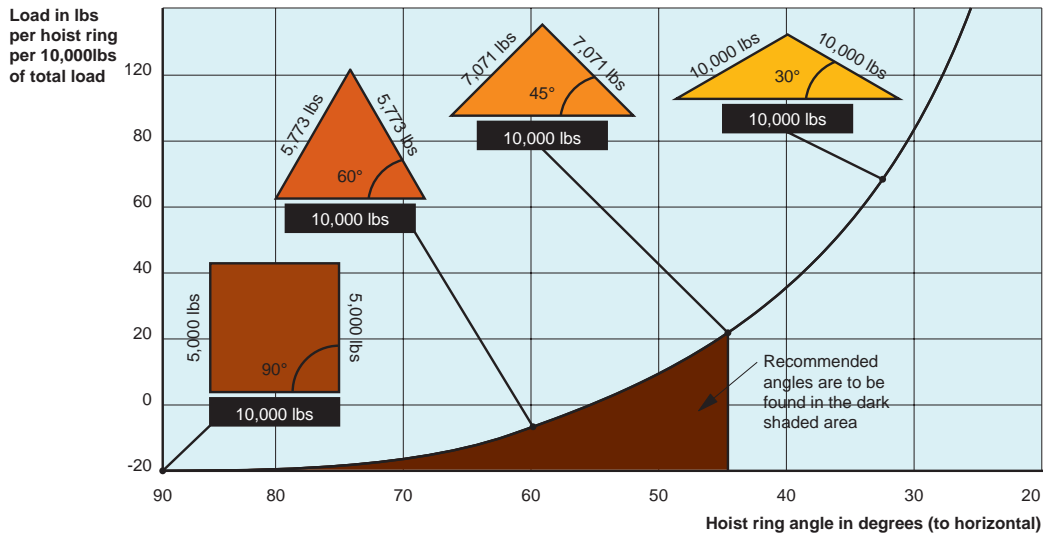
For example:

If A = 65° $F = \frac{4000}{4 \sin 65^\circ} = 1103 \text{ lbs.}$

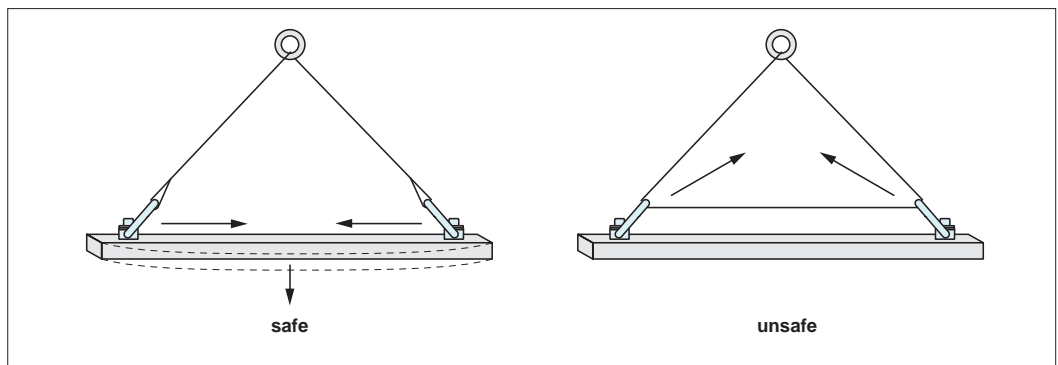
If A = 14° $F = \frac{4000}{4 \sin 14^\circ} = 4134 \text{ lbs.}$

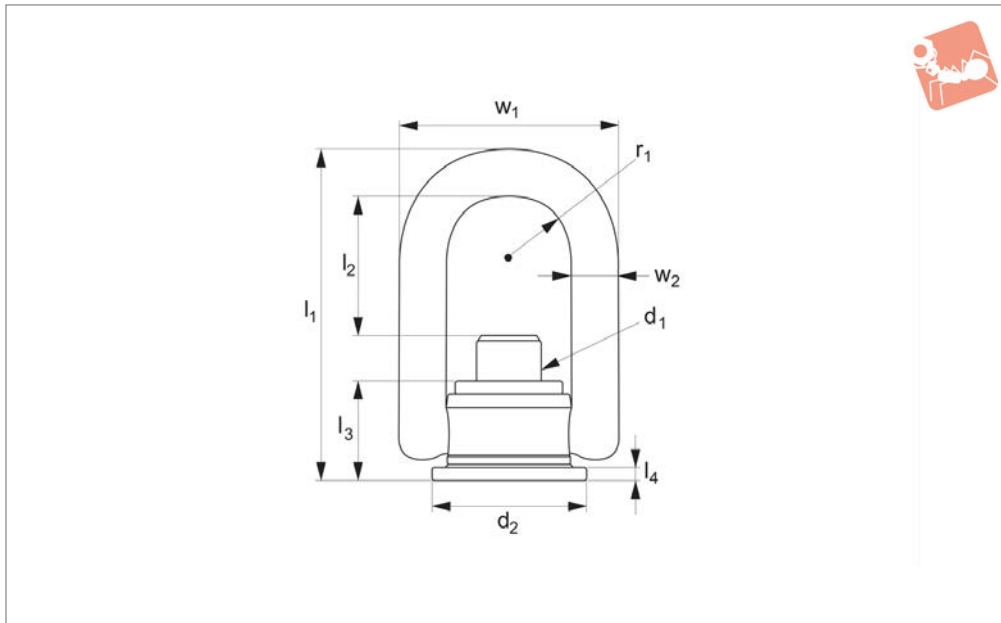
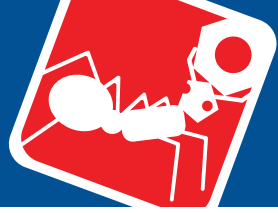
Important note: The force exerted on each hoist ring is not simply a function of the total weight divided by the number of hoist rings, but is critically reliant upon the lifting angle, greater forces are present the lower the lifting angle. See example below.

Angular lifting



Do not allow the lifting ring to bind/stick and hence apply side loads to the bail. Ensure loads applied are in the same direction of the bail. If necessary use a spreader bar to avoid binding.





63700

LOAD RINGS & EYE BOLT

Material

Forged alloy steel, min. tensile strength 180,000 psi, black oxide coated.

Technical Notes

Magnetic particle inspected.

Tips

Min design safety factor 5:1. *Rated load

relates to components of weld mount lifting ring 63700 only. The workpiece material and weld must be capable of supporting a similar weight - please make your own appropriate checks and calculations.

360° swivel and 180° load.

Important Notes

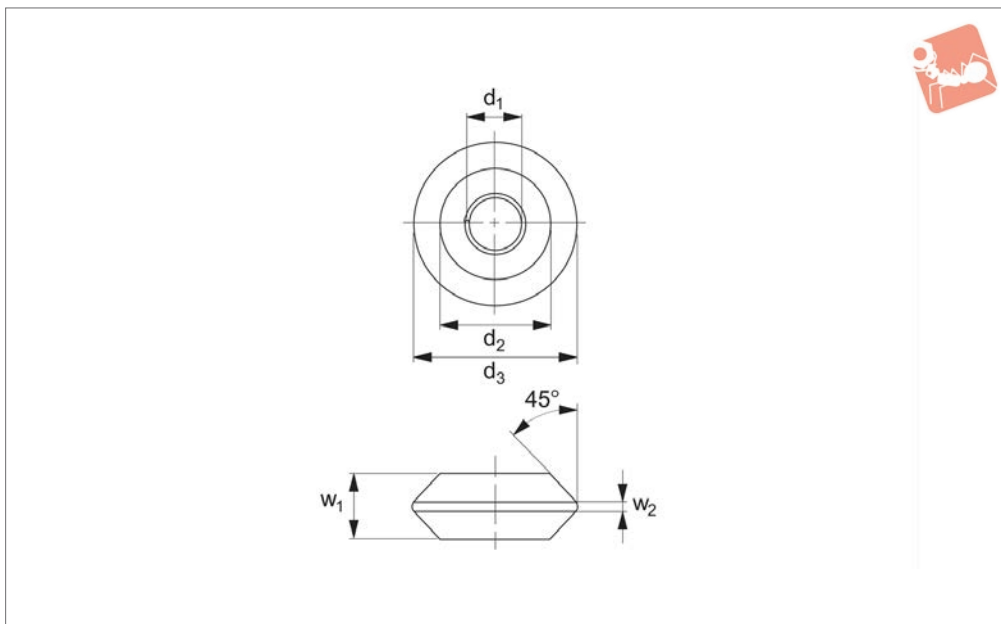
All dimensions in imperial.

Always follow safety instructions.

Order No.	Rated load lb	d ₁	d ₂	l ₁	l ₂	l ₃	l ₄	r ₁	w ₁	w ₂
63700.W0251I	5000	5/8-11	2.45	5.47	2.46	1.63	1/4	1.00	3.50	0.75
63700.W0371I	10000	1-8	3.51	7.64	3.22	2.30	3/8	1.50	5.10	1.00
63700.W0501I	24000	1-1/4-7	4.70	9.50	3.63	3.12	1/2	2.00	6.75	1.25



63712



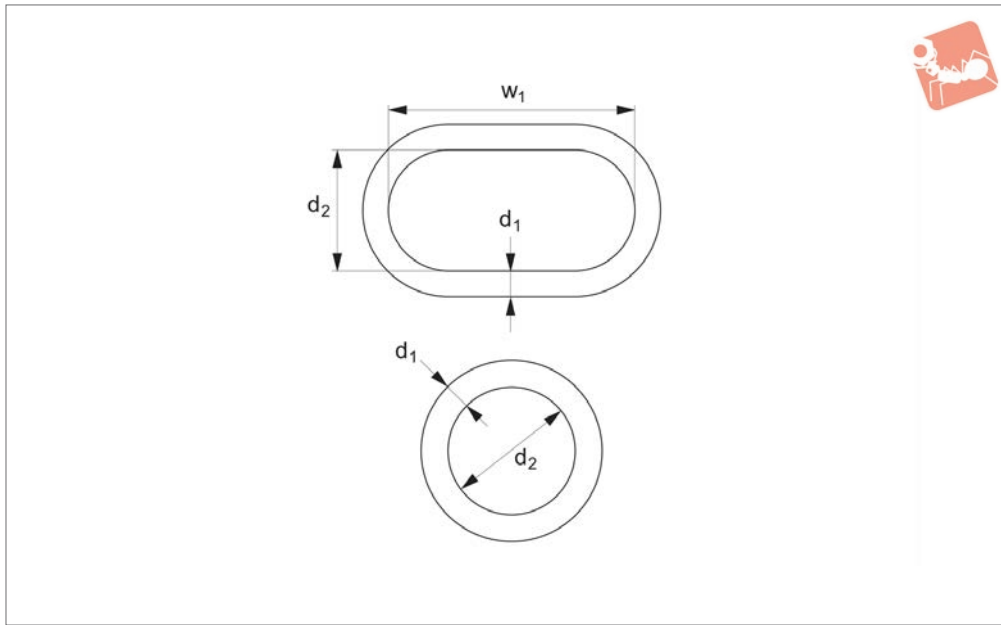
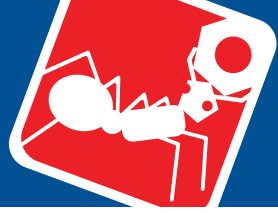
Material

High tensile steel alloy, heat treated.

Important Notes

All dimensions in imperial.

Order No.	Thread type	d_1	d_2	d_3	w_1	w_2
63712.W1251I	COIL	1-1/4	2-1/8	3	1	1/8
63712.W1501I	COIL	1-1/2	2-3/8	3-1/2	1-1/2	3/8



63760

LOAD RINGS & EYE BOLT

Material

Forged alloy steel, black oxide coated.

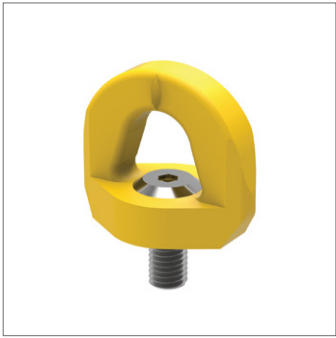
Important Notes

All dimensions in imperial.

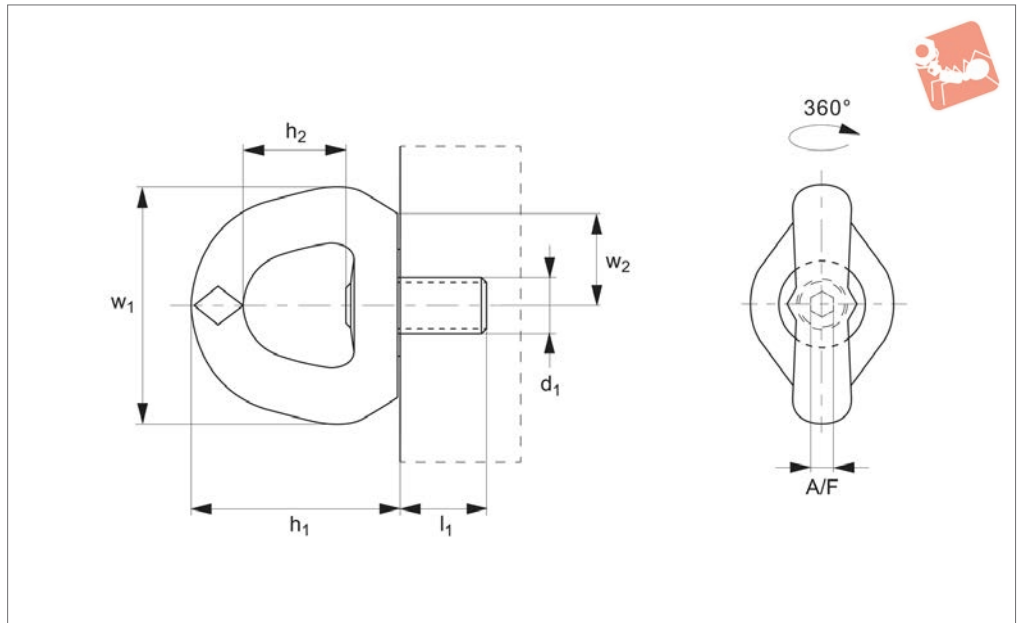
Tips

Min. design safety factor 6:1.

Order No.	Working load lb	d_1	d_2	w_1	Weight lb
63760.W0371I	3800	3/8	2.00	-	0.23
63760.W0631I	6100	5/8	3.00	-	1.00
63760.W1371I	30000	1-3/8	6.00	-	10.38
63760.W1501I	49000	1-1/2	5.25	10.5	15.70



63350



Material

High tensile corrosion resistant steel, strength class >8.
Coloured yellow to indicate personnel safety.
Supplied with CE certificate.

Technical Notes

Conforms to EN795:2012.
Single articulation, 360°.
Clearly marked with maximum number of persons. The yellow colour indicates the personnel safety use.

Tips

Marked with the number of persons the ring is certified to support.
For use by personnel wearing safety harnesses. Suitable for 1 or 2 persons as marked.
Typically used in building maintenance, wind power and offshore industries.

Important Notes

The thread diameter and depth must be appropriate to the material into which it will be installed:

Steel (min. ST37) - 1 x thread dia.
Cast iron - 1.25 x thread dia.
Aluminium - 2 x thread dia.
Other light metals - 2.5 x thread dia.
Tolerance of female thread to be 6H (metric).

Please refer to the safety documentation before using this part.
Supplied with certificate and operating instructions.

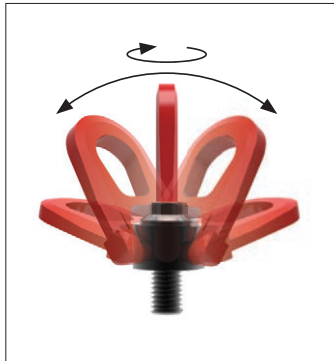
Order No.	No. of persons max.	l_1	w_1	h_1	d_1 tol. 6g	h_2	w_2	w_3	A/F	Torque to Nm	Weight kg
63350.W0012	1	21	60	57	M12x1,75	30	20	34	6	15	0.24
63350.W0016	1	27	88	80	M16x2,00	38	35	45	8	50	0.80
63350.W0020	1	30	88	80	M20x2,50	38	35	45	8	100	0.80



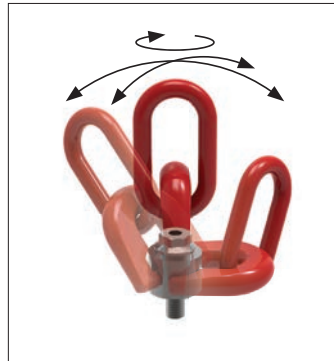
Swivel lifting rings



Single swivel - threads M8 – M48
loads 0,3 tons – 15 tons



Double swivel - threads M4 – M100
loads 0,05 tons – 50 tons



Triple swivel - threads M8 – M56
loads 0,3 tons – 22 tons

Our swivel lifting rings fully comply with the EC directive 2006/42/EC. They are CE marked and are supplied with a Certificate of Conformity. There is a 100% check on anti-cracking, a proof load test of 2.5 x load limit and a safety factor of 5 on most parts. Each ring is individually marked to ensure full product traceability. The Swivel Lifting Rings come in three main forms – depending on the number of axis required to swivel. The most popular type is the double swivel rings.

LOAD RINGS & EYE BOLT



Steel

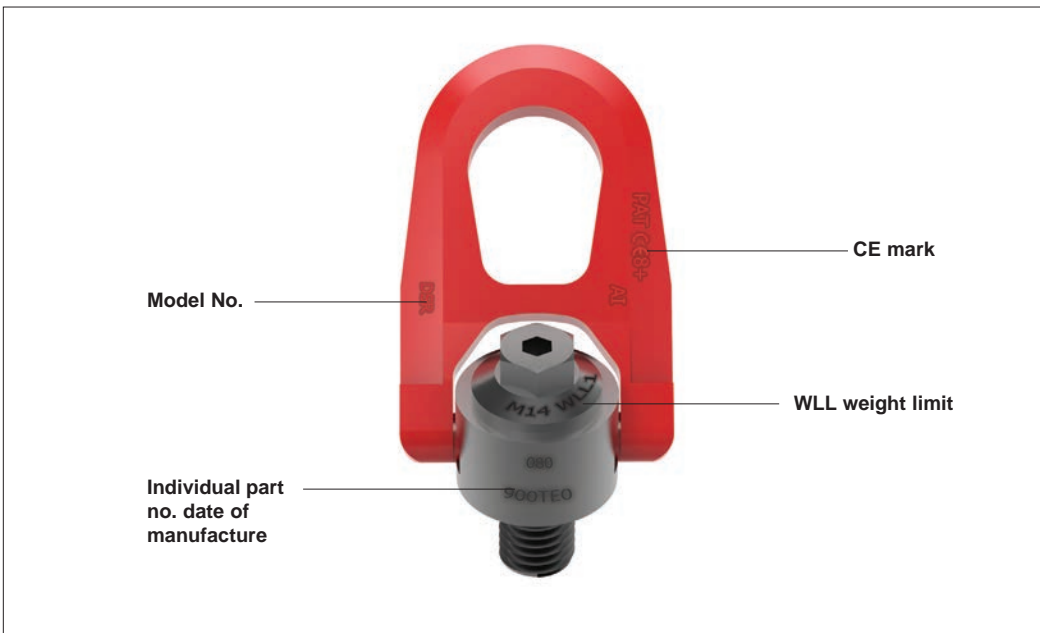


Stainless (316L)

Steel and stainless steel (316) versions

Compliant with 2006/42/EC, and with individual date of manufacture and batch number.

Product marking



A swivel lifting rings that complies with 2006/42/CE