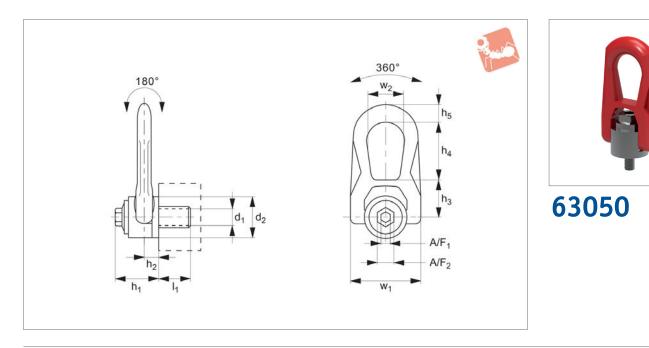


## **Double Swivel Rings Male**

# Lifting Points & Shackles



High tensile steel, strength class >8. Supplied with CE certificate.

#### **Technical Notes**

Double articulation.

Very low overhang for improved safety. Large support surface.

Longer or shorter thread lengths can be supplied but please consult our technical department for this information if required.

For use in temperatures from -20°C to +200°C. Can be used in lower or higher

temperatures but this affects the load rating - please ask for more information. Please refer to our technical information pages when specifying and/or using.

#### Tips

Double articulation allows perfect alignment with the sling if the part rotates during the lift.

With "automatic" position recovery system for best orientation to sling direction. Tighten by hex. key or spanner.

#### **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) or UNC-2B (inch). Please refer to the safety documentation before using this part. Supplied with certificate and operating

Order No.	Load tons (t) max.	d <sub>1</sub> tol. 6g (tol. 2A)	$I_1$	h <sub>1</sub>	h <sub>2</sub>	h <sub>3</sub>	h <sub>4</sub>	h <sub>5</sub>	$w_1$	d <sub>2</sub>	w <sub>2</sub>	A/F <sub>1</sub>	A/F <sub>2</sub>	Safety factor	Torque to Nm (ft·lb)	Weight kg
63050.W0005	0,1	M 5x 0,80	15	33	9,5	30	38	14	53	30	27	8	16	4	3	0,3
63050.W0006	0,2	M 6x 1,00	15	33	9,5	30	38	14	53	30	27	8	16	4	4	0,3
63050.W0008	0,5	M 8x 1,25	15	33	9,5	30	38	14	53	30	27	8	16	4	6	0,3
63050.W0010	0,9	M10x1,50	18	33	9,5	30	38	14	53	30	27	8	16	4	10	0,3
63050.W0012	1,3	M12x1,75	21	33	9,5	30	38	14	53	30	27	8	16	4	15	0,3
63050.W0014	1,8	M14x2,00	23	45	13	40	53	17	76	45	38	8	20	4	30	0,9
63050.W0016	2,3	M16x2,00	27	45	13	40	53	17	76	45	38	8	20	4	50	0,9
63050.W0018	2,3	M18x2,50	27	45	13	40	53	17	76	45	38	8	20	4	70	0,9
63050.W0020	2,5	M20x2,50	30	45	13	40	53	17	76	45	38	8	20	4	100	0,9
63050.W0022	4,5	M22x2,50	33	62	19	55	83	25	115	60	55	14	24	4	120	2,6
63050.W0024	5,5	M24x3,00	36	62	19	55	83	25	115	60	55	14	24	4	160	2,6
63050.W0027	6,0	M27x3,00	40	62	19	55	83	25	115	60	55	14	24	4	200	2,7
63050.W0030	6,3	M30x3,50	45	62	19	55	83	25	115	60	55	14	24	4	250	2,7
63050.W0031	(1,200)	(UNC 5/16"-18)	15	33	9,5	30	38	14	53	30	27	8	16	4	(5)	0,3
63050.W0038	(1,600)	(UNC 3/8"-16)	17	33	9,5	30	38	14	53	30	27	8	16	4	(8)	0,3
63050.W0050	(2,800)	(UNC 1/2"13)	21	33	9,5	30	38	14	53	30	27	8	16	4	(12)	0,3
63050.W0058	(4,900)	(UNC 5/8"-11)	27	45	13	40	53	17	76	45	38	8	20	4	(40)	0,9
63050.W0075	(5,250)	(UNC 3/4"-10)	30	45	13	40	53	17	76	45	38	8	20	4	(80)	0,9
63050.W0100	(12,500)	(UNC 1"-8)	36	62	19	55	83	25	115	60	55	14	24	4	(125)	2,6



# Wixroyd Swivel Lifting Rings

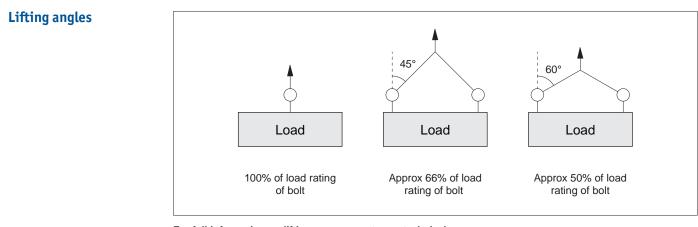
Materials Handling

63020 - 63210

product information

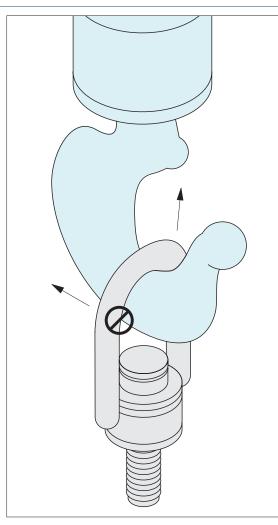


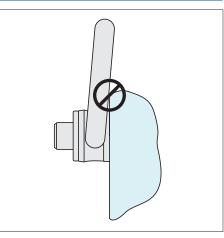
## **General product information**



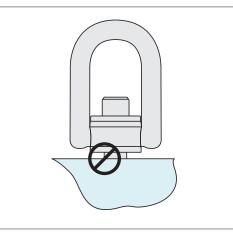
For full information on lifting arrangements see technical pages

## Installation information





After installation, check the hoist ring to be sure it swivels and pivots freely in all directions. The side of the ring must not contact anything.



Never use an oversized hook or other lifting device which will pry or tend to open the "U" shaped bar on centre pull hoist rings.

Always ensure full thread engagement when installing hoist rings.



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# Wixroyd Swivel Lifting Rings

product overview

# Materials Handling

## **Instructional Overview**

- Ensure all lifting bolts are CE marked.
- Ensure they are handled by qualified personnel.
- Refer to the operating instructions particularly with regards to product selection, any possibility of the load swivelling, the effect of lifting angles on the load capacity (see relevant tables), etc.
- Never allow any personnel underneath a suspended load.
- Always heed the load rating of the lifting bolt.
- Always perform a visual inspection of the lifting rings prior to use. Checking for any damage to thread and/or swivelling system. Check for wear or corrosion, signs of stress or bending.
- Ensure a yearly full service inspection is performed.
- Always ensure the full bottom face of the lifting bolts is in contact with a smooth, square surface.
- Ensure bolt is tightened to the correct torque.
- Ensure full and unrestricted movement of the lifting ring in all directions.
- Before each lift ensure the correct orientation of the shackle in the lift direction.
- Avoid using our standard steel lifting rings in corrosive environments eg. sandy, chemical, acid, moisture etc. In this case consider using our stainless steel lifting rings.
- Note the thread length requirements:
  - 1 x thread diameter for steel (ST37 min.).
  - 1.25 x thread diameter for cast iron.
  - 2 x thread diameter for aluminium.
  - 2.5 x thread diameter for other light metals.
  - If fixing into low resistance material it is better to allow for a bigger diameter thread to compensate for the lower material resistance.

# -40°C to -20°CLoad rating reduces by 20%.+200°C to +300°CLoad rating reduces by 10%.+300°C to +400°CLoad rating reduces by 25%.



Certificate of Conformity



For harsh environments we recommend the use of our stainless steel lifting rings.



63210 - Threads M30 – M45Loads 3,5 tons – 6 tons. **Operating instructions** 

Note: The full thread must be engaged. Longer thread lengths can be supplied on request or a bolt and washer/nut combination can be used.

### **Temperature extremes**

**Rugged environments** 

## Materials Handling

# Benefits of Swivel Lifting Rings Over Lifting Rings



## Swivel lifting rings

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.



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

90

	Pros	Cons
1	Individual CE certification	
1	CE marked	
1	100% physical check	
1	Proof load test of 2.5 x load limit	
1	Safety factor 5x stated load	
1	100% traceability with individual marking	
1	Complies with 2006/42/CE	
1	Axial load	
1	Max. load bearing 90°	
1	Max. lateral load 90°	
1	Swivel loads	
1	Forces across lifting ring plane (double and triple swivel type)	

## High tensile lifting rings

The High-tensile lifting bolts are similar to the standard lifting bolts but are rated at higher loads and can lift loads at up to 90° from the thread. They are not meant for loads that might swivel.

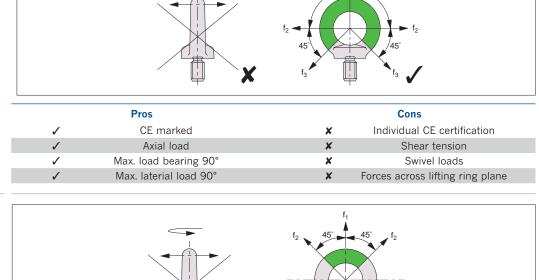
#### Important Note: Forces must act in the direction of the lifting ring plane.

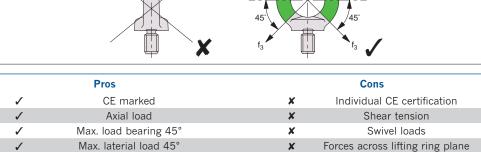
### Standard lifting rings DIN580 and DIN582

These are CE marked and are available with male or female threads in either steel or stainless steel (A4 AISI 316). They are meant only for axial loads, or load bearing or lateral loads at a maximum of 45° from the thread. They are not for use under shear tension or loads (across the thread), nor for loads likely to swivel.

Applied forces must act in the direction fo the eye bolt plane, do not apply forces across the eye bolt plane.

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Important Note: Forces must act in the direction of the lifting ring plane.



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# Single Swivel Lifting Rings

max. load rating - per lifting configuration

63020 Materials Handling



63020 Male

Lifting configuration		P	↓ ↓ P	P	¢¢	$\alpha$ max. = 60°		$\alpha \max = 60^{\circ}$	
No. of rings		1	2	1	2	2	2	4	4
Lifting angle		0°	0°	90°	90°	45°	60°	45°	60°
Thread			Max	kimum load	I rating for	given liftin	g configura	tion	
M8	tons	0,30	0,60	0,30	0,60	0,40	0,30	0,60	0,30
M10	tons	0,60	1,20	0,60	1,20	0,80	0,60	1,30	0,60
M12	tons	1,00	2,00	1,00	2,00	1,40	1,00	2,10	1,00
M16	tons	1,60	3,20	1,60	3,20	2,20	1,60	3,40	1,60
M20	tons	2,50	5,00	2,50	5,00	3,50	2,50	5,30	2,50
M24	tons	4,00	8,00	4,00	8,00	5,60	4,00	8,40	4,00
M30	tons	6,30	12,60	6,30	12,60	8,80	6,30	13,20	6,30
M36	tons	10,00	20,00	10,00	20,00	14,00	10,00	21,00	10,00
M42	tons	12,50	25,00	12,50	25,00	17,50	12,50	26,30	12,50
M48	tons	15,00	30,00	15,00	30,00	21,00	15,00	31,50	15,00

Important Note: Table shows the maximum load rating for a given lifting configuration (NOT maximum load rating per individual lifting ring).

