

P4074

Material

Pin, Body & Shackle: heat treated steel, tempered, manganese phosphated.
 Actuation Button: aluminium, red anodised.
 Spring: stainless steel.

Technical Notes

Pressing = unlocking.
 Releasing = locking.
 Lifts forces up to 4.8kN (with a 5 fold in-built safety factor).

Temperature range up to +250°C.

Easy installation with plain drilled hole to H11 tolerance.

Tips

The design of the safety shackle prevents accidental locking/unlocking. Safety shackle is adjustable and can be used to lift components at 90°, 45° or 180°.

Important Notes

* are values calculated on a 5-fold safety

against breakage.

When machining receiving hole in aluminium we recommend use of hardened bush or collar in receiving hole, see our part no. P4077.

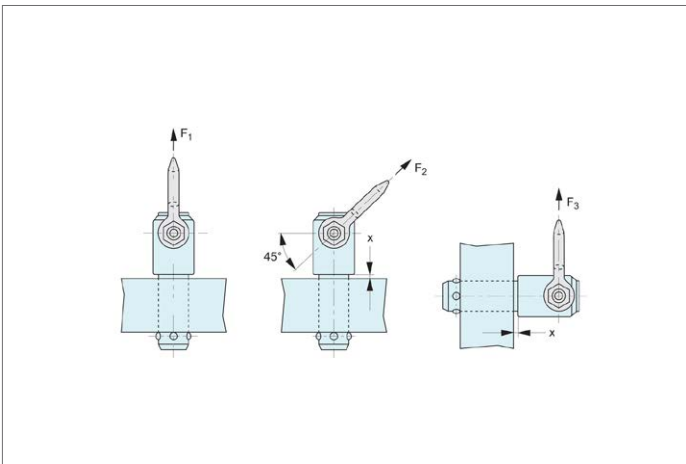
Supplied with TUV test certificate of manufacturing process. Parts not individually tested.

Order No.	l_1	d_1 -0.04 -0.08	d_2	d_3	d_4 min.	l_2	l_3	l_4	l_5	Weight g
P4074.080-010	10	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27.0	218
P4074.080-015	15	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27.0	220
P4074.080-025	25	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27.0	223
P4074.080-035	35	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27.0	226
P4074.083-010	10	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27.0	218
P4074.083-015	15	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27.0	219
P4074.083-025	25	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27.0	223
P4074.083-035	35	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27.0	228
P4074.100-015	15	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27.0	226
P4074.100-025	25	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27.0	238
P4074.100-035	35	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27.0	244
P4074.100-050	50	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27.0	252
P4074.120-015	15	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27.0	238
P4074.120-025	25	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27.0	243
P4074.120-035	35	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27.0	251
P4074.120-050	50	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27.0	268
P4074.138-025	25	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27.0	251
P4074.138-050	50	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27.0	279
P4074.138-075	75	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27.0	309
P4074.160-025	25	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27.0	312
P4074.160-050	50	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27.0	353
P4074.160-075	75	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27.0	388



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

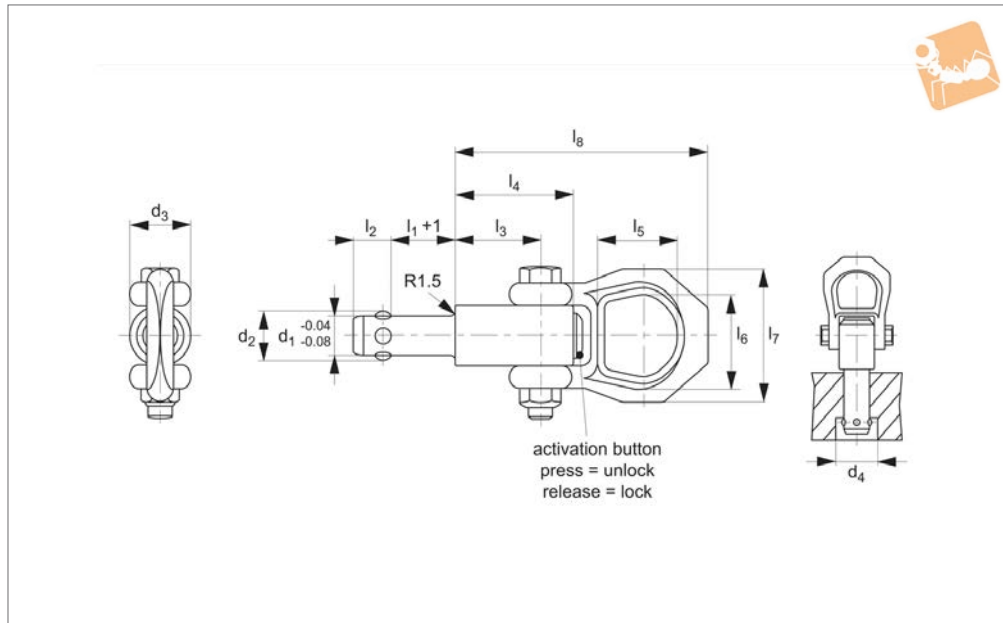
Order No.	l_6	l_7	l_8	F_1 kN	F_2 kN	F_3 kN	x min.	x max.	Location hole tol. H11
P4074.080-010	30	49	87.5	1.5	1.2	0.5	1.5	5	8.0
P4074.080-015	30	49	87.5	1.5	1.2	0.5	1.5	10	8.0
P4074.080-025	30	49	87.5	1.5	1.2	0.5	1.5	15	8.0
P4074.080-035	30	49	87.5	1.5	1.2	0.5	1.5	15	8.0
P4074.083-010	30	49	87.5	1.5	1.2	0.5	1.5	5	8.3
P4074.083-015	30	49	87.5	1.5	1.2	0.5	1.5	10	8.3
P4074.083-025	30	49	87.5	1.5	1.2	0.5	1.5	15	8.3
P4074.083-035	30	49	87.5	1.5	1.2	0.5	1.5	15	8.3
P4074.100-015	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4074.100-025	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4074.100-035	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4074.100-050	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4074.120-015	30	49	87.5	3.5	3.2	2.8	1.5	10	12.0
P4074.120-025	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4074.120-035	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4074.120-050	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4074.138-025	30	49	87.5	3.8	3.5	2.8	1.5	15	13.8
P4074.138-050	30	49	87.5	3.8	3.5	2.8	1.5	35	13.8
P4074.138-075	30	49	87.5	3.8	3.5	2.8	1.5	35	13.8
P4074.160-025	30	49	92.8	4.8	4.5	4.1	1.5	15	16.0
P4074.160-050	30	49	92.8	4.8	4.5	4.1	1.5	35	16.0
P4074.160-075	30	49	92.8	4.8	4.5	4.1	1.5	40	16.0





Quick Lift Pins - Self Locking stainless steel

Lifting Pins, Lifting Bolts &



P4075

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Pin & Body: stainless steel 1.4542 (AISI 630), precipitation hardened.
Shackle: stainless steel 1.4571.
Actuation Button: aluminium, red anodised.
Spring: stainless steel.

Technical Notes

Pressing = unlocking.
Releasing = locking.
Lifts forces up to 4.8kN (with a 5 fold in-

built safety factor).
Temperature range up to +250°C.
Easy installation with plain drilled hole to H11 tolerance.
Corrosion and weather resistant, therefore suitable for outdoor applications.

Tips

The design of the safety shackle prevents accidental locking/unlocking. Safety shackle is adjustable and can be used to lift components at 90°, 45° or 180°.

Important Notes

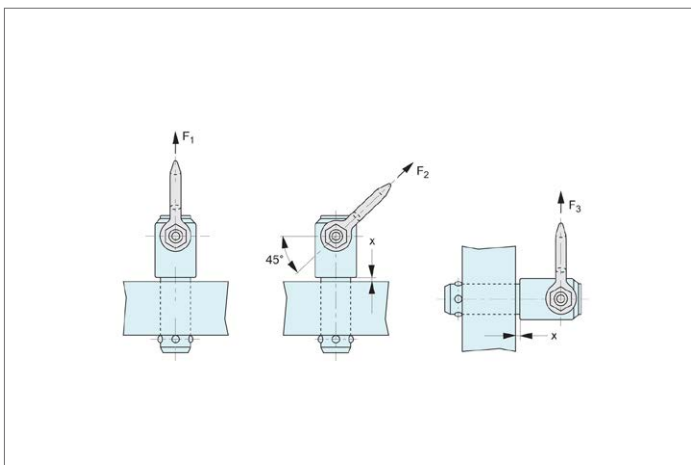
* are values calculated on a 5-fold safety against breakage.
When machining receiving hole in aluminium we recommend use of hardened bush or collar in receiving hole, see our part no. P4077.
Supplied with TUV test certificate of manufacturing process. Parts not individually tested.

Order No.	l_1	d_1	d_2	d_3	d_4 min.	l_2	l_3	l_4	l_5	Weight g
P4075.080-010	10	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27	221
P4075.080-015	15	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27	222
P4075.080-025	25	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27	225
P4075.080-035	35	8.0	9.35	21.5	9.85	8.75	25.7	36.0	27	229
P4075.083-010	10	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27	222
P4075.083-015	15	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27	223
P4075.083-025	25	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27	225
P4075.083-035	35	8.3	9.65	21.5	10.05	8.75	25.7	36.0	27	231
P4075.100-015	15	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27	233
P4075.100-025	25	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27	243
P4075.100-035	35	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27	250
P4075.100-050	50	10.0	11.70	21.5	12.20	10.20	25.7	36.0	27	257
P4075.120-015	15	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27	246
P4075.120-025	25	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27	255
P4075.120-035	35	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27	265
P4075.120-050	50	12.0	14.20	21.5	14.70	11.00	25.7	36.0	27	273
P4075.138-025	25	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27	255
P4075.138-050	50	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27	283
P4075.138-075	75	13.8	16.20	21.5	16.70	13.00	25.7	36.0	27	311
P4075.160-025	25	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27	313
P4075.160-050	50	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27	367
P4075.160-075	75	16.0	18.60	25.0	19.20	15.10	31.0	44.5	27	403
P4075.200-050	50	20.0	24.50	30.0	25.00	19.70	36.5	52.0	32.6	607



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Order No.	l ₆	l ₇	l ₈	F ₁ kN	F ₂ kN	F ₃ kN	x min.	x max.	Location hole dia. tol. H11
P4075.080-010	30	49	87.5	1.5	1.2	0.5	1.5	5	8.0
P4075.080-015	30	49	87.5	1.5	1.2	0.5	1.5	10	8.0
P4075.080-025	30	49	87.5	1.5	1.2	0.5	1.5	15	8.0
P4075.080-035	30	49	87.5	1.5	1.2	0.5	1.5	15	8.0
P4075.083-010	30	49	87.5	1.5	1.2	0.5	1.5	5	8.3
P4075.083-015	30	49	87.5	1.5	1.2	0.5	1.5	10	8.3
P4075.083-025	30	49	87.5	1.5	1.2	0.5	1.5	15	8.3
P4075.083-035	30	49	87.5	1.5	1.2	0.5	1.5	15	8.3
P4075.100-015	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4075.100-025	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4075.100-035	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4075.100-050	30	49	87.5	2.7	2.4	2.1	1.5	10	10.0
P4075.120-015	30	49	87.5	3.5	3.2	2.8	1.5	10	12.0
P4075.120-025	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4075.120-035	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4075.120-050	30	49	87.5	3.5	3.2	2.8	1.5	15	12.0
P4075.138-025	30	49	87.5	3.8	3.5	2.8	1.5	15	13.8
P4075.138-050	30	49	87.5	3.8	3.5	2.8	1.5	35	13.8
P4075.138-075	30	49	87.5	3.8	3.5	2.8	1.5	35	13.8
P4075.160-025	30	49	92.8	4.8	4.5	4.1	1.5	15	16.0
P4075.160-050	30	49	92.8	4.8	4.5	4.1	1.5	35	16.0
P4075.160-075	30	49	92.8	4.8	4.5	4.1	1.5	40	16.0
P4075.200-050	36	56	114.0	10.0	8.5	6.5	1.5	25	20.0





Danger!

Self-locking quick lift pins are designed to lift and hold point loads not people.

Self-locking quick lift pins are not suited for rotating loads.

Dirt and debris etc can affect the performance of the pins.

Using damaged self-locking pins can be very dangerous. Before each use carefully inspect the pins (damage, deformities, signs of stress, corrosion, check unlocking and locking function, loss of balls etc. Check full movement of shackle. Withdraw any defective pins from service immediately.

To release the balls, press button A. To lock the balls, release button A.

The load figures F_1 , F_2 and F_3 apply only to lifting applications used with a steel retainer, and an "x" min of 1.5mm.

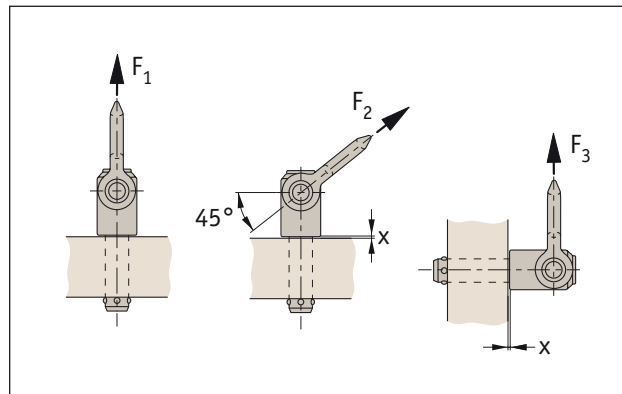
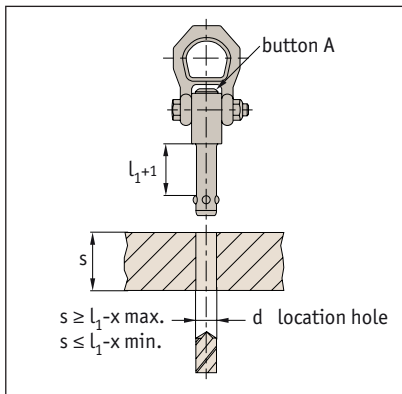
Inspect before and after every use. For maintenance – take the out of service after 12 months for inspection by qualified personnel.

Operating Instructions P4074 and P4075

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

- Ensure all lifting pins 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 pin.
- Always perform a visual inspection of the lifting pins 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 pin shoulder is in contact with a smooth, square surface.
- Ensure full and unrestricted movement of the lifting pin in all directions.
- Before each lift ensure the correct orientation of the shackle in the lift direction.
- Avoid using our standard steel lifting pins in corrosive environments eg. sandy, chemical, acid, moisture etc. In this case consider using our stainless steel lifting pins (P4075).

Notes





Single swivel

Threads M8 – M48
Loads 0,3 tons
to 15 tons



Double swivel

Threads M4 – M100
Loads 0,05 tons
to 50 tons



Triple swivel

Threads M8 – M56
Loads 0,3 tons
to 22 tons

Introduction to swivel lifting rings and Lifting Bolts (P4002-P4055)

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.

Other Standard Lifting Bolts

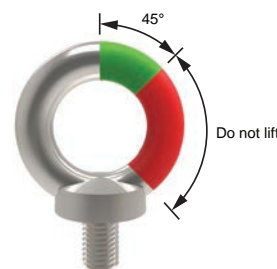
Standard lifting bolts (to DIN 580 and DIN 582) (P4040-P4048)

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 linear loading of the bolts at a maximum angle of 45° from the thread. They are not meant for loads that might swivel.

These are supplied with a generic CE Certificate of Conformity stating that the parts have been manufactured to the relevant DIN standard and therefore suitable for lifting.

High-tensile lifting bolts (P4054-P4055)

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.



Standard lifting bolts
DIN 580 & DIN 582
P4040-P4048



Hi-tensile lifting bolts
P4054-P4055

Swivel lifting rings operating instructions.

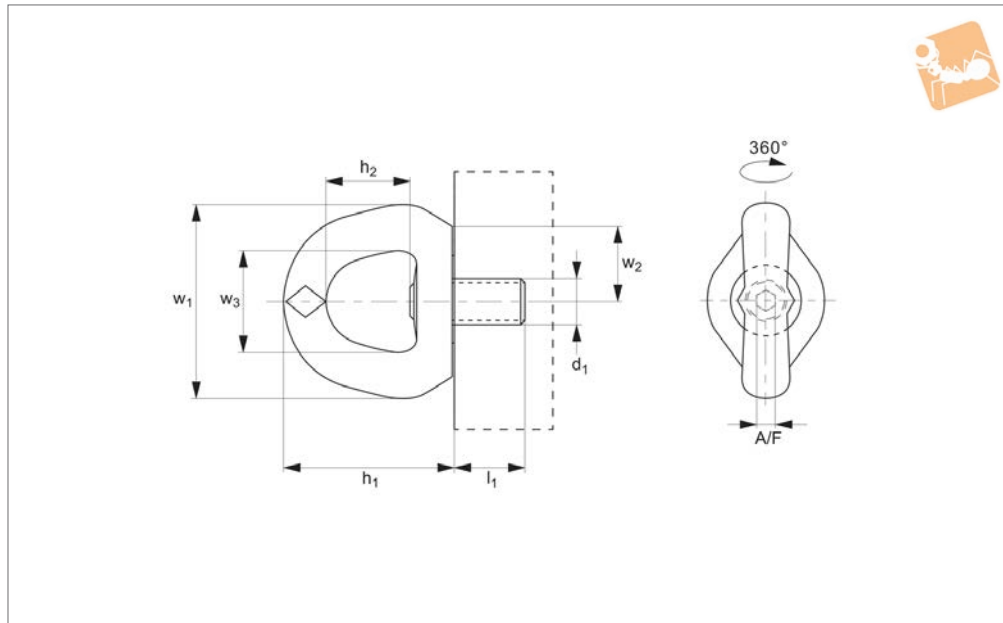
Please follow these instructions carefully.

- 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. Check CE mark and load rating.
- 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.

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.





P4002

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Single articulation, 360°, 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

Allows swivelling under load.
Swivel eye bolt with „automatic“ position recovery system for best orientation to sling direction.

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.	Load tonnes (t) max.	d ₁ tol. 6G	l ₁	h ₁	h ₂	w ₁	w ₂	w ₃	A/F	Safety factor	Torque to Nm	Weight kg
P4002.M008	0.5	M 8x 1.25	14	57	30	60	20	34	6	4	6	0.24
P4002.M010	0.7	M 10x1.50	17	57	30	60	20	34	6	4	10	0.24
P4002.M012	0.9	M 12x1.75	21	57	30	60	20	34	6	4	15	0.24
P4002.M016	1.8	M 16x2.00	27	80	38	88	35	45	8	4	50	0.80
P4002.M020	2.7	M 20x2.50	30	80	38	88	35	45	8	4	100	0.80
P4002.M024	4.2	M 24x3.00	36	106	58	115	50	70	14	4	160	2.60
P4002.M030	6.3	M 30x3.50	45	106	58	115	50	70	14	4	250	2.70
P4002.M036	11.0	M 36x4.00	54	155	83	168	70	94	14	4	320	7.00
P4002.M042	15.0	M 42x4.50	63	155	83	168	70	94	14	4	400	7.00
P4002.M048	16.0	M 48x5.00	68	155	80	168	70	94	19	4	600	7.00

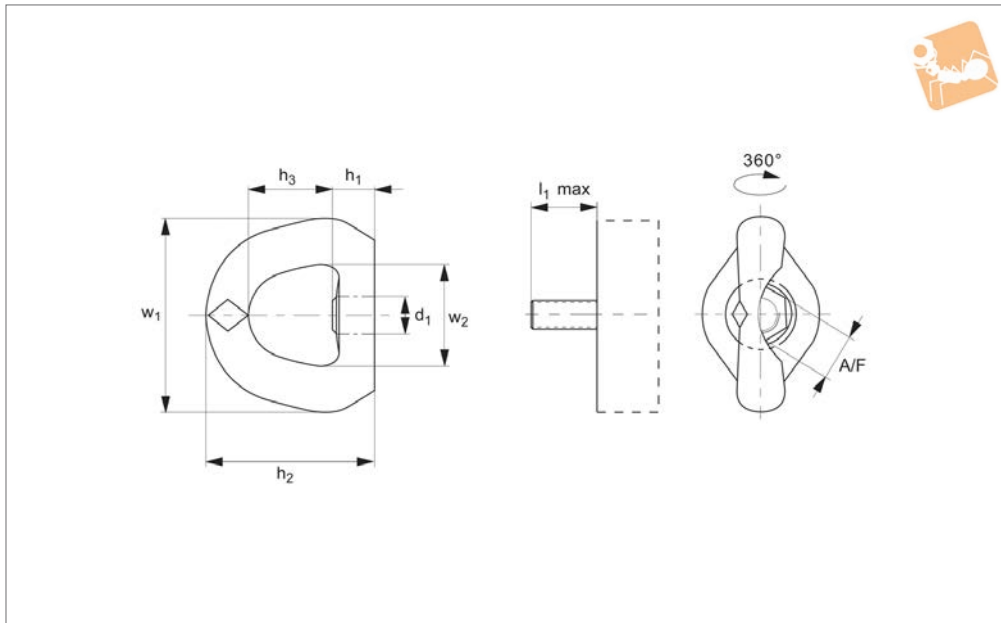




Swivel Eye Nuts Female

female

Lifting Pins, Lifting Bolts &



P4004

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Single articulation, very low overhang for improved safety, large support surface.
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

Allows swivelling under load.
Swivel eye bolt with „automatic“ position recovery system for best orientation to sling direction.
Permits the hook to move parallel to the supporting face of the ring when being

pulled at 90° angle.

Important Notes

Tolerance of male thread to be 6g (metric).
Please refer to the safety documentation before using this part.
Supplied with certificate and operating instructions.

Order No.	Load tonnes (t) max.	d ₁ 6H	h ₁ & l _{max}	h ₂	h ₃	w ₁	w ₂	A/F	Safety factor	Torque to Nm	Weight kg
P4004.M008	0.5	M 8x 1,25	22	80	38	88	45	21	4	6	0.8
P4004.M010	0.7	M10x1,50	22	80	38	88	45	21	4	10	0.8
P4004.M012	0.9	M12x1,75	22	80	38	88	45	21	4	15	0.8
P4004.M016	1.8	M16x2,00	22	80	38	88	45	21	4	50	0.8
P4004.M020	2.7	M20x2,50	35	106	55	115	70	36	4	100	2.5
P4004.M024	4.2	M24x3,00	48	155	77	168	94	40	4	160	6.3
P4004.M030	6.3	M30x3,50	48	155	77	168	94	40	4	250	6.3
P4004.M036	11.0	M36x4,00	48	155	77	168	94	40	4	320	6.3

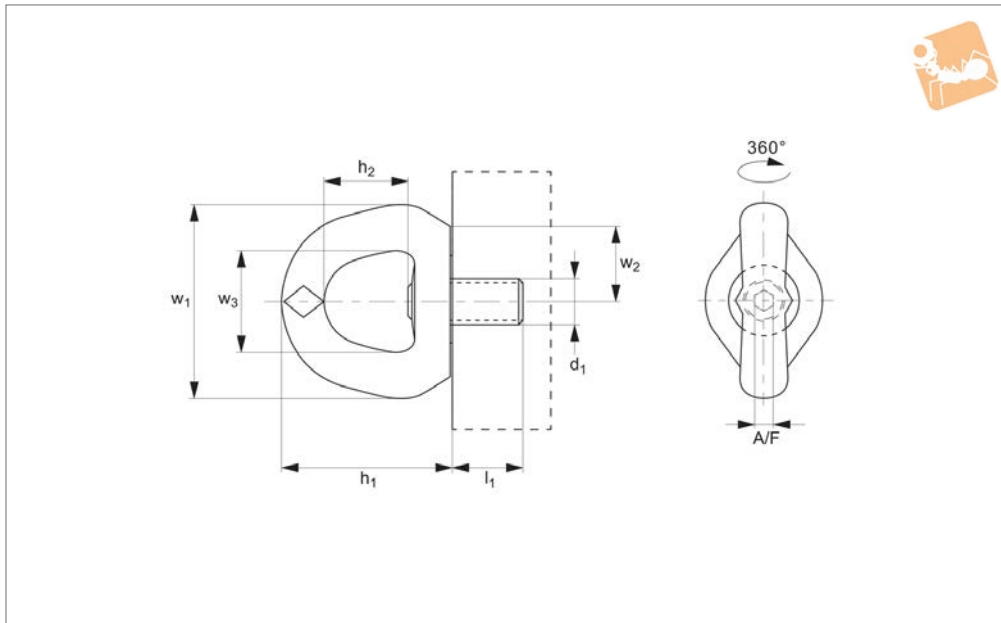




Swivel Eye Bolts Male

male: stainless steel 316L

Lifting Pins, Lifting Bolts &



P4003

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Stainless steel 316L.
Supplied with CE certificate.

Technical Notes

Single articulation, 360°, 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

Allows swivelling under load.
Swivel eye bolt with „automatic“ position recovery system for best orientation to sling direction.

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.	Load tonnes (t) max.	d ₁ tol. 6G	l ₁	h ₁	h ₂	w ₁	w ₂	w ₃	A/F	Safety factor	Torque to Nm	Weight kg
P4003.M012	0.55	M12x1,75	21	80	38	90	20	45	8	4	15	0.80
P4003.M016	1.20	M16x2,00	27	80	38	90	35	45	8	4	50	0.82
P4003.M020	1.50	M20x2,50	30	80	38	90	35	45	8	4	100	0.84
P4003.M024	2.50	M24x3,00	36	80	38	90	50	45	8	4	100	0.90

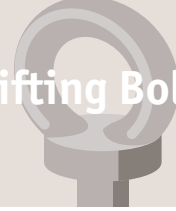




Product Overview

Swivel Lifting Rings

Lifting Bolts



Temperature extremes

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

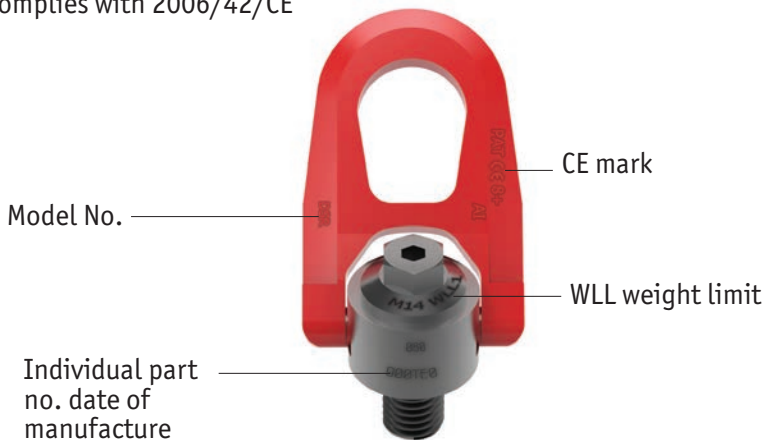
Rugged

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

Product marking

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

Complies with 2006/42/CE



P4020

Threads M8 – M30
Loads 0,3 tons to 3 tons.

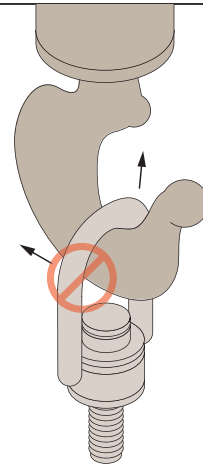


P4022

Threads M30 – M45
Loads 3,5 tons to 6 tons.

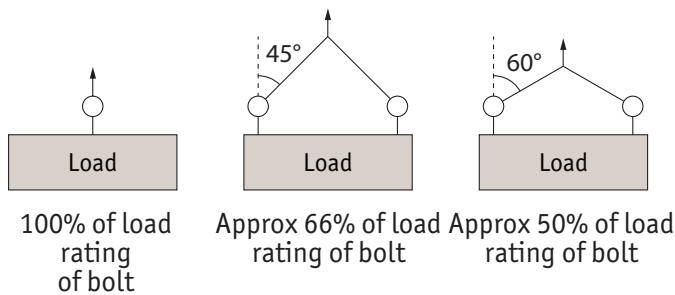


Installation Information



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

Lifting angles



For full information on lifting arrangements see technical pages

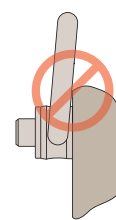
Steel and Stainless steel (316) versions



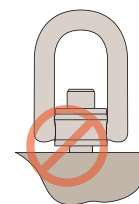
Steel



Stainless (316L)



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.**



Always ensure full thread engagement when installing hoist rings. Also ensure face is flush.



P4002 Male



P4004 Female



Lifting type									$\alpha \text{ max.} = 60^\circ$ 		$\alpha \text{ max.} = 60^\circ$ 	
	No. of rings	1	2	1	2	2	2	4	4			
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°				
Part no.	Thread											
P4002.M008 & P4004.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons			
P4002.M010 & P4004.M010	M10	0,60 tons	1,20 tons	0,60 tons	1,20 tons	0,80 tons	0,60 tons	1,30 tons	0,60 tons			
P4002.M012 & P4004.M012	M12	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons			
P4002.M016 & P4004.M016	M16	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons			
P4002.M020 & P4004.M020	M20	2,50 tons	5,00 tons	2,50 tons	5,00 tons	3,50 tons	2,50 tons	5,30 tons	2,50 tons			
P4002.M024 & P4004.M024	M24	4,00 tons	8,00 tons	4,00 tons	8,00 tons	5,60 tons	4,00 tons	8,40 tons	4,00 tons			
P4002.M030 & P4004.M030	M30	6,30 tons	12,60 tons	6,30 tons	12,60 tons	8,80 tons	6,30 tons	13,20 tons	6,30 tons			
P4002.M036 & P4004.M036	M36	10,00 tons	20,00 tons	10,00 tons	20,00 tons	14,00 tons	10,00 tons	21,00 tons	10,00 tons			
P4002.M042	M42	12,50 tons	25,00 tons	12,50 tons	25,00 tons	17,50 tons	12,50 tons	26,30 tons	12,50 tons			
P4002.M048	M48	15,00 tons	30,00 tons	15,00 tons	30,00 tons	21,00 tons	15,00 tons	31,50 tons	15,00 tons			

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

ov-W63020-AP4002-T-W63024-AP4004-T lifting-bolts-single-lifting-rings-lmh-Updated - 19-01-2023

Technical Information

Double Swivel Lifting Rings

Lifting Bolts

P4005 Male



P4006 Female



Lifting type									α max. = 60° 		α max. = 60° 	
	1	2	1	2	2	2	4	4				
No. of rings	1	2	1	2	2	2	4	4				
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°				
Part no.	Thread											
P4005.M004	M 4	0,050 tons	0,100 tons	0,050 tons	0,100 tons	0,070 tons	0,050 tons	0,100 tons	0,050 tons			
P4005.M005	M 5	0,075 tons	0,150 tons	0,075 tons	0,150 tons	0,100 tons	0,075 tons	0,150 tons	0,075 tons			
P4005.M006	M 6	0,100 tons	0,200 tons	0,100 tons	0,200 tons	0,140 tons	0,100 tons	0,200 tons	0,100 tons			
P4005.M008 & P4006.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons			
P4005.M010 & P4006.M010	M10	0,60 tons	1,20 tons	0,60 tons	1,20 tons	0,80 tons	0,60 tons	1,30 tons	0,60 tons			
P4005.M012 & P4006.M012	M12	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons			
P4005.M014 & P4006.M014	M14	1,30 tons	2,60 tons	1,30 tons	2,60 tons	1,80 tons	1,30 tons	2,70 tons	1,30 tons			
P4005.M016 & P4006.M016	M16	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons			
P4005.M018 & P4006.M018	M18	2,00 tons	4,00 tons	2,00 tons	4,00 tons	2,80 tons	2,00 tons	4,20 tons	2,00 tons			
P4005.M020 & P4006.M020	M20	2,50 tons	5,00 tons	2,50 tons	5,00 tons	3,50 tons	2,50 tons	5,30 tons	2,50 tons			
P4005.M022 & P4006.M022	M22	3,00 tons	6,00 tons	3,00 tons	6,00 tons	4,20 tons	3,00 tons	6,30 tons	3,00 tons			
P4005.M024	M24	4,00 tons	8,00 tons	4,00 tons	8,00 tons	5,60 tons	4,00 tons	8,40 tons	4,00 tons			
P4005.M027	M27	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,00 tons	5,00 tons	10,50 tons	5,00 tons			
P4005.M030	M30	6,30 tons	12,60 tons	6,30 tons	12,60 tons	8,8 tons	6,30 tons	13,20 tons	6,30 tons			
P4005.I031 & P4006.I031	(UNC 5/16"-18)	650 lbs	1,300 lbs	650 lbs	1,300 lbs	910 lbs	650 lbs	1,365 lbs	650 lbs			
P4005.I037 & P4006.I037	(UNC 3/8"-16)	1,200 lbs	2,400 lbs	1,200 lbs	2,400 lbs	1,680 lbs	1,200 lbs	2,520 lbs	1,200 lbs			
P4005.I050 & P4006.I050	(UNC 1/2"-13)	2,200 lbs	4,400 lbs	2,200 lbs	4,400 lbs	3,080 lbs	2,200 lbs	4,620 lbs	2,200 lbs			
P4005.I063 & P4006.I063	(UNC 5/8"-11)	3,800 lbs	7,600 lbs	3,800 lbs	7,600 lbs	5,320 lbs	3,800 lbs	7,980 lbs	3,800 lbs			
P4005.I075 & P4006.I075	(UNC 3/4"-10)	5,500 lbs	11,000 lbs	5,500 lbs	11,000 lbs	7,700 lbs	5,500 lbs	11,550 lbs	5,500 lbs			
P4005.I088 & P4006.I088	(UNC 7/8"-9)	6,600 lbs	13,200 lbs	6,600 lbs	13,200 lbs	9,240 lbs	6,600 lbs	13,860 lbs	6,600 lbs			
P4005.I100	(UNC 1"-8)	10,000 lbs	20,000 lbs	10,000 lbs	20,000 lbs	14,000 lbs	10,000 lbs	21,000 lbs	10,000 lbs			

ov-W63050-AP4005-T-W63054-AP4006-T-lifting-bolts-double-lifting-rings-rmh - Updated 19.01.2023

LIFTING PINS, LIFTING BOLTS & SWING BOLTS



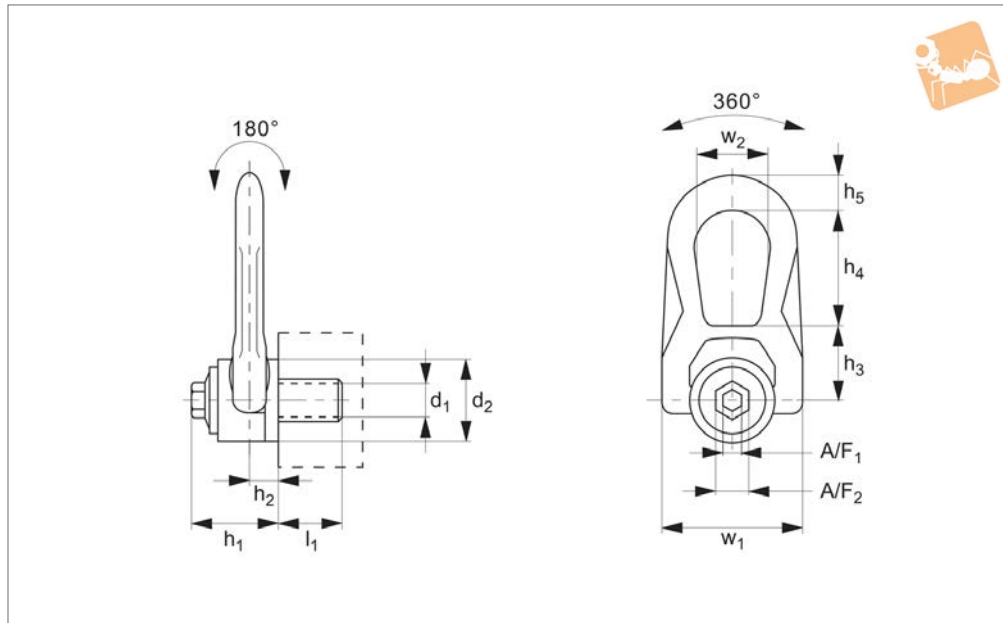
P4020 Male



P4021 Female



Lifting type									$\alpha \text{ max.} = 60^\circ$ 		$\alpha \text{ max.} = 60^\circ$ 	
	No. of rings	1	2	1	2	2	2	4	4			
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°				
Part no.	Thread											
P4020.M008 & P4021.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons			
P4020.M009	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons			
P4020.M010 & P4021.M008	M10	0,50 tons	1,00 tons	0,50 tons	1,00 tons	0,70 tons	0,50 tons	1,10 tons	0,50 tons			
P4020.M011	M10	0,50 tons	1,00 tons	0,50 tons	1,00 tons	0,70 tons	0,50 tons	1,10 tons	0,50 tons			
P4020.M012 & P4021.M008	M12	0,80 tons	1,60 tons	0,80 tons	1,60 tons	1,10 tons	0,80 tons	1,70 tons	0,80 tons			
P4020.M013	M12	0,80 tons	1,60 tons	0,80 tons	1,60 tons	1,10 tons	0,80 tons	1,70 tons	0,80 tons			
P4020.M014 & P4021.M008	M14	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons			
P4020.M016 & P4021.M008	M16	1,50 tons	3,00 tons	1,50 tons	3,00 tons	2,10 tons	1,50 tons	3,20 tons	1,50 tons			
P4020.M018 & P4021.M008	M18	1,50 tons	3,00 tons	1,50 tons	3,00 tons	2,10 tons	1,50 tons	3,20 tons	1,50 tons			
P4020.M020 & P4021.M008	M20	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons			
P4020.M022 & P4021.M008	M22	2,00 tons	4,00 tons	2,00 tons	4,00 tons	2,80 tons	2,00 tons	4,20 tons	2,00 tons			
P4020.M024	M24	2,70 tons	5,40 tons	2,70 tons	5,40 tons	3,80 tons	2,70 tons	5,70 tons	2,70 tons			
P4020.M027	M27	2,80 tons	5,60 tons	2,80 tons	5,60 tons	3,90 tons	2,80 tons	5,90 tons	2,80 tons			
P4020.M030	M30	3,00 tons	6,00 tons	3,00 tons	6,00 tons	4,20 tons	3,00 tons	6,30 tons	3,00 tons			



P4005

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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.

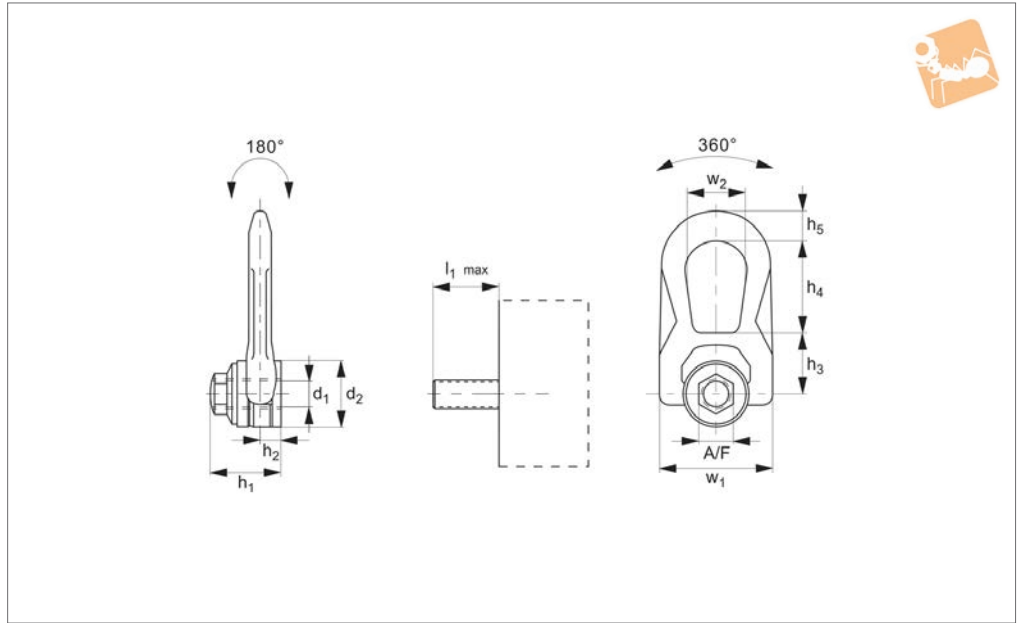
Important Notes

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 ₁ tol. 6g (tol. 2A)	l ₁	h ₁	h ₂	h ₃	h ₄	h ₅	w ₁	d ₂	w ₂	A/F ₁	A/F ₂	Safety factor	Torque to Nm (ft·lb)	Weight kg
P4005.M005	0,1	M 5x 0,80	15	33	9,5	30	38	14	53	30	27	8	16	4	3	0,3
P4005.M006	0,2	M 6x 1,00	15	33	9,5	30	38	14	53	30	27	8	16	4	4	0,3
P4005.M008	0,5	M 8x 1,25	15	33	9,5	30	38	14	53	30	27	8	16	4	6	0,3
P4005.M010	0,9	M10x1,50	18	33	9,5	30	38	14	53	30	27	8	16	4	10	0,3
P4005.M012	1,3	M12x1,75	21	33	9,5	30	38	14	53	30	27	8	16	4	15	0,3
P4005.M014	1,8	M14x2,00	23	45	13	40	53	17	76	45	38	8	20	4	30	0,9
P4005.M016	2,3	M16x2,00	27	45	13	40	53	17	76	45	38	8	20	4	50	0,9
P4005.M018	2,3	M18x2,50	27	45	13	40	53	17	76	45	38	8	20	4	70	0,9
P4005.M020	2,5	M20x2,50	30	45	13	40	53	17	76	45	38	8	20	4	100	0,9
P4005.M022	4,5	M22x2,50	33	62	19	55	83	25	115	60	55	14	24	4	120	2,6
P4005.M024	5,5	M24x3,00	36	62	19	55	83	25	115	60	55	14	24	4	160	2,6
P4005.M027	6,0	M27x3,00	40	62	19	55	83	25	115	60	55	14	24	4	200	2,7
P4005.M030	6,3	M30x3,50	45	62	19	55	83	25	115	60	55	14	24	4	250	2,7
P4005.I031	(1,200)	(UNC 5/16"-18)	15	33	9,5	30	38	14	53	30	27	8	16	4	(5)	0,3
P4005.I037	(1,600)	(UNC 3/8"-16)	17	33	9,5	30	38	14	53	30	27	8	16	4	(8)	0,3
P4005.I050	(2,800)	(UNC 1/2"-13)	21	33	9,5	30	38	14	53	30	27	8	16	4	(12)	0,3
P4005.I063	(4,900)	(UNC 5/8"-11)	27	45	13	40	53	17	76	45	38	8	20	4	(40)	0,9
P4005.I075	(5,250)	(UNC 3/4"-10)	30	45	13	40	53	17	76	45	38	8	20	4	(80)	0,9
P4005.I088	(9,800)	(UNC 7/8"-9)	33	62	19	55	83	25	115	60	55	14	24	4	(90)	2,5
P4005.I100	(12,500)	(UNC 1"-8)	36	62	19	55	83	25	115	60	55	14	24	4	(125)	2,6



P4006



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Double articulation.
Very low overhang for improved safety.
Large support surface.
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

Please read our instruction leaflet when specifying and/or using.

Please refer to the safety documentation before using this part.

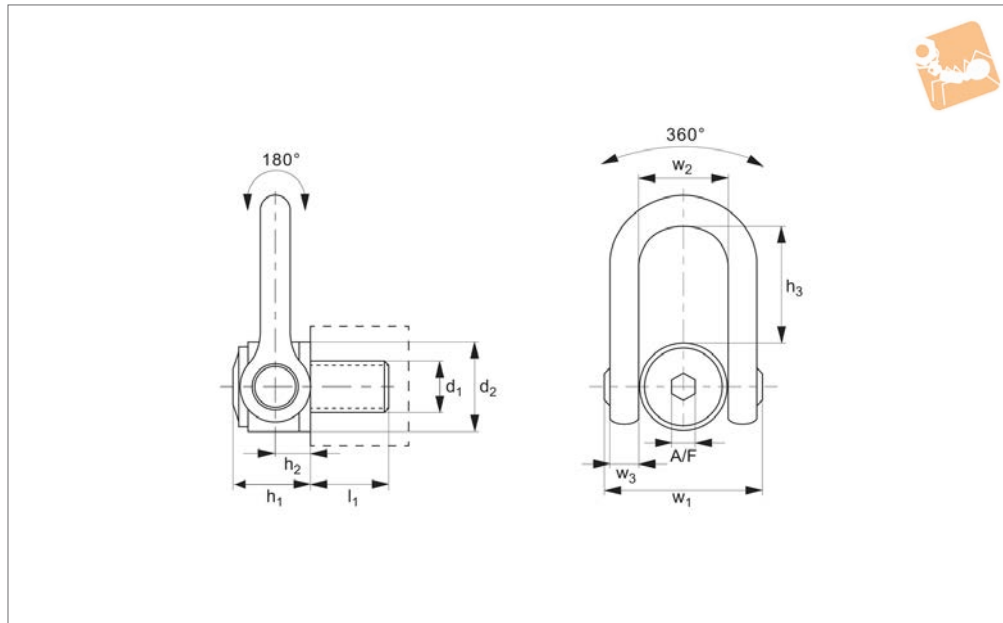
Supplied with certificate and operating instructions.

Order No.	Load tons (t) max.	d_1 6H (tol. 2A)	h_1 & l_{max}	h_2	h_3	h_4	h_5	w_1	d_2	w_2	A/F	Safety factor	Torque to Nm	Weight kg
P4006.M008	0.5	M 8x 1,25	45	13	40	53	17	76	45	38	20	4	6	0.9
P4006.M010	0.9	M10x1,50	45	13	40	53	17	76	45	38	20	4	10	0.9
P4006.M012	1.3	M12x1,75	45	13	40	53	17	76	45	38	20	4	15	0.9
P4006.M014	1.8	M14x2,00	45	13	40	53	17	76	45	38	20	4	30	0.9
P4006.M016	2.3	M16x2,00	45	13	40	53	17	76	45	38	20	4	50	0.9
P4006.M018	2.3	M18x2,50	62	19	55	83	25	115	60	55	24	4	70	2.6
P4006.M020	2.5	M20x2,50	62	19	55	83	25	115	60	55	24	4	100	2.6
P4006.M022	4.5	M22x2,50	62	19	55	83	25	115	60	55	24	4	120	2.6
P4006.I031	(1.200)	(UNC 5/16"-18)	45	13	40	53	17	76	45	38	20	4	5	0.9
P4006.I037	(1.600)	(UNC 3/8"-16)	45	13	40	53	17	76	45	38	20	4	8	0.9
P4006.I050	(2.800)	(UNC 1/2"-13)	45	13	40	53	17	76	45	38	20	4	12	0.9
P4006.I063	(4.900)	(UNC 5/8"-11)	45	13	40	53	17	76	45	38	20	4	40	0.9
P4006.I075	(5.250)	(UNC 3/4"-10)	62	19	55	83	25	115	60	55	24	4	80	2.6
P4006.I088	(9.800)	(UNC 7/8"-9)	62	19	55	83	25	115	60	55	24	4	90	2.6



Double Swivel Shackles Male

Lifting Pins,
Lifting Bolts &



P4008

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Double articulation.
Very low overhang for improved safety.
Large support surface.
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 instructions.

Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l ₁	h ₁	h ₂	h ₃	w ₁	d ₂	w ₂	w ₃	A/F	Safety factor	Torque to Nm (ft-lb)	Weight kg
P4008.M024	5.5	M24x3,0	36	61	31	98	149	70	73	33	19	4	160	5.4
P4008.M030	8.5	M30x3,5	45	61	31	98	149	70	73	33	19	4	250	5.5
P4008.M033	10.5	M33x3,5	50	61	31	98	149	70	73	33	19	4	250	5.5
P4008.M036	12.0	M36x4,0	54	61	31	98	149	70	73	33	19	4	320	5.5
P4008.M037	12.0	M36x3,0*	54	61	31	98	149	70	73	33	19	4	320	5.5
P4008.M039	14.0	M39x4,0	58	61	31	98	149	70	73	33	19	4	320	5.7
P4008.M042	15.0	M42x4,5	63	61	31	98	149	70	73	33	19	4	400	5.8
P4008.M043	15.0	M42x3,0*	63	61	31	98	149	70	73	33	19	4	400	5.8
P4008.M045	16.0	M45x4,5	63	61	31	98	149	70	73	33	19	4	400	5.9
P4008.M048	20.0	M48x5,0	68	79	38	123	182	90	91	45	19	4	600	11.0
P4008.M049	20.0	M48x3,0*	68	79	38	123	182	90	91	45	19	4	600	11.0
P4008.M050	20.0	M48x4,0*	68	79	38	123	182	90	91	45	19	4	600	11.0
P4008.M052	21.0	M52x5,0	68	79	38	123	182	90	91	45	19	4	600	11.2
P4008.M056	25.0	M56x5,5	78	79	38	123	182	90	91	45	19	4	600	11.3
P4008.M057	25.0	M56x4,0*	78	79	38	123	182	90	91	45	19	4	600	11.4
P4008.M064	32.1	M64x6,0	90	79	38	123	182	95	91	45	19	4	600	12.2
P4008.M065	32.1	M64x4,0*	90	79	38	123	182	95	91	45	19	4	600	12.2
P4008.M072	25.0	M72x6,0*	90	79	38	123	182	95	91	45	19	4	600	14.0
P4008.M073	25.0	M72x4,0*	90	79	38	123	182	95	91	45	19	4	600	14.0
P4008.M080	32.1	M80x6,0*	90	79	38	123	182	100	91	45	19	4	600	15.0
P4008.M090	32.1	M90x6,0*	90	79	38	123	182	100	91	45	19	4	600	15.5
P4008.M100	32.1	M100x6,0*	90	79	38	123	182	110	91	45	19	4	600	16.5
P4008.I125	(19.000)	(UNC 1 1/4"-7)	45	61	31	98	149	70	73	33	19	4	(200)	5.4

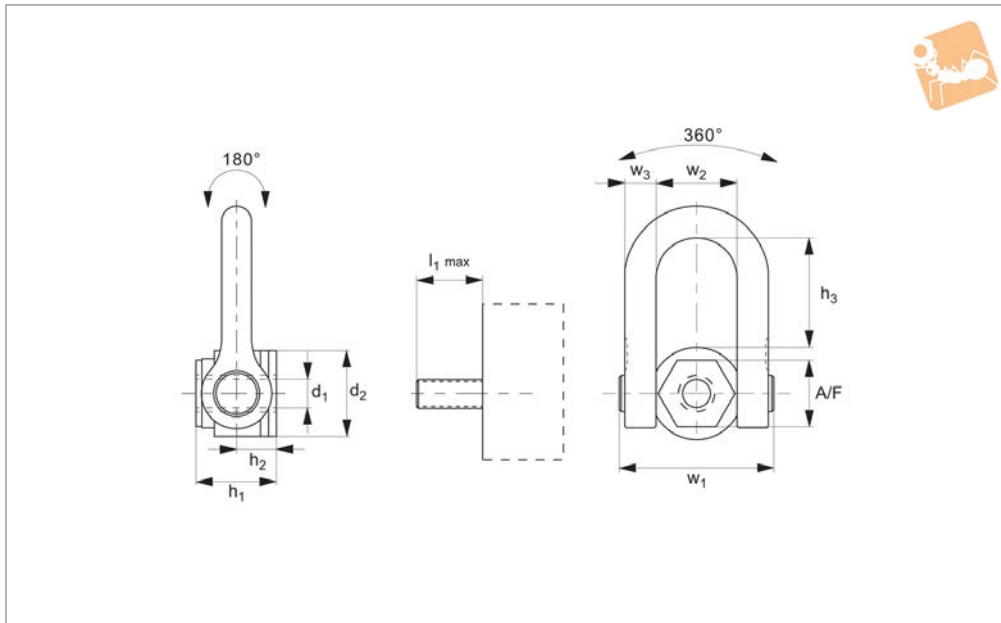


Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l ₁	h ₁	h ₂	h ₃	w ₁	d ₂	w ₂	w ₃	A/F	Safety factor	Torque to Nm (ft-lb)	Weight kg
P4008.I137	(22.000)	(UNC 1 3/8"-6*)	54	61	31	98	149	70	73	33	19	4	(240)	5.4
P4008.I150	(27.000)	(UNC 1 1/2"-6)	54	61	31	98	149	70	73	33	19	4	(240)	5.4
P4008.I200	(50.000)	(UNC 2"-4 1/2)	76	79	38	123	182	90	91	45	19	4	(450)	11.1



Double Swivel Shackle Nuts Female

Lifting Pins,
Lifting Bolts &



P4010

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Designed to be used directly with the hook of the crane. Load ratings clearly marked. 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

Tolerance of male thread to be 6H (metric) or UNC-2B (inch).

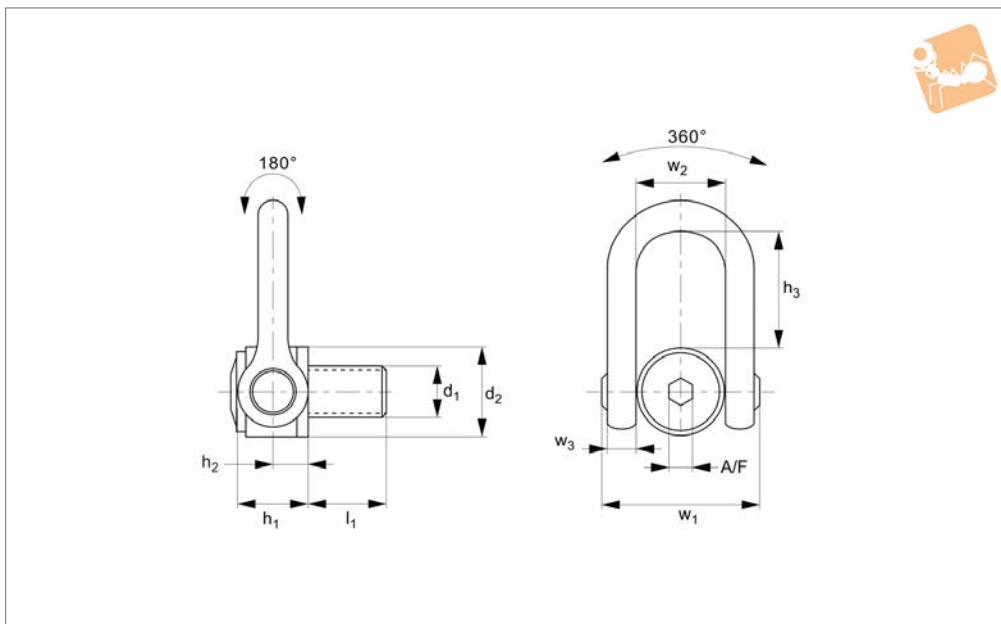
Please refer to the safety documentation before using this part.

Supplied with certificate and operating instructions.

Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	h ₁ & l _{max.}	h ₂	h ₃	w ₁	d ₂	w ₂	w ₃	A/F	Safety factor	Torque to Nm	Weight kg
P4010.M024	5.5	M24x3,0	66	31	98	149	70	73	33	50	4	160	5.1
P4010.M027	6.5	M27x3,0	66	31	98	149	70	73	33	50	4	200	5.1
P4010.M030	8.5	M30x3,5	66	31	98	149	70	73	33	50	4	250	5.1
P4010.M033	10.5	M33x3,5	66	31	98	149	70	73	33	50	4	250	5.1
P4010.M036	12.0	M36x4,0	66	31	98	149	70	73	33	50	4	320	5.1
P4010.M039	14.0	M39x4,0	89	38	123	182	95	91	45	60	4	320	10.0
P4010.M042	15.0	M42x4,5	89	38	123	182	95	91	45	60	4	400	10.0
P4010.M045	16.0	M45x4,5	89	38	123	182	95	91	45	60	4	400	10.0
P4010.M048	20.0	M48x5,0	89	38	123	182	95	91	45	60	4	600	10.0
P4010.M052	21.0	M52x5,0	89	38	123	182	95	91	45	60	4	600	10.0
P4010.I125	(19.000)	(UNC 1"1/4-7)	66	31	98	149	70	73	33	50	4	200	5.1
P4010.I137	(22.000)	(UNC 1"3/8-6)	66	31	98	149	70	73	33	50	4	240	5.1
P4010.I150	(27.000)	(UNC 1"1/2-6)	89	38	123	182	95	91	45	60	4	240	10.0
P4010.I200	(50.000)	(UNC 2"-4 1/2)	89	38	123	182	95	91	45	60	4	450	10.0



P4011



Material

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

Technical Notes

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 instructions.

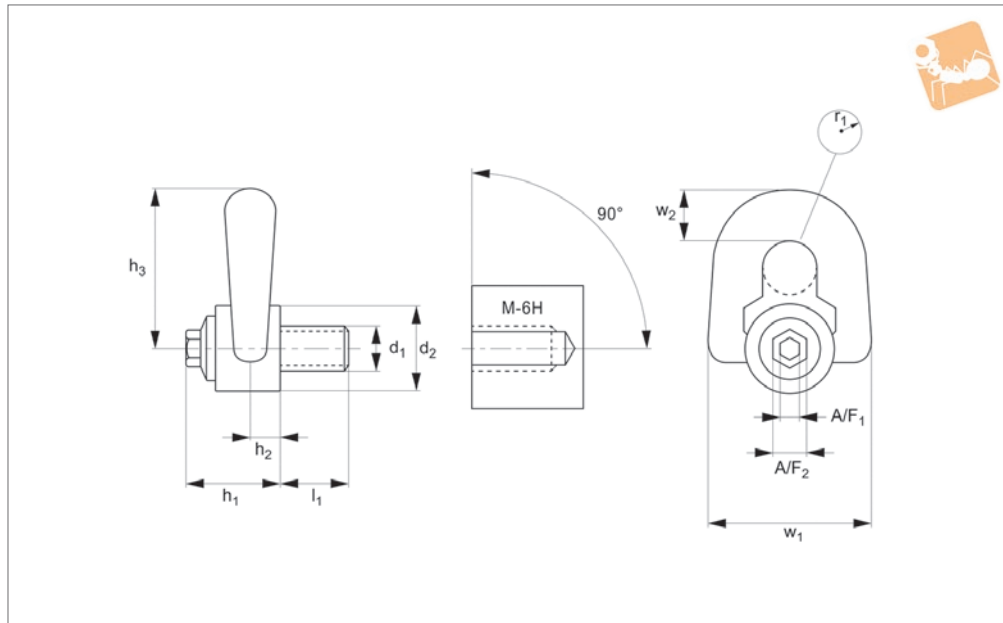
Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l	h ₁	h ₂	h ₃	w ₁	d ₂	w ₂	w ₃	A/F	Safety factor	Torque to Nm (ft·lb)	Weight kg
P4011.M064	33.0	M 64x6	100	127	64	186	278	140	143	69	36	4	600	42.0
P4011.M072	35.0	M 72x6	110	127	64	186	278	140	143	69	36	4	700	43.0
P4011.M073	35.0	M 72x4	110	127	64	186	278	140	143	69	36	4	700	43.0
P4011.M080	40.0	M 80x6	120	127	64	186	278	140	143	69	36	4	800	44.5
P4011.M090	45.0	M 90x6	135	127	64	186	278	140	143	69	36	4	900	46.5
P4011.M100	60.0	M100x6	150	127	64	186	278	140	143	69	36	4	1000	49.0
P4011.I275	(75.000)	(UNC 2"3/4-4)	105	127	64	186	278	140	143	69	36	4	(520)	42.5
P4011.I300	(80.000)	(UNC 3"-4)	115	127	64	186	278	140	143	69	36	4	(520)	43.0
P4011.I325	(90.000)	(UNC 3"1/4-4)	125	127	64	186	278	140	143	69	36	4	(590)	44.5
P4011.I350	(95.000)	(UNC 3"1/2-4)	135	127	64	186	278	140	143	69	36	4	(665)	46.0
P4011.I375	(100.000)	(UNC 3"3/4-4)	145	127	64	186	278	140	143	69	36	4	(740)	47.0
P4011.I400	(110.000)	(UNC 4"-4)	150	127	64	186	278	140	143	69	36	4	(740)	49.0



Double Swivel Lifting Points

for wire rope

Lifting Pins, Lifting Bolts &



P4012

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Double articulation.
Low overhang for improved safety.
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

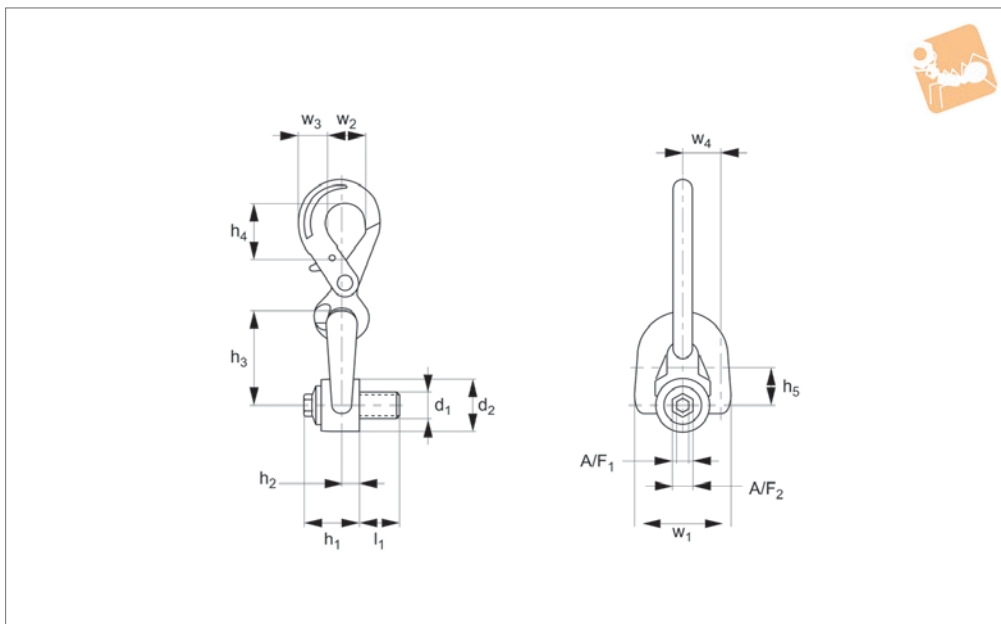
will be installed:

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 instructions.

Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l	h ₁	h ₂	h ₃	w ₁	d ₂	R	w ₂	A/F ₁	A/F ₂	Safety factor	Torque to Nm (ft-lb)	Weight kg
P4012.M008	0.40	M8x 1,25	15	33	9.5	56	58	30	9.5	19	8	16	5	6	0.3
P4012.M010	0.70	M10x1,50	18	33	9.5	56	58	30	9.5	19	8	16	5	10	0.3
P4012.M012	1.05	M12x1,75	21	33	9.5	56	58	30	9.5	19	8	16	5	15	0.3
P4012.M014	1.40	M14x2,00	23	45	13.0	81	79	45	12.5	27	8	20	5	30	0.9
P4012.M016	2.00	M16x2,00	27	45	13.0	81	79	45	12.5	27	8	20	5	50	0.9
P4012.M018	2.30	M18x2,50	27	45	13.0	81	79	45	12.5	27	8	20	5	70	1.0
P4012.M020	2.50	M20x2,50	30	45	13.0	81	79	45	12.5	27	8	20	5	100	1.0
P4012.I031	(1.000)	(UNC 5/16"-18)	15	33	9.5	56	58	30	9.5	19	8	16	5	(7)	0.3
P4012.I037	(1.300)	(UNC 3/8"-16)	17	33	9.5	56	58	30	9.5	19	8	16	5	(8)	0.3
P4012.I050	(2.400)	(UNC 1/2"-13)	21	33	9.5	56	58	30	9.5	19	8	16	5	(12)	0.3
P4012.I063	(3.900)	(UNC 5/8"-11)	27	45	13.0	81	79	45	12.5	27	8	16	5	(40)	1.0
P4012.I075	(5.250)	(UNC 3/4"-10)	30	45	13.0	81	79	45	12.5	27	8	16	5	(80)	1.0



P4017



Material

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

Technical Notes

This lifting ring combines a swivel lifting ring and lifting hook in one unit.
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. The safety hook is compatible with most types of lifting such as chains, wire ropes and slings.

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 instructions.

Order No.	Load tons (t) max.	d_1 tol. 6g (tol. 2A)	l_1	h_1	h_2	h_3	h_4	w_1	d_2	h_5 & w_4	w_2	w_3	A/F_1	A/F_2	Safety factor	Torque to Nm (ft-lb)	Weight kg
P4017.M008	0,40	M 8x1,25	15	33	9,5	56	44	58	30	18	32	23	8	16	5	6	0,8
P4017.M010	0,70	M10x1,50	18	33	9,5	56	44	58	30	18	32	23	8	16	5	10	0,8
P4017.M012	1,05	M12x1,75	21	33	9,5	56	44	58	30	18	32	23	8	16	5	15	0,8
P4017.M014	1,40	M14x2,00	23	45	13,0	81	65	79	45	24	46	29	8	20	5	30	1,9
P4017.M016	2,00	M16x2,00	27	45	13,0	81	65	79	45	24	46	29	8	20	5	50	2,0
P4017.M018	2,30	M18x2,50	27	45	13,0	81	65	79	45	24	46	29	8	20	5	70	2,0
P4017.M020	2,50	M20x2,50	30	45	13,0	81	65	79	45	24	46	29	8	20	5	100	2,0
P4017.I031	(1,000)	(UNC 5/16"-18)	15	33	9,5	56	44	58	30	18	32	23	8	16	5	(7)	0,8
P4017.I038	(1,300)	(UNC 3/8"-16)	17	33	9,5	56	44	58	30	18	32	23	8	16	5	(8)	0,8
P4017.I050	(2,400)	(UNC 1/2"-13)	21	33	9,5	56	44	58	30	18	32	23	8	16	5	(12)	0,8
P4017.I063	(3,900)	(UNC 5/8"-11)	27	45	13,0	81	58	79	45	24	46	29	8	20	5	(40)	1,9
P4017.I075	(5,250)	(UNC 3/4"-10)	30	45	13,0	81	58	79	45	24	46	29	8	20	5	(80)	2,0



Technical Information

Heavy Duty Double Swivel Lifting Rings



P4008 Male

P4010 Female



Lifting type									α max. = 60° 		α max. = 60° 	
	No. of rings	1	2	1	2	2	2	4	4			
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°				
Part no.	Thread											
P4008.M024 & P4010.M024	M24	4,50 tons	9,00 tons	4,50 tons	9,00 tons	6,30 tons	4,50 tons	9,50 tons	4,50 tons			
P4010.M027	M27	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,00 tons	5,00 tons	10,50 tons	5,00 tons			
P4008.M030 & P4010.M030	M30	7,30 tons	14,60 tons	7,30 tons	14,60 tons	10,20 tons	7,30 tons	15,30 tons	7,30 tons			
P4008.M033 & P4010.M033	M33	8,00 tons	16,00 tons	8,00 tons	16,00 tons	11,20 tons	8,00 tons	16,80 tons	8,00 tons			
P4008.M036 & P4010.M036	M36	10,00 tons	20,00 tons	10,00 tons	20,00 tons	14,00 tons	10,00 tons	21,00 tons	10,00 tons			
P4008.M037	M36	10,00 tons	20,00 tons	10,00 tons	20,00 tons	14,00 tons	10,00 tons	21,00 tons	10,00 tons			
P4008.M039 & P4010.M039	M39	10,00 tons	20,00 tons	10,00 tons	20,00 tons	14,00 tons	10,00 tons	21,00 tons	10,00 tons			
P4008.M042 & P4010.M042	M42	12,50 tons	25,00 tons	12,50 tons	25,00 tons	17,50 tons	12,50 tons	26,30 tons	12,50 tons			
P4008.M043	M42	12,50 tons	25,00 tons	12,50 tons	25,00 tons	17,50 tons	12,50 tons	26,30 tons	12,50 tons			
P4008.M045 & P4010.M045	M45	15,00 tons	30,00 tons	15,00 tons	30,00 tons	21,00 tons	15,00 tons	31,50 tons	15,00 tons			
P4008.M048 & P4010.M048	M48	20,00 tons	40,00 tons	20,00 tons	40,00 tons	28,00 tons	20,00 tons	42,00 tons	20,00 tons			
P4008.M049	M48	20,00 tons	40,00 tons	20,00 tons	40,00 tons	28,00 tons	20,00 tons	42,00 tons	20,00 tons			
P4008.M050	M50	20,00 tons	40,00 tons	20,00 tons	40,00 tons	28,00 tons	20,00 tons	42,00 tons	20,00 tons			
P4008.M052 & P4010.M052	M52	20,00 tons	40,00 tons	20,00 tons	40,00 tons	28,00 tons	20,00 tons	42,00 tons	20,00 tons			
P4008.M056	M56	25,00 tons	50,00 tons	25,00 tons	50,00 tons	35,00 tons	25,00 tons	52,50 tons	25,00 tons			
P4008.M057	M56	25,00 tons	50,00 tons	25,00 tons	50,00 tons	35,00 tons	25,00 tons	52,50 tons	25,00 tons			
P4008.M064	M64	32,10 tons	64,20 tons	32,10 tons	64,20 tons	44,90 tons	32,10 tons	67,40 tons	32,10 tons			
P4008.M065	M65	32,10 tons	64,20 tons	32,10 tons	64,20 tons	44,90 tons	32,10 tons	67,40 tons	32,10 tons			
P4008.M072	M72	25,00 tons	50,00 tons	25,00 tons	50,00 tons	35,00 tons	25,00 tons	52,50 tons	25,00 tons			
P4008.M073	M72	25,00 tons	50,00 tons	25,00 tons	50,00 tons	35,00 tons	25,00 tons	52,50 tons	25,00 tons			
P4008.M080	M80	32,10 tons	64,20 tons	32,10 tons	64,20 tons	44,90 tons	32,10 tons	67,40 tons	32,10 tons			
P4008.M090	M90	32,10 tons	64,20 tons	32,10 tons	64,20 tons	44,90 tons	32,10 tons	67,40 tons	32,10 tons			
P4008.M100	M100	32,10 tons	64,20 tons	32,10 tons	64,20 tons	44,90 tons	32,10 tons	67,40 tons	32,10 tons			
P4010.I100	(UNC 1"-8)	10,000 lbs	20,000 lbs	10,000 lbs	20,000 lbs	14,000 lbs	10,000 lbs	21,000 lbs	10,000 lbs			
P4008.I125 & P4010.I125	(UNC 1 1/4"-7)	14,000 lbs	28,000 lbs	14,000 lbs	28,000 lbs	19,600 lbs	14,000 lbs	29,400 lbs	14,000 lbs			
P4008.I137 & P4010.I137	(UNC 1 3/8"-6*)	20,000 lbs	40,000 lbs	20,000 lbs	40,000 lbs	28,000 lbs	20,000 lbs	42,000 lbs	20,000 lbs			
P4008.I150 & P4010.I150	(UNC 1 1/2"-6)	20,000 lbs	40,000 lbs	20,000 lbs	40,000 lbs	28,000 lbs	20,000 lbs	42,000 lbs	20,000 lbs			
P4008.I200 & P4010.I200	(UNC 2"-4 1/2)	50,000 lbs	100,000 lbs	50,000 lbs	100,000 lbs	70,000 lbs	50,000 lbs	105,000 lbs	50,000 lbs			

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LIFTING PINS, LIFTING BOLTS & SWING BOLTS



P4011 Male



Lifting type	0°		90°		α max. = 60°		α max. = 60°			
	1	2	1	2	2	2	4	4		
No. of rings	1	2	1	2	2	2	4	4		
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°		
Part no.	Thread									
P4011.M064	M64		33,00 tons	66,00 tons	33,00 tons	66,00 tons	46,00 tons	33,00 tons	69,00 tons	33,00 tons
P4011.M072	M72		35,00 tons	70,00 tons	35,00 tons	70,00 tons	49,00 tons	35,00 tons	74,00 tons	35,00 tons
P4011.M073	M72		35,00 tons	70,00 tons	35,00 tons	70,00 tons	49,00 tons	35,00 tons	74,00 tons	35,00 tons
P4011.M080	M80		40,00 tons	80,00 tons	40,00 tons	80,00 tons	56,00 tons	40,00 tons	84,00 tons	40,00 tons
P4011.M090	M90		45,00 tons	90,00 tons	45,00 tons	90,00 tons	63,00 tons	45,00 tons	95,00 tons	45,00 tons
P4011.M100	M100		50,00 tons	100,00 tons	50,00 tons	100,00 tons	70,00 tons	50,00 tons	105,00 tons	50,00 tons
P4011.I225	(UNC 2"1/4-4)		55,000 lbs	110,000 lbs	55,000 lbs	110,000 lbs	77,000 lbs	55,000 lbs	115,500 lbs	55,000 lbs
P4011.I250	(UNC 2"1/2-4)		70,000 lbs	140,000 lbs	70,000 lbs	140,000 lbs	98,000 lbs	70,000 lbs	147,000 lbs	70,000 lbs
P4011.I275	(UNC 2"3/4-4)		75,000 lbs	150,000 lbs	75,000 lbs	150,000 lbs	105,000 lbs	75,000 lbs	157,500 lbs	75,000 lbs
P4011.I300	(UNC 3"-4)		80,000 lbs	160,000 lbs	80,000 lbs	160,000 lbs	112,000 lbs	80,000 lbs	168,000 lbs	80,000 lbs
P4011.I325	(UNC 3"1/4-4)		90,000 lbs	180,000 lbs	90,000 lbs	180,000 lbs	126,000 lbs	90,000 lbs	189,000 lbs	90,000 lbs
P4011.I350	(UNC 3"1/2-4)		95,000 lbs	190,000 lbs	95,000 lbs	190,000 lbs	133,000 lbs	95,000 lbs	199,500 lbs	95,000 lbs
P4011.I375	(UNC 3"3/4-4)		100,000 lbs	200,000 lbs	100,000 lbs	200,000 lbs	140,000 lbs	100,000 lbs	210,000 lbs	100,000 lbs
P4011.I400	(UNC 4"-4)		110,000 lbs	220,000 lbs	110,000 lbs	220,000 lbs	154,000 lbs	110,000 lbs	231,000 lbs	110,000 lbs

Technical Information

Heavy Duty Stainless Steel Double Swivel Lifting Rings

Lifting Bolts

P4022 Male



P4023 Female



Lifting type									α max. = 60° 		α max. = 60° 	
	1	2	1	2	2	2	4	4				
No. of rings	1	2	1	2	2	2	4	4				
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°				
Part no.	Thread											
P4023.M024	M24	2,70 tons	5,40 tons	2,70 tons	5,40 tons	3,80 tons	2,70 tons	5,70 tons	2,70 tons			
P4023.M027	M27	2,80 tons	5,60 tons	2,80 tons	5,60 tons	3,90 tons	2,80 tons	5,90 tons	2,80 tons			
P4022.M030 & P4023.M30	M30	3,50 tons	7,00 tons	3,50 tons	7,00 tons	4,90 tons	3,50 tons	7,30 tons	3,50 tons			
P4022.M033 & P4023.M33	M33	3,50 tons	7,00 tons	3,50 tons	7,00 tons	4,90 tons	3,50 tons	7,30 tons	3,50 tons			
P4022.M036 & P4023.M36	M36	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,00 tons	5,00 tons	10,50 tons	5,00 tons			
P4022.M037	M36	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,00 tons	5,00 tons	10,50 tons	5,00 tons			
P4022.M039	M39	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,00 tons	5,00 tons	10,50 tons	5,00 tons			
P4022.M042	M42	6,00 tons	12,00 tons	6,00 tons	12,00 tons	8,40 tons	6,00 tons	12,60 tons	6,00 tons			
P4022.M043	M42	6,00 tons	12,00 tons	6,00 tons	12,00 tons	8,40 tons	6,00 tons	12,60 tons	6,00 tons			
P4022.M045	M45	6,00 tons	12,00 tons	6,00 tons	12,00 tons	8,40 tons	6,00 tons	12,60 tons	6,00 tons			
P4022.I100 & P4023.I100	(UNC 1"-8)	6,000 lbs	12,000 lbs	6,000 lbs	12,000 lbs	8,400 lbs	6,000 lbs	12,600 lbs	6,000 lbs			
P4022.I125 & P4023.I125	(UNC 1 1/4"-7)	7,500 lbs	15,000 lbs	7,500 lbs	15,000 lbs	10,500 lbs	7,500 lbs	15,750 lbs	7,500 lbs			
P4022.I137 & P4023.I137	(UNC 1 3/8"-6)	7,500 lbs	15,000 lbs	7,500 lbs	15,000 lbs	10,500 lbs	7,500 lbs	15,750 lbs	7,500 lbs			
P4022.I150	(UNC 1 1/2"-6)	11,000 lbs	22,000 lbs	11,000 lbs	22,000 lbs	15,400 lbs	11,000 lbs	23,100 lbs	11,000 lbs			

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LIFTING PINS, LIFTING BOLTS & SWING BOLTS



P4012 Male



Lifting type	0°		90°		α max. = 60°		α max. = 60°		
	1	2	1	2	2	2	4	4	
No. of rings	1	2	1	2	2	2	4	4	
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°	
Part no.	Thread								
P4012.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons
P4012.M010	M10	0,60 tons	1,20 tons	0,60 tons	1,20 tons	0,80 tons	0,60 tons	1,30 tons	0,60 tons
P4012.M012	M12	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons
P4012.M014	M14	1,30 tons	2,60 tons	1,30 tons	2,60 tons	1,80 tons	1,30 tons	2,70 tons	1,30 tons
P4012.M016	M16	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons
P4012.M018	M18	2,00 tons	4,00 tons	2,00 tons	4,00 tons	2,80 tons	2,00 tons	4,20 tons	2,00 tons
P4012.M020	M20	2,50 tons	5,00 tons	2,50 tons	5,00 tons	3,50 tons	2,50 tons	5,30 tons	2,50 tons
P4012.I031	(UNC 5/16"-18)	650 lbs	1,300 lbs	650 lbs	1,300 lbs	910 lbs	650 lbs	1,365 lbs	650 lbs
P4012.I037	(UNC 3/8"-16)	1,200 lbs	2,400 lbs	1,200 lbs	2,400 lbs	1,680 lbs	1,200 lbs	2,520 lbs	1,200 lbs
P4012.I050	(UNC 1/2"-13)	2,200 lbs	4,400 lbs	2,200 lbs	4,400 lbs	3,080 lbs	2,200 lbs	4,620 lbs	2,200 lbs
P4012.I063	(UNC 5/8"-11)	3,800 lbs	7,600 lbs	3,800 lbs	7,600 lbs	5,320 lbs	3,800 lbs	7,980 lbs	3,800 lbs
P4012.I075	(UNC 3/4"-10)	5,500 lbs	11,000 lbs	5,500 lbs	11,000 lbs	7,700 lbs	5,500 lbs	11,550 lbs	5,500 lbs



Technical Information

Hook Double Swivel Lifting Rings

Lifting Bolts



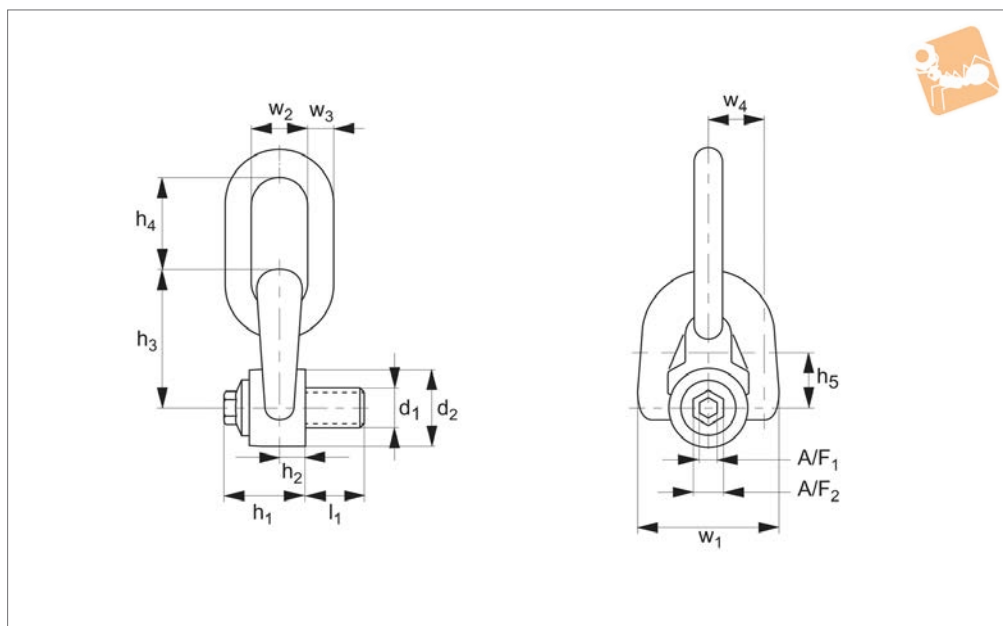
P4017 Male



Lifting type	0°		90°		α max. = 60°		α max. = 60°		
	1	2	1	2	2	2	4	4	
No. of rings	1	2	1	2	2	2	4	4	
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°	
Part no.	Thread								
P4017.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons
P4017.M010	M10	0,60 tons	1,20 tons	0,60 tons	1,20 tons	0,80 tons	0,60 tons	1,30 tons	0,60 tons
P4017.M012	M12	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons
P4017.M014	M14	1,30 tons	2,60 tons	1,30 tons	2,60 tons	1,80 tons	1,30 tons	2,70 tons	1,30 tons
P4017.M016	M16	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons
P4017.M018	M18	2,00 tons	4,00 tons	2,00 tons	4,00 tons	2,80 tons	2,00 tons	4,20 tons	2,00 tons
P4017.M020	M20	2,50 tons	5,00 tons	2,50 tons	5,00 tons	3,50 tons	2,50 tons	5,30 tons	2,50 tons
P4017.I031	(UNC 5/16"-18)	650 lbs	1,300 lbs	650 lbs	1,300 lbs	910 lbs	650 lbs	1,365 lbs	650 lbs
P4017.I038	(UNC 3/8"-16)	1,200 lbs	2,400 lbs	1,200 lbs	2,400 lbs	1,680 lbs	1,200 lbs	2,520 lbs	1,200 lbs
P4017.I050	(UNC 1/2"-13)	2,200 lbs	4,400 lbs	2,200 lbs	4,400 lbs	3,080 lbs	2,200 lbs	4,620 lbs	2,200 lbs
P4017.I063	(UNC 5/8"-11)	3,800 lbs	7,600 lbs	3,800 lbs	7,600 lbs	5,320 lbs	3,800 lbs	7,980 lbs	3,800 lbs
P4017.I075	(UNC 3/4"-10)	5,500 lbs	11,000 lbs	5,500 lbs	11,000 lbs	7,700 lbs	5,500 lbs	11,550 lbs	5,500 lbs



P4015



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

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

Technical Notes

Three articulations.
Very low overhang for improved safety.
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.
Longer or shorter thread lengths can be

supplied but please consult our technical department for this information if required.

Please refer to our technical information pages when specifying and/or using.

Tips

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 instructions..

Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l ₁	h ₁	w ₁	d ₂	h ₂	h ₃	h ₄	h ₅ & w ₄	w ₂	w ₃	A/F ₁	A/F ₂	Safety factor	Torque to Nm (ft-lb)	Weight kg
P4015.M008	0,40	M 8x 1,25	14	33	58	30	9,5	56	41	18	25	10	8	16	5	6	0,4
P4015.M010	0,70	M10x1,50	17	33	58	30	9,5	56	41	18	25	10	8	16	5	10	0,4
P4015.M012	1,05	M12x1,75	21	33	58	30	9,5	56	41	18	25	10	8	16	5	15	0,4
P4015.M014	1,40	M14x2,00	23	45	79	45	13,0	81	56	24	37	14	8	20	5	30	1,1
P4015.M016	2,00	M16x2,00	27	45	79	45	13,0	81	56	24	37	14	8	20	5	50	1,2
P4015.M018	2,30	M18x2,50	27	45	79	45	13,0	81	56	24	37	14	8	20	5	70	1,2
P4015.M020	2,50	M20x2,50	30	45	79	45	13,0	81	56	24	37	14	8	20	5	100	1,2
P4015.M022	3,00	M22x2,50	33	62	106	60	19,0	105	80	45	45	20	14	24	5	120	2,8
P4015.M024	4,00	M24x3,00	36	62	106	60	19,0	105	80	45	45	20	14	24	5	160	2,9
P4015.M027	5,00	M27x3,00	36	62	106	60	19,0	105	80	45	45	20	14	24	5	200	2,9
P4015.M030	6,30	M30x3,50	45	62	106	60	19,0	105	80	45	45	20	14	24	5	250	3,0
P4015.M036	10,00	M36x4,00	54	81	148	80	26,5	140	111	54	71	30	19	30	5	320	7,6
P4015.M042	12,50	M42x4,50	63	84	148	80	26,5	146	111	58	71	30	19	30	5	400	7,8
P4015.M048	20,00	M48x5,00	68	100	180	110	33,0	178	135	69	90	42	19	30	4	600	17,5
P4015.M056	22,00	M56x5,50	78	104	190	110	33,0	184	135	73	90	42	19	30	4	600	18,0
P4015.I031	(1,000)	(UNC 5/16"-18)	15	33	58	30	9,5	56	41	18	25	10	8	16	5	(7)	0,4
P4015.I037	(1,300)	(UNC 3/8"-16)	17	33	58	30	9,5	56	41	18	25	10	8	16	5	(8)	0,4
P4015.I050	(2,400)	(UNC 1/2"-13)	21	33	58	30	9,5	56	41	18	25	10	8	16	5	(12)	0,4
P4015.I063	(3,900)	(UNC 5/8"-11)	27	45	79	45	13,0	81	56	24	37	14	8	20	5	(40)	1,1
P4015.I075	(5,250)	(UNC 3/4"-10)	30	45	79	45	13,0	81	56	24	37	14	8	20	5	(80)	1,2
P4015.I088	(6,600)	(UNC 7/8"-9)	33	62	106	60	19,0	84	80	41	45	20	14	24	5	(90)	2,7
P4015.I100	(10,000)	(UNC 1"-8)	36	62	106	60	19,0	84	80	41	45	20	14	24	5	(125)	2,8
P4015.I125	(14,000)	(UNC 1 1/4"-7)	46	84	106	80	26,5	146	111	41	71	30	14	24	5	(200)	7,1



Triple Swivel Rings Male

Lifting Pins, Lifting Bolts &

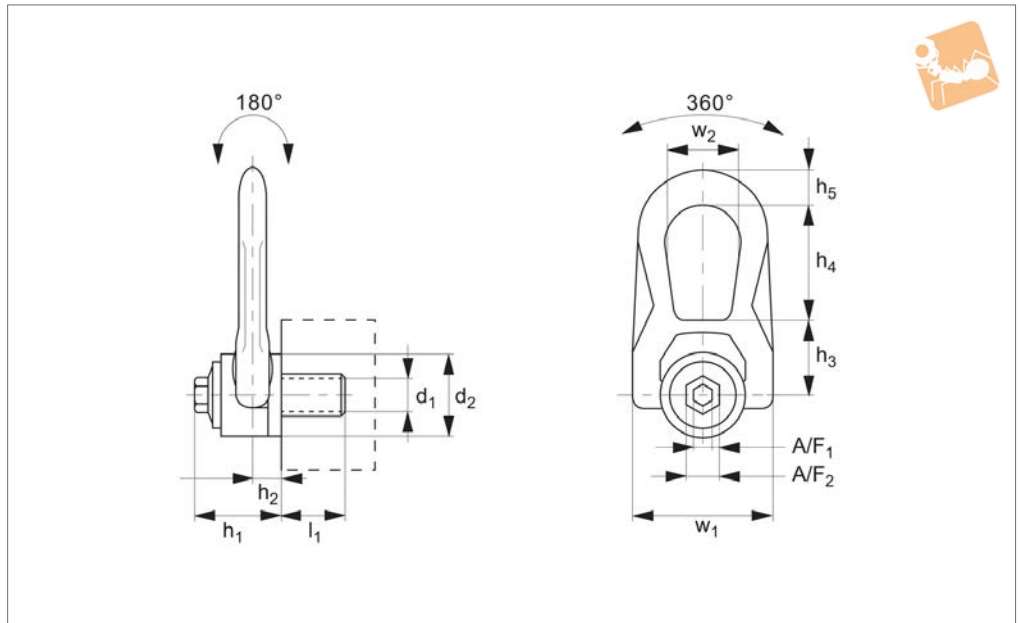
Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	l ₁	h ₁	w ₁	d ₂	h ₂	h ₃	h ₄	h ₅ & w ₄	w ₂	w ₃	A/F ₁	A/F ₂	Safety factor	Torque to Nm (ft·lb)	Weight kg
P4015.I150	(20,000)	(UNC 1 1/2"-6)	61	84	148	80	26,5	146	111	54	71	30	19	30	5	(240)	7,7
P4015.I200	(50,000)	(UNC 2"-4 1/2)	76	104	190	110	33,0	184	135	66	90	42	19	30	4	(450)	17,7



LIFTING PINS, LIFTING BOLTS & SWING BOLTS



P4020



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

High tensile stainless steel (316L), strength class >8. Supplied with CE certificate.

Technical Notes

Double articulation. Very low overhang for improved safety. Large support surface. 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. Longer or shorter thread lengths can be

supplied but please consult our technical department for this information if required. Please refer to our technical information pages when specifying and/or using.

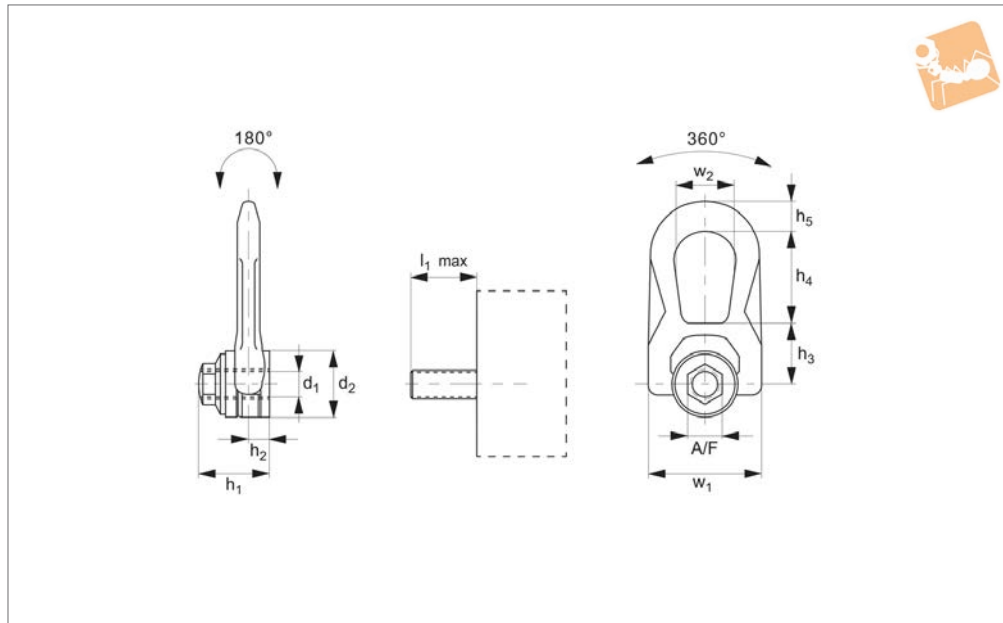
Tips

Double articulation allows perfect alignment with the sling. 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 tonnes (t) max.	d ₁ tol. 6g (tol. 2A)	h ₁	w ₁	h ₂	h ₃	h ₄	h ₅	d ₂	l ₁	w ₂	A/F ₁	A/F ₂	Safety factor	Torque to Nm	Weight kg
P4020.M008	0.3	M 8x 1,25	32	53	9.5	30	39	13	30	16	28	8	16	4	6	0.3
P4020.M030	3.5	M30x3,50	62	115	19.0	55	83	25	58	47	56	14	24	4	250	2.8
P4020.M010	0.5	M10x1,50	32	53	9.5	30	39	13	30	16	28	8	16	4	10	0.3
P4020.M012	0.8	M12x1,75	32	53	9.5	30	39	13	30	19	28	8	16	4	15	0.3
P4020.M014	1.0	M14x2,00	44	76	13.0	40	53	17	45	29	38	8	20	4	30	0.9
P4020.M016	1.5	M16x2,00	44	76	13.0	40	53	17	45	26	38	8	20	4	50	0.9
P4020.M018	1.5	M18x2,50	44	76	13.0	40	53	17	45	30	38	8	20	4	70	1.0
P4020.M020	1.6	M20x2,50	44	76	13.0	40	53	17	45	30	38	8	20	4	100	1.0
P4020.M022	2.2	M22x2,50	62	115	19.0	55	83	25	58	42	56	14	24	4	120	2.5
P4020.M024	2.7	M24x3,00	62	115	19.0	55	83	25	58	42	56	14	24	4	160	2.6
P4020.M027	2.9	M27x3,00	62	115	19.0	55	83	25	58	42	56	14	24	4	200	2.7



P4021

Material

High tensile stainless steel (316L), strength class >8.
Supplied with CE certificate.

Technical Notes

Double articulation, very low overhang for improved safety, large support surface. 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.
Longer or shorter thread lengths can be

supplied but please consult our technical department for this information if required.
Please refer to our technical information pages when specifying and/or using.

Tips

Double articulation allows perfect alignment with the sling.
With „automatic“ position recovery system for best orientation to sling direction.
Tighten by hex. key or spanner.

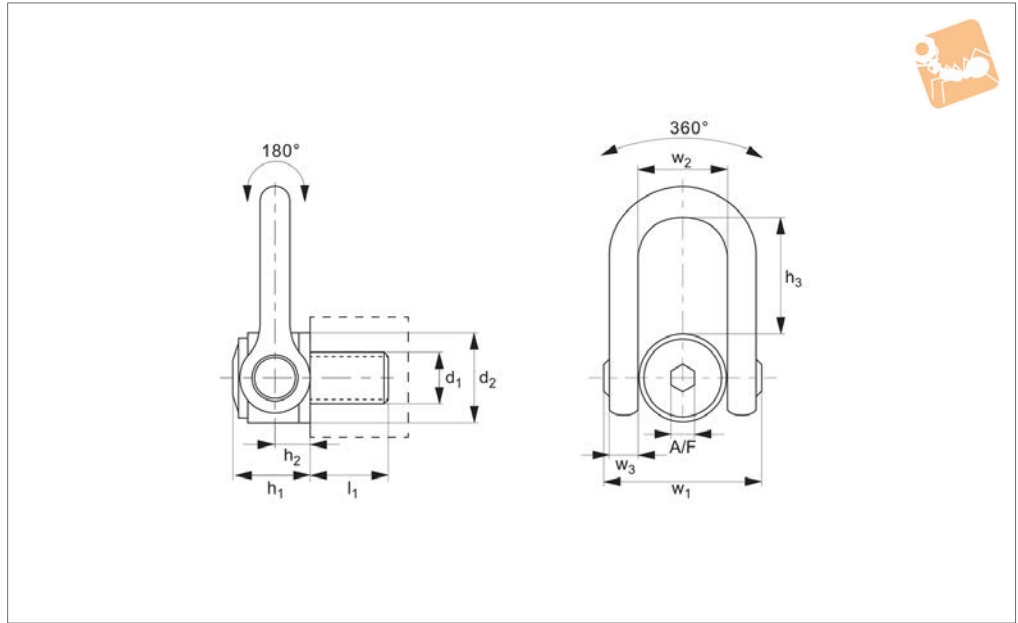
Important Notes

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 male thread to be 6G (metric) or UNC-2B (inch).
Please refer to the safety documentation before using this part.
Supplied with certificate and operating

Order No.	Load tonnes (t) max.	d ₁ tol. 6g (tol. 2A)	h ₁ & l _{max}	w ₁	h ₂	h ₃	h ₄	h ₅	d ₂	w ₂	A/F	Safety factor	Torque to Nm	Weight kg
P4021.M008	0.3	M 8x 1,25	43	76	13	40	53	17	45	38	20	4	6	0.9
P4021.M010	0.5	M10x1,50	43	76	13	40	53	17	45	38	20	4	10	0.9
P4021.M012	0.8	M12x1,75	43	76	13	40	53	17	45	38	20	4	15	0.9
P4021.M014	1.0	M14x2,00	43	76	13	40	53	17	45	38	20	4	30	0.9
P4021.M016	1.5	M16x2,00	43	76	13	40	53	17	45	38	20	4	50	0.9
P4021.M018	1.5	M18x2,50	62	115	19	55	83	25	58	56	24	4	70	2.6
P4021.M020	1.6	M20x2,50	62	115	19	55	83	25	58	56	24	4	100	2.6
P4021.M022	2.2	M22x2,50	62	115	19	55	83	25	58	56	24	4	120	2.6



P4022



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

High tensile stainless steel (316L), strength class >8. Supplied with CE certificate.

Technical Notes

Double articulation, very low overhang for improved safety, large support surface. 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. * = non standard thread pitch. Longer or shorter thread lengths can be

supplied but please consult our technical department for this information if required. Please refer to our technical information pages when specifying and/or using.

Tips

Double articulation allows perfect alignment with the sling. 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.

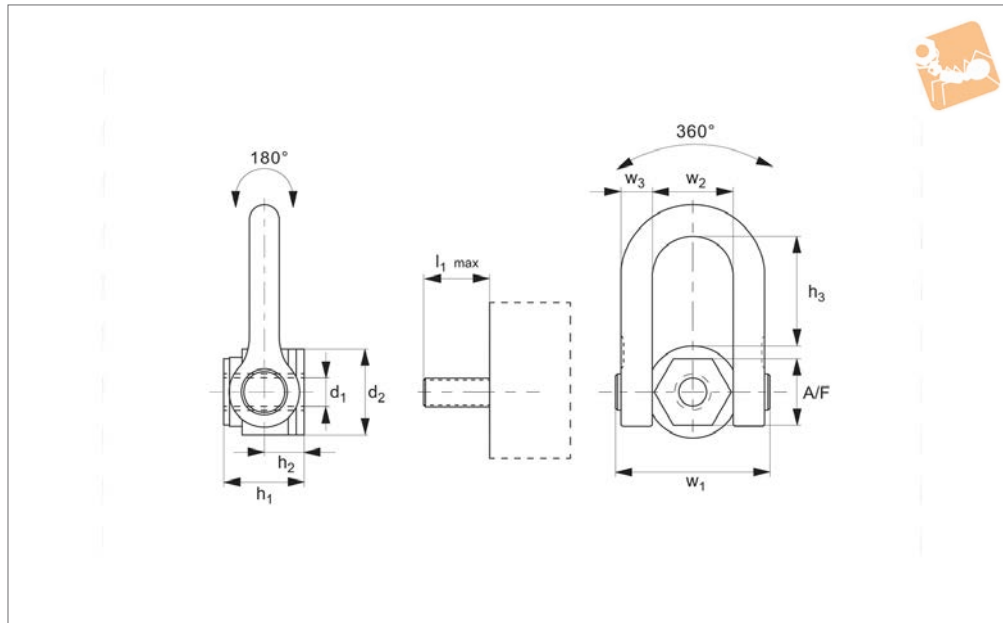
Other light metals - 2.5 x thread dia.

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 instructions.

Order No.	Load tons (t) max.	d ₁ tol. 6g (tol. 2A)	h ₁	w ₁	h ₂	h ₃	d ₂	l ₁	w ₂	w ₃	A/F	Safety factor	Torque to Nm (ft·lb)	Weight kg
P4022.M030	3.5	M30x3,5	61	149	31	98	70	45	73	30	19	4	250	5.2
P4022.M033	3.5	M33x3,5	61	149	31	98	70	50	73	30	19	4	250	5.2
P4022.M036	5.0	M36x4,0	61	149	31	98	70	54	73	30	19	4	320	5.2
P4022.M037	5.0	M36x3,0*	61	149	31	98	70	54	73	30	19	4	320	5.2
P4022.M039	5.0	M39x4,0	61	149	31	98	70	54	73	30	19	4	320	5.4
P4022.M042	6.0	M42x4,5	61	149	31	98	70	63	73	30	19	4	400	5.4
P4022.M043	6.0	M42x3,0*	61	149	31	98	70	63	73	30	19	4	400	5.4
P4022.M045	6.0	M45x4,5	61	149	31	98	70	63	73	30	19	4	400	5.7
P4022.I100	(6000)	(UNC 1"-8)	61	149	31	98	70	40	73	30	3/4"	4	(125)	5.2
P4022.I125	(7500)	(UNC 1 1/4"-7)	61	149	31	98	70	45	73	30	3/4"	4	(200)	5.2
P4022.I137	(7500)	(UNC 1 3/8"-6)	61	149	31	98	70	54	73	30	3/4"	4	(240)	5.2
P4022.I150	(11000)	(UNC 1 1/2"-6)	61	149	31	98	70	61	73	30	3/4"	4	(240)	5.4



P4023

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

High tensile stainless steel (316L), strength class >8.
Supplied with CE certificate.

Technical Notes

Double articulation, very low overhang for improved safety, large support surface. 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. With „automatic“ position recovery system for best orientation to sling direction. Tighten by hex. key or spanner.

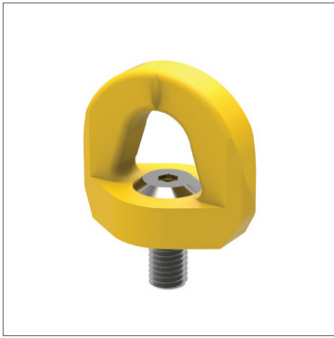
Important Notes

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

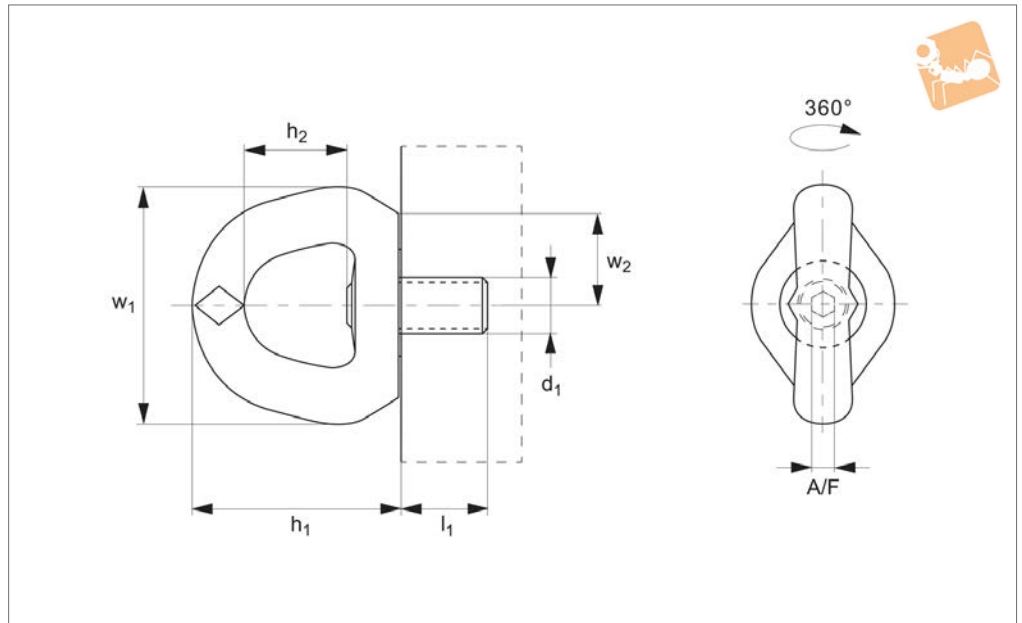
will be installed:

- 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 male thread to be 6G (metric) or UNC-2B (inch).
- Please refer to the safety documentation before using this part.**
- Supplied with certificate and operating instructions.**

Order No.	Load tons (t) max.	d ₁ 6H (tol. 2A)	h ₁ & l ₁ max.	w ₁	h ₂	h ₃	d ₂	w ₂	w ₃	A/F	Safety factor	Torque to Nm	Weight kg
P4023.M024	2.7	M24x3,0	66	149	31	98	70	73	30	50	4	160	5.8
P4023.M030	3.5	M30x3,5	66	149	31	98	70	73	30	50	4	250	5.8
P4023.M033	3.5	M33x3,5	66	149	31	98	70	73	30	50	4	250	5.8
P4023.M036	5.0	M36x4,0	66	149	31	98	70	73	30	50	4	320	5.8
P4023.I125	(7.500)	(UNC 1 1/4"-7)	66	149	31	98	70	73	30	50	4	200	5.4
P4023.I100	(6.000)	(UNC 1"-8)	66	149	31	98	70	73	30	50	4	125	5.4
P4023.I137	(7.500)	(UNC 1 3/8"-6)	66	149	31	98	70	73	30	50	4	240	5.4



P4030



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

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
P4030.M012	1	21	60	57	M12x1,75	30	20	34	6	15	0.24
P4030.M016	1	27	88	80	M16x2,00	38	35	45	8	50	0.80
P4030.M020	1	30	88	80	M20x2,50	38	35	45	8	100	0.80

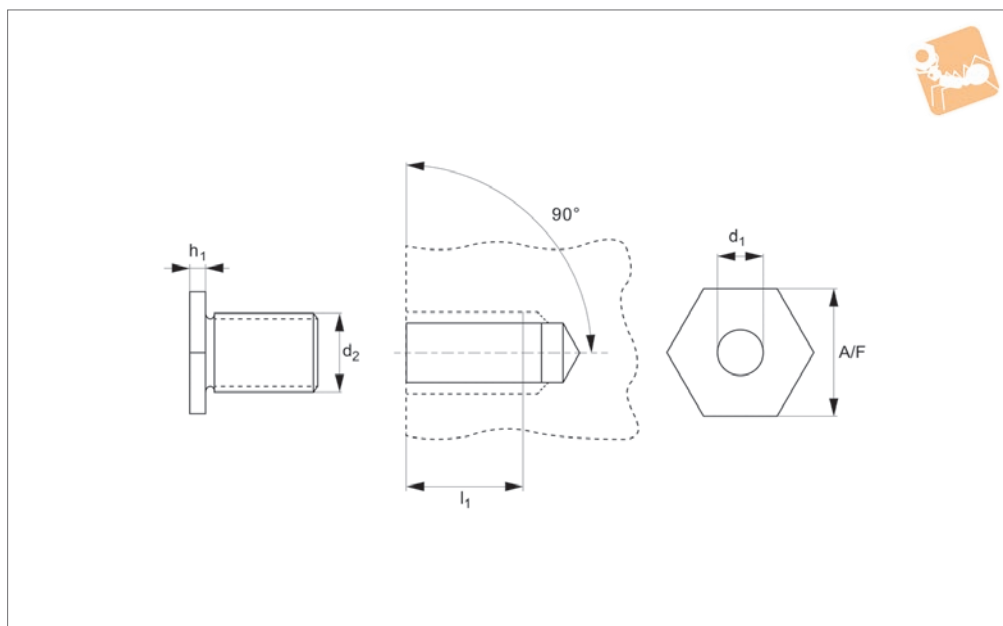
P4015 Male



Lifting type	0°		90°		α max. = 60°		α max. = 60°		
	1	2	1	2	2	2	4	4	
No. of rings	1	2	1	2	2	2	4	4	
Lifting angle	0°	0°	90°	90°	45°	60°	45°	60°	
Part no.	Thread								
P4015.M008	M 8	0,30 tons	0,60 tons	0,30 tons	0,60 tons	0,40 tons	0,30 tons	0,60 tons	0,30 tons
P4015.M010	M10	0,60 tons	1,20 tons	0,60 tons	1,20 tons	0,80 tons	0,60 tons	1,30 tons	0,60 tons
P4015.M012	M12	1,00 tons	2,00 tons	1,00 tons	2,00 tons	1,40 tons	1,00 tons	2,10 tons	1,00 tons
P4015.M014	M14	1,30 tons	2,60 tons	1,30 tons	2,60 tons	1,80 tons	1,30 tons	2,70 tons	1,30 tons
P4015.M016	M16	1,60 tons	3,20 tons	1,60 tons	3,20 tons	2,20 tons	1,60 tons	3,40 tons	1,60 tons
P4015.M018	M18	2,00 tons	4,00 tons	2,00 tons	4,00 tons	2,80 tons	2,00 tons	4,20 tons	2,00 tons
P4015.M020	M20	2,50 tons	5,00 tons	2,50 tons	5,00 tons	3,50 tons	2,50 tons	5,30 tons	2,50 tons
P4015.M022	M22	3,00 tons	6,00 tons	3,00 tons	6,00 tons	4,20 tons	3,00 tons	6,30 tons	3,00 tons
P4015.M024	M24	4,00 tons	8,00 tons	4,00 tons	8,00 tons	5,60 tons	4,00 tons	8,40 tons	4,00 tons
P4015.M027	M27	5,00 tons	10,00 tons	5,00 tons	10,00 tons	7,0 tons	5,00 tons	10,50 tons	5,00 tons
P4015.M030	M30	6,30 tons	12,60 tons	6,30 tons	12,60 tons	8,80 tons	6,30 tons	13,20 tons	6,30 tons
P4015.M036	M36	10,00 tons	20,00 tons	10,00 tons	20,00 tons	14,00 tons	10,00 tons	21,00 tons	10,00 tons
P4015.M042	M42	12,50 tons	25,00 tons	12,50 tons	25,00 tons	17,50 tons	12,50 tons	26,30 tons	12,50 tons
P4015.M048	M48	20,00 tons	40,00 tons	20,00 tons	40,00 tons	28,00 tons	20,00 tons	42,00 tons	20,00 tons
P4015.M056	M56	22,00 tons	44,00 tons	22,00 tons	44,00 tons	30,80 tons	22,00 tons	46,20 tons	22,00 tons
P4015.I031	(UNC 5/16"-18)	650 lbs	1,300 lbs	650 lbs	1,300 lbs	910 lbs	650 lbs	1,365 lbs	650 lbs
P4015.I037	(UNC 3/8"-16)	1,200 lbs	2,400 lbs	1,200 lbs	2,400 lbs	1,680 lbs	1,200 lbs	2,520 lbs	1,200 lbs
P4015.I050	(UNC 1/2"-13)	2,200 lbs	4,400 lbs	2,200 lbs	4,400 lbs	3,080 lbs	2,200 lbs	4,620 lbs	2,200 lbs
P4015.I063	(UNC 5/8"-11)	3,800 lbs	7,600 lbs	3,800 lbs	7,600 lbs	5,320 lbs	3,800 lbs	7,980 lbs	3,800 lbs
P4015.I075	(UNC 3/4"-10)	5,500 lbs	11,000 lbs	5,500 lbs	11,000 lbs	7,700 lbs	5,500 lbs	11,550 lbs	5,500 lbs
P4015.I088	(UNC 7/8"-9)	6,600 lbs	13,200 lbs	6,600 lbs	13,200 lbs	9,240 lbs	6,600 lbs	13,860 lbs	6,600 lbs
P4015.I100	(UNC 1"-8)	10,000 lbs	20,000 lbs	10,000 lbs	20,000 lbs	14,000 lbs	10,000 lbs	21,000 lbs	10,000 lbs
P4015.I125	(UNC 1 1/4"-7)	14,000 lbs	28,000 lbs	14,000 lbs	28,000 lbs	19,600 lbs	14,000 lbs	29,400 lbs	14,000 lbs
P4015.I150	(UNC 1 1/1"-6)	20,000 lbs	40,000 lbs	20,000 lbs	40,000 lbs	28,000 lbs	20,000 lbs	42,000 lbs	20,000 lbs
P4015.I200	(UNC 2"-4 1/2)	50,000 lbs	100,000 lbs	50,000 lbs	100,000 lbs	70,000 lbs	50,000 lbs	105,000 lbs	50,000 lbs



P4019



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

High tensile steel, strength class >8.

Technical Notes

The internal portion of the adaptor can be machined (by us) to suit the required lifting bolt thread, specify suffix thread size x pitch.

Allowing differing sized lifting bolts to be used.

Advise the internal thread size and pitch required e.g. P4019.M30-M20x2.5.

Female thread tolerances required to be 6H (metric) or UNC-2B (inch).

Tips

Not suitable/rated for customers to machine internal threads themselves.

Only to be used with lifting bolts P4002 to

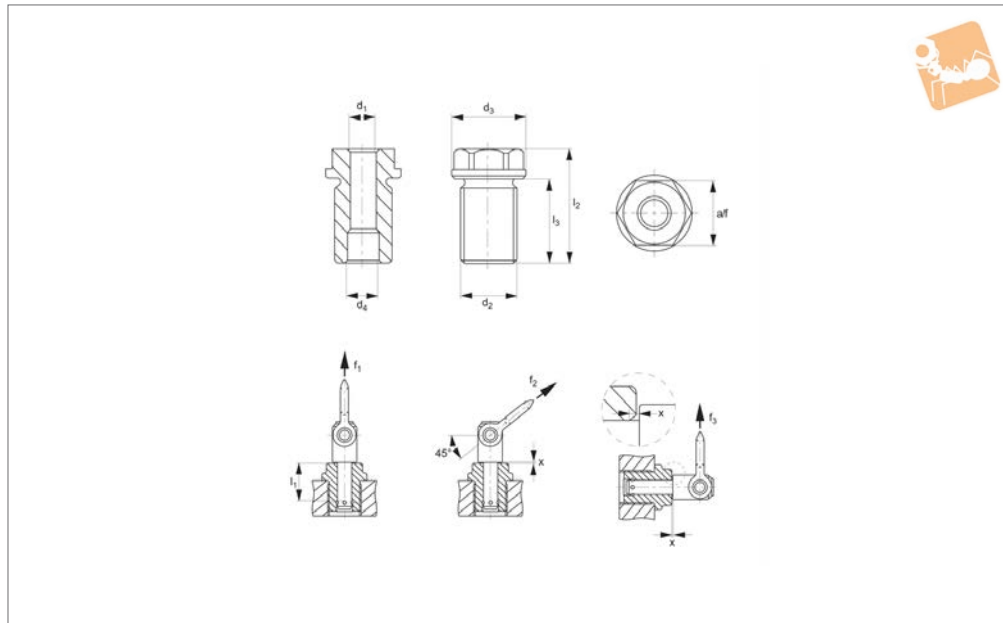
P4015.

Important Notes

Please refer to the safety documentation before using this part.

Supplied with certificate and operating instructions.

Order No.	d ₁ mm max.	d ₁ inch max.	d ₂ tol. 6g (tol. 2A)	l ₁	h ₁	A/F	Torque to Nm (ft·lb)
P4019.M024-xx	18	5/8"	M 24 x 3	36	10	50	160
P4019.M030-xx	20	7/8"	M 30 x 3,5	45	10	50	250
P4019.M036-xx	27	1"	M 36 x 4	54	10	65	320
P4019.M040-xx	33	1" 1/4	M 42 x4,5	63	10	75	400
P4019.M048-xx	39	1" 1/2	M 48 x 5	68	10	75	600
P4019.M056-xx	42	1" 3/4	M 56 x5,5	78	10	95	600
P4019.M064-xx	52	2"	M 64 x 6	90	10	95	600
P4019.M100-xx	80	3" 1/2	M100 x 6	100	15	155	600
P4019.I088-xx	16	5/8"	UNC 7/8"-9	33	10	50	(90)
P4019.I100-xx	18	3/4"	UNC 1"-8	36	10	50	(125)
P4019.I125-xx	24	7/8"	UNC 1"1/4-7	45	10	50	(200)
P4019.I138-xx	27	1"	UNC 1"3/8-6	54	10	65	(240)
P4019.I150-xx	30	1" 1/8	UNC 1"1/2-6	61	10	75	(240)
P4019.I200-xx	39	1" 1/2	UNC 2"-4 1/2	68	10	95	(450)
P4019.I275-xx	56	2" 1/4	UNC 2"3/4-4	90	10	155	(520)
P4019.I400-xx	80	3" 1/4	UNC 4"-4	100	15	155	(740)



P4077

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Body: stainless steel 1.4542 (AISI 630), precipitation hardened.

Technical Notes

Locating bushes are used for quick and safe locating of lifting pins P4074 and P4075.

Provides easy and safe assembly, and can be incorporated into a variety of materials. Can be used in thin-walled parts and in blind holes.

Important Notes

Lifting forces f_1 to f_3 , have a 5 fold in-built

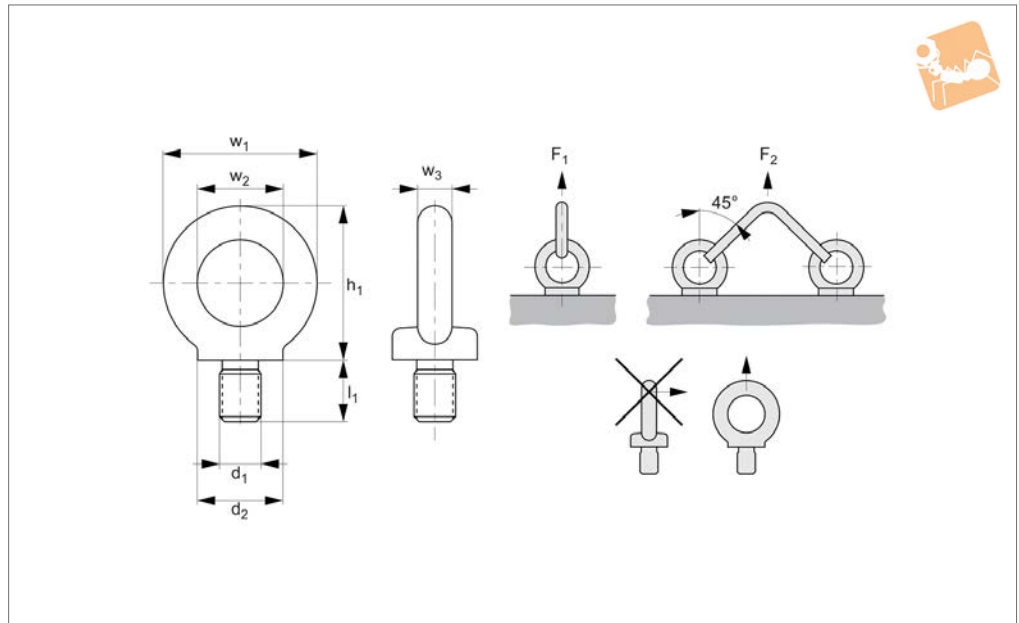
safety factor.

Due to the radius on the underside of the lifting face, please ensure $x_{min.}$ is $x_{max.}$ to avoid stress on pin when used as angle lift. See product table for details.

Order No.	For pin length	d ₁ tol. H11	d ₂	d ₃ -0.2	d ₄ +0.3	l ₂	l ₃	A/F	x max.	F ₁ kN	F ₂ kN	F ₃ kN	Starting torque Nm max.	For lifting pin 33400/33420	Weight g
P4077.080-010	10	8	M16x1,5	24	9,8	27,5	20	19	1,5	1,5	1,2	0,5	90	.W0601/.W0701	32
P4077.080-015	15	8	M16x1,5	24	9,8	27,5	20	19	1,5	1,5	1,2	0,5	90	.W0602/.W0702	33
P4077.120-015	15	12	M24x1,5	32	14,7	35,5	24	27	1,0	3,5	3,2	2,8	220	.W0631/.W0731	94



P4040



Material

Forged steel (C15E) annealed and zinc plated. Contact face machined. CE marked.

Technical Notes

To DIN 580.
When using lifting eye bolts it is critical to ensure that the face is in firm contact with the mating surface.
These lifting bolts are generally installed and remain on a piece of equipment for the

purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread is fully screwed in, and the material it is being used in is as least as strong as the that of the bolt.
Temperature range -20°C to +200°C.

F_1 and F_2 values given are for steel and cast iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.
Please refer to the safety documentation before using this part.
Supplied with certificate and operating instructions.

Order No.	Thread	d ₁	d ₂	w ₁	l ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4040.060-ZP	Coarse	M 6	20	36	13.0	36	20	8	70	50	0.05
P4040.080-ZP	Coarse	M 8	20	36	13.0	36	20	8	140	95	0.06
P4040.100-ZP	Coarse	M10	25	45	17.0	45	25	10	230	170	0.11
P4040.120-ZP	Coarse	M12	30	54	20.5	53	30	12	340	240	0.18
P4040.140-ZP	Coarse	M14	35	63	27.0	62	35	14	340	240	0.18
P4040.160-ZP	Coarse	M16	35	63	27.0	62	35	14	700	500	0.28
P4040.180-ZP	Coarse	M18	40	72	30.0	71	40	14	700	500	0.43
P4040.200-ZP	Coarse	M20	40	72	30.0	71	40	16	1200	830	0.45
P4040.220-ZP	Coarse	M22	40	72	30.0	71	40	16	1200	830	0.45
P4040.240-ZP	Coarse	M24	50	90	36.0	90	50	20	1800	1270	0.74
P4040.270-ZP	Coarse	M27	65	108	45.0	109	60	24	1800	1270	0.93
P4040.300-ZP	Coarse	M30	65	108	45.0	109	60	24	3200	2300	1.66
P4040.330-ZP	Coarse	M33	75	126	54.0	128	70	28	3600	3600	2.60
P4040.360-ZP	Coarse	M36	75	126	54.0	128	70	28	4600	3300	2.65
P4040.390-ZP	Coarse	M39	85	144	63.0	147	80	32	5100	3700	3.87
P4040.420-ZP	Coarse	M42	85	144	63.0	147	80	32	6300	4500	4.03
P4040.450-ZP	Coarse	M45	100	166	68.0	168	90	38	7000	5000	6.15
P4040.480-ZP	Coarse	M48	100	166	68.0	168	90	38	8600	6100	6.38
P4040.560-ZP	Coarse	M56	110	184	78.0	187	100	42	11500	8200	8.80
P4040.640-ZP	Coarse	M64	120	206	90.0	208	110	48	16000	11000	12.4
P4040.720-ZP	Coarse	M72 x 6	150	260	100.0	260	140	60	20000	14000	23.3
P4040.800-ZP	Coarse	M80 x 6	170	296	112.0	298	160	68	28000	20000	34.2
P4040.999-ZP	Coarse	M100 x 6	190	330	130.0	330	180	75	40000	29000	49.1
P4040.120-015-ZP	Fine	M12 x 1,5	30	54	20.5	53	30	12	340	240	0.18



Steel Male Lifting Eye Bolts metric sizes

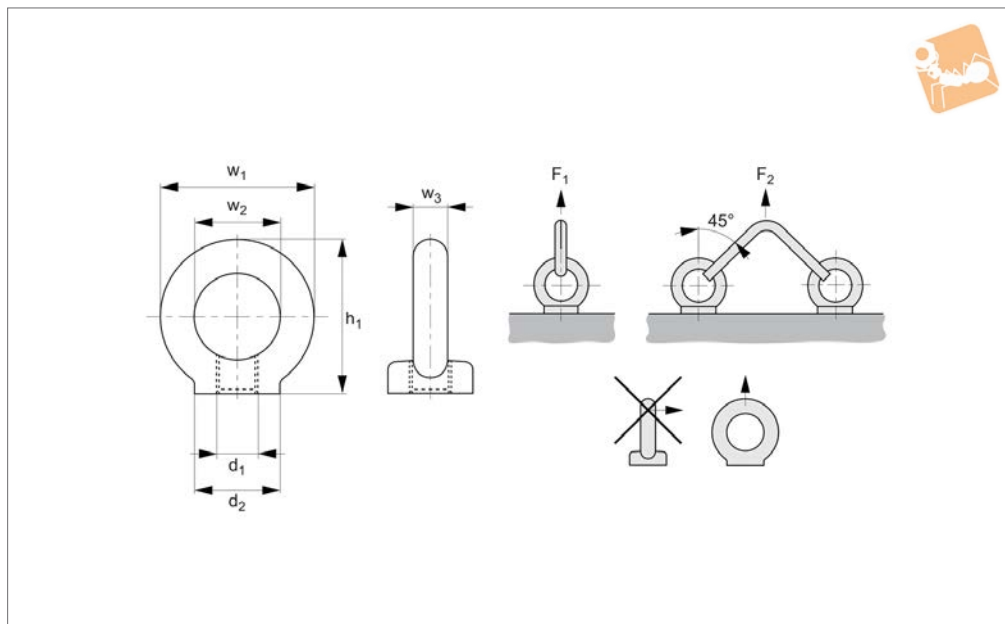
Lifting Pins,
Lifting Bolts &

Order No.	Thread	d ₁	d ₂	w ₁	l ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4040.160-015-ZP	Fine	M16 x 1,5	35	63	27.0	62	35	14	700	500	0.28
P4040.200-020-ZP	Fine	M20 x 2,0	40	72	30.0	71	40	16	1200	830	0.45
P4040.240-020-ZP	Fine	M24 x 2,0	50	90	36.0	90	50	20	1800	1270	0.74
P4040.300-020-ZP	Fine	M30 x 2,0	65	108	45.0	109	60	24	3600	2600	1.66
P4040.360-030-ZP	Fine	M36 x 3,0	75	126	54.0	128	70	28	5100	3700	2.58
P4040.420-030-ZP	Fine	M42 x 3,0	85	144	63.0	147	80	32	7000	5000	3.95
P4040.480-030-ZP	Fine	M48 x 3,0	100	166	68.0	168	90	38	8600	6100	6.38
P4040.560-040-ZP	Fine	M56 x 4,0	110	184	78.0	187	100	42	11500	8300	8.48

LIFTING PINS, LIFTING BOLTS & SWING
BOLTS



P4041



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Forged steel (C15E) annealed and zinc plated. Contact face machined. CE marked.
Hot dipped galvanised versions (for more demanding applications and limited outside use) also available on request, suffix changes to -GV.

Technical Notes

To DIN 582.
When using lifting eye bolts it is critical to ensure that the face is in firm contact with

the mating surface.

These lifting bolts are generally installed and remain on a piece of equipment for the purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread and the material, it is being used in is as least as strong as the

that of the bolt.

Temperature range -20°C to +200°C.
F₁ and F₂ values given are for steel and cast iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.
Please refer to the safety documentation before using this part.
Supplied with certificate and operating instructions.

Order No.	Thread	d ₁	d ₂	w ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4041.060-ZP	Coarse	M 6	20	36	36	20	8	70	50	0.05
P4041.080-ZP	Coarse	M 8	20	36	36	20	8	140	95	0.05
P4041.100-ZP	Coarse	M10	25	45	45	25	10	230	170	0.09
P4041.120-ZP	Coarse	M12	30	54	53	30	12	340	240	0.16
P4041.140-ZP	Coarse	M14	35	63	62	35	14	340	240	0.24
P4041.160-ZP	Coarse	M16	35	63	62	35	14	700	500	0.24
P4041.180-ZP	Coarse	M18	40	72	71	40	16	700	700	0.35
P4041.200-ZP	Coarse	M20	40	72	71	40	16	1200	830	0.36
P4041.220-ZP	Coarse	M22	40	72	71	40	16	1200	830	0.36
P4041.240-ZP	Coarse	M24	50	90	90	50	20	1800	1270	0.72
P4041.270-ZP	Coarse	M27	50	90	90	50	20	1800	1270	0.72
P4041.300-ZP	Coarse	M30	65	108	109	60	24	3200	2300	1.32
P4041.330-ZP	Coarse	M33	65	108	109	60	24	3600	2600	1.30
P4041.360-ZP	Coarse	M36	75	126	128	70	28	5100	3700	2.08
P4041.390-ZP	Coarse	M39	75	126	128	70	28	5100	3700	2.08
P4041.420-ZP	Coarse	M42	85	144	147	80	32	7000	4500	3.11
P4041.480-ZP	Coarse	M48	100	166	168	90	38	8600	6100	5.02
P4041.560-ZP	Coarse	M56	110	184	187	100	42	11500	8200	6.70
P4041.640-ZP	Coarse	M64	120	206	208	110	48	16000	11000	9.30
P4041.720-ZP	Coarse	M72x6	150	260	260	140	60	20000	14000	18.5
P4041.800-ZP	Coarse	M80x6	170	296	298	160	68	28000	20000	27.3
P4041.999-ZP	Coarse	M100x6	190	330	330	180	75	40000	29000	26.4
P4041.160-015-ZP	Fine	M16 x 1,5	35	63	62	35	14	700	500	0.24



Steel Female Lifting Eye Bolts metric sizes

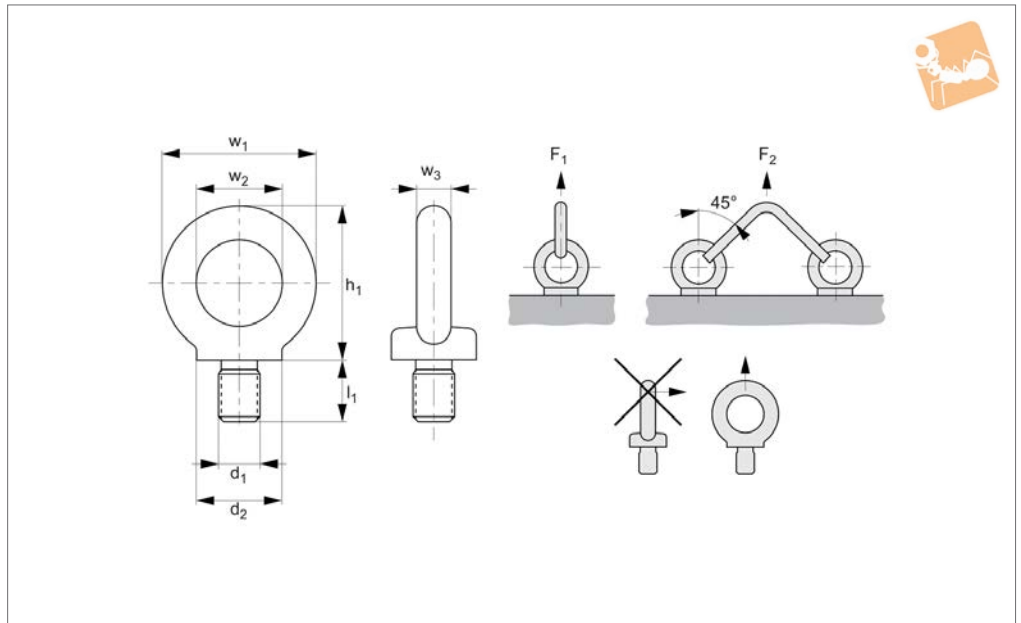
Lifting Pins,
Lifting Bolts &

Order No.	Thread	d ₁	d ₂	w ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4041.200-020-ZP	Fine	M20 x 2,0	40	72	71	40	16	1200	830	0.36
P4041.240-020-ZP	Fine	M24 x 2,0	50	90	90	50	20	1800	1270	0.72
P4041.300-020-ZP	Fine	M30 x 2,0	65	108	109	60	24	3600	2600	1.32
P4041.360-030-ZP	Fine	M36 x 3,0	75	126	128	70	28	5100	3700	2.08
P4041.420-030-ZP	Fine	M42 x 3,0	85	144	147	80	32	7000	5000	3.11
P4041.480-030-ZP	Fine	M48 x 3,0	100	166	168	90	38	8600	6100	5.02
P4041.560-040-ZP	Fine	M56 x 4,0	110	184	187	100	42	11500	8300	6.69

LIFTING PINS, LIFTING BOLTS & SWING
BOLTS



P4043



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Stainless steel (A4, AISI 316).
CE marked.

Technical Notes

To DIN 580.

When using lifting eye bolts it is critical to ensure that the face is in firm contact with the mating surface.

These lifting bolts are generally installed and remain on a piece of equipment for the

purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread and the material, it is being used in is as least as strong as the that of the bolt.

F_1 and F_2 values given are for steel and cast

iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.

Please refer to the safety documentation before using this part.

Supplied with certificate and operating instructions.

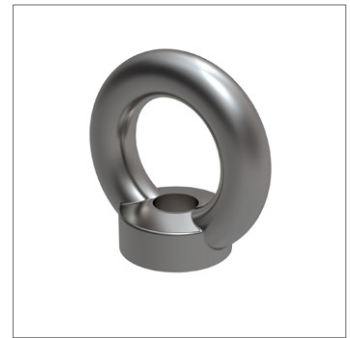
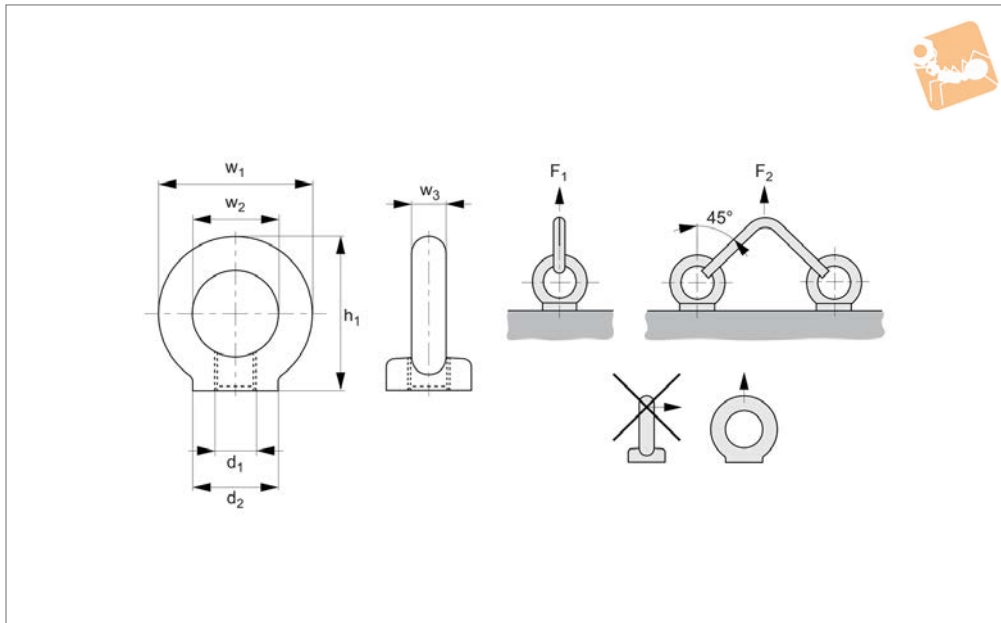
Order No.	Material	d ₁	d ₂	w ₁	l ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4043.060-A4	A4 s/s	M 6	20	36	13.0	36	20	8	70	50	0.05
P4043.080-A4	A4 s/s	M 8	20	36	13.0	36	20	8	140	95	0.06
P4043.100-A4	A4 s/s	M10	25	45	17.0	45	25	10	230	170	0.11
P4043.120-A4	A4 s/s	M12	30	54	20.5	53	30	12	340	240	0.18
P4043.160-A4	A4 s/s	M16	35	63	27.0	62	35	14	700	500	0.28
P4043.200-A4	A4 s/s	M20	40	72	30.0	71	40	16	1200	860	0.45
P4043.240-A4	A4 s/s	M24	50	90	36.0	90	50	20	1800	1270	0.74
P4043.300-A4	A4 s/s	M30	65	108	45.0	109	60	24	3200	2300	1.66
P4043.360-A4	A4 s/s	M36	75	126	54.0	128	70	28	4600	3300	2.65
P4043.420-A4	A4 s/s	M42	85	144	63.0	147	80	32	6300	4500	4.03
P4043.480-A4	A4 s/s	M48	100	166	68.0	168	90	38	8600	6100	6.38
P4043.060-A2	A2 s/s	M 6	20	36	11.0	31	16	8	70	50	0.05
P4043.080-A2	A2 s/s	M 8	20	36	13.0	36	20	8	140	95	0.06
P4043.100-A2	A2 s/s	M10	25	45	17.0	45	25	10	230	170	0.11
P4043.120-A2	A2 s/s	M12	30	54	20.5	53	30	12	340	240	0.18
P4043.160-A2	A2 s/s	M16	35	63	27.0	62	35	14	700	500	0.28
P4043.200-A2	A2 s/s	M20	40	72	30.0	71	40	16	1200	860	0.45
P4043.240-A2	A2 s/s	M24	50	90	36.0	90	50	20	1800	1290	0.74
P4043.300-A2	A2 s/s	M30	65	108	45.0	109	60	24	3200	3200	1.66



Stainless Female Lifting Eye Bolts

metric sizes

Lifting Pins, Lifting Bolts &



P4044

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Stainless steel (A4, AISI 316).
CE marked.

Technical Notes

To DIN 582.

When using lifting eye bolts it is critical to ensure that the face is in firm contact with the mating surface.

These lifting bolts are generally installed and remain on a piece of equipment for the

purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread and the material, it is being used in is as least as strong as the that of the bolt.

F_1 and F_2 values given are for steel and cast

iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.

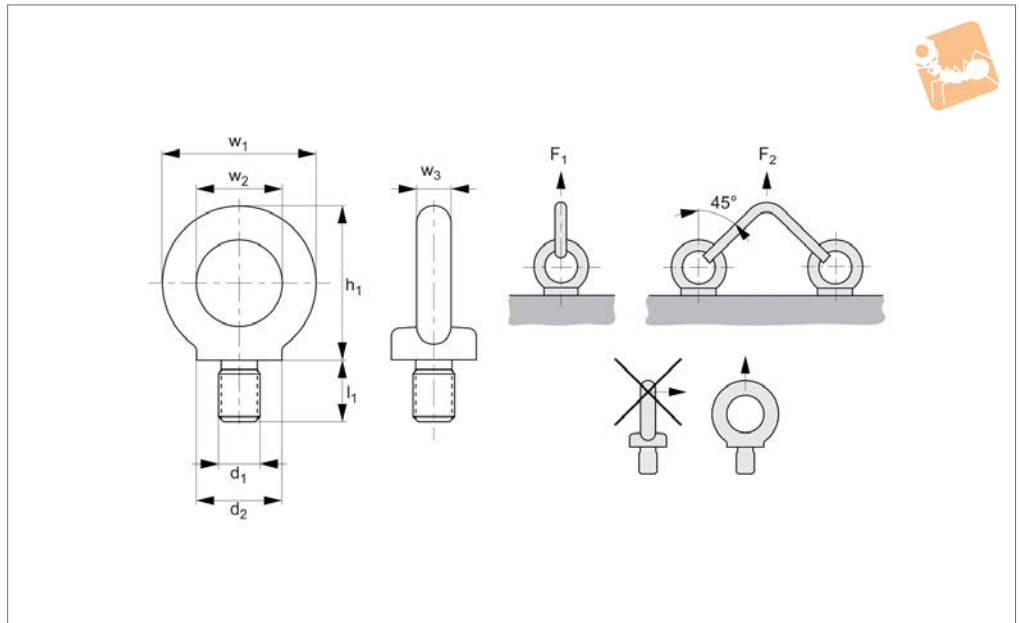
Please refer to the safety documentation before using this part.

Supplied with certificate and operating instructions.

Order No.	Material	d ₁	d ₂	w ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4044.060-A4	A4 s/s	M 6	20	36	36	20	8	70	50	0.05
P4044.080-A4	A4 s/s	M 8	20	36	36	20	8	140	95	0.05
P4044.100-A4	A4 s/s	M10	25	45	45	25	10	230	170	0.09
P4044.120-A4	A4 s/s	M12	30	54	53	30	12	340	240	0.16
P4044.160-A4	A4 s/s	M16	35	63	62	35	14	700	500	0.24
P4044.200-A4	A4 s/s	M20	40	72	71	40	16	1200	860	0.36
P4044.240-A4	A4 s/s	M24	50	90	90	50	20	1800	1270	0.72
P4044.300-A4	A4 s/s	M30	65	108	109	60	24@	3200	2300	1.32
P4044.360-A4	A4 s/s	M36	75	126	128	70	28	4600	3300	2.08
P4044.420-A4	A4 s/s	M42	85	144	147	80	32	6300	4500	3.11
P4044.480-A4	A4 s/s	M48	100	166	168	90	38	8600	6100	5.02
P4044.060-A2	A2 s/s	M 6	20	36	31	16	8,5@	70	50	0.03
P4044.080-A2	A2 s/s	M 8	20	36	36	20	8.5	140	95	0.05
P4044.100-A2	A2 s/s	M10	25	45	45	25	10	230	170	0.09
P4044.120-A2	A2 s/s	M12	30	54	53	30	11	340	240	0.16
P4044.160-A2	A2 s/s	M16	35	63	62	35	13	700	500	0.24
P4044.200-A2	A2 s/s	M20	40	72	71	40	16	1200	860	0.36
P4044.240-A2	A2 s/s	M24	50	90	90	50	20	1800	1270	0.72
P4044.300-A2	A2 s/s	M30	65	108	109	60	25	3200	2300	1.32
P4044.360-A2	A2 s/s	M36	75	126	128	70	30	4600	3300	2.08



P4046



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Forged steel (C15E) annealed and zinc-plated (-ZP). Contact face machined. CE marked.
Hot dipped galvanised versions (for more demanding applications and limited outside use) also available on request, suffix changes to -GV.

Technical Notes

To DIN 580.
When using lifting eye bolts it is critical to ensure that the face is in firm contact with

the mating surface.

These lifting bolts are generally installed and remain on a piece of equipment for the purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread and the material, it is being used in is as least as strong as the

that of the bolt.

F_1 and F_2 values given are for steel and cast iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.

Please refer to the safety documentation before using this part.

Supplied with certificate and operating instructions.

Order No.	d ₁	Thread type	d ₂	w ₁	l ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4046.U1/4-ZP	1/4"-20	UNC	20	36	13.0	36	20	8	70	50	0.06
P4046.U5/16-ZP	5/16"-18	UNC	20	36	13.0	36	20	8	140	95	0.06
P4046.U3/8-ZP	3/8"-16	UNC	25	45	17.0	45	25	10	230	170	0.11
P4046.U1/2-ZP	1/2"-12	UNC	30	54	20.5	53	30	12	340	240	0.18
P4046.U5/8-ZP	5/8"-11	UNC	35	63	27.0	62	35	14	700	500	0.28
P4046.U3/4-ZP	3/4"-10	UNC	40	72	30.0	71	40	16	1200	830	0.45
P4046.U7/8-ZP	7/8"-9	UNC	50	90	36.0	90	50	20	1500	1050	0.74
P4046.U1-ZP	1"-8	UNC	50	90	36.0	90	50	20	1800	1270	0.74
P4046.U1-1/8-ZP	1-1/8"-7	UNC	65	108	45.0	109	60	24	2500	1650	1.66
P4046.U1-1/4-ZP	1-1/4"-7	UNC	75	126	54.0	128	70	28	4300	3200	2.65
P4046.U1-1/2-ZP	1-1/2"-6	UNC	85	144	63.0	147	80	32	6100	4300	4.03
P4046.U1-3/4-ZP	1-3/4"-5	UNC	100	166	68.0	168	90	38	8000	5500	6.38
P4046.U2-ZP	2"	UNC	100	166	68.0	168	90	38	9900	7300	6.38
P4046.U2-1/4-ZP	2-1/4"	UNC	110	184	78.0	187	100	42	11500	8300	8.80
P4046.U2-1/2-ZP	2-1/2"	UNC	120	206	90.0	208	110	48	16000	11000	12.40
P4046.W1/4-ZP	1/4"-20	BSW	20	36	13.0	36	20	8	70	50	0.06
P4046.W5/16-ZP	5/16"-18	BSW	20	36	13.0	36	20	8	140	95	0.06
P4046.W3/8-ZP	3/8"-16	BSW	25	45	17.0	45	25	10	230	170	0.11
P4046.W1/2-ZP	1/2"-12	BSW	30	54	20.5	53	30	12	340	240	0.18
P4046.W5/8-ZP	5/8"-11	BSW	35	63	27.0	62	35	14	700	500	0.28
P4046.W3/4-ZP	3/4"-10	BSW	40	72	30.0	71	40	16	1200	830	0.45
P4046.W7/8-ZP	7/8"-9	BSW	50	90	36.0	90	50	20	1500	1050	0.74
P4046.W1-ZP	1"-8	BSW	50	90	36.0	90	50	20	1800	1270	0.74



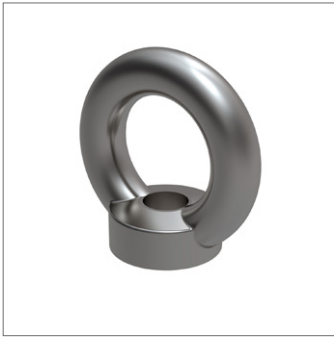
Steel Male Lifting Eye Bolts

inch sizes

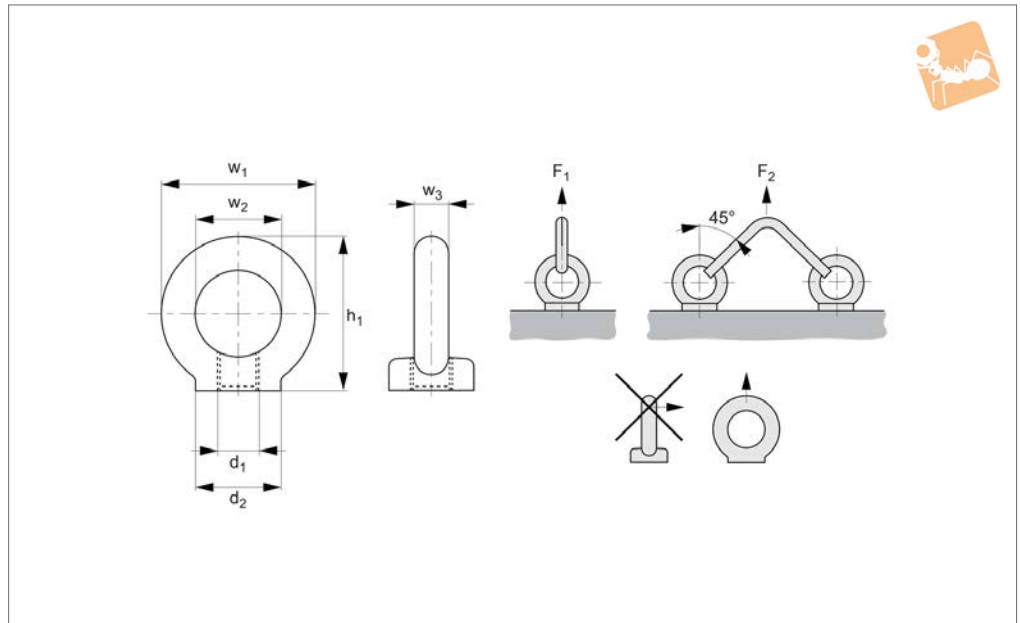
Lifting Pins, Lifting Bolts &

Order No.	d ₁	Thread type	d ₂	w ₁	l ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4046.W1-1/8-ZP	1-1/8"-7	BSW	65	108	45.0	109	60	24	2500	1650	1.66
P4046.W1-1/4-ZP	1-1/4"-7	BSW	75	126	54.0	128	70	28	4300	3200	2.65
P4046.W1-1/2-ZP	1-1/2"-6	BSW	85	144	63.0	147	80	32	6100	4300	4.03
P4046.W1-3/4-ZP	1-3/4"-5	BSW	100	166	68.0	168	90	38	8000	5500	6.38
P4046.W2-ZP	2"	BSW	100	166	68.0	168	90	38	9900	7300	6.38
P4046.W2-1/4-ZP	2-1/4"	BSW	110	184	78.0	187	100	42	11500	8300	8.80
P4046.W2-1/2-ZP	2-1/2"	BSW	120	206	90.0	208	110	48	16000	11000	12.40

LIFTING PINS, LIFTING BOLTS & SWING
BOLTS



P4048



LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Forged steel (C15E) annealed and zinc plated. Contact face machined. CE marked. Hot dipped galvanised versions (for more demanding applications and limited outside use) also available on request, suffix changes to -GV.

Technical Notes

To DIN 582.
When using lifting eye bolts it is critical to ensure that the face is in firm contact with the mating surface.

These lifting bolts are generally installed and remain on a piece of equipment for the purpose of transporting them. They are not for repeated lifting use - if this is required our swivelling lifting bolt range should be used.

Tips

Maximum load values are only applicable when the thread and the material, it is being used in is as least as strong as the that of the bolt.

F_1 and F_2 values given are for steel and cast iron components.

Important Notes

Not to be used at lift angles of greater than 45° or with swivelling loads.

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

Order No.	d ₁	Thread type	d ₂	w ₁	h ₁	w ₂	w ₃	F ₁ kg max.	F ₂ kg max.	Weight kg
P4048.U1/4-ZP	1/4"-20	UNC	20	36	8	20	36	70	50	0.05
P4048.U5/16-ZP	5/16"-18	UNC	20	36	8	20	36	140	95	0.05
P4048.U3/8-ZP	3/8"-16	UNC	25	45	10	25	45	230	170	0.09
P4048.U1/2-ZP	1/2"-13	UNC	30	54	12	30	53	340	240	0.16
P4048.U5/8-ZP	5/8"-11	UNC	35	63	14	35	62	700	500	0.24
P4048.U3/4-ZP	3/4"-10	UNC	40	72	16	40	71	1200	830	0.36
P4048.U7/8-ZP	7/8"-9	UNC	50	90	20	50	90	1500	1050	0.72
P4048.U1-ZP	1"-8	UNC	50	90	20	50	90	1800	1270	0.72
P4048.U1-1/8-ZP	1-1/8"-7	UNC	65	108	24	60	109	2500	1650	1.32
P4048.U1-1/4-ZP	1-1/4"-7	UNC	75	126	28	70	128	4300	3200	2.08
P4048.U1-1/2-ZP	1-1/2"-6	UNC	85	144	32	80	147	6100	4300	3.11
P4048.U1-3/4-ZP	1-3/4"-5	UNC	100	166	38	90	168	8000	5500	5.02
P4048.U2-ZP	2"	UNC	100	166	38	90	168	9900	7300	5.02
P4048.U2-1/4-ZP	2-1/4"	UNC	110	184	42	100	187	11500	8300	6.69
P4048.U2-1/2-ZP	2-1/2"	UNC	120	206	48	110	208	16000	11000	9.30
P4048.G1/4-ZP	1/4"-19	BSP	30	54	12	30	53	70	50	0.16
P4048.G3/8-ZP	3/8"-19	BSP	35	63	14	35	62	230	170	0.24
P4048.G1/2-ZP	1/2"-14	BSP	40	72	16	40	71	340	240	0.36
P4048.G5/8-ZP	5/8"-14	BSP	40	72	16	40	71	700	500	0.36
P4048.G3/4-ZP	3/4"-14	BSP	50	90	20	50	90	1200	830	0.72
P4048.G7/8-ZP	7/8"-14	BSP	65	108	24	60	109	1500	1050	1.32
P4048.G1-ZP	1"-11	BSP	65	108	24	60	109	1800	1270	1.32
P4048.W1/4-ZP	1/4"-20	BSW	20	36	8	20	36	70	50	0.05



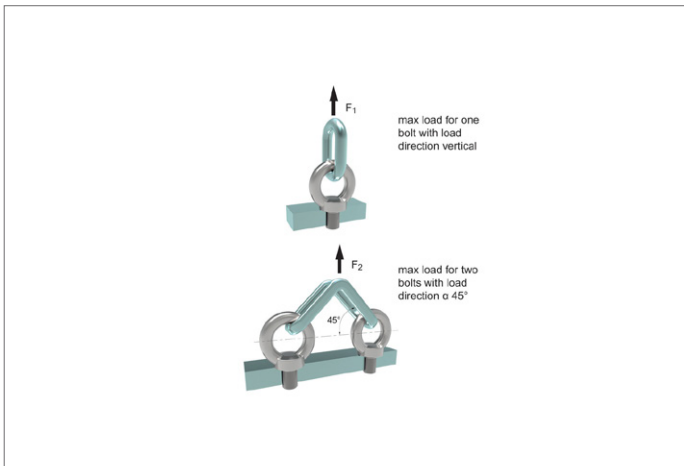
Steel Female Lifting Eye Bolts

inch sizes

Lifting Pins, Lifting Bolts &

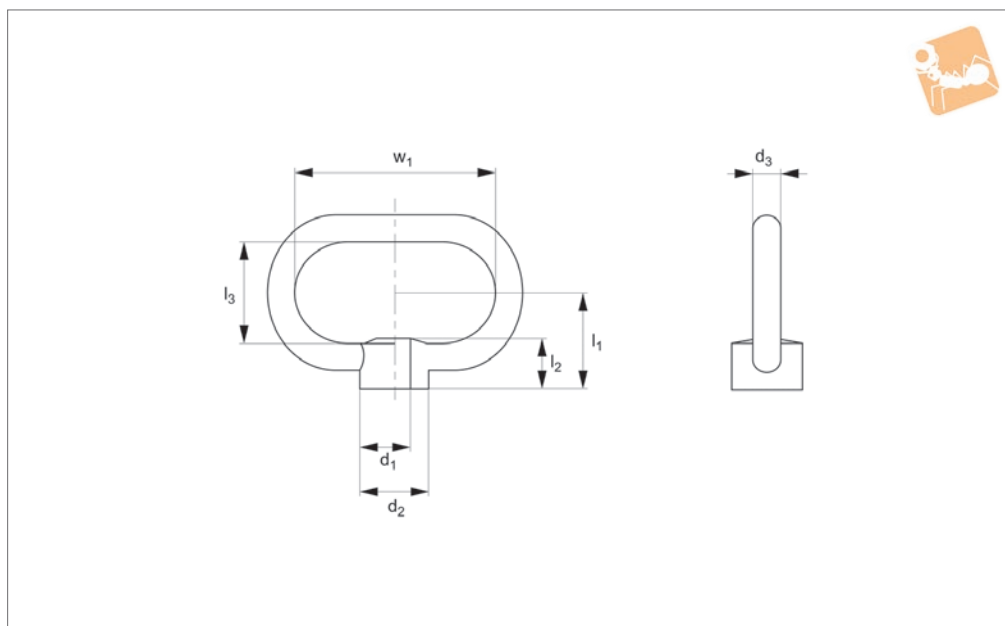
Order No.	d_1	Thread type	d_2	w_1	h_1	w_2	w_3	F_1 kg max.	F_2 kg max.	Weight kg
P4048.W5/16-ZP	5/16"-18	BSW	20	36	8	20	36	140	95	0.05
P4048.W3/8-ZP	3/8"-16	BSW	25	45	10	25	45	230	170	0.09
P4048.W1/2-ZP	1/2"-13	BSW	30	54	12	30	53	340	240	0.16
P4048.W5/8-ZP	5/8"-11	BSW	35	63	14	35	62	700	500	0.24
P4048.W3/4-ZP	3/4"-10	BSW	40	72	16	40	71	1200	830	0.36
P4048.W7/8-ZP	7/8"-9	BSW	50	90	20	50	90	1500	1050	0.72
P4048.W1-ZP	1"-8	BSW	50	90	20	50	90	1800	1270	0.72
P4048.W1-1/8-ZP	1-1/8"-7	BSW	65	108	24	60	109	2500	1650	1.32
P4048.W1-1/4-ZP	1-1/4"-7	BSW	75	126	28	70	128	4300	3200	2.08
P4048.W1-1/2-ZP	1-1/2"-6	BSW	85	144	32	80	147	6100	4300	3.11
P4048.W1-3/4-ZP	1-3/4"-5	BSW	100	166	38	90	168	8000	5500	5.02
P4048.W2-ZP	2"	BSW	100	166	38	90	168	9900	7300	5.02
P4048.W2-1/4-ZP	2-1/4"	BSW	110	184	42	100	187	11500	8300	6.69
P4048.W2-1/2-ZP	2-1/2"	BSW	120	206	48	110	208	16000	11000	9.30

LIFTING PINS, LIFTING BOLTS & SWING BOLTS





P4180



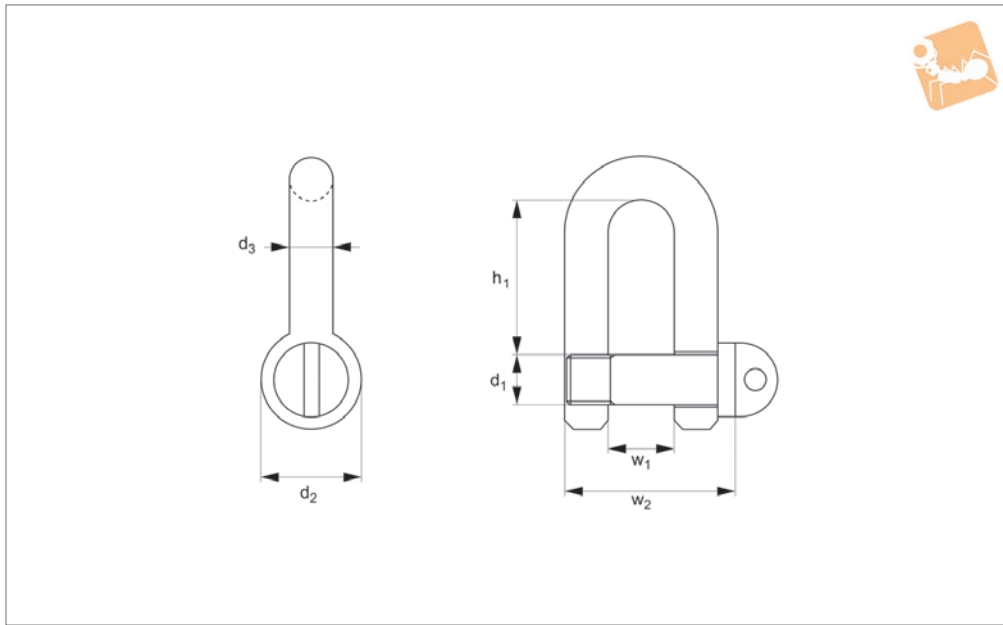
Material

Steel (C35N) zinc plated, or stainless steel (AISI 316, 1.4571).

Technical Notes

To DIN 28129.

Order No.	Material	d ₁	d ₂	w ₁	d ₃	l ₁	l ₂	l ₃	Weight kg
P4180.012	Steel	M12	14	48	100	25	50	0.45	35
P4180.016	Steel	M16	14	48	100	25	50	0.46	35
P4180.020	Steel	M20	16	50	100	28	50	0.63	40
P4180.024	Steel	M24	18	55	100	32	50	0.80	45
P4180.027	Steel	M27	20	58	100	35	50	1.00	50
P4180.030	Steel	M30	20	58	100	35	50	1.00	50
P4180.012-A4	Stainless	M12	14	48	100	25	50	0.45	35
P4180.016-A4	Stainless	M16	14	48	100	25	50	0.46	35
P4180.020-A4	Stainless	M20	16	50	100	28	50	0.63	40
P4180.024-A4	Stainless	M24	18	55	100	32	50	0.80	45
P4180.027-A4	Stainless	M27	20	58	100	35	50	1.00	50
P4180.030-A4	Stainless	M30	20	58	100	35	50	1.00	50



P4081

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Steel, zinc plated.

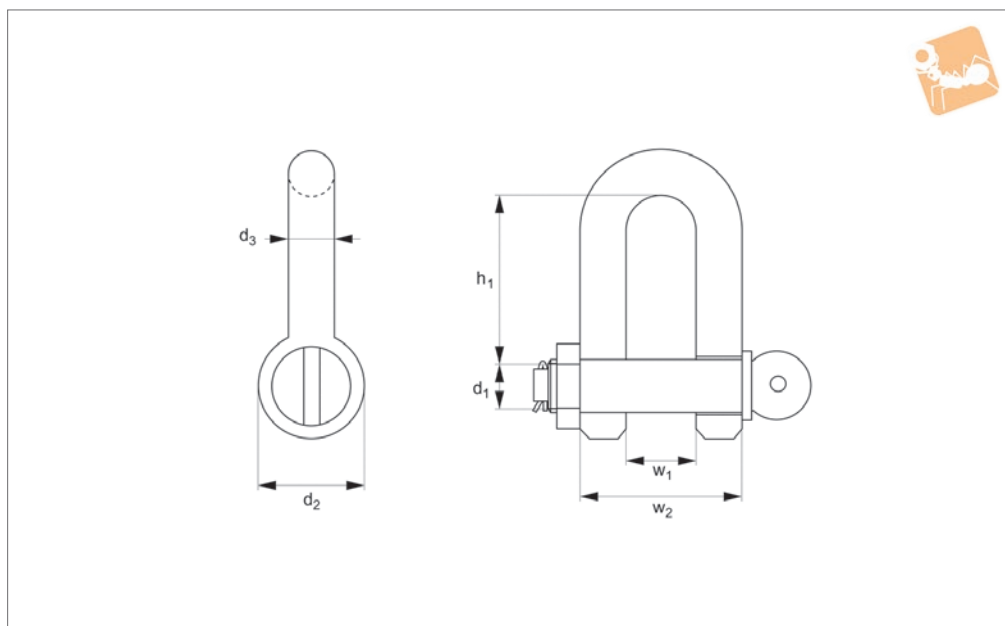
Technical Notes

To DIN 82101 Form A.

Order No.	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	Load kg max.	Weight kg
P4081.05	5	10	4	15.5	7	15	100	0.01
P4081.06	6	12	5	18.0	8	18	160	0.02
P4081.08	8	16	7	24.0	11	25	225	0.04
P4081.10	10	20	8	30.0	14	30	400	0.08
P4081.12	12	25	10	36.0	17	37	630	0.17
P4081.16	16	32	13	49.0	21	47	1000	0.36
P4081.20	20	40	17	61.0	27	61	1600	0.75
P4081.22	22	44	19	67.0	30	68	2000	1.00
P4081.24	24	48	21	73.0	33	75	2500	1.32
P4081.27	27	54	24	83.5	38	86	3150	1.85
P4081.30	30	60	27	91.0	42	96	4000	2.50
P4081.36	36	72	30	111.0	47	107	5000	4.00
P4081.39	39	78	34	119.5	53	121	6300	5.40



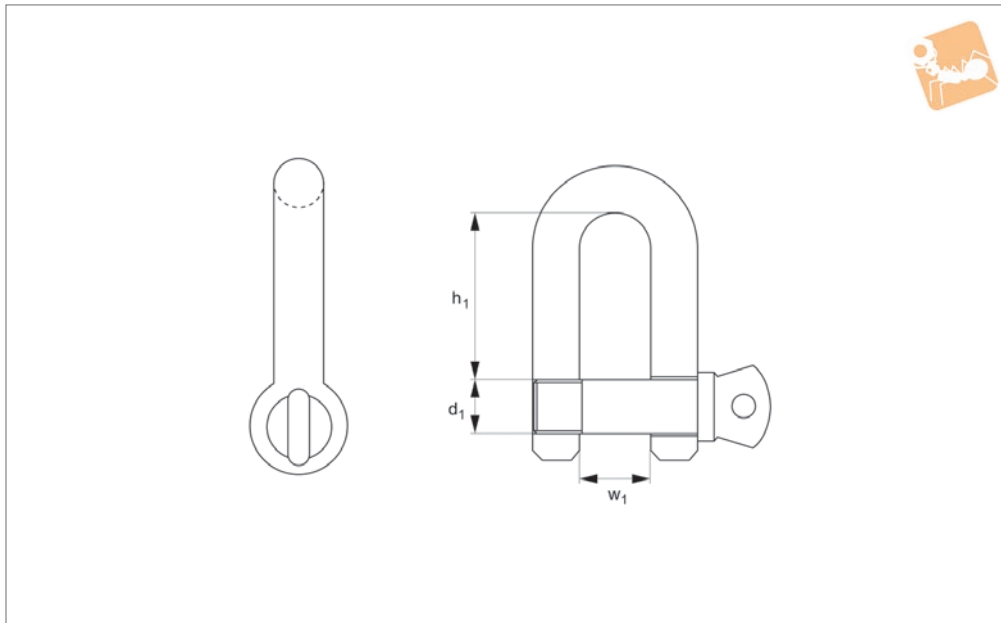
P4082



Material
Steel, zinc plated.

Technical Notes
To DIN 82101 Form C.

Order No.	Material	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	Load kg max.	Weight kg
P4082.10	Steel	10	20	8	30.0	14	30	400	0.10
P4082.12	Steel	12	24	10	36.0	17	37	630	0.18
P4082.16	Steel	16	32	13	49.0	21	47	1000	0.39
P4082.20	Steel	20	40	17	61.0	27	61	1600	0.80
P4082.22	Steel	22	44	19	67.0	30	68	2000	1.08
P4082.24	Steel	24	48	21	73.0	33	75	2500	1.40
P4082.27	Steel	27	54	24	85.5	38	86	3150	2.00
P4082.30	Steel	30	60	27	91.0	42	96	4000	2.70
P4082.36	Steel	36	72	30	111.0	47	107	5000	4.30
P4082.39	Steel	39	78	34	119.5	53	121	6300	5.80
P4082.45	Steel	45	90	38	139.5	60	136	8000	8.50
P4082.48	Steel	48	96	42	147.0	66	150	10000	10.8
P4082.52	Steel	52	104	47	158.0	73	167	12500	14.4
P4082.60	Steel	60	120	52	185.0	81	185	16000	20.5
P4082.68	Steel	68	136	58	211.0	90	206	20000	29.5
P4082.72	Steel	72	144	63	221.0	100	226	25000	36.0
P4082.80	Steel	80	160	70	246.0	110	250	31500	49.5
P4082.90	Steel	90	180	79	276.0	125	283	40000	69.0



P4084

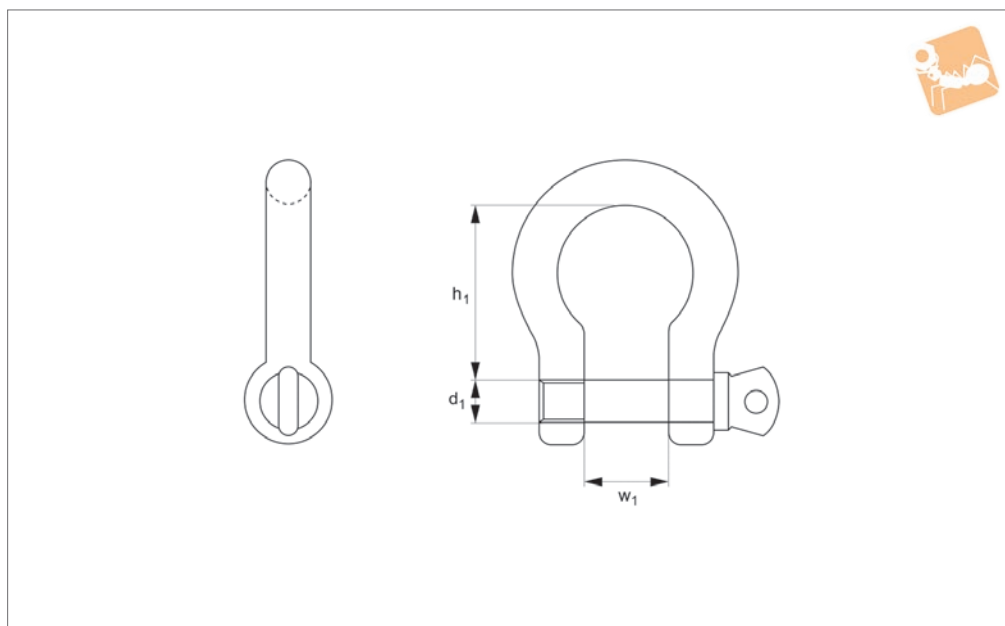
Material

Steel, zinc plated or stainless steel (A4, AISI 316).

Order No.	Material	d ₁	h ₁	w ₁	Load kg max.	Weight kg
P4084.05	Steel	5	80	-	0.02	10
P4084.06	Steel	6	100	24	0.03	12
P4084.08	Steel	8	200	32	0.07	16
P4084.10	Steel	10	320	40	0.13	20
P4084.11	Steel	11	400	44	0.17	22
P4084.13	Steel	13	500	48	0.24	24
P4084.14	Steel	14	600	56	0.35	28
P4084.16	Steel	16	800	64	0.50	32
P4084.19	Steel	19	1100	74	0.80	38
P4084.22	Steel	22	1500	88	1.32	44
P4084.24	Steel	4	2000	96	2.00	48
P4084.28	Steel	8	3000	112	3.00	56
P4084.32	Steel	32	4000	128	4.30	64
P4084.36	Steel	36	4500	144	5.40	72
P4084.38	Steel	38	5000	152	6.75	76
P4084.05-A4	Stainless	5	80	20	0.02	10
P4084.06-A4	Stainless	6	100	4	0.03	12
P4084.08-A4	Stainless	8	200	32	0.07	16
P4084.10-A4	Stainless	10	320	40	0.13	20
P4084.11-A4	Stainless	11	400	44	0.17	22
P4084.13-A4	Stainless	13	500	48	0.24	24
P4084.14-A4	Stainless	4	600	56	0.35	28
P4084.16-A4	Stainless	16	800	64	0.50	32
P4084.19-A4	Stainless	9	1100	74	0.80	38
P4084.22-A4	Stainless	22	1500	88	1.32	44
P4084.24-A4	Stainless	24	2000	96	2.00	48
P4084.28-A4	Stainless	28	3000	112	3.00	56
P4084.32-A4	Stainless	32	4000	128	4.30	64
P4084.36-A4	Stainless	36	4500	144	5.40	72
P4084.38-A4	Stainless	38	5000	152	6.75	76



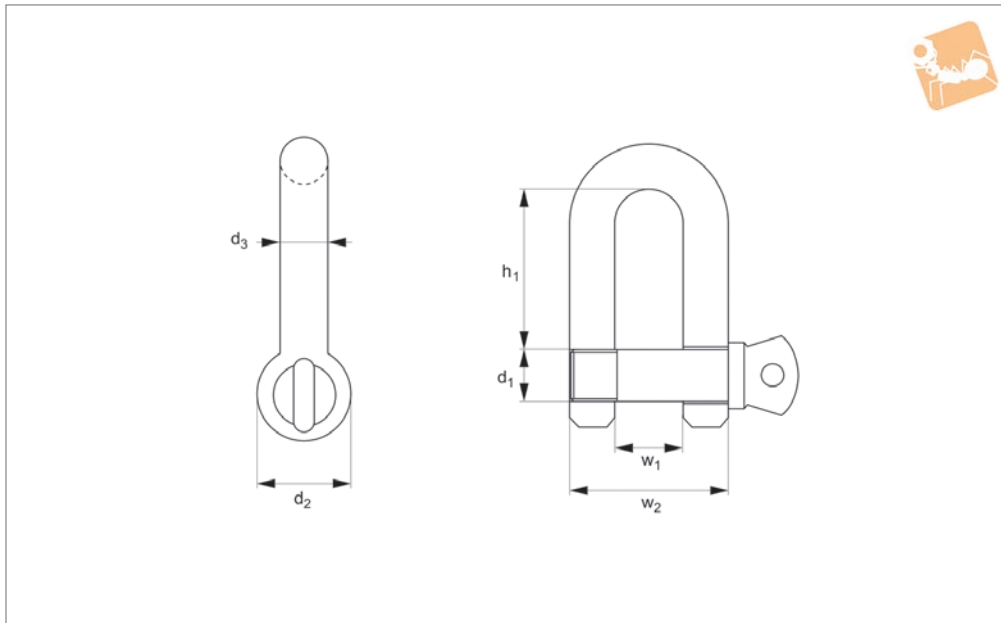
P4086



Material

Steel, zinc plated or stainless steel (A4, AISI 316).

Order No.	Material	d ₁	h ₁	w ₁	Load kg max.	Weight kg
P4086.05	Steel	5	80	20	0.02	10
P4086.06	Steel	6	100	24	0.03	12
P4086.08	Steel	8	200	32	0.07	16
P4086.10	Steel	10	320	40	0.13	20
P4086.11	Steel	11	400	44	0.18	22
P4086.13	Steel	13	500	48	0.26	24
P4086.14	Steel	14	600	56	0.35	28
P4086.16	Steel	16	800	64	0.50	32
P4086.19	Steel	19	1100	74	0.80	38
P4086.22	Steel	22	1500	88	1.30	44
P4086.24	Steel	24	2000	96	2.00	48
P4086.28	Steel	28	3000	112	3.10	56
P4086.32	Steel	32	4000	128	4.30	64
P4086.36	Steel	36	4500	144	5.40	72
P4086.38	Steel	38	5000	152	7.00	76
P4086.05-A4	Stainless	5	80	20	0.02	10
P4086.06-A4	Stainless	6	100	24	0.03	12
P4086.08-A4	Stainless	8	200	32	0.07	16
P4086.10-A4	Stainless	10	320	40	0.13	20
P4086.11-A4	Stainless	11	400	44	0.18	22
P4086.13-A4	Stainless	13	500	48	0.26	24
P4086.14-A4	Stainless	14	600	56	0.35	28
P4086.16-A4	Stainless	16	800	64	0.50	32
P4086.19-A4	Stainless	19	1100	74	0.80	38
P4086.22-A4	Stainless	22	1500	88	1.30	44
P4086.24-A4	Stainless	24	2000	96	2.00	48
P4086.28-A4	Stainless	28	3000	112	3.10	56
P4086.32-A4	Stainless	32	4000	128	4.30	64
P4086.36-A4	Stainless	36	4500	144	5.40	72
P4086.38-A4	Stainless	38	5000	152	7.00	76



P4096

Material

High-tensile steel.

Pin: hot-dip galvanized and lacquered;

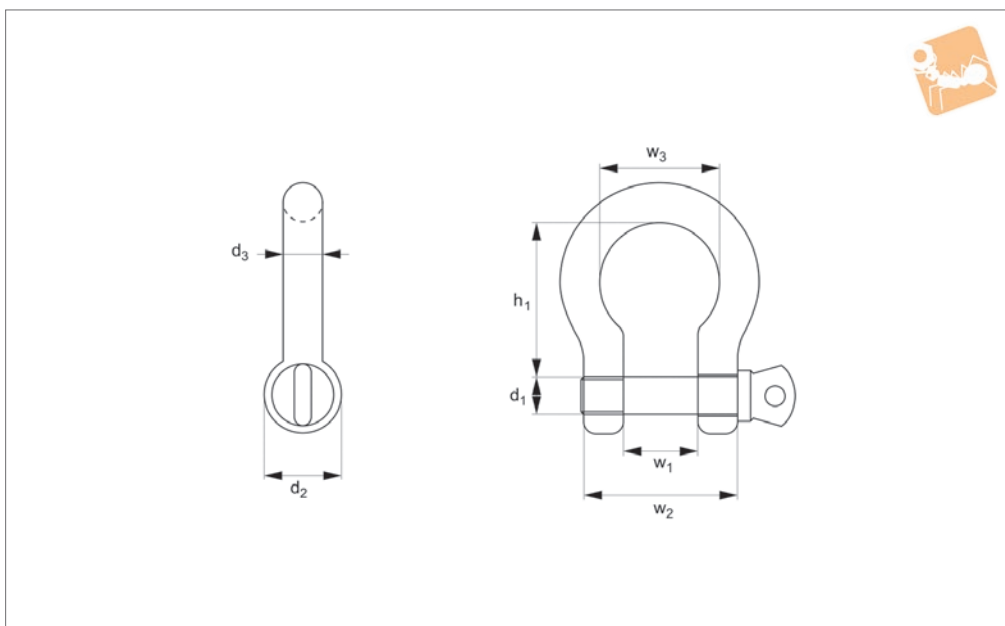
shackle: hot-dip galvanized.

CE marked.

Order No.	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	Load kg max.	Weight kg
P4096.06	6	12	5	20	9	24	330	0.02
P4096.08	8	17	6	22	12	26	500	0.05
P4096.10	10	21	8	26	13	29	750	0.08
P4096.12	12	26	10	31	16	36	1000	0.13
P4096.14	14	28	11	36	18	40	1500	0.19
P4096.16	16	30	13	41	21	47	2000	0.31
P4096.20	20	42	16	51	27	59	3250	0.55
P4096.22	22	48	19	60	32	70	4750	0.96
P4096.27	27	57	22	71	36	80	6500	1.41
P4096.28	28	62	25	81	43	93	8500	2.03
P4096.33	33	69	29	90	46	104	9500	2.97
P4096.36	36	78	32	100	52	116	12000	4.01
P4096.39	39	86	35	113	57	127	13500	5.40
P4096.42	42	94	38	124	60	136	17000	7.29
P4096.52	52	112	44	146	73	161	25000	11.25
P4096.60	60	135	51	171	83	185	35000	16.20
P4096.72	72	158	63	203	106	232	55000	33.30



P4097



Material

High-tensile steel.

Pin: hot-dip galvanized and lacquered;

shackle: hot-dip galvanized.

CE marked.

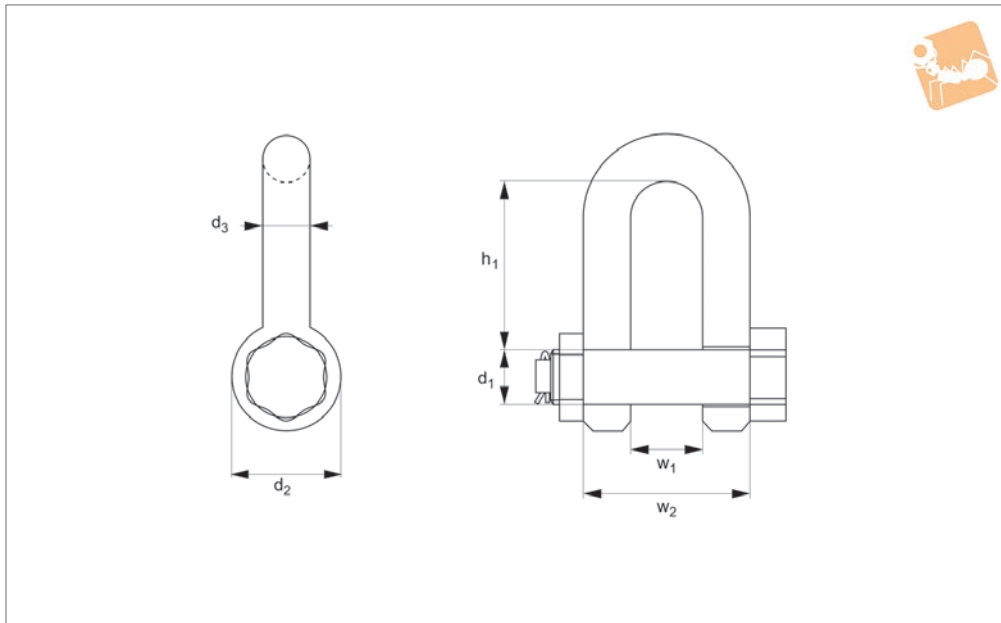
Order No.	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	w ₃	Load kg max.	Weight kg
P4097.06	6	12	5	22	9	20	16	330	0.02
P4097.08	8	17	6	28	12	25	19	500	0.05
P4097.10	10	21	8	31	13	29	21	750	0.08
P4097.12	12	26	10	36	16	36	26	1000	0.14
P4097.14	14	28	11	42	18	40	29	1500	0.22
P4097.16	16	30	13	48	21	47	33	2000	0.33
P4097.20	20	42	16	60	27	59	43	3250	0.65
P4097.22	22	48	19	71	32	70	51	4750	0.97
P4097.27	27	57	22	84	36	80	58	6500	1.46
P4097.28	28	62	25	95	43	93	68	8500	2.39
P4097.33	33	69	29	103	46	104	74	9500	3.15
P4097.36	36	78	32	119	52	116	82	12000	4.32
P4097.39	39	86	35	133	57	127	92	13500	5.67
P4097.42	42	94	38	146	60	136	98	17000	7.79
P4097.52	52	112	44	178	73	161	127	25000	12.51
P4097.60	60	135	51	197	83	185	146	35000	18.50
P4097.72	72	158	63	267	106	232	184	55000	37.58



High-tensile Steel D Shackles

with pin, nut and cotter

Lifting Pins,
Lifting Bolts &



P4098

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

High-tensile steel.

Pin: hot-dip galvanized and lacquered;

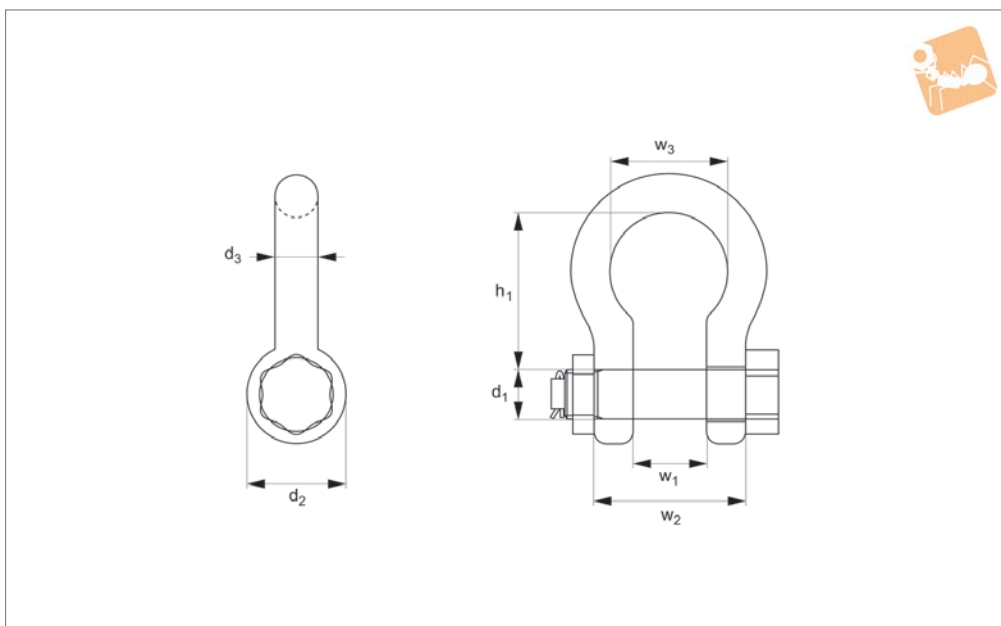
shackle: hot-dip galvanized.

CE marked.

Order No.	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	Load kg max.	Weight kg
P4098.16	16	30	13	41	21	47	1000	0.34
P4098.19	19	42	16	51	27	59	3250	0.70
P4098.22	22	48	19	60	32	70	4750	1.18
P4098.25	25	57	22	71	36	80	6500	1.64
P4098.28	28	62	25	81	43	93	8500	2.41
P4098.32	32	69	29	90	46	104	9500	3.27
P4098.35	35	78	32	100	52	116	12000	4.59
P4098.38	38	86	35	113	57	127	13500	6.00
P4098.42	42	94	38	124	60	136	17000	8.33
P4098.50	50	112	44	146	73	161	25000	12.83
P4098.55	55	127	51	171	83	185	35000	19.30
P4098.70	70	152	64	203	105	232	55000	34.50
P4098.82	82	165	75	230	127	279	85000	60.00
P4098.95	95	203	89	253	133	317	120000	93.00



P4099



Material

High-tensile steel.

Pin: hot-dip galvanized and lacquered;

shackle: hot-dip galvanized.

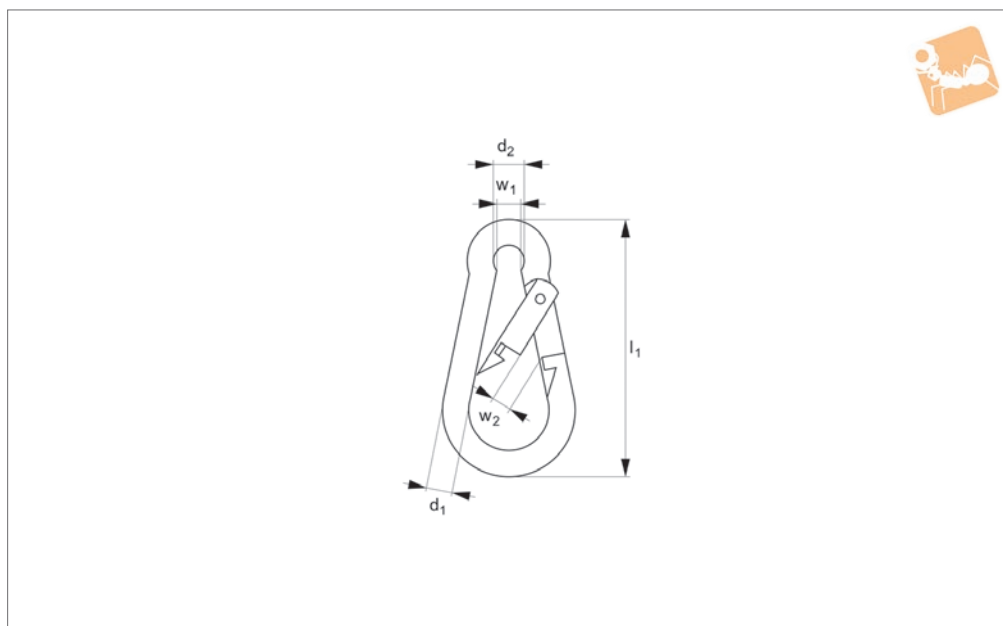
CE marked.

Order No.	d ₁	d ₂	d ₃	h ₁	w ₁	w ₂	w ₃	Load kg max.	Weight kg
P4099.008	8	17	6	28	12	25	19	500	0.07
P4099.010	10	21	8	31	13	29	21	750	0.10
P4099.012	12	26	10	36	16	36	26	1000	0.18
P4099.014	14	28	11	42	18	40	29	1500	0.25
P4099.016	16	30	13	48	21	47	33	2000	0.37
P4099.020	20	42	16	60	27	59	43	3250	0.71
P4099.022	22	48	19	71	32	70	51	4750	1.27
P4099.027	27	57	22	84	36	80	58	6500	1.78
P4099.028	28	62	25	95	43	93	68	8500	2.52
P4099.033	33	69	29	109	46	104	74	9500	3.53
P4099.036	36	78	32	119	52	116	82	12000	5.04
P4099.039	39	86	35	133	57	127	92	13500	6.84
P4099.042	42	94	38	146	60	136	98	17000	8.78
P4099.052	52	112	44	178	73	161	127	25000	14.1
P4099.055	55	127	51	197	83	185	146	35000	20.9
P4099.070	70	152	64	267	105	232	184	55000	39.9
P4099.082	82	200	76	330	127	279	200	85000	62.0
P4099.095	95	220	92	374	137	321	232	120000	109.0
P4099.108	108	240	104	372	145	353	250	150000	130.0





P4190



Material

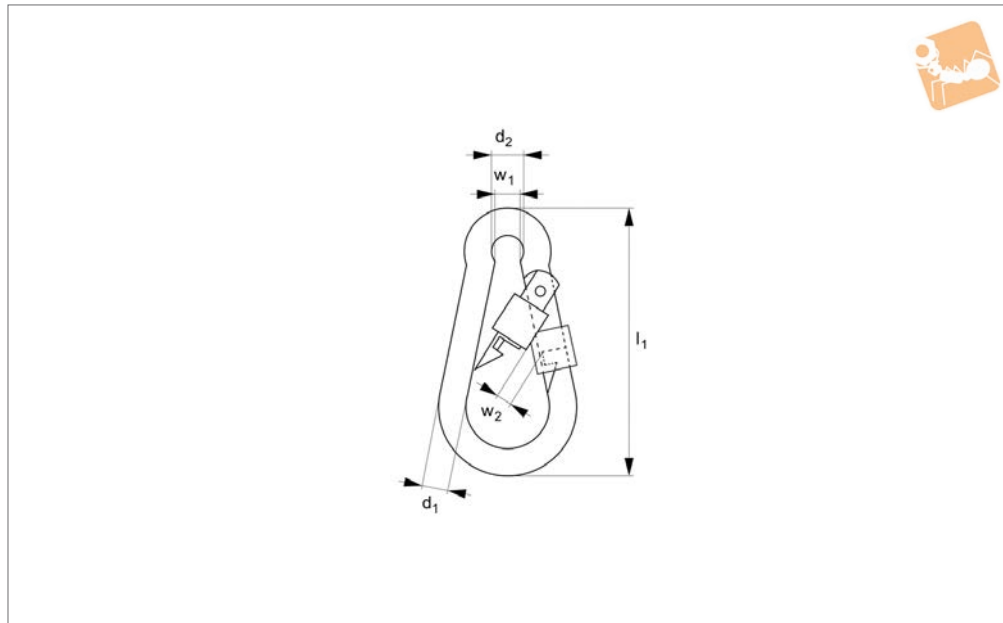
Steel, zinc plated or stainless steel (A4, AISI 316).

Order No.	Material	d ₁	d ₂	l ₁	w ₁	w ₂	Weight kg
P4190.040-ZP	Steel	4	7	40	4.0	6	0.01
P4190.050-ZP	Steel	5	8	50	5.0	7	0.02
P4190.060-ZP	Steel	6	9	60	6.5	8	0.03
P4190.070-ZP	Steel	7	10	70	8.0	8	0.04
P4190.080-ZP	Steel	8	10	Mar-00	8.5	9	0.07
P4190.090-ZP	Steel	9	12	90	9.5	10	0.09
P4190.100-ZP	Steel	10	15	100	10.5	11	0.12
P4190.120-ZP	Steel	11	18	120	11.5	16	0.18
P4190.140-ZP	Steel	12	20	140	13.0	19	0.26
P4190.160-ZP	Steel	13	22	Jun-00	15.0	25	0.35
P4190.180-ZP	Steel	14	23	180	16.0	28	0.48
P4190.040-A4	Stainless	4	6	40	4.0	6	0.02
P4190.050-A4	Stainless	5	8	50	5.0	7	0.02
P4190.060-A4	Stainless	6	9	Feb-00	6.5	8	0.03
P4190.070-A4	Stainless	7	10	70	8.0	8	0.04
P4190.080-A4	Stainless	8	12	78	8.5	9	0.07



Screw Coupling Snap Hooks

Lifting Pins,
Lifting Bolts &



P4192

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Steel, zinc plated or stainless steel (A4, AISI 316).

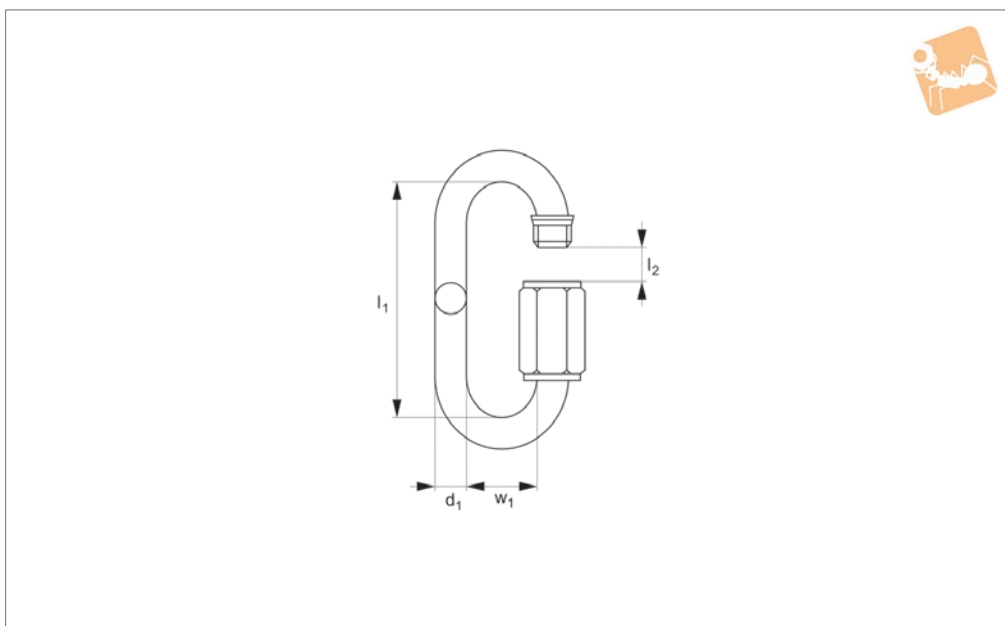
Technical Notes

To DIN 5299C.

Order No.	Material	d ₁	d ₂	l ₁	w ₁	w ₂	Weight kg
P4192.050-ZP	Steel	5	8	Feb-00	5.0	7	0.02
P4192.060-ZP	Steel	6	9	60	6.5	8	0.03
P4192.070-ZP	Steel	7	10	Mar-00	8.0	8	0.04
P4192.080-ZP	Steel	8	10	Mar-00	8.5	9	0.07
P4192.090-ZP	Steel	9	12	Mar-00	9.5	10	0.10
P4192.100-ZP	Steel	10	15	Apr-00	10.5	11	0.14
P4192.120-ZP	Steel	11	18	120	11.5	16	0.19
P4192.140-ZP	Steel	12	20	19-Feb	13.0	19	0.27
P4192.050-A4	Stainless	5	8	19-Feb	5.0	7	0.02
P4192.060-A4	Stainless	6	9	29-Feb	6.5	8	0.03
P4192.070-A4	Stainless	7	10	70	8.0	8	0.04
P4192.080-A4	Stainless	8	10	80	8.5	9	0.07
P4192.090-A4	Stainless	9	12	90	9.5	10	0.10
P4192.100-A4	Stainless	10	15	100	10.5	11	0.14
P4192.120-A4	Stainless	11	18	120	11.5	16	0.19
P4192.140-A4	Stainless	12	20	140	13.0	19	0.27



P4194



Material

Steel, zinc plated or stainless steel (A4, AISI 316).

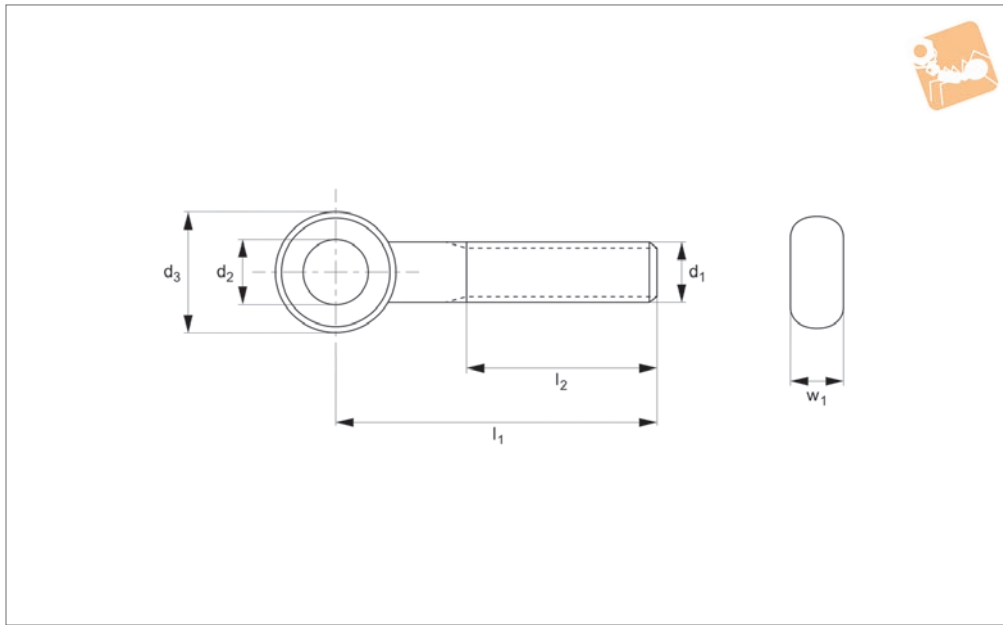
Order No.	Material	d ₁	l ₁	l ₂	w ₁	Weight kg
P4194.040-ZP	Steel	4	32	5.5	12	0.20
P4194.050-ZP	Steel	5	39	6.5	13	0.30
P4194.060-ZP	Steel	6	45	7.5	14	0.40
P4194.080-ZP	Steel	8	58	10.0	17	0.80
P4194.100-ZP	Steel	10	69	12.0	21	0.14
P4194.120-ZP	Steel	12	81	14.5	24	0.20
P4194.040-A4	Stainless	4	32	5.5	12	0.20
P4194.050-A4	Stainless	5	39	6.5	13	0.30
P4194.060-A4	Stainless	6	45	7.5	14	0.40
P4194.080-A4	Stainless	8	58	10.0	17	0.80
P4194.100-A4	Stainless	10	69	12.0	21	0.14
P4194.120-A4	Stainless	12	81	14.5	24	0.20



Swing Bolts

A2 stainless

Lifting Pins, Lifting Bolts &



P0070.A2

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Stainless steel (A2, AISI 303).

Technical Notes

To DIN 444 B.

Order No.	d ₁ tol. H9	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.060-040-A2	M6	40	6	14	18	7
P0070.060-050-A2	M6	50	6	14	18	7
P0070.060-060-A2	M6	60	6	14	18	7
P0070.080-030-A2	M8	30	8	18	22	9
P0070.080-040-A2	M8	40	8	18	22	9
P0070.080-050-A2	M8	50	8	18	22	9
P0070.080-060-A2	M8	60	8	18	22	9
P0070.080-070-A2	M8	70	8	18	22	9
P0070.080-075-A2	M8	75	8	18	22	9
P0070.080-080-A2	M8	80	8	18	22	9
P0070.080-090-A2	M8	90	8	18	22	9
P0070.080-100-A2	M8	100	8	18	22	9
P0070.100-040-A2	M10	40	10	20	26	12
P0070.100-050-A2	M10	50	10	20	26	12
P0070.100-060-A2	M10	60	10	20	26	12
P0070.100-070-A2	M10	70	10	20	26	12
P0070.100-080-A2	M10	80	10	20	26	12
P0070.100-090-A2	M10	90	10	20	26	12
P0070.100-100-A2	M10	100	10	20	26	12
P0070.100-120-A2	M10	120	10	20	26	12
P0070.120-040-A2	M12	40	12	25	30	14
P0070.120-050-A2	M12	50	12	25	30	14
P0070.120-060-A2	M12	60	12	25	30	14
P0070.120-070-A2	M12	70	12	25	30	14
P0070.120-080-A2	M12	80	12	25	30	14
P0070.120-100-A2	M12	100	12	25	30	14
P0070.120-120-A2	M12	120	12	25	30	14
P0070.120-130-A2	M12	130	12	25	30	14
P0070.120-140-A2	M12	140	12	25	30	14
P0070.120-150-A2	M12	150	12	25	30	14
P0070.160-060-A2	M16	60	16	32	38	17
P0070.160-070-A2	M16	70	16	32	38	17
P0070.160-080-A2	M16	80	16	32	38	17
P0070.160-090-A2	M16	90	16	32	38	17



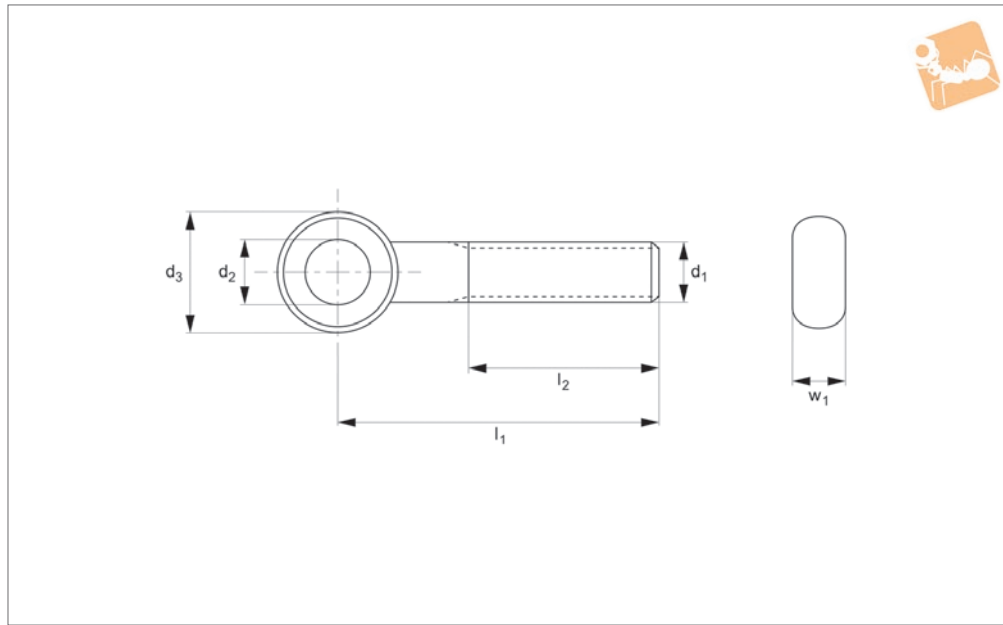
Order No.	d ₁ tol. H9	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.160-100-A2	M16	100	16	32	38	17
P0070.160-110-A2	M16	110	16	32	38	17
P0070.160-120-A2	M16	120	16	32	38	17
P0070.160-130-A2	M16	130	16	32	38	17
P0070.160-140-A2	M16	140	16	32	38	17
P0070.160-150-A2	M16	150	16	32	38	17
P0070.200-075-A2	M20	75	18	40	46	22
P0070.200-080-A2	M20	80	18	40	46	22
P0070.200-090-A2	M20	90	18	40	46	22
P0070.200-100-A2	M20	100	18	40	46	22
P0070.200-110-A2	M20	110	18	40	46	22
P0070.200-120-A2	M20	120	18	40	46	22
P0070.200-130-A2	M20	130	18	40	46	22
P0070.200-140-A2	M20	140	18	40	46	22
P0070.200-150-A2	M20	150	18	40	46	22
P0070.200-160-A2	M20	160	18	40	46	22
P0070.240-080-A2	M24	80	22	45	54	25
P0070.240-090-A2	M24	90	22	45	54	25
P0070.240-100-A2	M24	100	22	45	54	25
P0070.240-110-A2	M24	110	22	45	54	25
P0070.240-120-A2	M24	120	22	45	54	25
P0070.240-130-A2	M24	130	22	45	54	25
P0070.240-140-A2	M24	140	22	45	54	25
P0070.240-150-A2	M24	150	22	45	54	25
P0070.240-160-A2	M24	160	22	45	54	25



Swing Bolts

A4 stainless

Lifting Pins, Lifting Bolts &



P0070.A4

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Stainless steel (A4, AISI 316).

Technical Notes

To DIN 444 B.

Order No.	d_1 tol. H9	l_1	d_2 tol. H7	d_3	l_2	w_1 max.
P0070.060-030-A4	M6	30	6	14	18	7
P0070.060-040-A4	M6	40	6	14	18	7
P0070.060-050-A4	M6	50	6	14	18	7
P0070.060-060-A4	M6	60	6	14	18	7
P0070.080-030-A4	M8	30	8	18	22	9
P0070.080-040-A4	M8	40	8	18	22	9
P0070.080-050-A4	M8	50	8	18	22	9
P0070.080-060-A4	M8	60	8	18	22	9
P0070.080-070-A4	M8	70	8	18	22	9
P0070.080-080-A4	M8	80	8	18	22	9
P0070.080-090-A4	M8	90	8	18	22	9
P0070.080-100-A4	M8	100	8	18	22	9
P0070.100-040-A4	M10	40	10	20	26	12
P0070.100-050-A4	M10	50	10	20	26	12
P0070.100-060-A4	M10	60	10	20	26	12
P0070.100-070-A4	M10	70	10	20	26	12
P0070.100-080-A4	M10	80	10	20	26	12
P0070.100-090-A4	M10	90	10	20	26	12
P0070.100-100-A4	M10	100	10	20	26	12
P0070.120-040-A4	M12	40	12	25	30	14
P0070.120-050-A4	M12	50	12	25	30	14
P0070.120-060-A4	M12	60	12	25	30	14
P0070.120-070-A4	M12	70	12	25	30	14
P0070.120-080-A4	M12	80	12	25	30	14
P0070.120-090-A4	M12	90	12	25	30	14
P0070.120-100-A4	M12	100	12	25	30	14
P0070.120-120-A4	M12	120	12	25	30	14
P0070.120-130-A4	M12	130	12	25	30	14
P0070.120-150-A4	M12	150	12	25	30	14
P0070.160-070-A4	M16	70	16	32	38	17
P0070.160-080-A4	M16	80	16	32	38	17
P0070.160-090-A4	M16	90	16	32	38	17
P0070.160-100-A4	M16	100	16	32	38	17
P0070.160-120-A4	M16	120	16	32	38	17



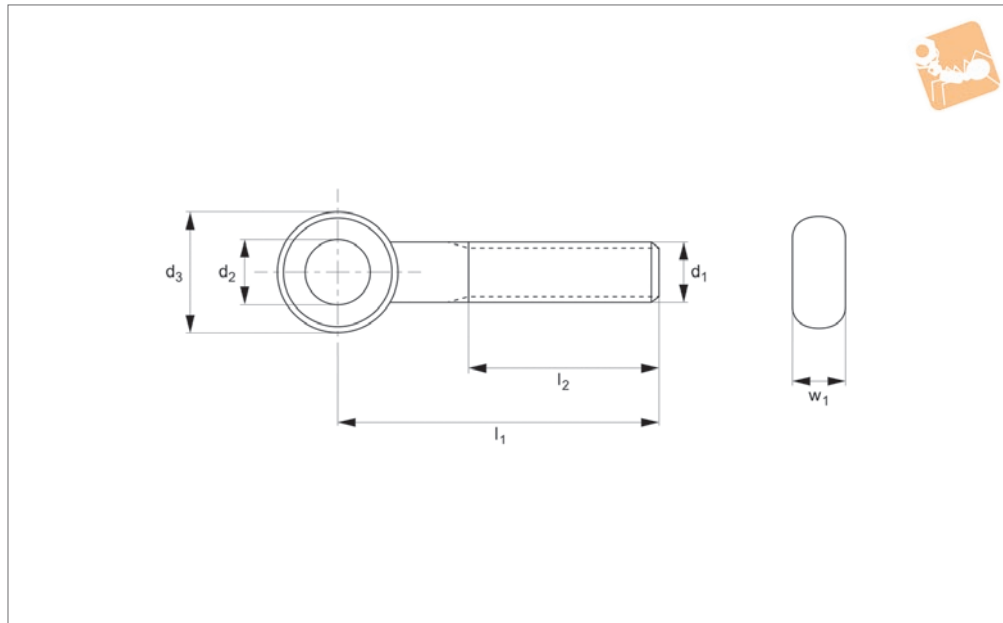
Order No.	d ₁ tol. H9	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.160-130-A4	M16	130	16	32	38	17
P0070.200-080-A4	M20	80	18	40	46	22
P0070.200-090-A4	M20	90	18	40	46	22
P0070.200-100-A4	M20	100	18	40	46	22
P0070.200-120-A4	M20	120	18	40	46	22
P0070.240-100-A4	M24	100	22	45	54	25
P0070.240-120-A4	M24	120	22	45	54	25
P0070.240-140-A4	M24	140	22	45	54	25



Swing Bolts

Brass

Lifting Pins, Lifting Bolts &



P0070.BR

LIFTING PINS, LIFTING BOLTS & SWING BOLTS

Material

Brass.

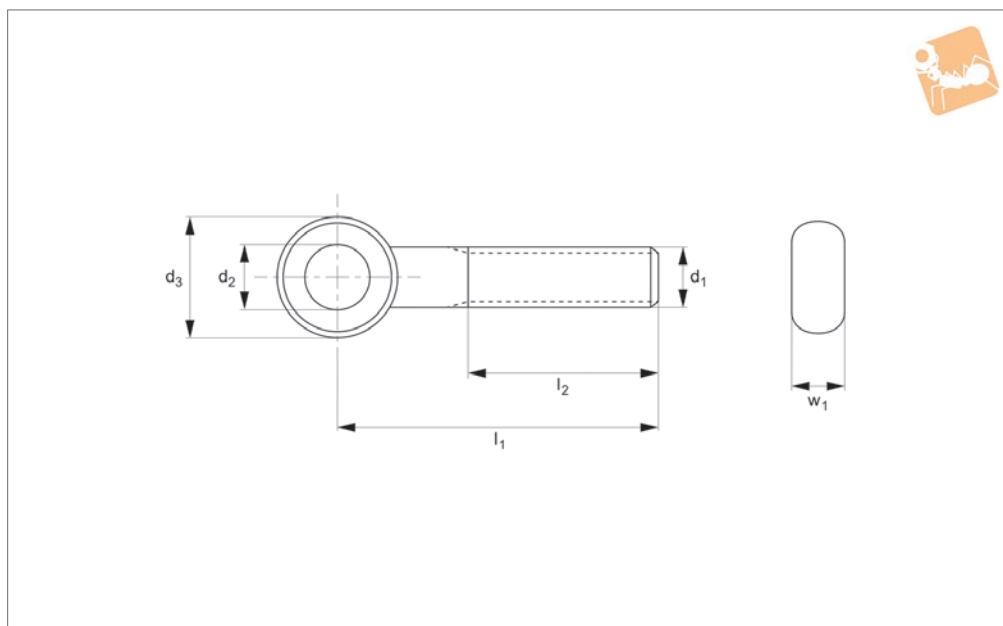
Technical Notes

To DIN 444 B.

Order No.	d ₁ tol. H9	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.060-030-BR	M6	30	6	14	18	7
P0070.060-040-BR	M6	40	6	14	18	7
P0070.060-050-BR	M6	50	6	14	18	7
P0070.060-060-BR	M6	60	6	14	18	7
P0070.080-030-BR	M8	30	8	18	22	9
P0070.080-040-BR	M8	40	8	18	22	9
P0070.080-050-BR	M8	50	8	18	22	9
P0070.080-060-BR	M8	60	8	18	22	9
P0070.080-080-BR	M8	80	8	18	22	9
P0070.080-100-BR	M8	100	8	18	22	9
P0070.100-050-BR	M10	50	10	20	26	12
P0070.100-060-BR	M10	60	10	20	26	12
P0070.100-080-BR	M10	80	10	20	26	12
P0070.100-120-BR	M10	100	10	20	26	12
P0070.100-100-BR	M10	120	10	20	26	12
P0070.120-040-BR	M12	40	12	25	30	14
P0070.120-050-BR	M12	50	12	25	30	14
P0070.120-060-BR	M12	60	12	25	30	14
P0070.120-080-BR	M12	80	12	25	30	14
P0070.120-100-BR	M12	100	12	25	30	14
P0070.120-120-BR	M12	120	12	25	30	14
P0070.160-060-BR	M16	60	16	32	38	17
P0070.160-080-BR	M16	80	16	32	38	17
P0070.160-100-BR	M16	100	16	32	38	17
P0070.160-120-BR	M16	120	16	32	38	17
P0070.200-100-BR	M20	100	18	40	46	22
P0070.200-120-BR	M20	120	18	40	46	22
P0070.200-140-BR	M20	140	18	40	46	22
P0070.200-160-BR	M20	160	18	40	46	22



P0070.SC



Material

Steel, self-colour (class 4.6).

Technical Notes

To DIN 444 B.

Order No.	d ₁	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.060-030-SC	M6	30	6	14	18	7
P0070.060-040-SC	M6	40	6	14	18	7
P0070.060-050-SC	M6	50	6	14	18	7
P0070.060-060-SC	M6	60	6	14	18	7
P0070.080-030-SC	M8	30	8	18	22	9
P0070.080-040-SC	M8	40	8	18	22	9
P0070.080-050-SC	M8	50	8	18	22	9
P0070.080-060-SC	M8	60	8	18	22	9
P0070.080-070-SC	M8	70	8	18	22	9
P0070.080-080-SC	M8	80	8	18	22	9
P0070.080-090-SC	M8	90	8	18	22	9
P0070.080-100-SC	M8	100	8	18	22	9
P0070.080-120-SC	M8	120	8	18	22	9
P0070.100-040-SC	M10	40	10	20	26	12
P0070.100-050-SC	M10	50	10	20	26	12
P0070.100-060-SC	M10	60	10	20	26	12
P0070.100-070-SC	M10	70	10	20	26	12
P0070.100-080-SC	M10	80	10	20	26	12
P0070.100-090-SC	M10	90	10	20	26	12
P0070.100-100-SC	M10	100	10	20	26	12
P0070.100-120-SC	M10	120	10	20	26	12
P0070.120-040-SC	M12	40	12	25	30	14
P0070.120-050-SC	M12	50	12	25	30	14
P0070.120-060-SC	M12	60	12	25	30	14
P0070.120-070-SC	M12	70	12	25	30	14
P0070.120-080-SC	M12	80	12	25	30	14
P0070.120-090-SC	M12	90	12	25	30	14
P0070.120-100-SC	M12	100	12	25	30	14
P0070.120-120-SC	M12	120	12	25	30	14
P0070.120-130-SC	M12	130	12	25	30	14
P0070.120-140-SC	M12	140	12	25	30	14
P0070.120-150-SC	M12	150	12	25	30	14
P0070.160-060-SC	M16	60	16	32	38	17
P0070.160-070-SC	M16	70	16	32	38	17



Swing Bolts

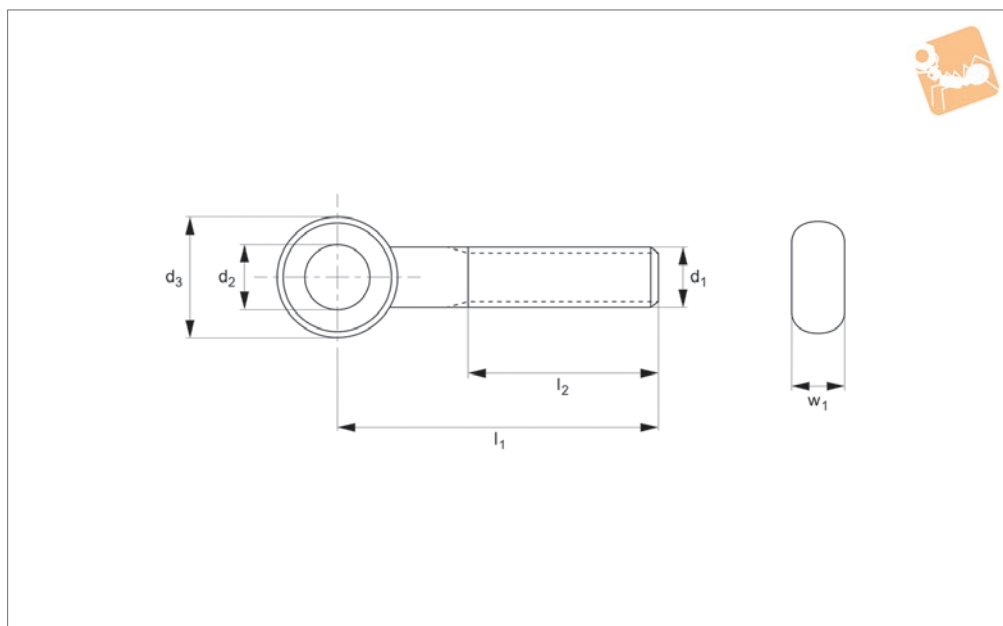
Steel - self-colour

Lifting Pins, Lifting Bolts &

Order No.	d ₁	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.160-080-SC	M16	80	16	32	38	17
P0070.160-090-SC	M16	90	16	32	38	17
P0070.160-100-SC	M16	100	16	32	38	17
P0070.160-120-SC	M16	120	16	32	38	17
P0070.160-130-SC	M16	130	16	32	38	17
P0070.160-140-SC	M16	140	16	32	38	17
P0070.160-150-SC	M16	150	16	32	38	17
P0070.200-080-SC	M20	80	18	40	46	22
P0070.200-090-SC	M20	90	18	40	46	22
P0070.200-100-SC	M20	100	18	40	46	22
P0070.200-120-SC	M20	120	18	40	46	22
P0070.200-130-SC	M20	130	18	40	46	22
P0070.200-140-SC	M20	140	18	40	46	22
P0070.200-150-SC	M20	150	18	40	46	22
P0070.200-160-SC	M20	160	18	40	46	22
P0070.240-080-SC	M24	80	22	45	54	25
P0070.240-100-SC	M24	100	22	45	54	25
P0070.240-120-SC	M24	120	22	45	54	25
P0070.240-130-SC	M24	130	22	45	54	25
P0070.240-140-SC	M24	140	22	45	54	25
P0070.240-150-SC	M24	150	22	45	54	25
P0070.240-160-SC	M24	160	22	45	54	25
P0070.270-080-SC	M27	120	18	40	60	27
P0070.270-090-SC	M27	140	18	40	60	27
P0070.270-100-SC	M27	160	18	40	60	27
P0070.270-120-SC	M27	180	18	40	60	27
P0070.270-130-SC	M27	200	18	40	60	27
P0070.300-120-SC	M30	120	22	45	66	30
P0070.300-140-SC	M30	140	22	45	66	30
P0070.300-160-SC	M30	160	22	45	66	30
P0070.300-180-SC	M30	180	22	45	66	30
P0070.300-200-SC	M30	200	22	45	66	30



P0070.ZP



Material

Steel, zinc-plated (class 4.6).

Technical Notes

To DIN 444 B.

Order No.	d ₁	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.060-030-ZP	M6	30	6	14	18	7
P0070.060-040-ZP	M6	40	6	14	18	7
P0070.060-050-ZP	M6	50	6	14	18	7
P0070.080-040-ZP	M8	40	8	18	22	9
P0070.080-050-ZP	M8	50	8	18	22	9
P0070.080-060-ZP	M8	60	8	18	22	9
P0070.080-080-ZP	M8	80	8	18	22	9
P0070.100-040-ZP	M10	40	10	20	26	12
P0070.100-050-ZP	M10	50	10	20	26	12
P0070.100-060-ZP	M10	60	10	20	26	12
P0070.100-070-ZP	M10	70	10	20	26	12
P0070.100-080-ZP	M10	80	10	20	26	12
P0070.100-090-ZP	M10	90	10	20	26	12
P0070.100-100-ZP	M10	100	10	20	26	12
P0070.100-120-ZP	M10	120	10	20	26	12
P0070.120-060-ZP	M12	60	12	25	30	14
P0070.120-070-ZP	M12	70	12	25	30	14
P0070.120-080-ZP	M12	80	12	25	30	14
P0070.120-090-ZP	M12	90	12	25	30	14
P0070.120-100-ZP	M12	100	12	25	30	14
P0070.120-120-ZP	M12	120	12	25	30	14
P0070.120-140-ZP	M12	140	12	25	30	14
P0070.160-070-ZP	M16	70	16	32	38	17
P0070.160-080-ZP	M16	80	16	32	38	17
P0070.160-090-ZP	M16	90	16	32	38	17
P0070.160-100-ZP	M16	100	16	32	38	17
P0070.160-120-ZP	M16	120	16	32	38	17
P0070.160-140-ZP	M16	140	16	32	38	17
P0070.160-160-ZP	M16	160	16	32	38	17
P0070.160-180-ZP	M16	180	16	32	38	17
P0070.160-200-ZP	M16	200	16	32	38	17
P0070.200-100-ZP	M20	100	18	40	46	22
P0070.200-120-ZP	M20	120	18	40	46	22
P0070.200-140-ZP	M20	140	18	40	46	22



Swing Bolts

Steel - zinc-plated

Lifting Pins, Lifting Bolts &

Order No.	d ₁	l ₁	d ₂ tol. H7	d ₃	l ₂	w ₁ max.
P0070.200-160-ZP	M20	160	18	40	46	22
P0070.200-180-ZP	M20	180	18	40	46	22
P0070.200-200-ZP	M20	200	18	40	46	22