



# Introduction

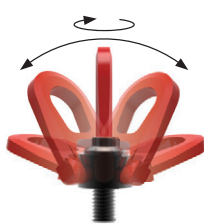
## Swivel Lifting Rings and Lifting Bolts

# Lifting Bolts



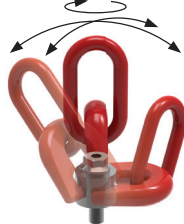
**Single swivel**

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.

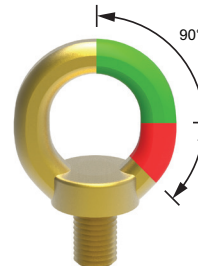
These are supplied with a generic CE Certificate of Conformity stating that the parts have been manufactured to the relevant DIN standard and therefore suitable for lifting.

#### 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.



Do not lift



Do not lift

**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.

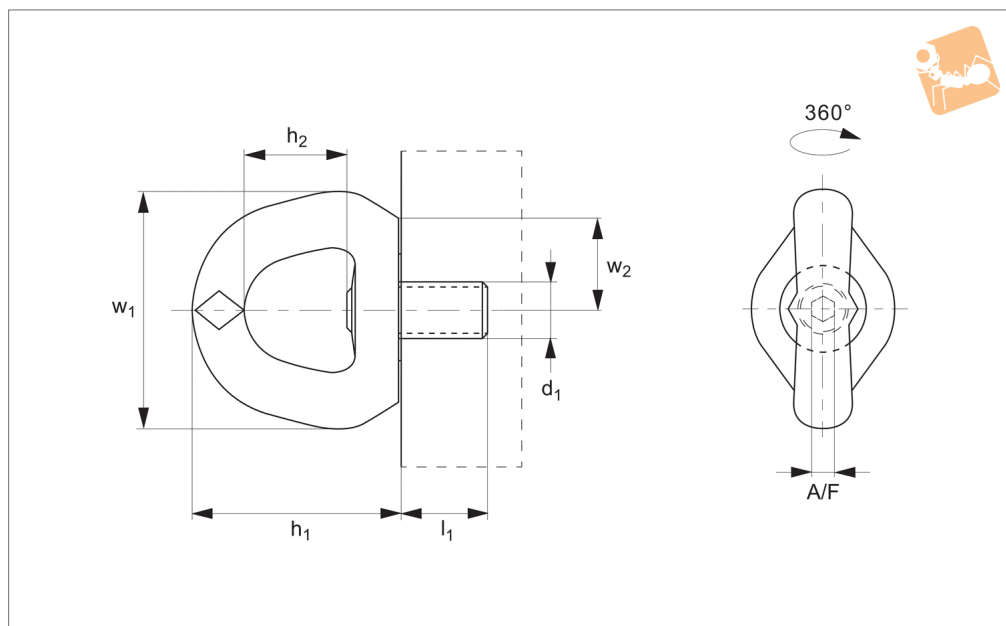
- Note the thread length requirements:
  - 1 x thread diameter for steel (ST37 min.).
  - 1.25 x thread diameter for cast iron.
  - 2 x thread diameter for aluminium.
  - 2.5 x thread diameter for other light metals.
  - If fixing into low resistance material it is better to allow for a bigger diameter 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.





**P4030**



## 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.

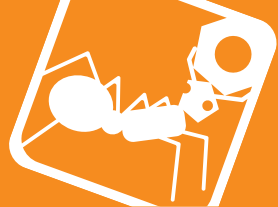
## Important Notes

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      |



# 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%. |

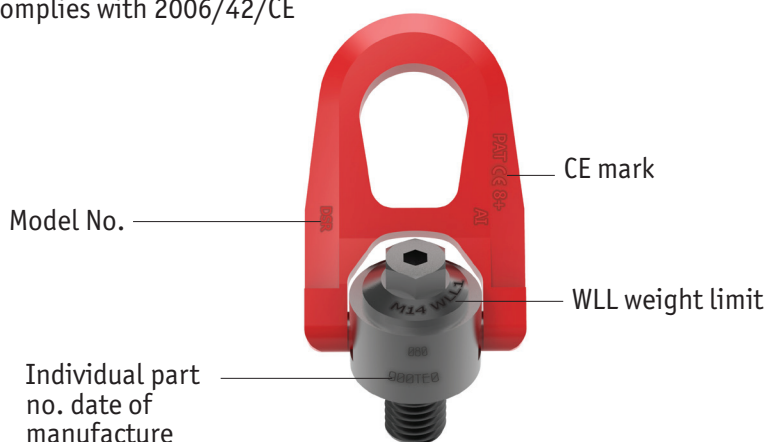
### Rugged

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

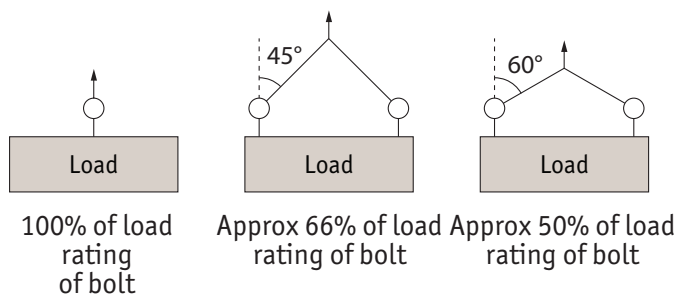
### Product marking

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

Complies with 2006/42/CE



### Lifting angles

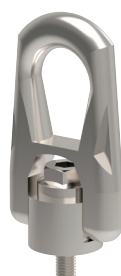


For full information on lifting arrangements see technical pages

### Steel and Stainless steel (316) versions



Steel



Stainless (316L)

### P4020

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

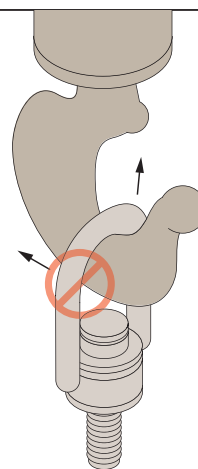


### P4022

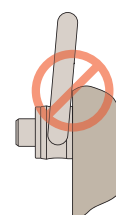
Threads M30 – M45  
Loads 3,5 tons to 6 tons.



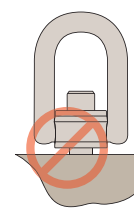
### Installation Information



**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.



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.**



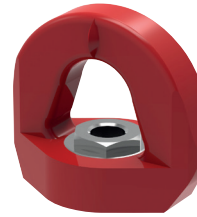
**Always** ensure full thread engagement when installing hoist rings. Also ensure face is flush.



P4002 Male



P4004 Female



| Lifting type            |        |            |            |            |            | $\alpha \text{ max.} = 60^\circ$<br> |            | $\alpha \text{ max.} = 60^\circ$<br> |            |
|-------------------------|--------|------------|------------|------------|------------|--------------------------------------|------------|--------------------------------------|------------|
| 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 |



# Technical Information

## Double Swivel Lifting Rings

# Lifting Bolts



P4005 Male



P4006 Female



| Lifting type            |                |            |            |            |            | $\alpha$ max. = 60°<br> |            | $\alpha$ max. = 60°<br> |            |
|-------------------------|----------------|------------|------------|------------|------------|-------------------------|------------|-------------------------|------------|
| 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 |



P4020 Male



P4021 Female



| Lifting type            |        |           |           |           |           | $\alpha \text{ max.} = 60^\circ$<br> |           | $\alpha \text{ max.} = 60^\circ$<br> |           |
|-------------------------|--------|-----------|-----------|-----------|-----------|--------------------------------------|-----------|--------------------------------------|-----------|
| 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 |



# Technical Information

## Heavy Duty Double Swivel Lifting Rings

# Lifting Bolts



P4008 Male



P4010 Female



| Lifting type            |                 |            |             |            |             | $\alpha$ max. = 60°<br> |            | $\alpha$ max. = 60°<br> |            |
|-------------------------|-----------------|------------|-------------|------------|-------------|-------------------------|------------|-------------------------|------------|
| 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 |





P4011 Male



| Lifting type  |               |             |             |             |             | $\alpha \text{ max.} = 60^\circ$<br> |             | $\alpha \text{ max.} = 60^\circ$<br> |             |
|---------------|---------------|-------------|-------------|-------------|-------------|--------------------------------------|-------------|--------------------------------------|-------------|
| 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  | 110,00 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 |



P4022 Male



P4023 Female



| Lifting type            |                |            |            |            |            | $\alpha$ max. = 60°<br> |            | $\alpha$ max. = 60°<br> |            |
|-------------------------|----------------|------------|------------|------------|------------|-------------------------|------------|-------------------------|------------|
| 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 |



P4012 Male

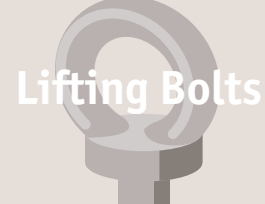


| Lifting type  |                |           |            |           |            | $\alpha$ max. = 60°<br> |           | $\alpha$ max. = 60°<br> |           |
|---------------|----------------|-----------|------------|-----------|------------|-------------------------|-----------|-------------------------|-----------|
| 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



P4017 Male



| Lifting type  |                |           |            |           |            | $\alpha$ max. = 60°<br> |           | $\alpha$ max. = 60°<br> |           |
|---------------|----------------|-----------|------------|-----------|------------|-------------------------|-----------|-------------------------|-----------|
| 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 Male



| Lifting type  |                |            |             |            |             | $\alpha \text{ max.} = 60^\circ$<br> |            | $\alpha \text{ max.} = 60^\circ$<br> |            |
|---------------|----------------|------------|-------------|------------|-------------|--------------------------------------|------------|--------------------------------------|------------|
| 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 |