




Load Pin

Accurate real time load monitoring of any load bearing pin connection or joint. Suitable for all industry sectors including Construction, Factory Automation, Marine, Offshore and Subsea.





Load Pins are integrated in mechanical structures and mechanism to provide precision load monitoring within existing designs.

- Standard capacities from 2Te to 2000Te.
- Pins designed to exactly suit your application.
- Robust, Compact, High Tensile Stainless Steel design.
- Accurate to 1%
- Proof Load 150%

Features

- Safety Factor of 5:1
- Output options include mV, mA, V, RS232 with others available (on request)
- Single, Dual and Redundant Bridge Designs
- Operating Temperature -20°C to +80°C as standard.
- Wireless and cabled options available.
- Axial or radial cable exit.
- Standard cabled versions have glanded exit with 5m flying cable.
- Plugin Connector versions available.
- Integral signal conditioning available.
- Enclosure IP67 as standard.
- ATEX version available for Zones 0, 1 and 2.
- Subsea variants (on request)
- Every unit load tested and certified.
- Designed & Manufactured by Power Jacks in the UK.

Applications

- Crane Overload protection
- Cable tension monitoring
- Anchor Systems
- Mooring Systems
- Hoist Overload Protection
- Force Calibration
- Winch Load Monitoring
- Sheave/Pulley system line tension
- Structural Joints
- Hydraulic Presses
- Lifting Systems
- Aerospace development
- Elevator Cable Monitoring
- Pipe Laying Ships
- Subsea Ploughs
- Conveyor Systems
- Heavy Plant Machinery Knuckle Joints

Accessories

- Matched handheld telemetry display for wireless models. Up to 12 wireless load pins can be linked to the handheld display for individual or summed load values.
- Anti-rotation plates supplied as standard with load pins.
- Matched Connectors.
- Fixed display monitor.
- Data logging software for your complete system solution.



Design Detail

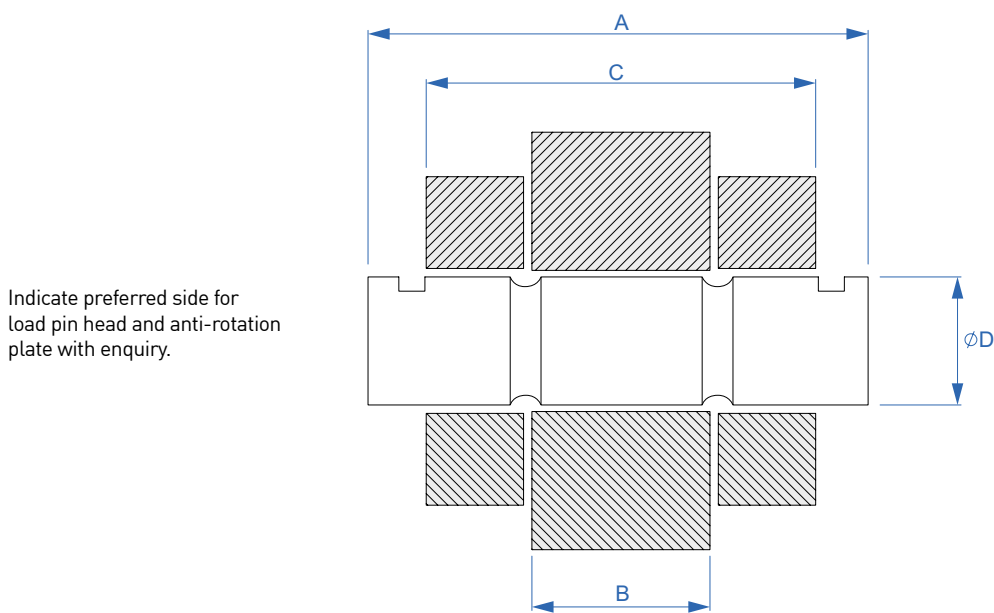
Typical Load Pin Diameters

Capacity (Tonne)	5	10	20	50	100	200	500	1000
Minimum Diameter (mm)	30	35	50	70	95	130	185	240

These diameters are provided as a guide only, we can produce larger and smaller sizes to suit individual requirements. Each Load Pin will be designed and manufactured to suit your application ensuring maximum performance and ease of installation.

Detailed below are the most critical dimensions.

When making an enquiry, it's important to provide these values (A, B, C and D) along with any additional requirements/restrictions due to the application such as pin length, head size etc.



Load Pin Locking

The load pin needs to be securely locked into position. This can be achieved by the following common methods:

- Single Anti-Rotation Plate.
 - Double Anti-Rotation Plate (both on 1 end or 1 on each end of pin).
 - Anti-Rotation Plate, Split Pin & Washer.
 - Anti-Rotation Plate and Lock Nut on threaded end of load pin.
 - Anti-Rotation Yoke (similar to shackles), Split Pin & Washer.
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