

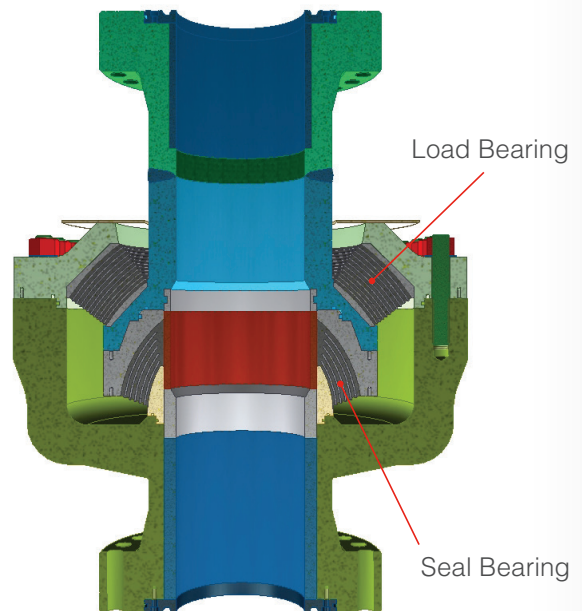
# LORD® Flexible Joints

## Featured Application:

### FLEXIBLE JOINTS FOR DRILLING RISERS

- Based on LORD drilling riser flexible joint patented designs from 1970s - 1980s
- Features unique dual bearing design
  - Seal bearing optimized for high-pressure containment and fluid resistance
  - Load bearing optimized for low rotational stiffness and fatigue strength
  - Load bearing functions as a redundant seal to improve reliability and capability over a single-bearing design
- High Pressure, High Temperature (HPHT) versions available (> 350°F)

Single-Acting Flexible Joint



SPECIFICATION	LORD HIGH TEMPERATURE DRILLING RISER FLEXIBLE JOINT
Operating Pressure, max	6,000 psi (41 MPa)
Hydrotest Pressure	9,000 psi (62 MPa)
Operating Temperature	250°F (120°C)
Maximum Temperature Range	14°F (-10°C) to 350°F (177°C)
Internal Diameter	18.75" (47.6 cm)
Maximum Cocking Angle	10°
Axial Load	3,500 kips (1560 tonne)
Axial Stiffness	10,000 kips/in (1750 kN/mm)
Cocking Stiffness*	40 ft-kip/deg (54 kN-m/deg)
Torsional Stiffness*	34 ft-kip/deg (46 kN-m/deg)

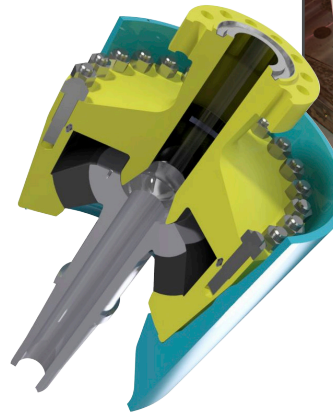
\*Stiffness predicted at 2 degrees of motion

## OTHER FLEXIBLE JOINT APPLICATIONS

- Tendon connector bearings
- Rotating latch connectors
- FPSO buoy turret bearings
- Steel catenary riser flexible joints

## WHY LORD?

- Advanced quality and process controls
- Innovative manufacturing processes enable low rotational stiffness
- Responsive, agile engineering and support team
- LORD flexible joints installed offshore over 30 years ago are still in service today



## ABOUT LORD CORPORATION

Founded in 1924, LORD Corporation is a diversified technology and manufacturing company commercializing highly reliable adhesives, coatings, vibration control and motion management devices and systems, and sensing technologies. Our dedicated teams collaborate with customers to provide innovative solutions, reduce risk and increase the value of their products.

**Employees:** More than 3,000 worldwide

**Operations:** LORD operates 19 manufacturing facilities and 10 R&D centers worldwide. Dedicated teams provide customers with easy access to products and technical expertise — whenever and wherever they are needed.

## CORE SCIENCES AND TECHNOLOGIES

Continuing the company's tradition of ingenuity and inventive spirit, we continue to develop technologies to meet the needs and challenges of an ever-evolving global marketplace.

- Surface Science
- Polymer Science
- Material Science
- Mechanical Design
- Dynamic Systems
- Control Systems
- Wireless Sensing
- Energy Harvesting
- Inertial/Orientation Technologies
- Displacement Sensing

## MORE INFORMATION

To learn more about LORD Oil & Gas products, visit [LORD.com/OilandGas](http://LORD.com/OilandGas). Contact Customer Support at +1 800 275 5673 or [OilandGas@lord.com](mailto:OilandGas@lord.com).