

POSEIDON 3090 Bearing Assembly

The POSEIDON 3090 Bearing Assembly is designed, manufactured, and certified to API 16RCD specifications and guidelines. This Bearing Assembly is a significant component in Beyond Energy's Rotating Control Device (RCD).

The Bearing Assembly creates a pressure-tight barrier between fluid returns and personnel on the rig floor, safely containing annular fluids under pressure while the drill pipe is rotating and diverting fluids below the rig floor to the returns system without interrupting drilling operations. This superior design ensures a reduced number of bearing and element changeouts.

Applications

- Managed Pressure Drilling
- Underbalanced Drilling
- Pressurized Mud Cap Drilling
- Containment of wellbore returns
- Geothermal wells
- Extended Reach Wells
- Offshore and Land Operations

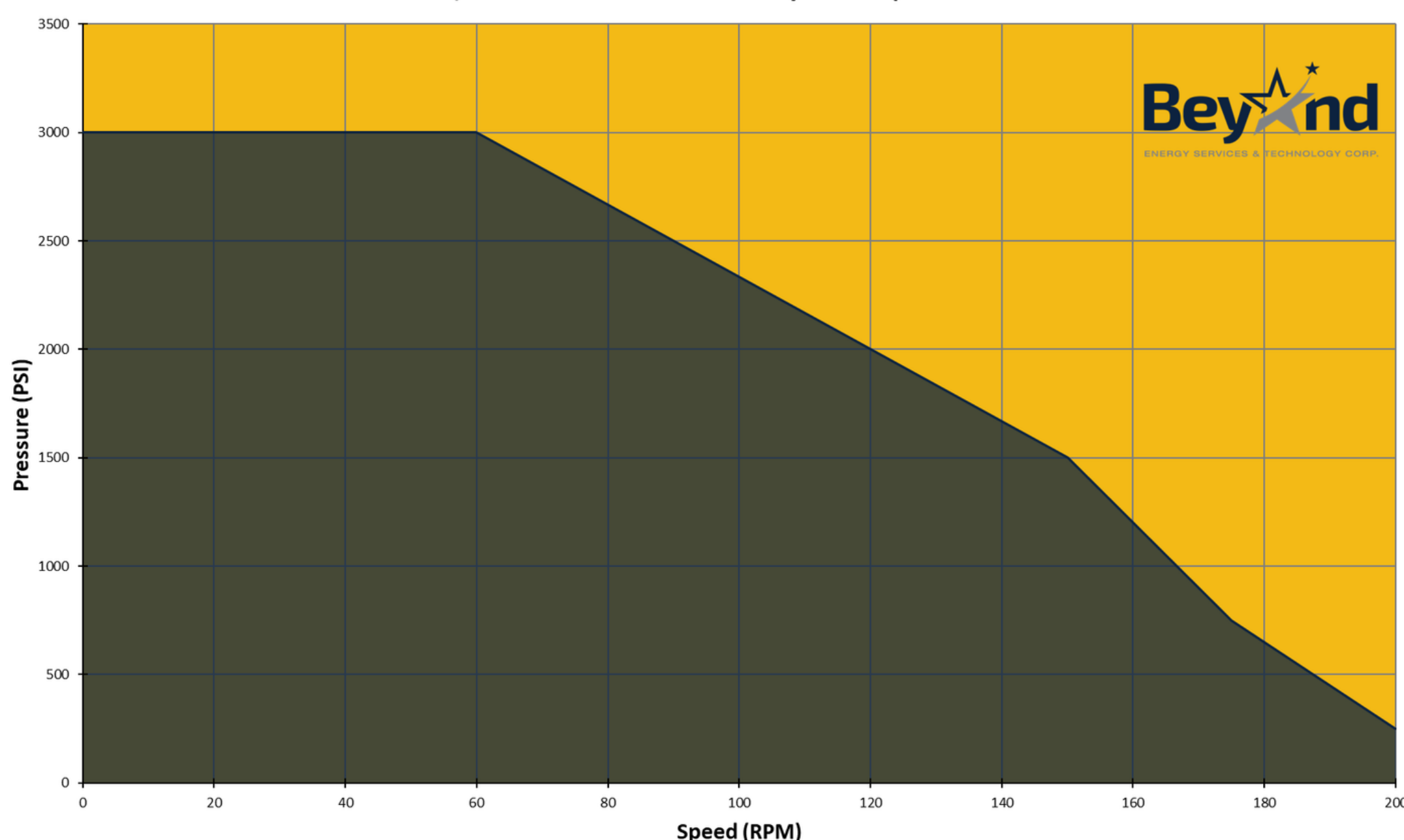
Features and Accessories

- 5,000 psi Static Rated
- 3,000 psi Dynamic Rated
- Max Rating of 200 rpm
- 9" Passthrough
- Dual Sealing Element Capable (DUSA)
- Drill Pipe Conveyed Running /Retrieving Tools
- Designed to have maintenance performed onsite
- Operates with ATLAS Class Sealing Elements for 4 1/2" - 6 5/8" drill pipe
- Optional use of TITAN Class Sealing Elements for 2 7/8" - 5 7/8" drill pipe
- NACE-MR0175 Compliant
- Manufactured in accordance with API Q1, ISO 9001:2015, and API 16RCD
- API 16RCD 0027 Monogrammed



POSEIDON 3090

ARES 3090/POSEIDON 3090 Maximum Dynamic Operational Limits



POSEIDON 3090 Bearing Assembly Specifications

Physical Data

Maximum Outer Diameter	482.1 mm	18.98 in.
Pass through Diameter	228.6 mm	9.0 in.
Weight	514 kg	1,133 lbs.
Height without ATLAS Class Sealing Element	815.3 mm	32.1 in.
Height with ATLAS Class Sealing Element	1,107.4 mm	43.6 in.
Internal Fluid		
Bearing Oil Type	Chevron Meropa Synthetic EP 320	
Bearing Oil Capacity	4.5 Litres	1.2 Gallons

Operating Parameters

Pressure Ratings

Static Pressure Rating	34,473 kPa	5,000 psi
Dynamic Pressure Rating @ 60 RPM	20,684 kPa	3,000 psi
Dynamic Pressure Rating @ 150 RPM	10,342 kPa	1,500 psi
Dynamic Pressure Rating @ 175 RPM	5,171 kPa	750 psi
Dynamic Pressure Rating @ 200 RPM	1,724 kPa	250 psi
Maximum RPM	200 RPM	
Maximum Temperature	85° C	185° F
Minimum Temperature	5° C	41° F
Stripping Speeds vs Pressure with ATLAS Elements		
ATLAS-HP Sealing Element	10 m/min. @ 7,000 kPa	33 ft/min. @ 1,015 psi
	20 m/min. @ 6,000 kPa	66 ft/min. @ 870 psi
	30 m/min. @ 5,000 kPa	100 ft/min. @ 725 psi
Maximum Stripping Speed	30 m/min.	100 ft/min.