## Introduction

The Hydraulic Impacting PDM uses a newly designed energy distribution system to increase drilling performance in areas where it is a challenge to maintain ROP. The tool combines the torque and rotational speed from a mud motor power section with a high-frequency axial oscillation directly in the BHA. The Hydraulic Impacting PDM allows for application-specific setups and is compatible with both fixed cutter and roller cone bits. This 100% mechanical system maintains contact with the formation and reduces weight stacking from friction on the BHA, all while amplifying the cutting interaction of the bit, enhancing its rock-failing properties



## Features & Benefits

- Increases ROP - Combines axial movement with rotational torque and speed to improve bit efficiency
- Reduces friction - High-frequency axial motion configured specifically for specific application
- Improves weight transfer - Oscillates the BHA up to 12 times/s
- Prevents bit damage - Activated with weight on bit, and disengages when off bottom
- Innovative engineering - Oil-seal allows for 100% flow to bit
- Compatible with most common power section configurations

## Specification

| OD (in) | 5 | 6-3/4 | 8 | 9-5/8 |
|---|---|---|---|---|
| Max WOB (lbs) | 30000 | 4400 | 55000 | 80000 |
| Weight (lbs) | 1350 | 2400 | 3900 | 6900 |
| Borehole size(in) | 6~6-7/8 | 7-7/8~9-1/2 | 9-1/2~12-1/4 | 12-1/4~16 |