

## Z450H

## Z-REAMER

The Z-Reamer is a compact block-type underreamer featuring advanced reaming capabilities. Due to its short size and hydraulic activation, it can be run either above MWD/LWD strings or below, as a near-bit/rathole reamer. This versatility makes it usable in a wide range of applications, providing reliability and performances even in challenging operations.

PDC cutter sizes can be matched to the bit for a wide range of formations and applications.

### Advantages

- Compact size, can be run directionally near-bit.
- Largest opening range among block-type PDC underreamers.
- Choice between fully hydraulic activation and ball drop.
- Fully pass-through internal diameter.
- Simple and reliable expanding/retracting mechanism (No Lock™).
- Long cutting blocks featuring dense cutting structures and long gauges.
- Joint bit and cutters design for matching cutting structures.
- Backreaming capability.

### Specifications

<b>Max. body OD (hardfaced)</b>	4 3/8"	111 mm
<b>Shoulder-to-shoulder length (A)</b>	26.38"	670 mm
<b>Bit-to-blade length (B)</b>	17.24"	438 mm
<b>Blade length (C)</b>	6.14"	156 mm
<b>Top thread</b>	2 7/8" REG Pin	
<b>Top shank OD</b>	3 7/8"	98 mm
<b>Bottom thread</b>	2 7/8" REG Box	
<b>Min. ID (operating)</b>	0.83"	21 mm
<b>Total weight (w. std. cutters)</b>	79 lbs	36 kg

### Operating Parameters

<b>Min. pilot hole size</b>	4 1/2"	114 mm
<b>Opening range</b>	4 3/4" - 6 3/8"	121 – 162 mm
<b>Collapsed diameter</b>	4 3/8"	111 mm
<b>Max flow rate</b>	250 GPM	950 lpm
<b>Min operating pressure</b>	150 PSI	10 bar
<b>Max operating temp. (std. seals)</b>	392 degF	200 degC

