

Product Report



8 1/2" DSR613M-G2

Design Features of this bit

Raptor® cutters - Thermostable PDC cutters featuring an unique layer of thermostable PDC that is 200% more heat tolerant and 400% more abrasion resistant than premium PDC. The thermostable layer dramatically improves abrasion resistance by maintaining a sharp, slow-wearing tough cutting edge. When a wearflat finally develops, the thermostable layer wears more slowly than the multimodal polycrystalline diamond behind it, forming two sharp lips that maintain ROP. This allows the bit to drill significantly further and faster than premium PDC cutter bits.

Design Specifications

Make up Length (ft): .80
 Shank Bore (ins): 2.283
 Shank Diam (ins): 6.750
 Connection std: Y
 Connection Size(ins): 4.500
 Connection Type: Api Reg Pin
 Make up Torque (ft-lbs): 20000

IADC Code92: M432
 Diameter:(ins) 8 1/2"

Body Material: Matrix

JSA(in²): 10.48
 Face Volume:(in³) 43.40
 Normalised Face vol: 47.10%

Blade Qty: 6
 Gauge Length:(ins) 3.000
 Gauge Geometry: Spiral-Trailing
 Profile: Short Taper - Medium Cone

Recommended Operating Parameters

Max Operating WOB (klbs): 35
 TFA Range (ins²): 0.519-1.549
 Max Flow (gpm): 750

In some applications this bit is run successfully beyond these parameters. Contact your NOV Downhole Representative for recommended operating parameters in your application. NOV Downhole reserves the right to revise these specifications, based on advances and improvements in technology.
This report is valid for 30 days from 16-May-2012

Cutting Structure

Type	Qty	Location	Diameter	Shape
Primary	42	FACE	13 mm	CYLINDER
Primary	9	GAGE	13 mm	CYLINDER
Impact Arrester	18	FACE	11 mm	CHISEL
Upream	3	BACK-ANGLE	13 mm	CYLINDER

Nozzles & Ports

Qty	Type	Size
8	C55	VARIABLE