



**Specs: 3 7/8" WS413TV(99mm)**

**IADC:S333**

**ID:WFN099S13401A**



**Design character:**

■ Special design of back-rake angles will decrease torque on bit, increase bit aggressiveness, improve efficiency of ROP.

■ Adopting CFD emulational technology to calculate to optimize PDC bit, then reduce possibility of heavy breaking and wearing of bit.

■ Special gauge design has more cutters placed on gauge to prolong life time of PDC bit in high abrasive formation, to avoid diameter shrinkage for gauge wearing.

■ Suit for well drilling in low compressive strength, even texture soft-medium rock formation. Such as wake shale, density marlstone, strong batt, wake sandstone, limestone, and soft gravel, etc.

Specialized in Medium-hard formation for water well, Excellent drilling speed & long life-span using

**Specifications:**

Blade Qty	4
Total Cutters	14
Primary Cutter Size	13.44mm
Assistant Cutter Size	Non
Gauge Cutter Size	13.44mm or PDC block
anti-quake ball size	Non
Nozzle Qty.	4
Crown length	93.5mm
Gauge length	28mm
Connetion Size	2 3/8REG
Make-up Torque	2.40-4.12kN.m
Assembly groove wID:th	60mm
Bit Weight	5.5kg

**Operating Parameters:**

Rotary speed	60-450RPM
Flow rate	5-15L/S
Bit Weight on bit	20-60KN