



**Scientific Drilling International's TiAN22 performance drilling motor is designed for the most extreme drilling environments in the industry.**

It has been engineered to run with the highest torque power sections, delivering ultimate reliability and durability in all sections of the well.

The TiAN22 also features a unique Ti-Flex™ Titanium Flex Shaft and bearing pack assembly to deliver optimal performance in a wide range of applications.

For more information on improving your drilling efficiency [while staying on target] contact your Scientific Drilling sales representative or visit:

<http://scientificdrilling.com/titan22>

## APPLICATIONS

- + Performance Drilling
- + Extended Reach Laterals
- + Factory Drilling in Shale Reservoirs
- + One Run Applications
- + Laminated Formations

## BENEFITS

- + Enhanced WOB capacity supporting increased and consistent ROP for superior drilling performance
- + Rugged driveline design for ultra-high power torque sections delivering maximized reliability
- + Full rotational capabilities in all sections of the well ensuring optimal wellbore integrity

## FEATURES

- + Innovative Ti-Flex™ Titanium Flex Shaft and bearing assembly, for increased durability and extended tool life

## GENERAL SPECIFICATIONS

<b>OD</b>	6.60 in. (168 mm)
<b>LENGTH</b>	33.8 ft (10.3 m)
<b>RECOMMENDED HOLE SIZES</b>	7.87 - 8.75 in. (200 - 222 mm)
<b>MAX BEND ANGLE</b>	2.38°

## BEARING SECTION

<b>BIT TO BEND LENGTH</b>	49 in. (1.2 m)
<b>BIT BOX CONNECTION</b>	4 1/2 in. API Reg. Box
<b>MAX WOB</b>	60,000 lbs (26,289 DaN)
<b>MAX OVERPULL FOR RETURN</b>	105,000 lbs (47,706 DaN)
<b>OVERPULL TO YIELD MOTOR</b>	210,000 lbs (93,413 DaN)
<b>MAX BIT PRESSURE DROP</b>	1,000 psi (6,894 kPa)
<b>OPT BIT PRESSURE DROP</b>	100 - 750 psi (690 - 5,171 kPa)
<b>LCM CAPABILITY</b>	40 lb nut plug

## POWER SECTION

<b>LOBE CONFIGURATION</b>	7/8
<b>STAGES</b>	3.3
<b>MAX DIFFERENTIAL PRESSURE</b>	740 psi (5,120 kPa)
<b>STALL DIFFERENTIAL PRESSURE</b>	1,110 psi (7,680 kPa)
<b>TORQUE AT MAX DIF PRESSURE</b>	14,110 ft-lbs (19,130 Nm)
<b>STALL TORQUE</b>	21,160 ft-lbs (28,690 Nm)
<b>FLOW RANGE</b>	300 - 600 gal/min (1,140 - 2,270 L/min)
<b>SPEED RANGE</b>	42 - 84 RPM
<b>SPEED RATIO</b>	0.14 rev/gal (0.04 rev/L)
<b>TORQUE SLOPE</b>	19.00 ft-lb/psi (3.74 Nm/kPa)

\*Specifications are subject to change without notice

