

DYNOMAX

REGULATOR™

THE CHALLENGE

Today's drilling applications are becoming more challenging with deeper, longer and more complex wells being drilled faster than ever before. One of the most common challenges is keeping the hole clean while drilling which is achieved with higher flow rates. These flow rates are limited by the power sections on the motors and quite often lead to premature failure due to over pumping.

THE ANSWER

Dynomax Drilling Tools Regulator™ is designed to continually regulate the flow rate through the motor to a pre-set limit. The extra fluid needed to help clean the hole is bypassed to the annulus for increased hole cleaning.

The Regulator™ employs a variable size exit orifice to actively moderate the flow that goes through the motor continuously – extra fluid is vented out the side. The exit orifice is controlled by a valve that measures the flow entering the motor.

When a motor over-spins as it is brought off-bottom, the exit orifices will open to let more fluid out the side and save the motor from being damaged. The valve mechanism responds in milliseconds so that flow to the motor is always regulated.

BENEFITS

- reduce stator failures due to over pumping
- utilize optimal performance of the power section in motors
- reduce washing out of components in the motor
- no need to drop balls or darts for activation
- motor stalls are still visible at surface
- applicable not only conventional drilling, but also coil tubing, and completion operations

DynoMax supplies leading performance drilling products engineered for the oil and gas industry. We provide high value products and services for vertical, directional and horizontal drilling operations worldwide.

Our product lines include Mud Motors, Shock Tools, Drilling Jars and Slide Reamers, which bear our industry-leading technologies backed by experience in the field—tools that are built for extended uses. Our QA/QC Program ensures that every tool meets or exceeds expectations in the field.



DYNOMAX
DRILLING
TOOLS INC.

AVAILABLE SIZES AND SPECIFICATIONS ON REVERSE SIDE

DYNOMAX REGULATOR™



SPECIFICATIONS



	2.125"	2.875"
TOOL OD	2.125 in (54 mm)	2.875 in (73 mm)
OVERALL LENGTH	43.5 in (111 mm)	35.0 in (89 mm)
PIN ID	1 in (25 mm)	1.13 in (29 mm)
MOTOR FLOW RATE SETTING RATE (MIN/MAX)	TBA	80 / 600 lpm (21/158 gpm)
MAX. PUMP RATE	100 gpm (0.4 m ³ /min)	315 gpm (1.2 m ³ /min)
MAX. OVERPULL	150,000 lbf (66,720 daN)	150,000 lbf (66,720 daN)
MAX. TORQUE	1,700 ft-lbs (2,305 Nm)	2,000 ft-lbs (2,712 Nm)
CONNECTION	1-1/2 MT	2-3/8 PAC

	4.750"	6.500"
TOOL OD	4.75" (121mm)	6.50" (165mm)
OVERALL LENGTH	43" (1.09m)	45" (1.14mm)
PIN ID	2.75" (70mm)	2.89" (73mm)
MOTOR FLOW RATE SETTING RATE (MIN/MAX)	100/465 gpm (0.38 / 1.75 m ³ /min)	200/800 gpm (0.75 / 3.00 m ³ /min)
MAX. PUMP RATE	630 gpm (2.4 m ³ /min)	920 gpm (3.5 m ³ /min)
MAX. OVERPULL	750,000 LBS (333,600 DaN)	1,500,000 lbf (667,200 daN)
MAX. TORQUE	11,000 ft-lbs (14,914 Nm)	24,000 ft-lbs (32,539 Nm)
CONNECTION	3-1/2 IF	4-1/2 IF

CORPORATE

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DynoMax Corporate Head Office
is proud to be
ISO 9001 Quality Certified.