

JOLT FRICTION REDUCTION TOOL

Rival Friction Reduction Tool (FRT) breaks friction in the drill string.

- As mud is pumped tool pulses to activate shock tool
- Optimized to rig's specific mud program (Flow & Mud Weight)
- High Frequency 1-2 lobe configuration (17-20 hz) maximizes friction reduction benefit while minimizing MWD interference

Payoffs: Easier slides, increased ROP, and extended reach in laterals

New: *JOLT FX™*

- The JOLT FX is the only on-demand friction reduction tool with 1/2 power section configuration. The JOLT FX ships in the off-position and is activated downhole.
- To activate, briefly raise flow rate to pre-determined target on or off-bottom.
- Instantaneous Activation. No ball or dart needed.
- Two JOLT FX tools can be run in tandem with the same or different flow activation targets.

Size	5 1/8"	6 1/2"	6 3/4"	7 1/8"
Overall Length	10.0 ft (3.0 m)	10.2 ft (3.1 m)	10.2 ft (3.1 m)	10.2 ft (3.1 m)
Weight	460 lbs (210 kg)	800 lbs (360 kg)	800 lbs (360 kg)	860 lbs (390 kg)
Max Flow Rate	350 gpm (1,300 l/min)	700 gpm (2,650 l/min)	700 gpm (2,650 l/min)	700 gpm (2,650 l/min)
Max Temperature	320°F (160°C)	320°F (160°C)	320°F (160°C)	320°F (160°C)
Operating Frequency	15 Hz @ 300 gpm 15 Hz @ 1,130 l/min	17 Hz @ 600 gpm 17 Hz @ 2,270 l/min	17 Hz @ 600 gpm 17 Hz @ 2,270 l/min	17 Hz @ 600 gpm 17 Hz @ 2,270 l/min
Operating Avg Pressure	500 - 600 psi (3,450 - 4,150 kPa)	500 - 625 psi (3,450 - 4,300 kPa)	500 - 625 psi (3,450 - 4,300 kPa)	500 - 625 psi (3,450 - 4,300 kPa)
Max Pull (POOH 90%)	515,000 lbs (230,000 daN)	900,000 lbs (400,000 daN)	1,150,000 lbs (510,000 daN)	1,350,000 lbs (600,000 daN)
Max Pull (Re-Run 65%)	370,000 lbs (165,000 daN)	650,000 lbs (290,000 daN)	840,000 lbs (374,000 daN)	1,000,000 lbs (445,000 daN)
Connections	XT39, 3-1/2 IF & Premium Connections (DS, HT, etc.)	4-1/2 IF 4-1/2 XH DS50	4-1/2 IF 4-1/2 XH DS50	4-1/2 IF & Premium Connections (XT, DS, HT, etc.)

