WZL M9

Zero Bypass Oil Sealed RSS Motor

OPTIMIZED FLOW FOR RSS APPLICATIONS

Adding a power section to your rotary steerable system (RSS) tool can provide significant RPM and torque gains with precise control. When it comes to RSS applications, WZL offers a number of drilling motor solutions including the M9 zero bypass motor.



FEATURES & BENEFITS

Optimized flow for optimal lubrication and control

Much like our M42 mud lubricated motor, the M9 zero-bypass oil sealed bearing assembly was designed specifically with RSS applications in mind.

The M9 design incorporates a secondary oil sealed isolation chamber that separates bore pressure from annular pressure. This allows the main bearing assembly oil seal chamber to be balanced with annular pressure, greatly increasing downhole reliability.

Meanwhile, 100% of the drilling fluid that flows through the M9 is sent through the drill bit without loss, providing maximized bit hydraulics and cleaning.

Restricted flow motors for RSS applications

If the M9 zero bypass motor does not fit your RSS needs, consider our oil sealed drilling motors. The restricted bypass feature of our M5 and M6 oil sealed drilling motors gives you full control over the amount of fluid flowing to your rotary steerable system and bit.

Bypassed mud flow can be limited with the use of specially designed jetted plugs, which reduce the restricted flow area of the piston housing ports. This allows optimal fluid to flow to the RSS and prevents wash within the assembly due to increased flow velocity.

SECONDARY OIL SEALED ISOLATION CHAMBER

PISTON HOUSING PORTS WITH JETTED PLUGS

SPECIFICATIONS – IMPERIAL

					OPERATING CAPACITY		STATIC CAPACITY		
Power section (in)	Nominal BA OD (in)	Bit box to stator (ft)	Hole size (in)	Standard bit box thread (API)	Max WOB (lb)	Max bit overpull (lb)	Max WOB to re-run (lb)	Max bit overpull to re-run (lb)	Absolute body overpull (lb)
4 ¾	5 ½	9.6	5 ⅞ – 7 ⅞	3.5 IF Pin	54,000	25,000	222,000	108,000	436,000
5	5 ½	9.6	5 ⅞ – 7 ⅞	3.5 IF Pin	54,000	25,000	222,000	108,000	481,000

Specifications are based on as-new condition and are subject to change without notice. Motor assemblies are available in a multitude of speeds and configurations.

SPECIFICATIONS – METRIC

					OPERATING CAPACITY		STATIC CAPACITY		
Power section (mm)	Nominal BA OD (mm)	Bit box to stator (m)	Hole size (mm)	Standard bit box thread (API)	Max WOB (daN)	Max bit overpull (daN)	Max WOB to re-run (daN)	Max bit overpull to re-run (daN)	Absolute body overpull (daN)
121	140	2.9	149 – 200	3.5 IF Pin	24,000	11,100	98,700	48,000	194,000
127	140	2.9	149 – 200	3.5 IF Pin	24,000	11,100	98,700	48,000	214,000

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