Baker Hughes

8-in. Ultra XL and XL-HP

Equipped with high performance elastomer

Tool Specifications		
Length	34.8 ft	10.65 m
Weight range	4,080-4,480 lb	1,850-2,030 kg
Bit size range	9⅞ in. – 17½ in.	
Top connection (optional)	6⅝-in. API Reg. box (6⅝-in. H90)	
Bit connection (optional)	6⅝-in. API Reg. box	
Max. slick OD at wear pad	8.5 in.	216.5 mm
Max. slick OD at wear ring	8.7 in.	220.5 mm
Deflection angle range of AKO	0° – 2.5°	

Power Section		
Lobe configuration	5/6	
Flow Rate	395–900 gpm	1,500–3,400 lpm
Speed	85–195 rpm	
Speed to flow ratio	0.22 rev/gal	0.06 rev/l
Rotor nozzle	Yes	
Max. flow with nozzle	990 gpm	3,750 lpm
No load pressure drop	305 psi	21 bar
Temperature		
with standard or high performance elastomer	265°F	130°C
with high temperature elastomer	320°F	160°C

Performance Data		
Standard or high temperature elastomer		
Operational limits		
Differential pressure	870 psi	60 bar
Torque	7,700 ft-lb	10,500 Nm
Power output	285 hp	215 kW
Maximum operational		
Differential pressure	1,400 psi	96 bar
Torque	12,500 ft-lb	16,500 Nm
High performance elastomer		
Operational limits		
Differential pressure	1,300 psi	90 bar
Torque	11,500 ft-lb	15,500 Nm
Power output	430 hp	320 kW
Maximum operational		
Differential pressure	1,750 psi	120 bar
Torque	15,500 ft-lb	21,000 Nm

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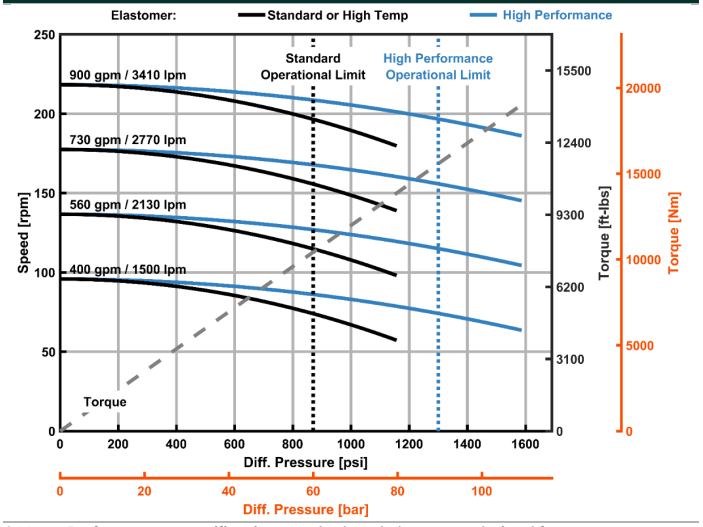
Bearing Section Operating Specifications and Limits

Ball Bearings

WOB and backreaming weight*	67.5 klb	300 kN
Re-run overpull and set-down weight*	135 klb	600 kN
Ultimate overpull to failure*	1,150 klb	5,200 kN

* While mtoor is not operating

Performance Charts



* Motor Performance specifications and related charts are derived from dynamometer testing performed with water at 68ºF (20ºC) as the working fluid. Motor power sections were assembled for maximum performance and longevity in the testing environment on surface and are presented for comparative analysis and operational calculations. Motor performance specifications subject to change without notice. Actual downhole operational performance may vary due to temperature, fluid type and rotor/stator fit adjustments. If the motors, that have been assembled to compensate for downhole temperature effects, are surface tested, they may show reduced performance on surface and at low temperatures.

Build Up Rate Chart

Hole Size		Slick			Partial			Full		
		AKO	BUR	RPM	AKO	BUR	RPM	AKO	BUR	RPM
9⅝ in.	A1	0.4	0.5	128	0.25	1.5	137	0.25	0.7	134
	A2	1.6	7.2	60	1.7	8.1	60	1.4	5.7	60
	A3	1.8	8.3	30	1.8	8.6	30			
	A4	2.1	10.0	0	2.1	10.0	0			
10¾ in.	A1	0.6	0.4	122	0.3	1.8	134	0.3	0.9	135
	A2	1.9	7.6	60	1.7	7.9	60	1.8	7.4	60
	A3	2.1	8.7	30						
	A4	2.5	10.8	0	2.5	11.3	0	1.9	7.8	0
12¼ in.	A1	N/A			0.25	2.4	137	0.3	0.9	134
	A2				1.7	9.0	60	1.7	6.9	60
	A3				1.9	9.9	30	2	8.2	30
	A4				2.5	12.6	0	2.5	10.4	0

A1: Minimum building AKO setting
A2: Recommended maximum rotable AKO setting
A3: Absolute maximum rotable AKO setting
A4: Absolute maximum oriented setting