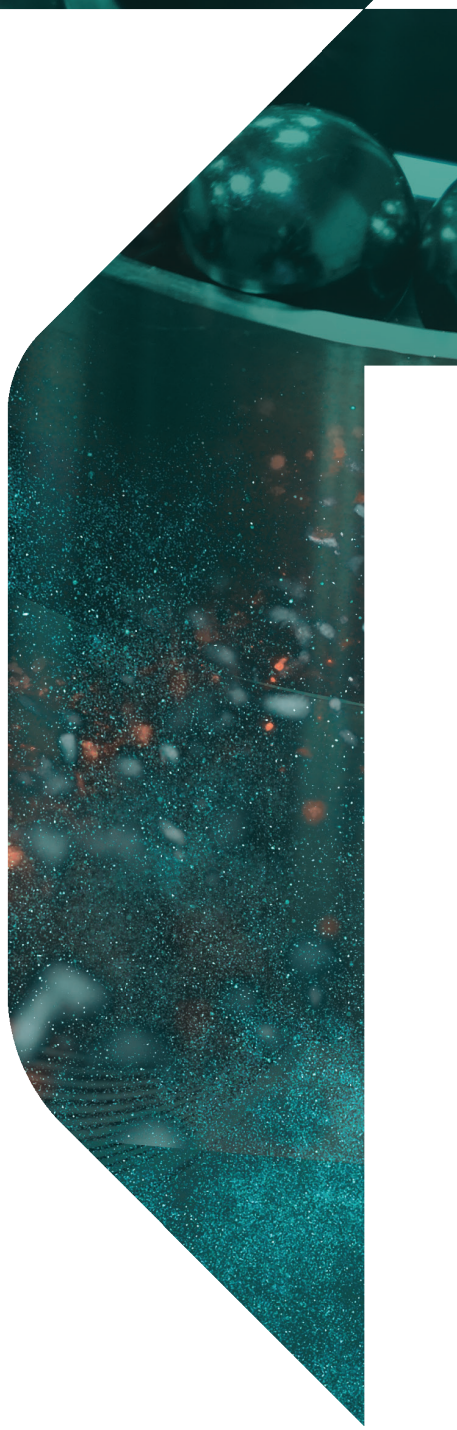
Esaar™

In drilling, every trip counts. Every hour of uptime, every section drilled, and every well delivered more efficiently translates into tangible value. That's why TAQA developed Esaar™ motors—a new generation of drilling motors engineered to survive the toughest environments, optimize performance, and reduce the cost of service delivery.

Backed by TAQA's 50+ years of downhole engineering expertise, Esaar motors combine reliability, adaptability, and serviceability into one solution that empowers operators and contractors alike.

With Esaar, TAQA delivers a clear promise: motors that go the distance, keep you drilling longer, and lower your overall cost per foot.



FEATURES AND BENEFITS

- **Built for Harsh Conditions:** Custom mud-lubricated bearing packs thrive under high torque and corrosive mud systems, extending tool life and improving operational reliability.
- **Enhanced Torque and Load Transfer:** With larger OD internals and optimized rotor-stator fits, Esaar motors deliver superior torque and penetration rates even in the longest laterals.
- **Operational Flexibility:** Compatible with any power section provider, Esaar motors are configurable to match your existing fleet strategy.
- **Service-Friendly Design**: Bearings and housings are optimized for easy shop servicing and even wellsite adjustments, boosting asset velocity and reducing turnaround.
- **Broad Range of Applications:** Proven in verticals, curves, laterals, geothermal wells, and future-ready RSS-specific runs.
- **Multiple Sizes and Configurations:** From 4.75" to 11.75", Esaar motors can be stabilized, non-stabilized, straight, or adjustable—built for purpose, not compromise.
- **RSS-Optimized Evolution:** The upcoming Esaar^{RSS} delivers reliable, undiminished hydraulic performance for RSS systems—ensuring your directional drilling operations stay efficient and on target.

TAQA

Esaar™
TECH SPEC SHEET

The Esaar™, TAQA's mud lubricated bearing mud motor utilizes custom radial and thrust bearings to assist operators to drill longer in the harshest conditions. The bearings are cooled and lubricated by the drilling fluid and these are designed to ensure reliable load transfers from the BHA to the bit. TAQA motors are built to handle all drilling conditions from corrosive muds to high temperatures.

SPECIFICATIONS

IMPERIAL

Model	OD (in)	Hole Size (in)	Length (ft)	Bit to Bend (in)	Max Static WOB (lbs) *1,2	Max Allowable Pull Static (lbs)	Pull to Yield Motor (lbs)	Max Flow (gpm) *3	Maximum Torque (ft-lbs) *4
500	5.000	5 7/8 - 7 7/8	32.00	57	71,000	140,000	520,000	400	7,000
675	6.750	8 3/8 - 9 7/8	30.00	77	87,000	375,000	620,000	700	18,000
800	8.000	9 7/8 - 12 1/4	27.00	90	140,000	600,000	1,000,000	1,000	21,500
962	9.625	12 1/4 - 17 1/2	32.00	97	179,000	900,000	1,400,000	1,400	33,500
1175	11.750	16 - 36	34.00	114	230,000	1,000,000	1,700,000	1,750	60,000

METRIC

Model	OD (mm)	Hole Size (mm)	Length (m)	Bit to Bend (cm)	Max Static WOB (daN) *1,2	Max Allowable Pull Static (daN)	Pull to Yield Motor (daN)	Max Flow (lpm) *3	Maximum Torque (N-m) *4
500	127	149 - 200	9.75	145	31,582	62,275	231,308	1,514	9,491
675	171	212 - 250	9.14	196	38,700	166,808	275,790	2,650	24,405
800	203	250 - 311	8.23	229	62,275	266,893	444,822	3,785	29,150
962	244	311 - 444	9.75	246	79,623	400,340	622,751	5,300	45,420
1175	298	406 - 914	10.36	290	102,309	444,822	756,198	6,624	81,349

*1. Listed value is the maximum static WOB at 0 rpm and 0 psi differential pressure.

*2. Variable but is limited to a maximum of 50% of the static WOB. with a WOB max reduction to 25% of Static WOB number depending on hole conditions ,angle etc . When dealing with out-of-specification operations these numbers further derated (i.e. hard stall/improper use of stall recovery procedure, reaming/backreaming, stuck pipe scenarios and well control situations).

*3. Refer to maximum flow rate of the applicable power section to avoid damage to stator.

*4. Maximum torque is limited by the output of the applicable power section whichever is lower