

DynaForce TT

High-performance thru-tubing motor

APPLICATIONS

- Coiled tubing and thru-tubing equipment
- Frac and bridge plug milling, scale, cement, barium, etc.
- Cleanout operations with venturi jet baskets
- Thru-tubing underreaming and sidetracking

BENEFITS

- Saves time thorough a reduced number of connections
- Can perform multiple jobs between maintenance intervals

FEATURES

- Highest power output in the industry
- Strong torque generation throughout the full flow range
- Fully designed, engineered, manufactured, assembled, and supported in-house
- Premium materials maximize strength and performance
- Rotor catch available on sizes 2.88 in and above

Schlumberger DynaForce TT* high-performance thru-tubing motors provide the highest mechanical power output of any conventional thru-tubing motor in the industry for any given model.

Power Section

The power section of the DynaForce TT motor features a hard, high-performance NBR-HR elastomer that can sustain up to a 350 degF working temperature. The extensively engineered profile design of the power sections, combined with countless hours of testing and validation, maximize efficiency and the power ratio to provide the industry's highest mechanical HP of any conventional motor. The DynaForce TT motor can be used in a nitrogen mixture of up to 60% gas.

This high-performance power section outputs power consistently throughout the life of the stator and drastically reduces debonding-related issues by using specifically designed and formulated bonding agents.

Lower End

The lower end of the DynaForce TT motor was designed in a modular fashion to accommodate a variety of power sections for any given size (OD), enabling the customer to switch only the power section to dramatically reduce final operational costs. In addition, the low maintenance design of the mud-lubricated lower end was designed to work seamlessly with all power sections. The trust bearing pack offers the choice between standard ball bearings or our patented diamond bearings for even more longevity.

The lower end features high-flow internals for improved annular velocity while displacing milling solids. It has a low-stress driveshaft catch and optimized connections for extreme torque output. It has a one-piece transmission with no moving parts, which enables it to withstand extreme torque.

Fits

Schlumberger offers a variety of fits, with a choice of 2–3 stators and 2–3 rotors per model, for optimal performance at temperatures from 80 degF to 350 degF. If higher temperature resistance is needed, we offer other elastomer options to fit your needs.

Specifications

Motor Size, in	Lobes	Stages	Overall Length, ft	Weight, lbm	Flow Rate, galUS/min	Speed (rev/gal)	Max. Diff. Pressure, psi	Operation Torque, ft.lbf	Stall Torque, ft.lbf	Power, hp	Max.Temp., degF	WOB Capacity, lbf	Overpull Capacity, lbf
1 1/16	5/6	2.3	9.0	50	20–42	9.25	580	160	240	12	350	2,500	57,850
	5/6	4.0	8.8	47	20–42	16.31	1,000	170	250	22	350	2,500	57,850
2 1/8	5/6	4.0	10.0	83	30–65	9.57	1,000	270	410	32	350	5,000	94,890
	5/6	4.9	11.1	97	30–65	9.57	1,230	340	510	41	350	5,000	94,890
2 3/8	5/6	4.0	10.5	95	40–80	7.18	1,000	360	530	40	300	5,000	94,890
2 7/8	7/8	3.5	12.2	179	60–120	3.38	880	570	850	52	350	12,500	150,960
	5/6	3.5	13.8	198	60–120	4.00	880	610	910	48	350	12,500	150,960
	5/6	4.7	13.8	450	60–145	3.73	1,175	820	1,250	64	350	12,500	150,960
	5/6	5.0	15.3	202	90–170	2.91	1,250	1,120	1,670	96	350	12,500	150,960
	5/6	7.0	15.3	202	60–120	5.74	1,750	850	1,300	112	350	12,500	150,960
3 1/8	7/8	3.0	15.8	395	80–160	1.69	750	1,120	1,670	60	300	14,500	208,150
	7/8	3.3	16.6	375	120–210	1.49	830	1,510	2,260	92	350	14,500	208,150
3 3/8	7/8	3.0	17.3	398	80–160	1.39	680	1,260	1,890	55	300	14,500	208,150
	7/8	4.7	18.2	405	120–210	1.85	1,060	1,520	2,280	113	300	14,500	208,150

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