



HDD Horizontal Directional Drilling Motor

The Wenzel Downhole Tools HDD Motor is designed to offer reliable performance for both straight and directional drilling within the oil and gas industry, as well as for civil construction applications requiring trenchless horizontal directional drilling (HDD). Known for their operational longevity and efficiency, Wenzel tools are versatile to a wide range of drilling applications for the energy and construction industries.

Wenzel Drilling Motors continue to offer the highest level of quality to customers through superior designs, materials, and manufacturing processes. Optimized design features and the pursuit of technological advancements mean Wenzel tools offer exceptional performance.

Features and Benefits

- ▶ High allowable WOB (weight on bit) and load capacities.
- ▶ Equipped with 2° Fixed Bend Assembly.
- ▶ Features the HDD Driveline for shortened overall length.
- ▶ Inhouse manufactured components adhere to Wenzel's high standard of premium materials and quality production.
- ▶ Patented design.

Wenzel HDD Motor Specifications for US Region

IMPERIAL												
Nominal OD (inch)	Model	Bit Box to Fixed Bend (inch)	Overall Length (ft)	Hole Size (inch)	Max WOB* (lbs)	Max Bit Overpull* (lbs)	Absolute Body Overpull** (lbs)	Flow Range (GPM)	Speed Range (RPM)	Max Diff. Pressure (psi)	Torque at Max Diff. Pressure (ft.lbs)	Max Power (HP)
3 1/2	7838	30	16.2	4 1/2 – 5 7/8	18 500	18 500	212 000	75-150	120-235	950	1 575	60
4 3/4	7838	50	22.9	5 7/8 – 7 7/8	33 000	31 000	436 000	150-250	80-140	860	4 450	105
4 3/4	7850	50	23.5	5 7/8 – 7 7/8	33 000	31 000	436 000	100-275	65-180	1 130	4 460	145
6 1/2	7840	56	21.2	7 7/8 – 9 7/8	66 000	51 000	550 000	300-500	105-180	900	6 200	200
7 3/4	7830	67	23.5	9 5/8 – 12 1/4	88 000	73 000	638 000	400-900	65-150	680	11 200	295

METRIC												
Nominal OD (mm)	Model	Bit Box to Fixed Bend (m)	Overall Length (m)	Hole Size (mm)	Max WOB* (daN)	Max Bit Overpull* (daN)	Absolute Body Overpull** (daN)	Flow Range (lpm)	Speed Range (RPM)	Max Diff. Pressure (kPa)	Torque at Max Diff. Pressure (N.m)	Max Power (kW)
89	7838	0.76	4.95	114 – 149	8 200	8 200	94 000	285-570	120-235	6 550	2 100	45
121	7838	1.27	6.99	149 – 200	14 700	13 800	194 000	570-950	80-140	5 900	6 030	80
121	7850	1.27	7.19	149 – 200	14 700	13 800	194 000	380-1040	65-180	7 760	6 050	110
165	7840	1.42	6.46	200 – 251	29 500	23 000	245 000	1140-1890	105-180	6 210	8 410	150
197	7830	1.70	7.16	244 – 311	39 000	32 000	284 000	1510-3410	65-150	4 650	15 190	220

Specifications for US Region only

*Operating Capacity

**Static Capacity

Specifications are based on as new condition and are subject to change without notice