



Millennium Oil Sealed Drilling Motor

The Wenzel Downhole Tools Millennium Oil Sealed Drilling Motor is designed with patented technology for use with the latest developments in high torque - high speed power sections. Delivering superior performance and reliability, it provides users with an efficient tool for their drilling applications.

The Millennium Drilling Motors continue to offer the highest level of quality to customers through superior designs, materials, and manufacturing processes.

Features and Benefits

- ▶ High allowable WOB (weight on bit) and load capacities.
- ▶ Equipped with 0 - 3° Adjustable Bend Assembly.
- ▶ Option for shorter bit-to-bend Fixed Bend Assembly.
- ▶ Features the Maxi-Torque Driveline for use with high torque – high speed power sections.
- ▶ Inhouse manufactured components adhere to Wenzel's high standard of premium materials and quality production.
- ▶ Patented design.

Millennium Oil Sealed Drilling Motor Specifications

| IMPERIAL | | | | | | | | | |
|-------------------|------------------------|------------------------------|------------------|-------------------------------|--------------------|-------------------------|---------------------------|------------------------------------|--------------------------------|
| Nominal OD (inch) | Bit Box to Bend (inch) | Bit Box to Fixed Bend (inch) | Hole Size (inch) | Standard Bit Box Thread (API) | Max WOB* (lbs) | Max Bit Overpull* (lbs) | Max WOB to Re-run** (lbs) | Max Bit Overpull to Re-run** (lbs) | Absolute Body Overpull** (lbs) |
| 2 7/8 | 33 | N/A | 3 1/2 - 4 1/2 | 2 3/8 REG | 11 500 | 11 500 | 40 900 | 40 900 | 158 000 |
| 3 1/8 | 33 | N/A | 3 3/4 - 4 1/2 | 2 3/8 REG | 11 500 | 11 500 | 40 900 | 40 900 | 167 000 |
| 3 1/2 | 37 | 30 | 4 1/4 - 5 7/8 | 2 7/8 REG | 18 500 | 18 500 | 68 400 | 68 400 | 212 000 |
| 4 3/4 | 61 | 50 | 5 7/8 - 7 7/8 | 3 1/2 REG | 54 000 (33 000) | 31 000 | 222 000 (133 000) | 138 000 | 436 000 |
| 5 | 61 | 50 | 5 7/8 - 7 7/8 | 3 1/2 REG | 54 000 (33 000) | 31 000 | 222 000 (133 000) | 138 000 | 481 000 |
| 6 1/2 | 67 | 56 | 7 7/8 - 9 7/8 | 4 1/2 REG | 91 000 (66 000) | 51 000 | 396 000 (261 000) | 210 000 | 550 000 |
| 6 3/4 | 67 | 56 | 8 1/2 - 9 7/8 | 4 1/2 REG | 91 000 (66 000) | 51 000 | 396 000 (261 000) | 210 000 | 597 000 |
| 7 3/4 | 80 | 67 | 9 5/8 - 12 1/4 | 6 5/8 REG | 88 000 | 73 000 | 365 000 | 318 000 | 638 000 |
| 8 | 80 | 67 | 9 5/8 - 12 1/4 | 6 5/8 REG | 105 000 | 73 000 | 419 000 | 318 000 | 845 000 |
| 9 5/8 | 112 | 105 | 12 1/4 - 17 1/2 | 6 5/8 REG | 190 000 | 82 000 | 907 000 | 416 000 | 1 256 000 |
| 11 1/4 | 122 | 108 | 14 3/4 - 26 | 7 5/8 REG | 225 000 | 119 000 | 1 118 000 | 610 000 | 1 520 000 |

| METRIC | | | | | | | | | |
|-----------------|---------------------|---------------------------|----------------|-------------------------------|--------------------|-------------------------|---------------------------|------------------------------------|--------------------------------|
| Nominal OD (mm) | Bit Box to Bend (m) | Bit Box to Fixed Bend (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) |
| 73 | 0.84 | N/A | 89 - 114 | 2 3/8 REG | 5 100 | 5 100 | 18 200 | 18 200 | 70 000 |
| 79 | 0.84 | N/A | 95 - 114 | 2 3/8 REG | 5 100 | 5 100 | 18 200 | 18 200 | 74 000 |
| 89 | 0.94 | 0.76 | 108 - 149 | 2 7/8 REG | 8 200 | 8 200 | 30 400 | 30 400 | 94 000 |
| 121 | 1.55 | 1.27 | 149 - 200 | 3 1/2 REG | 24 000 (14 700) | 13 800 | 99 000 (59 000) | 61 400 | 194 000 |
| 127 | 1.55 | 1.27 | 149 - 200 | 3 1/2 REG | 24 000 (14 700) | 13 800 | 99 000 (59 000) | 61 400 | 214 000 |
| 165 | 1.70 | 1.42 | 200 - 251 | 4 1/2 REG | 40 500 (29 500) | 23 000 | 176 000 (116 000) | 93 000 | 245 000 |
| 171 | 1.70 | 1.42 | 216 - 251 | 4 1/2 REG | 40 500 (29 500) | 23 000 | 176 000 (116 000) | 93 000 | 266 000 |
| 197 | 2.03 | 1.70 | 244 - 311 | 6 5/8 REG | 39 000 | 32 000 | 162 000 | 141 000 | 284 000 |
| 203 | 2.03 | 1.70 | 244 - 311 | 6 5/8 REG | 47 000 | 32 000 | 186 000 | 141 000 | 376 000 |
| 244 | 2.84 | 2.67 | 311 - 445 | 6 5/8 REG | 85 000 | 36 000 | 403 000 | 185 000 | 559 000 |
| 286 | 3.10 | 2.74 | 375 - 660 | 7 5/8 REG | 100 000 | 53 000 | 497 000 | 271 000 | 676 000 |

*Operating Capacity

**Static Capacity

(WOB Capacity) in brackets refers to the single On Bottom Bearing option.

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