

MM4 | Oil Sealed Bearing Drilling Motor

The MM4 oil-sealed bearing mud motor utilizes a special rotary shaft seal designed specifically for drilling motor use that isolates the drilling fluid from the oil lubricated bearing at all times. The bearing assembly is designed to ensure reliable load transfers from the BHA to the bit. Cougar’s motors are built to handle all drilling conditions from corrosive muds to high temperatures.

SPECIFICATIONS

Imperial

OD (in)	Lobes	Stages	Length (ft)	Distance to Stab (in)	Bit to Bend (in)	Weight (lb)	Speed Ratio (rev/gal)	Max Flow (gpm)	Max Torque (ft-lb)
3 1/8	7/8	3.0	16.25	N/A	47	287	1.710	140	650
3 3/4	4/5	3.5	19.08	N/A	48	425	1.550	160	960
3 3/4	7/8	2.3	19.41	N/A	48	428	0.768	160	1,110
4 3/4	4/5	3.5	19.66	18	62	819	1.020	250	1,450
4 3/4	5/6	3.4 ERT*	26.33	18	62	1,078	0.506	300	4,520
4 3/4	5/6	8.3	30.91	18	62	1,400	1.000	275	2,997
4 3/4	7/8	2.0	25.75	18	62	1,025	0.438	250	2,190
4 3/4	7/8	2.2	20.41	18	62	1,181	0.522	140	1,560
4 3/4	7/8	2.6	28.83	18	62	1,164	0.263	300	3,500
4 3/4	7/8	3.8	26.33	18	62	1,078	0.521	250	2,960
4 3/4	7/8	4.5	29.83	18	62	1,164	0.463	300	3,500
4 3/4	7/8	5.0	27.25	18	62	1,300	0.630	275	2,980
6 1/2	4/5	4.8	25.33	22	76	2,269	0.500	600	3,250
6 1/2	4/5	7.0	25.33	22	76	1,911	0.497	600	6,060
6 1/2	6/7	3.1 ERT*	23.16	22	76	1,884	0.370	650	4,827
6 1/2	6/7	5.0	29.16	22	76	2,087	0.292	600	6,230
6 1/2	7/8	2.9	30.83	22	76	2,442	0.170	500	6,400
6 1/2	7/8	3.0	22.91	22	76	1,835	0.283	600	6,190
6 1/2	7/8	5.0	28.33	22	76	2,310	0.288	600	6,980
6 1/2	7/8	5.7	34.16	22	76	2,326	0.242	600	9,150
6 3/4	4/5	4.8	25.33	22	76	2,269	0.500	600	3,250
6 3/4	4/5	7.0	25.33	22	76	1,911	0.497	600	9,080
6 3/4	5/6	5.3 ERT*	23.16	22	76	1,884	0.304	600	11,618
6 3/4	6/7	3.1 ERT*	23.16	22	76	1,884	0.370	650	4,827
6 3/4	6/7	5.0	29.16	22	76	2,087	0.292	600	6,230
6 3/4	7/8	2.9	30.83	22	76	2,442	0.170	500	6,400
6 3/4	7/8	3.0	22.91	22	76	1,835	0.283	600	4,190
6 3/4	7/8	5.0	28.33	22	76	2,310	0.288	600	10,460
6 3/4	7/8	5.7	34.16	22	76	2,326	0.242	600	9,150
8	4/5	5.3	27.50	28	87	2,859	0.253	900	8,880
8	5/6	3.3 ERT*	27.50	28	87	2,859	0.190	900	11,670
8	5/6	4.5 ERT*	27.50	28	87	2,859	0.190	900	15,762
8	7/8	3.4	27.50	28	87	2,859	0.166	900	14,300
9 5/8	5/6	5.0	33.50	28	92	5,365	0.138	1,200	16,120
9 5/8	6/7	5.0	31.50	28	92	5,144	0.127	1,200	15,230
9 5/8	7/8	3.9	38.33	28	95	6,301	0.068	1,200	22,500
11 3/4	5/6	4.6	33.83	22.7	95.1	8,160	0.089	1,800	21,800
11 3/4	5/6	7.2	34.66	22.7	95.1	8,300	0.035	1,200	32,090

- HR premium elastomer available
- Bend angles from 0 - 3 degrees, fixed or adjustable

*ERT is a trademark of NOV and it describes all even wall products for various manufacturers

MAX TEMPERATURE
 Standard Seals: 250°F / 121°C
 High Temp Seals: 405°F / 207°C
 Geo Seals: 405°F + / 207°C +

