

Calzoni Motors

The outstanding performance of this robust product is the result of our original, patented design. Used widely in the mining, off shore drilling, oil field, and marine winch markets; the Parker Calzoni motor is produced in sizes from 32cc up to 6 gallons per revolution. The efficiency of our design allows

for a smaller installed product for the same displacement vs our competitors. Since there are no internal connecting rods we have greatly reduced frictional drag as well as most thrust loading. By creating a static balance on the shaft we have extended the expected lifetime as well.

MR-MRE Series-Fixed Displacement



- 5 piston design
- Wide range of displacement
- Starting torque from 90-95% theoretical
- Total efficiency up to 96%
- Resistance to thermal shocks $\Delta T=176^{\circ}F$
- Speed feedback accessories optional

Frame size MR/E*	33	57	73	93	110	125	160	190	200	250	300
Displacement (cm ³ /rev) (in ³ /rev)	32.1 2.0	56.4 3.4	72.6 4.4	92.6 5.7	109.0 6.7	124.7 7.6	159.7 9.8	191.6 11.7	199.2 12.2	250.9 15.3	304.4 18.6
Max pressure (Bar) (PSI)	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350	300 4350
Max speed (RPM)	1400	1300	1200	1150	1100	900	900	850	800	800	750
Frame size MR/E*	330*	350	450	500*	600	700	800*	1100	1400*	1600	1800
Displacement (cm ³ /rev) (in ³ /rev)	332.4 20.1	349.5 21.3	451.6 27.6	497.9 30.4	607.9 37.1	706.9 43.1	804.2 49.1	1125.8 68.7	1369.5 83.6	1598.4 97.5	1809.6 110.4
Max pressure (Bar) (PSI)	250 3626	300 4350	300 4350	250 3626	300 4350	300 4350	250 3626	300 4350	250 3626	300 4350	300 4350
Max speed (RPM)	750	640	600	600	520	500	450	330	280	260	250
Frame size MR/E*	2100*	2400	2800	3100*	3600	4500	5400*	6500	7000*	8200	
Displacement (cm ³ /rev) (in ³ /rev)	2091.2 127.6	2393.1 139.9	2792.0 170.4	3103.7 189.4	3636.8 221.9	4502.7 274.8	5401.2 329.6	6460.5 394.2	6967.2 408.7	8226.4 502	
Max pressure (Bar) (PSI)	250 3626	300 4350	300 4350	250 3626	300 4350	300 4350	250 3626	300 4350	300 4350	250 3626	
Max speed (RPM)	250	220	215	215	180	170	160	130	130	130	

MRT-MRTE-MRTF Series-Fixed Displacement



- Hydraulically balanced 10 and 14 piston twin row design
- Wide range of displacements
- Starting torque from 91% theoretical
- Total efficiency up to 96%
- Speed feedback accessories optional

Frame size MRT/E*/F**	7100	7800**	8500*	9000	9900**	10800*	14000	15500**
Displacement (cm ³ /rev) (in ³ /rev)	7100.4 433.5	7808.4 476.5	8517.3 519.8	9005.4 549.5	9903.9 604.4	10802.4 659.2	14010 854.9	15276 932.3
Max pressure (Bar) (PSI)	300 4350	250 3626	250 3626	300 4350	250 3626	250 3626	300 4350	250 3626
Max speed (RPM)	150	130	120	130	120	110	80	75

Frame size MRT/E*/F**	16500*	17000	18000**	19500	20000*	21500**	23000*
Displacement (cm ³ /rev) (in ³ /rev)	16542 1009.5	16759 1022.7	18025 1100	19508 1190.5	19788 1207.5	21271 1298	23034 1405.6
Max pressure (Bar) (PSI)	250 3626	300 4350	250 3626	300 4350	250 3626	250 3626	250 3626
Max speed (RPM)	70	70	65	60	60	55	50

MRD-MRDE Series-Dual Displacement MRV-MRVE Series-Variable Displacement



- 5 piston design
- Displacement ratios of 1:2 or 1:3
- Starting torque from 90-95% theoretical
- Total efficiency up to 96%
- Resistance to thermal shocks $\Delta T=176^{\circ}F$
- Speed feedback accessories optional

Frame size MRV/E* MRD/E*	300	330*	450 450	500*	700 700	800* 800*	1100 1100	1400* 1400*
Displacement (cm ³ /rev) (in ³ /rev)	304.1 18.6	332.4 20.3	451.6 27.6	497.9 30.4	706.9 43.1	804.2 49.1	1125.8 68.7	1369.5 83.6
Max pressure (Bar) (PSI)	300 4350	250 3626	300 4350	250 3626	300 4350	250 3626	300 4350	250 3626
Max speed (RPM)	1000	1000	850	800	700	650	580	550

Frame size MRV/E* MRD/E*	1800 1800	2100* 2100*	2800 2800	3100* 3100*	4500 4500	5400* 5400*
Displacement (cm ³ /rev) (in ³ /rev)	1809.6 110.4	2091.2 127.6	2792.0 170.4	3103.7 189.4	4502.7 274.8	5401.2 329.6
Max pressure (Bar) (PSI)	300 4350	250 3626	300 4350	250 3626	300 4350	250 3626
Max speed (RPM)	400	370	280	280	250	210