



# MOTORS

## Gerotor Motors – Low Speed – High Torque



### FEATURES:

- High-torque, low speed with gerotor
- Instantly reversible by reversing the flow
- Cross-over for many popular models in the market

- 2 Bolt Flange
- 1.0" keyed shaft
- 4 Bolt flange
- ½ NPTF ports

### APPLICATIONS:

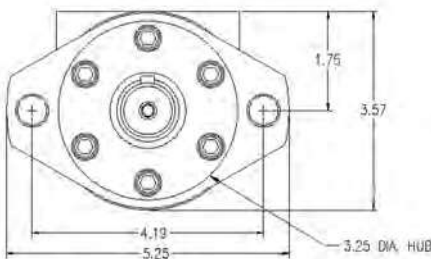
Use the CMM Series for light to medium duty applications such as grain augers and elevators, salt and sand spreaders, car wash and sweeper brushes, conveyors, winches, scissor lifts, and many others. To assure optimum motor life, run motor for approximately one hour at 30% of rated pressure before application of full load.

### CMM MOTORS

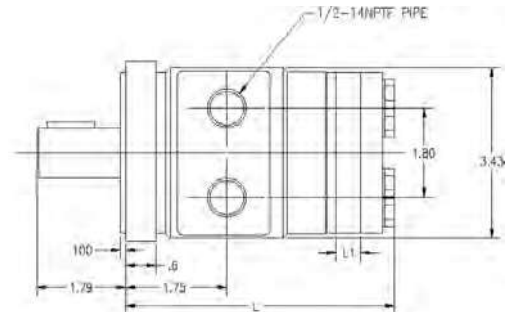
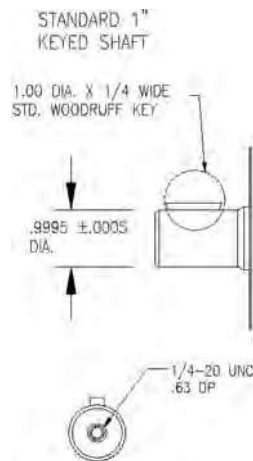
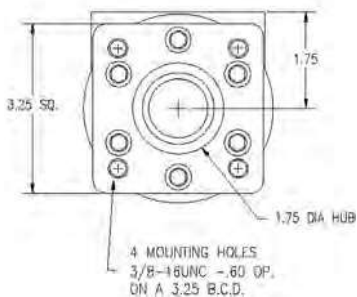
MODEL NUMBER	DISPLACEMENT IN <sup>3</sup> /REV	MAXIMUM PRESSURE PSI		MAXIMUM SPEED RPM		WT LBS.	LIST PRICE
		CONTINUOUS	INTERMITTENT	CONTINUOUS	INTERMITTENT		
†CMM100-2RP	6.1	1300	2000	600	750	13.4	Call
†CMM150-2RP	9.2	1200	1900	400	500	14.0	Call
CMM200-2RP	12.2	1200	1800	300	400	14.5	343.00
CMM400-2RP	24.4	900	1300	125	160	16.7	370.00
CMM50-4RP	3.0	1400	2200	800	1000	12.8	296.00
CMM100-4RP	6.1	1300	2000	600	750	13.4	323.00
CMM150-4RP	9.2	1200	1900	400	500	14.0	333.00
CMM200-4RP	12.2	1200	1800	300	400	14.5	343.00
CMM300-4RP	17.9	1000	1600	200	250	15.5	359.00
CMM400-4RP	24.4	900	1300	125	160	16.7	370.00

It is not recommended to operate at a condition requiring both maximum torque and speed. Intermittent operation is 10% of any minute. Normal operating temperature 80°F to 140°F, max temperature 185°F. Max inlet pressure 2500 psi for motors in series. Max back pressure 1000 psi. For use with mineral based hydraulic fluid 100-200 SUS @ operating PSI. Maximum axial thrust load on shaft 1000 lbs. Oil filtration 10 micron on fine, oil cleanliness per ISO code level 17/14.

2 BOLT FLANGE

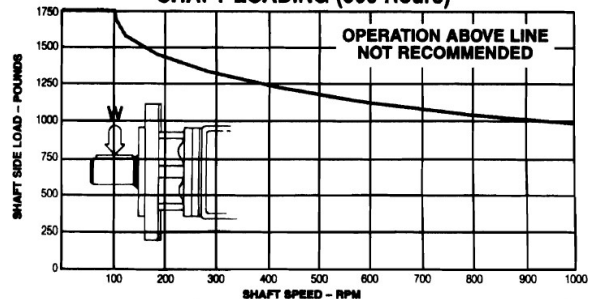


4 BOLT FLANGE



CMM	50	100	150	200	300	400
L	5.83	5.96	6.18	6.38	7.00	7.40
L1	.27	.51	.83	1.02	1.65	2.05

SHAFT LOADING (500 Hours)



† NON-STOCKED ITEMS AVAILABLE AT STANDARD LEAD-TIME.

CHECK OUR PRINCE WEBSITE OR CONTACT YOUR SALES REP TO VERIFY IF NON-STOCKED ITEMS ARE STILL ON HAND FOR IMMEDIATE SHIPMENT.



# MOTORS

## Gerotor Motor – Low Speed – High Torque

### Performance Data

**346** Bold number on top = TORQUE (in lbs.)  
**280** Number on bottom – SPEED (RPM)

☐ GREATEST EFFICIENCY  
 ☐ HIGH EFFICIENCY

CMM 50		3.0 Cu. In. REV						Δ PSI	Peak
		200	400	600	800	1000	1200	1400	2250
G P M	2	<b>69</b>	<b>139</b>	<b>209</b>	<b>279</b>	<b>349</b>	<b>419</b>	<b>489</b>	787
		149	143	137	131	125	119	113	63
	4	<b>66</b>	<b>136</b>	<b>206</b>	<b>276</b>	<b>346</b>	<b>416</b>	<b>486</b>	784
		304	298	292	286	280	274	268	218
	6	<b>62</b>	<b>132</b>	<b>202</b>	<b>272</b>	<b>342</b>	<b>412</b>	<b>482</b>	780
		459	453	447	441	435	429	423	373
8	<b>55</b>	<b>125</b>	<b>195</b>	<b>265</b>	<b>335</b>	<b>405</b>	<b>475</b>	775	
	614	608	602	596	590	584	578	529	
10	<b>47</b>	<b>117</b>	<b>187</b>	<b>257</b>	<b>327</b>	<b>397</b>	<b>467</b>	768	
	769	763	757	751	745	739	733	684	
12	<b>37</b>	<b>107</b>	<b>177</b>	<b>247</b>	<b>317</b>	<b>387</b>	<b>457</b>	758	
	924	918	912	906	900	894	888	839	

CMM 200		12.15 Cu. In. REV				Δ PSI	Peak
		200	400	600	800		
G P M	2	<b>283</b>	<b>563</b>	<b>843</b>	<b>1123</b>		1650
		35	32	29	26		
	4	<b>273</b>	<b>553</b>	<b>833</b>	<b>1113</b>		<b>2305</b>
		74	71	68	65		45
	6	<b>258</b>	<b>538</b>	<b>818</b>	<b>1098</b>		<b>2290</b>
		112	109	106	103		83
8	<b>237</b>	<b>517</b>	<b>797</b>	<b>1077</b>		<b>2269</b>	
	149	146	143	140		120	
10	<b>209</b>	<b>489</b>	<b>769</b>	<b>1049</b>		<b>2241</b>	
	187	184	181	178		158	
12	<b>180</b>	<b>460</b>	<b>640</b>	<b>920</b>		<b>2112</b>	
	225	223	220	217		197	
14	<b>136</b>	<b>416</b>	<b>696</b>	<b>976</b>		<b>2168</b>	
	264	261	258	255		235	

CMM 100		6.07 Cu. In. REV					Δ PSI	Peak
		200	400	600	800	1000	1200	1950
G P M	2	<b>144</b>	<b>292</b>	<b>440</b>	<b>588</b>	<b>736</b>	<b>884</b>	<b>1437</b>
		72	68	64	60	56	52	30
	4	<b>138</b>	<b>286</b>	<b>434</b>	<b>582</b>	<b>730</b>	<b>878</b>	<b>1431</b>
		147	143	139	135	131	127	105
	6	<b>130</b>	<b>278</b>	<b>426</b>	<b>574</b>	<b>722</b>	<b>870</b>	<b>1423</b>
		222	219	216	213	210	207	185
8	<b>119</b>	<b>267</b>	<b>415</b>	<b>563</b>	<b>711</b>	<b>859</b>	<b>1412</b>	
	300	297	294	291	288	285	263	
10	<b>104</b>	<b>252</b>	<b>400</b>	<b>548</b>	<b>696</b>	<b>844</b>	<b>1397</b>	
	375	372	369	366	363	360	368	
12	<b>85</b>	<b>233</b>	<b>381</b>	<b>529</b>	<b>677</b>	<b>825</b>	<b>1378</b>	
	452	449	446	443	440	437	415	
14	<b>64</b>	<b>212</b>	<b>360</b>	<b>508</b>	<b>656</b>	<b>804</b>	<b>1357</b>	
	528	525	522	519	516	513	491	

CMM 300		17.9 Cu. In. REV				Δ PSI	Peak
		200	400	600	800		
G P M	2	<b>426</b>	<b>856</b>	<b>1286</b>	<b>1716</b>		1350
		23	21	18	16		
	4	<b>413</b>	<b>843</b>	<b>1273</b>	<b>1703</b>		<b>2890</b>
		49	46	44	41		27
	6	<b>392</b>	<b>822</b>	<b>1252</b>	<b>1682</b>		<b>2865</b>
		75	72	70	67		53
8	<b>362</b>	<b>791</b>	<b>1222</b>	<b>1652</b>		<b>2830</b>	
	101	98	95	93		79	
10	<b>324</b>	<b>754</b>	<b>1184</b>	<b>1614</b>		<b>2785</b>	
	126	124	121	119		105	
12	<b>277</b>	<b>707</b>	<b>1137</b>	<b>1567</b>		<b>2735</b>	
	152	150	147	144		131	
14	<b>222</b>	<b>652</b>	<b>1082</b>	<b>1512</b>		<b>2680</b>	
	178	175	173	170		157	

CMM 150		9.37 Cu. In. REV					Δ PSI	Peak
		200	400	600	800	1000	1200	1800
G P M	2	<b>221</b>	<b>467</b>	<b>713</b>	<b>959</b>	<b>1205</b>	<b>1451</b>	<b>2193</b>
		46	43	40	37	34	31	15
	4	<b>214</b>	<b>460</b>	<b>706</b>	<b>952</b>	<b>1198</b>	<b>1444</b>	<b>2186</b>
		95	92	89	86	83	80	64
	6	<b>202</b>	<b>448</b>	<b>694</b>	<b>940</b>	<b>1186</b>	<b>1432</b>	<b>2174</b>
		145	142	139	136	133	130	114
8	<b>186</b>	<b>432</b>	<b>678</b>	<b>924</b>	<b>1170</b>	<b>1416</b>	<b>2158</b>	
	194	191	188	185	182	179	163	
10	<b>164</b>	<b>410</b>	<b>656</b>	<b>902</b>	<b>1148</b>	<b>1394</b>	<b>2136</b>	
	242	239	236	233	230	227	211	
12	<b>137</b>	<b>383</b>	<b>629</b>	<b>875</b>	<b>1121</b>	<b>1367</b>	<b>2109</b>	
	291	288	285	282	279	276	260	
14	<b>106</b>	<b>352</b>	<b>598</b>	<b>844</b>	<b>1090</b>	<b>1336</b>	<b>2078</b>	
	340	337	334	331	328	325	309	

CMM 400		24.4 Cu. In. REV				Δ PSI	Peak
		200	400	600	800		
G P M	2	<b>565</b>	<b>1136</b>	<b>1707</b>	<b>2279</b>		1200
		16	14	12	10		
	4	<b>549</b>	<b>1120</b>	<b>1691</b>	<b>2262</b>		<b>3392</b>
		36	33	31	29		20
	6	<b>520</b>	<b>1091</b>	<b>1663</b>	<b>2229</b>		<b>3371</b>
		55	53	51	48		39
8	<b>481</b>	<b>1053</b>	<b>1624</b>	<b>2195</b>		<b>3335</b>	
	74	73	70	68		59	
10	<b>430</b>	<b>1002</b>	<b>1573</b>	<b>2144</b>		<b>3274</b>	
	94	91	89	86		77	
12	<b>368</b>	<b>939</b>	<b>1511</b>	<b>2082</b>		<b>3213</b>	
	113	110	108	106		97	
14	<b>296</b>	<b>867</b>	<b>1438</b>	<b>2009</b>		<b>3147</b>	
	132	130	127	125		116	

**Δ PSI** – is the actual pressure difference between the inlet and outlet ports.

A SITUATION OF SIMULTANEOUS PEAK TORQUE AND MAXIMUM RPM SHOULD NOT BE ALLOWED TO OCCUR.

Operating motors at both low RPM (10-20 depending on disp.) and low torque may result in RPM fluctuations during operation.

To calculate horsepower from chart data use formula:

$$HP (out) = \frac{RPM \times TORQUE (in-lbs.)}{63025}$$

### MOTOR CROSS REFERENCE

	SHAFT	PORTS	MOTOR BRAND	DISPLACEMENT CU. IN./REV.				
				2.9	6.1	11.7	17.5	23.4
2 Bolt Flange Mounting	Woodruff Keyed	½" NPT	Prince Charlyn H Danfoss DH		CMM100-2RP 101-1027 151-2083	CMM200-2RP 101-1029 151-2086		CMM400-2RP 101-1032 151-2089
4 Bolt Flange Mounting	Woodruff Keyed	½" NPT	Prince Charlyn H Danfoss DH	CMM50-4RP 101-1001 151-2121	CMM100-4RP 101-1003 151-2123	CMM200-4RP 101-1005 151-2126	CMM300-4RP 101-1007 151-2128	CMM400-4RP 101-1008 151-2129

NOTE: THE CROSS REFERENCE INFORMATION IN THIS CHART IS TO BE USED ONLY AS A REFERENCE FOR GUIDELINE PURPOSES ONLY. AFTER SELECTING A MODEL FROM ABOVE, REVIEW THE MOTOR SPECIFICATIONS TO DETERMINE COMPATIBILITY WITH SPECIFIC APPLICATION.