



whitedriveproducts



SERIES

- 500 -
- 501 -
- 510 -
- 511 -
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MEDIUM DUTY
Hydraulic Motor & Brake

RE



OVERVIEW

RE Series motors offer the perfect compromise between price and performance by producing work horse power at a reasonable cost. Although these motors perform well in a wide range of applications, they are especially suited for low flow, high pressure applications. During startup, pressure causes the balance plate to flex toward the rotor, vastly improving volumetric efficiency. As the motor reaches operating pressure, the balance plate relaxes, allowing the rotor to turn freely which translates into higher mechanical efficiencies. Transmitting this power to the output shaft is the most durable drive link in its class. Four bearing options, combined with standard mounting flanges and output shafts, allow the motor to be configured to suit nearly any application.

FEATURES / BENEFITS

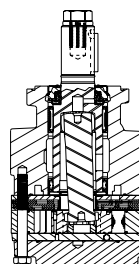
- High Pressure Shaft Seal offers superior seal life and performance and eliminates need for case drain.
- Three Bearing Options allow load carrying capability of motor to be matched to application.
- Heavy-Duty Drive Link is the most durable in its class and receives full flow lubrication to provide long life.
- Valve-In-Rotor Design provides cost effective, efficient distribution of oil and reduces overall motor length.
- Pressure-Compensated Balance Plate improves volumetric efficiency at low flows and high pressure.

TYPICAL APPLICATIONS

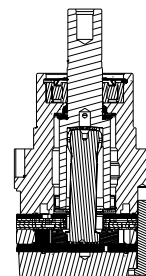
Medium-duty wheel drives, augers, mixers, winch drives, swing drives, grapple heads, feed rollers, broom drives and more

SERIES DESCRIPTIONS

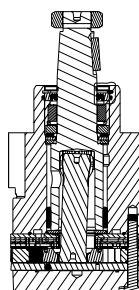
500/501 - Hydraulic Motor
Standard



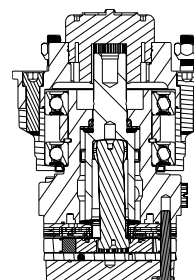
520/521 - Hydraulic Motor
With Medium Duty Bearing



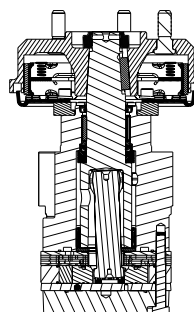
530/531 - Hydraulic Motor
With Heavy Duty Bearing



540/541 - Hydraulic Motor
With Wheel Hub



510/511 - Hydraulic Motor
With Integral Drum Brake



SPECIFICATIONS

CODE	Displacement cm ³ [in ³ /rev]	Max. Speed rpm		Max. Flow lpm [gpm]		Max. Torque Nm [lb-in]		Max. Pressure bar [psi]		
		cont.	inter.	cont.	inter.	cont.	inter.	cont.	inter.	peak
120	121 [7.4]	360	490	45 [12]	61 [16]	327 [2900]	383 [3400]	207 [3000]	241 [3500]	276 [4000]
160	162 [9.9]	370	470	61 [16]	76 [20]	475 [4200]	542 [4800]	207 [3000]	241 [3500]	276 [4000]
200	204 [12.4]	300	370	68 [18]	83 [22]	542 [4800]	633 [5600]	207 [3000]	241 [3500]	276 [4000]
230	232 [14.2]	260	320	68 [18]	83 [22]	644 [5700]	712 [6300]	207 [3000]	241 [3500]	276 [4000]
260	261 [15.9]	260	350	76 [20]	91 [24]	712 [6300]	791 [7000]	207 [3000]	241 [3500]	276 [4000]
300	300 [18.3]	250	320	83 [22]	95 [25]	825 [7300]	938 [8300]	207 [3000]	241 [3500]	276 [4000]
350	348 [21.2]	220	270	83 [22]	95 [25]	921 [8150]	1045 [9250]	207 [3000]	241 [3500]	276 [4000]
375	375 [22.8]	200	250	76 [20]	91 [24]	1006 [8900]	1158 [10250]	207 [3000]	241 [3500]	276 [4000]
470	465 [28.3]	160	200	76 [20]	91 [24]	1096 [9700]	1184 [10475]	172 [2500]	189 [2750]	207 [3000]
540	536 [32.7]	140	170	76 [20]	91 [24]	983 [8700]	1243 [11000]	138 [2000]	172 [2500]	207 [3000]
750	748 [45.6]	100	130	76 [20]	91 [24]	1062 [9400]	1237 [10950]	103 [1500]	121 [1750]	138 [2000]

► Performance data is typical. Performance of production units varies slightly from one motor to another. Running at intermittent ratings should not exceed 10% of every minute of operation.

DISPLACEMENT PERFORMANCE

120

17 [250]

35 [500]

69 [1000]

104 [1500]

138 [2000]

173 [2500]

207 [3000]

241 [3500]

121 cm³ [7.4 in³] / rev

Torque - Nm [lb-in], Speed rpm

Intermittent Ratings - 10% of Operation

Flow - lpm [gpm]

2 [0.5]

4 [1]

8 [2]

15 [4]

23 [6]

30 [8]

38 [10]

45 [12]

53 [14]

61 [16]

Max. Cont.

Max. Inter.

21 [187]
14

51 [448]
13

97 [859]
11

140 [1239]
8

24 [215]
26

54 [474]
25

111 [986]
25

162 [1429]
20

225 [1991]
13

57 [500]
58

118 [1043]
53

176 [1554]
51

226 [1997]
44

271 [2400]
40

302 [2673]
35

343 [3036]
27

54 [479]
111

116 [1030]
106

186 [1642]
97

237 [2094]
93

278 [2459]
89

335 [2964]
85

359 [3179]
79

49 [433]
174

116 [1023]
167

168 [1483]
155

232 [2051]
150

279 [2467]
144

328 [2903]
139

360 [3185]
137

111 [984]
245

169 [1497]
214

223 [1973]
205

283 [2505]
200

326 [2884]
197

385 [3404]
188

104 [923]
294

166 [1469]
281

218 [1930]
269

272 [2411]
261

325 [2878]
250

385 [3404]
242

99 [872]
358

161 [1428]
344

217 [1918]
331

276 [2444]
326

321 [2839]
321

385 [3403]
304

91 [807]
415

155 [1372]
413

208 [1845]
398

267 [2363]
391

338 [2992]
369

84 [745]
487

145 [1283]
475

211 [1864]
457

272 [2403]
447

327 [2897]
427

16

32

63

125

188

250

313

375

438

500

Theoretical rpm

Rotor Width

13.8 [542]

33 [295]

67 [589]

133 [1178]

200 [1768]

266 [2357]

333 [2946]

399 [3535]

466 [4124]

mm [in]

Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]

[illegible]

- ▶ Performance data is typical. Performance of production units varies slightly from one motor to another.



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]						Max. Cont.	Max. Inter.
200		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
204 cm ³ [12.4 in ³] / rev								Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]		Torque - Nm [lb-in], Speed rpm							
		40 [358]	91 [808]	133 [1181]	294 [2602]	375 [3323]			
2 [0.5]		7	4	4	4	3			10
4 [1]		43 [376]	85 [753]	200 [1769]	276 [2442]	373 [3304]	442 [3915]	526 [4656]	19
8 [2]		16	13	12	11	10	9	6	38
15 [4]		44 [385]	93 [851]	195 [1727]	299 [2646]	374 [3311]	461 [4079]	542 [4792]	75
23 [6]		34	31	29	27	27	25	23	112
30 [8]		39 [347]	94 [834]	198 [1752]	305 [2701]	401 [3549]	477 [4222]	544 [4818]	150
38 [10]		72	69	67	63	60	58	55	187
45 [12]			82 [724]	191 [1694]	284 [2518]	389 [3446]	463 [4098]	553 [4894]	224
53 [14]			111	109	107	103	100	99	261
61 [16]			80 [704]	188 [1661]	285 [2518]	402 [3556]	458 [4053]	543 [4802]	299
68 [18]			148	145	141	136	134	130	336
76 [20]			66 [581]	180 [1592]	276 [2445]	364 [3224]	458 [4051]	535 [4737]	373
83 [22]			185	181	176	173	170	164	410
				165 [1462]	261 [2312]	362 [3200]	450 [3982]	535 [4731]	
				221	214	210	207	198	
				150 [1328]	273 [2413]	368 [3253]	449 [3975]	558 [4936]	
				257	256	247	244	241	
				134 [1183]	253 [2242]	335 [2969]	435 [3850]	524 [4639]	
				296	292	284	277	273	
				121 [1068]	232 [2056]	339 [3003]	416 [3686]	512 [4532]	
				334	330	327	320	313	
				110 [970]	206 [1823]	308 [2725]	401 [3552]	507 [4484]	
				372	372	365	357	352	
					191 [1689]	285 [2520]	379 [3353]	486 [4303]	
					407	403	397	388	

Rotor

Width

17.3

[.682]

mm [in]

Overall Efficiency - 70 - 100% ☐

40 - 69% ☐

0 - 39% ☐

Theoretical Torque - Nm [lb-in]

56 [494]	112 [987]	223 [1975]	335 [2962]	446 [3949]	558 [4936]	669 [5924]	781 [6911]
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Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]

		Pressure - bar [psi]						Max. Cont.	Max. Inter.
230		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
233 cm ³ [14.2 in ³] / rev								Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]		Torque - Nm [lb-in], Speed rpm							
		45 [397]	92 [813]	184 [1628]	293 [2590]	375 [3323]			
2 [0.5]		6	4	3	2	1			9
4 [1]		48 [429]	101 [890]	223 [1972]	316 [2793]	414 [3660]	493 [4366]	560 [4955]	17
8 [2]		14	12	11	11	9	7	4	33
15 [4]		51 [453]	105 [926]	215 [1899]	329 [2911]	425 [3760]	524 [4637]	618 [5468]	66
23 [6]		30	27	25	25	23	20	17	98
30 [8]		43 [384]	108 [960]	209 [1851]	326 [2884]	435 [3846]	539 [4771]	655 [5799]	131
38 [10]		63	59	55	54	52	47	42	163
45 [12]			102 [603]	213 [1889]	339 [3001]	428 [3789]	536 [4747]	628 [5559]	196
53 [14]			93	88	85	82	77	73	228
61 [16]			89 [789]	207 [1830]	316 [2793]	425 [3762]	521 [4612]	639 [5653]	261
68 [18]			127	122	120	115	110	107	293
76 [20]			78 [690]	198 [1750]	311 [2752]	436 [3856]	527 [4660]	612 [5420]	326
83 [22]			161	157	151	148	143	140	358
				189 [1669]	296 [2624]	425 [3764]	510 [4517]	599 [5304]	
				191	186	182	176	170	
				177 [1565]	293 [2596]	388 [3434]	495 [4384]	587 [5197]	
				224	216	214	208	205	
				150 [1326]	272 [2408]	397 [3509]	484 [4280]	574 [5077]	
				256	255	249	245	237	
				142 [1261]	264 [2333]	355 [3140]	493 [4366]	569 [5032]	
				292	286	282	276	274	
				122 [1083]	237 [2096]	347 [3068]	453 [4009]	571 [5057]	
				324	321	316	309	305	
					210 [1855]	338 [2987]	464 [4104]	550 [4864]	
					357	351	345	339	

Rotor

Width

19.7

[.777]

mm [in]

Overall Efficiency - 70 - 100% ☐

40 - 69% ☐

0 - 39% ☐

Theoretical Torque - Nm [lb-in]

64 [565]	128 [1131]	256 [2261]	383 [3392]	511 [4522]	639 [5653]	767 [6783]	894 [7914]
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Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]

► Performance data is typical. Performance of production units varies slightly from one motor to another.



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]							Max. Cont.	Max. Inter.
260		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
261 cm ³ [15.9 in ³] / rev										
		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	49 [432] 5	112 [989] 2							8
	4 [1]	54 [475] 12	113 [998] 11	240 [2125] 10	365 [3230] 9	478 [4227] 8	578 [5112] 7	648 [5736] 5		15
	8 [2]	54 [474] 27	115 [1021] 25	247 [2184] 24	367 [3244] 22	488 [4318] 21	591 [5230] 19	703 [6223] 16		30
	15 [4]	49 [429] 57	114 [1010] 55	261 [2307] 51	363 [3214] 51	486 [4300] 48	595 [5268] 46	697 [6171] 43	807 [7143] 39	59
	23 [6]	45 [397] 86	115 [1016] 83	236 [2090] 80	364 [3221] 78	497 [4398] 76	590 [5225] 71	721 [6379] 68	802 [7096] 63	88
	30 [8]		94 [833] 114	227 [2008] 109	348 [3078] 109	477 [4224] 105	592 [5239] 101	692 [6128] 96	794 [7027] 88	117
	38 [10]		85 [752] 145	231 [2044] 144	340 [3013] 141	470 [4155] 138	585 [5180] 133	685 [6063] 127	796 [7048] 119	146
	45 [12]		78 [692] 173	217 [1919] 173	354 [3135] 168	464 [4108] 166	567 [5018] 161	672 [5945] 153	802 [7095] 144	175
	53 [14]		64 [563] 202	198 [1754] 202	326 [2886] 200	445 [3941] 196	568 [5026] 184	668 [5908] 181	765 [6771] 176	204
	61 [16]			182 [1608] 231	299 [2644] 229	448 [3965] 221	552 [4884] 219	651 [5763] 216	752 [6659] 209	233
	68 [18]			160 [1417] 261	304 [2693] 261	417 [3690] 256	550 [4870] 247	643 [5689] 240	740 [6551] 232	262
	76 [20]			136 [1204] 290	278 [2460] 289	391 [3464] 285	521 [4614] 277	636 [5628] 274	736 [6516] 263	291
Max. Inter.	83 [22]		132 [1168] 319	263 [2325] 319	374 [3314] 315	512 [4535] 311	615 [5442] 301			320
	91 [24]		82 [722] 348	227 [2009] 347	361 [3190] 345	496 [4386] 340				349
Rotor Width		Overall Efficiency - 70 - 100% ☐ 40 - 69% ☐ 0 - 39% ☐								
22.1 [872]		Theoretical Torque - Nm [lb-in]								
72 [633]		143 [1266]	286 [2532]	429 [3798]	572 [5064]	715 [6330]	858 [7596]	1001 [8861]		
mm [in]		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]								



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]							Max. Cont.	Max. Inter.
350		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
348 cm³ [21.2 in³] / rev										
		Torque - Nm [lb-in], Speed rpm					Intermittent Ratings - 10% of Operation			
Flow - lpm [gpm]	2 [0.5]	64 [566] 4	134 [1183] 4	272 [2404] 3	399 [3532] 2					6
	4 [1]	64 [570] 10	134 [1189] 9	296 [2619] 8	437 [3869] 8					11
	8 [2]	69 [607] 21	145 [1285] 20	312 [2764] 19	462 [4092] 18	600 [5308] 18	742 [6571] 17	855 [7569] 14		22
	15 [4]	71 [627] 42	151 [1340] 41	313 [2767] 40	471 [4169] 39	630 [5577] 37	772 [6834] 35	889 [7869] 34	993 [8785] 28	44
	23 [6]	62 [549] 64	149 [1618] 63	315 [2788] 62	474 [4191] 60	630 [5577] 57	768 [6796] 54	925 [8182] 51	1032 [9137] 45	66
	30 [8]	53 [472] 86	139 [1233] 85	307 [2713] 84	459 [4058] 82	626 [5537] 79	768 [6793] 75	928 [8210] 69	1051 [9300] 65	88
	38 [10]		113 [1004] 108	298 [2639] 108	431 [3814] 108	601 [5317] 102	745 [6593] 100	910 [8056] 93	1062 [9399] 87	109
	45 [12]		98 [869] 130	265 [2346] 129	445 [3936] 128	581 [5144] 125	740 [6552] 117	891 [7889] 109	1044 [9237] 104	131
	53 [14]		86 [758] 152	252 [2226] 151	422 [3738] 150	570 [5044] 147	723 [6398] 139	881 [7794] 133	1031 [9126] 120	153
	61 [16]		63 [560] 173	235 [2079] 173	409 [3619] 172	549 [4859] 170	720 [6375] 163	850 [7522] 155	1012 [8952] 147	175
Max. Cont.	68 [18]			220 [1948] 195	394 [3490] 194	571 [5054] 190	693 [6134] 187	839 [7428] 175	986 [8727] 164	197
	76 [20]			208 [1843] 217	375 [3320] 216	513 [4544] 214	683 [6044] 213	835 [7385] 195	975 [8632] 188	218
	83 [22]			179 [1583] 239	352 [3112] 239	554 [4906] 238	685 [6064] 233	813 [7198] 221	958 [8482] 215	240
	91 [24]			172 [1526] 261	360 [3186] 261	534 [4724] 260	666 [5890] 256			262
Max. Inter.	95 [25]				369 [3264] 271	529 [4682] 270	647 [5730] 265			273
Rotor Width										
39.4 [1.553]										
mm [in]										



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]				Max. Cont.	Peak
470		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500] 207 [3000]
465 cm ³ [28.3 in ³] / rev		Intermittent Ratings - 10% of Operation					
		Torque - Nm [lb-in], Speed rpm					
Flow - lpm [gpm]	2 [0.5]	93 [823] 2	185 [1635] 1				5
	4 [1]	97 [857] 7	203 [1794] 5	409 [3618] 5	610 [5402] 5	815 [7209] 4	9
	8 [2]	98 [865] 15	209 [1845] 14	435 [3851] 13	659 [5836] 13	855 [7563] 12	17
	15 [4]	94 [834] 31	200 [1774] 30	444 [3932] 28	659 [5829] 28	886 [7836] 26	33
	23 [6]	86 [759] 48	193 [1704] 47	438 [3880] 44	673 [5955] 44	872 [7715] 41	49
	30 [8]	73 [643] 64	179 [1587] 63	424 [3752] 60	663 [5863] 60	857 [7586] 57	66
	38 [10]	52 [464] 81	164 [1455] 80	407 [3597] 78	627 [5550] 78	851 [7533] 75	82
	45 [12]		141 [1248] 97	379 [3350] 94	630 [5575] 93	832 [7363] 90	98
	53 [14]		114 [1006] 113	350 [3094] 112	580 [5133] 111	802 [7101] 108	115
	61 [16]		83 [736] 130	322 [2846] 129	545 [4819] 127	796 [7040] 123	131
Max. Cont.	68 [18]		56 [497] 146	275 [2434] 145	526 [4657] 145	737 [6519] 142	147
	76 [20]			235 [2078] 162	479 [4239] 161	706 [6249] 158	164
	83 [22]			202 [1790] 179	460 [4075] 178	669 [5920] 176	180
	91 [24]			157 [1392] 195	385 [3410] 194	620 [5484] 190	196
Max. Inter.							
Rotor Width		Overall Efficiency - 70 - 100% ☐ 40 - 69% ☐ 0 - 39% ☐					
39.4 [1.553] mm [in]		Theoretical Torque - Nm [lb-in]					
		127 [1127]	255 [2253]	509 [4506]	764 [6760]	1018 [9013]	1273 [11266] 1528 [13519]
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]					

		Pressure - bar [psi]				Max. Cont.	Max. Inter.
540		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]
536 cm ³ [32.7 in ³] / rev		Intermittent Ratings - 10% of Operation					
		Torque - Nm [lb-in], Speed rpm					
Flow - lpm [gpm]	2 [0.5]	104 [921] 2	197 [1748] 2				4
	4 [1]	126 [1111] 6	230 [2031] 5	467 [4136] 5	699 [6183] 5	939 [8310] 5	8
	8 [2]	134 [1189] 13	240 [2120] 13	501 [4436] 12	755 [6679] 12	977 [8646] 11	15
	15 [4]	120 [1058] 27	232 [2055] 27	510 [4510] 26	757 [6697] 26	988 [8740] 24	29
	23 [6]	97 [859] 41	224 [1984] 41	505 [4469] 40	783 [6930] 40	993 [8787] 38	43
	30 [8]	78 [692] 56	213 [1887] 56	484 [4285] 55	750 [6635] 54	983 [8698] 53	57
	38 [10]	59 [523] 70	190 [1678] 70	455 [4026] 69	728 [6445] 69	959 [8487] 67	71
	45 [12]		176 [1554] 84	438 [3879] 83	719 [6360] 83	945 [8360] 80	85
	53 [14]		139 [1233] 98	418 [3703] 97	682 [6035] 96	952 [8421] 94	99
	61 [16]		109 [963] 112	385 [3407] 111	668 [5908] 111	899 [7957] 110	114
Max. Cont.	68 [18]		83 [736] 126	356 [3154] 126	612 [5417] 125	869 [7694] 124	128
	76 [20]			323 [2861] 140	603 [5333] 139	829 [7335] 138	142
	83 [22]			297 [2629] 154	537 [4753] 153	792 [7011] 152	156
	91 [24]			215 [1905] 169	491 [4349] 168	750 [6639] 168	170
Max. Inter.							
Rotor Width		Overall Efficiency - 70 - 100% ☐ 40 - 69% ☐ 0 - 39% ☐					
45.5 [1.791] mm [in]		Theoretical Torque - Nm [lb-in]					
		147 [1302]	294 [2604]	588 [5207]	883 [7811]	1177 [10414]	1471 [13018]
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]					

► Performance data is typical. Performance of production units varies slightly from one motor to another.



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]			Max. Cont.	Peak
750		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]
748 cm ³ [45.6 in ³] / rev		Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in]		Speed rpm		
Flow - lpm [gpm]	2 [0.5]	147 [1299] 2	281 [2487] 1			3
	4 [1]	156 [1379] 4	322 [2852] 4	652 [5768] 4	967 [8554] 3	6
	8 [2]	158 [1403] 9	339 [3003] 9	693 [6134] 9	1027 [9088] 8	11
	15 [4]	153 [1350] 19	331 [2933] 19	705 [6241] 19	1064 [9419] 18	21
	23 [6]	135 [1194] 29	321 [2840] 29	697 [6166] 28	1059 [9373] 28	31
	30 [8]	114 [1008] 40	304 [2690] 40	678 [6002] 39	1039 [9197] 38	41
	38 [10]	82 [722] 50	271 [2395] 49	648 [5733] 49	1015 [8980] 48	51
	45 [12]	54 [477] 60	249 [2207] 60	616 [5452] 59	983 [8699] 59	61
	53 [14]		197 [1739] 70	577 [5104] 69	946 [8372] 68	71
	61 [16]		150 [1325] 80	533 [4718] 79	905 [8008] 78	82
	68 [18]		105 [927] 90	494 [4374] 90	860 [7614] 89	92
	76 [20]		62 [552] 100	423 [3741] 100	805 [7123] 99	102
Max. Inter.	83 [22]			385 [3404] 110	747 [6608] 110	112
	91 [24]			302 [2669] 121	670 [5932] 120	122
Rotor Width		Overall Efficiency - 70 - 100% ☐ 40 - 69% ☐ 0 - 39% ☐				
63.5 [2.501]		Theoretical Torque - Nm [lb-in]				
		205 [1815]	410 [3631]	821 [7261]	1231 [10892]	1641 [14522]
mm [in]		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]				

► Performance data is typical. Performance of production units varies slightly from one motor to another.

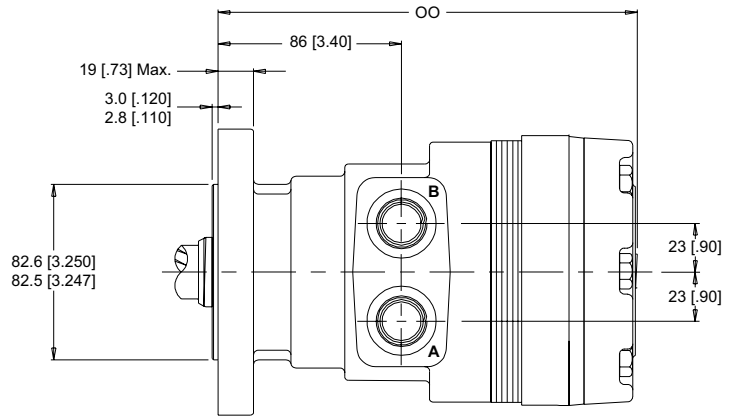
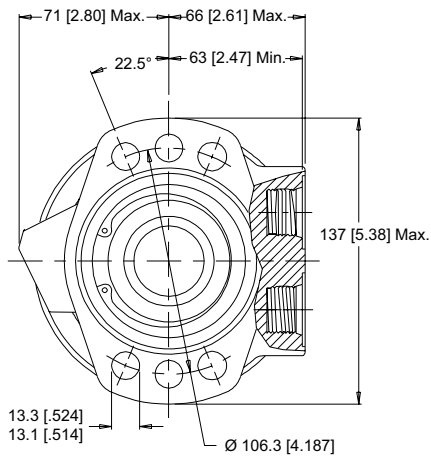


HOUSINGS

► Dimensions shown are without paint. Paint thickness can be up to 0.13 [.005].

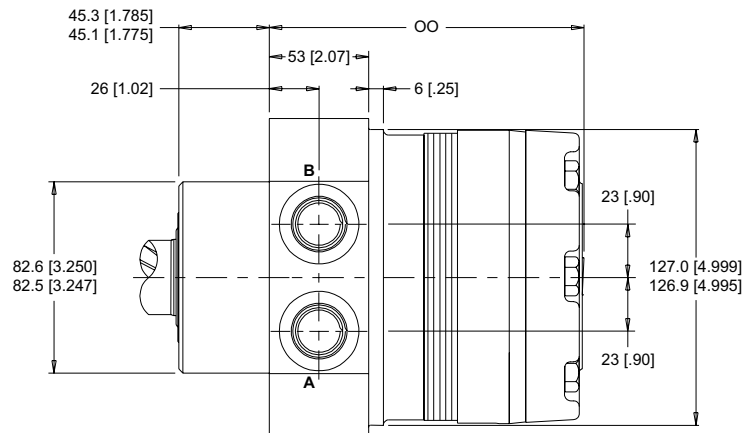
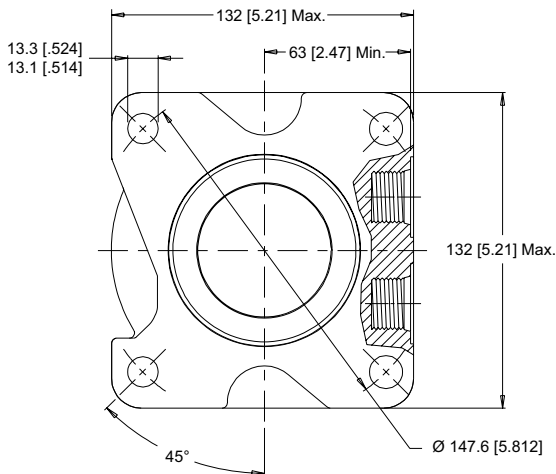
6-HOLE, SAE A MOUNT, ALIGNED PORTS

A51 7/8-14 UNF **A58** G 1/2



4-HOLE, WHEEL MOUNT, ALIGNED PORTS *

T31 7/8-14 UNF **T38** G 1/2 **W31** 7/8-14 UNF **W38** G 1/2



► Dimension OO is charted on page 19. *The W31 & W38 housings offer a higher side load capacity. Refer to the bearing curves listed on page 19.

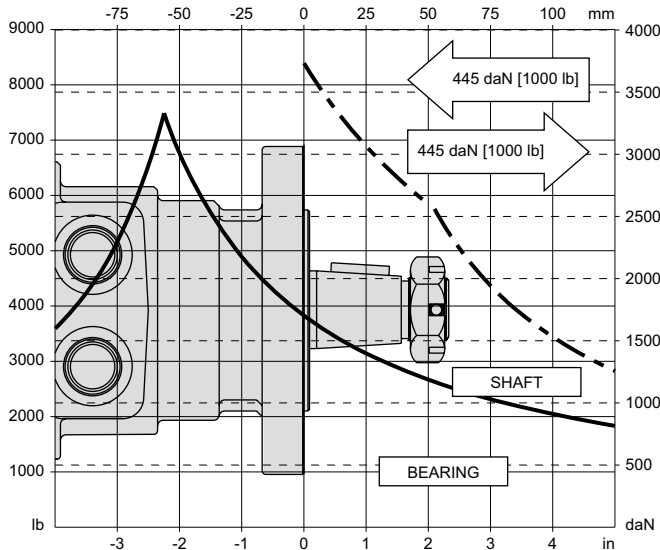


TECHNICAL INFORMATION

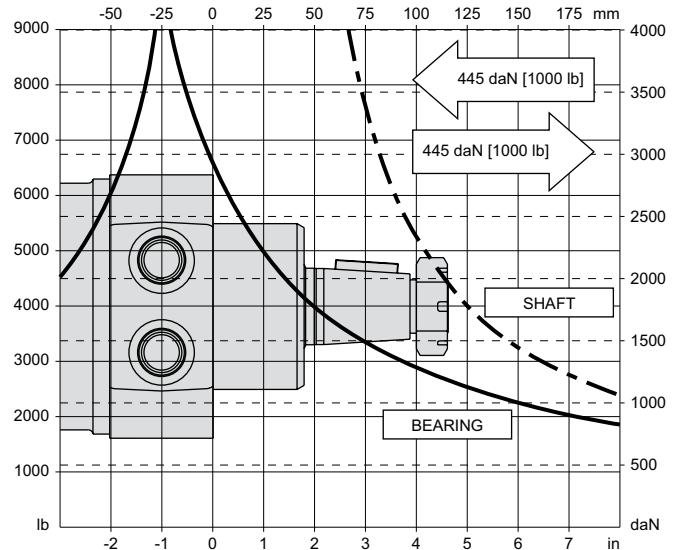
ALLOWABLE SHAFT LOAD / BEARING CURVE

The bearing curve represents allowable bearing loads based on ISO 281 bearing capacity for an L_{10} life of 2,000 hours at 100 rpm. Radial loads for speeds other than 100 rpm may be calculated using the multiplication factor table on page 11.

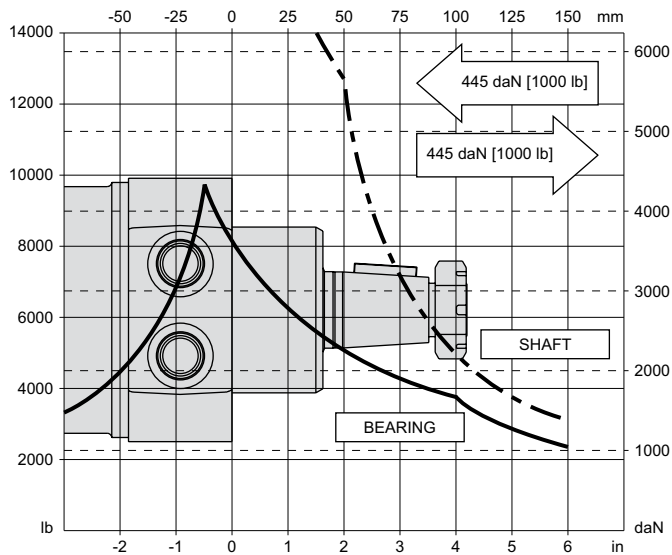
SAE A MOUNTS



T31 & T38 WHEEL MOUNTS



W31 & W38 WHEEL MOUNTS



LENGTH & WEIGHT CHART

Dimension OO is the overall motor length from the rear of the motor to the mounting flange surface and are referenced on detailed housing drawings listed on page 18.

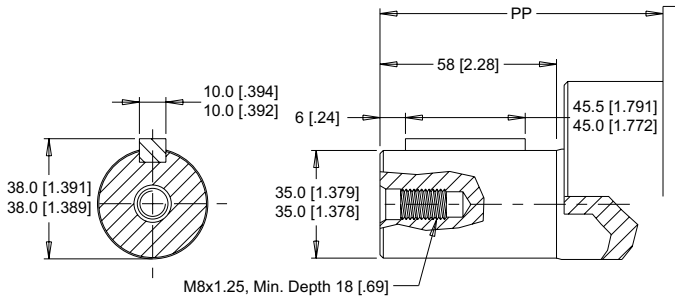
OO	SAE A Mounts	Wheel Mounts	Weight
#	mm [in]	mm [in]	kg [lb]
120	187 [7.37]	156 [6.15]	13.3 [29.4]
160	187 [7.37]	156 [6.15]	13.3 [29.4]
200	191 [7.51]	159 [6.29]	13.7 [30.2]
230	193 [7.61]	162 [6.38]	13.8 [30.4]
260	196 [7.70]	165 [6.48]	14.1 [31.0]
300	199 [7.83]	168 [6.61]	14.4 [31.8]
350	213 [8.38]	182 [7.16]	15.5 [34.2]
375	205 [8.08]	174 [6.86]	15.0 [33.0]
470	213 [8.38]	182 [7.16]	15.5 [34.2]
540	219 [8.62]	188 [7.40]	16.1 [35.4]
750	237 [9.33]	206 [8.11]	17.5 [38.5]

► All RE series motor weights can vary ± 0.5 kg [1 lb] depending on model configurations such as housing, shaft, endcover, options etc.



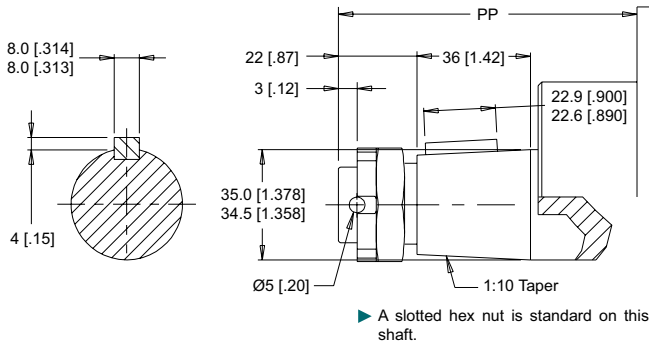
SHAFTS

27 35mm Straight



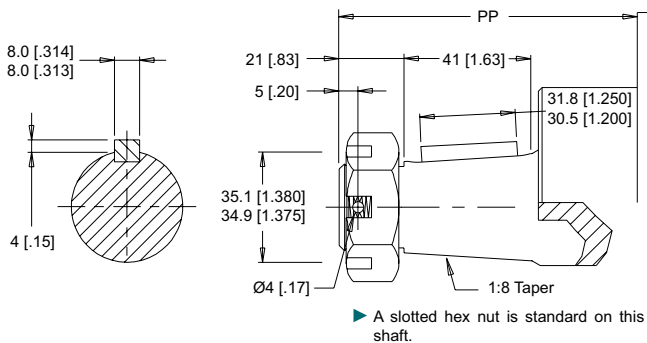
Max. Torque: 1200 Nm [10600 lb-in]

28 35mm" Tapered



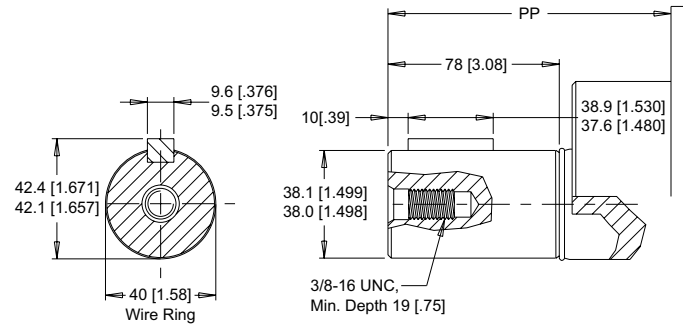
Max. Torque: 1200 Nm [10600 lb-in]

M4 1-3/8" Tapered



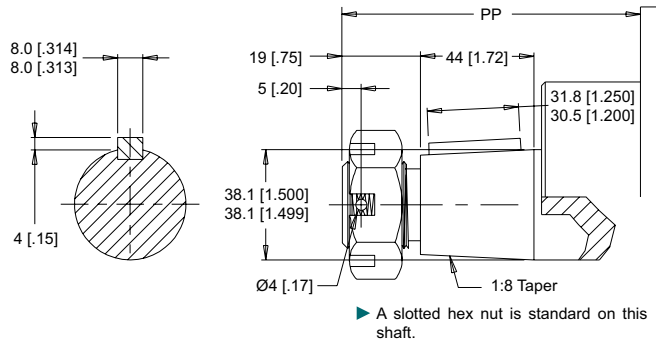
Max. Torque: 1200 Nm [10600 lb-in]

30 1-1/2" Straight



Max. Torque: 1200 Nm [10600 lb-in]

31 1-1/2" Tapered



Max. Torque: 1200 Nm [10600 lb-in]

MOUNTING / SHAFT LENGTH CHART

Dimension PP is the overall distance from the motor mounting surface to the end of the shaft and is referenced on detailed shaft drawings above.

► Shaft lengths vary ± 0.8 mm [.030 in.]

PP	SAE A Mounts	Wheel Mounts
#	mm [in]	mm [in]
27	N/A	104 [3.97]
28	N/A	105 [4.14]
30	87 [3.42]	118 [4.63]
31	84 [3.32]	115 [4.53]
M4	83 [3.28]	114 [4.49]

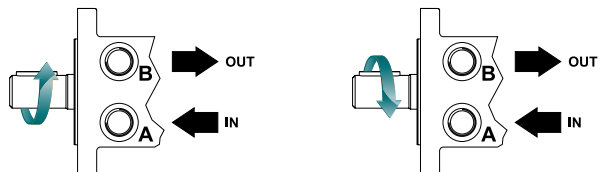


ORDERING INFORMATION

1		2		3		4		5	6	7	8			

1. CHOOSE SERIES DESIGNATION

530 Counterclockwise Rotation **531** Clockwise Rotation



► The 530 & 531 series are bi-directional. Reversing the inlet hose will reverse shaft rotation. For applications requiring the motor to rotate in only one direction, shaft seal life may be prolonged by pressurizing the A port of the motor.

2. SELECT A DISPLACEMENT OPTION

120	121 cm ³ /rev [7.4 in ³ /rev]	350	348 cm ³ /rev [21.2 in ³ /rev]
160	162 cm ³ /rev [9.9 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
200	204 cm ³ /rev [12.4 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
230	232 cm ³ /rev [14.2 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]		

3. SELECT A MOUNT & PORT OPTION

A51	6-Hole, SAE A Mount, Aligned Ports, 7/8-14 UNF
A58	6-Hole, SAE A Mount, Aligned Ports, G 1/2
T31	4-Hole, Wheel Mount, Aligned Ports, 7/8/14 UNF
T38	4-Hole, Wheel Mount, Aligned Ports, G 1/2
W31	4-Hole, Wheel Mount, Aligned Ports, 7/8/14 UNF
W38	4-Hole, Wheel Mount, Aligned Ports, G 1/2

4. SELECT A SHAFT OPTION

27	35mm Straight	31	1-1/2" Tapered
28	35mm Tapered	M4	1-3/8" Tapered
30	1-1/2" Straight		

► The 27 & 28 shafts are not available with SAE A mounts. The M4 shaft is only available with the "T" mount wheel motors.

5. SELECT A PAINT OPTION

A	Black
B	Black, Unpainted Mounting Surface
Z	No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

A	None
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7. SELECT AN ADD-ON OPTION

A	Standard
B	Lock Nut
C	Solid Hex Nut

8. SELECT A MISCELLANEOUS OPTION

AA	None
AC	Freeturning Rotor
AE	Hydraulic Declutch With Freeturning Rotor