



whitedriveproducts



SERIES

- 500 -
- 501 -
- 510 -
- 511 -
- 520 -
- 521 -
- 530 -
- 531 -
- 540 -
- 541 -



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

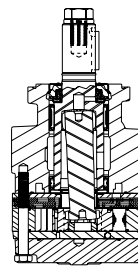
SPECIFICATIONS

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]

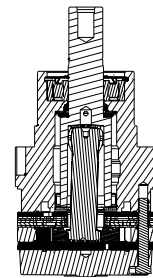
► Performance data is typical. Performance of production units varies slightly from one motor to another. Running at intermittent ratings should not exceed 10% of every minute of operation.

SERIES DESCRIPTIONS

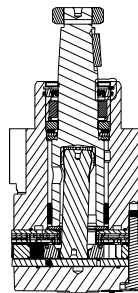
500/501 - Hydraulic Motor
Standard



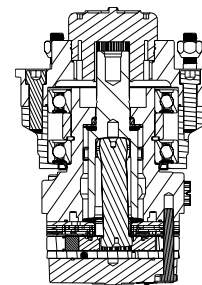
520/521 - Hydraulic Motor
With Medium Duty Bearing



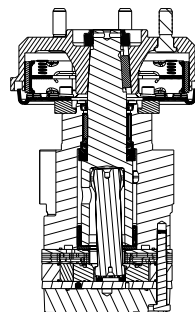
530/531 - Hydraulic Motor
With Heavy Duty Bearing



540/541 - Hydraulic Motor
With Wheel Hub



510/511 - Hydraulic Motor
With Integral Drum Brake





DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]						Max. Cont.	Max. Inter.			
120		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
121 cm ³ [7.4 in ³] / rev								Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], Speed rpm										
Flow - lpm [gpm]	2 [0.5]	21 [187] 14	51 [448] 13	97 [859] 11	140 [1239] 8						16	
	4 [1]	24 [215] 26	54 [474] 25	111 [986] 25	162 [1429] 20	225 [1991] 13					32	
Max. Cont.	8 [2]		57 [500] 58	118 [1043] 53	176 [1554] 51	226 [1997] 44	271 [2400] 40	302 [2673] 35	343 [3036] 27		63	
	15 [4]		54 [479] 111	116 [1030] 106	186 [1642] 97	237 [2094] 93	278 [2459] 89	335 [2964] 85	359 [3179] 79		125	
Max. Inter.	23 [6]		49 [433] 174	116 [1023] 167	168 [1483] 155	232 [2051] 150	279 [2467] 144	328 [2903] 139	360 [3185] 137		188	
	30 [8]			111 [984] 245	169 [1497] 214	223 [1973] 205	283 [2505] 200	326 [2884] 197	385 [3404] 188		250	
Max. Cont.	38 [10]			104 [923] 294	166 [1469] 281	218 [1930] 269	272 [2411] 261	325 [2878] 250	385 [3404] 242		313	
	45 [12]			99 [872] 358	161 [1428] 344	217 [1918] 331	276 [2444] 326	321 [2839] 321	385 [3403] 304		375	
Max. Inter.	53 [14]			91 [807] 415	155 [1372] 413	208 [1845] 398	267 [2363] 391	338 [2992] 369		438		
	61 [16]			84 [745] 487	145 [1283] 475	211 [1864] 457	272 [2403] 447	327 [2897] 427		500		
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
13.8 [542] mm [in]		Theoretical Torque - Nm [lb-in]										
		33 [295]	67 [589]	133 [1178]	200 [1768]	266 [2357]	333 [2946]	399 [3535]	466 [4124]			
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]										

		Pressure - bar [psi]						Max. Cont.	Max. Inter.			
160		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
162 cm ³ [9.9 in ³] / rev								Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], Speed rpm										
Flow - lpm [gpm]	2 [0.5]	37 [326] 7	77 [685] 3	149 [1323] 3	223 [1977] 3	310 [2741] 2	349 [3088] 1				12	
	4 [1]	30 [264] 21	80 [704] 18	164 [1448] 17	244 [2158] 16	324 [2865] 14	378 [3344] 13	442 [3909] 9			24	
Max. Cont.	8 [2]	36 [317] 45	80 [711] 43	161 [1423] 41	242 [2143] 39	316 [2792] 37	379 [3350] 35	481 [4258] 32	551 [4880] 28		47	
	15 [4]	39 [342] 92	75 [664] 90	171 [1510] 86	253 [2241] 84	321 [2838] 82	379 [3351] 80	451 [3992] 76	516 [4569] 72		94	
Max. Inter.	23 [6]		71 [631] 138	158 [1395] 134	235 [2078] 131	317 [2806] 127	389 [3447] 122	462 [4088] 121	518 [4586] 118		140	
	30 [8]		67 [596] 186	164 [1449] 182	236 [2090] 179	312 [2760] 173	385 [3411] 170	456 [4033] 167	513 [4537] 163		187	
Max. Cont.	38 [10]		72 [640] 232	149 [1323] 230	234 [2074] 229	309 [2736] 222	376 [3329] 220	455 [4022] 213	522 [4623] 207		234	
	45 [12]		67 [596] 279	144 [1275] 279	226 [1998] 272	304 [2689] 270	369 [3270] 264	440 [3890] 255	497 [4397] 247		280	
Max. Inter.	53 [14]			135 [1190] 326	228 [2022] 323	310 [2739] 317	375 [3317] 311	457 [4040] 304	541 [4789] 299		327	
	61 [16]			123 [1087] 372	213 [1889] 372	298 [2634] 364	368 [3253] 361	435 [3847] 357	502 [4439] 350		374	
Max. Cont.	68 [18]			108 [952] 419	199 [1764] 417	283 [2501] 416	362 [3201] 407	419 [3708] 401		420		
	76 [20]			105 [929] 466	195 [1726] 465	280 [2476] 462	349 [3092] 453	453 [4008] 443		467		
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
13.8 [542] mm [in]		Theoretical Torque - Nm [lb-in]										
		45 [394]	89 [788]	178 [1576]	267 [2365]	356 [3153]	445 [3941]	534 [4729]	623 [5518]			
		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

200		Pressure - bar [psi]						Max. Cont.	Max. Inter.	
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
204 cm ³ [12.4 in ³] / rev										
Flow - lpm [gpm]		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		
		40 [358] 7	91 [808] 4	133 [1181] 4	294 [2602] 4	375 [3323] 3				10
Max. Cont.	4 [1]	43 [376] 16	85 [753] 13	200 [1769] 12	276 [2442] 11	373 [3304] 10	442 [3915] 9	526 [4656] 6		19
	8 [2]	44 [385] 34	93 [851] 31	195 [1727] 29	299 [2646] 27	374 [3311] 27	461 [4079] 25	542 [4792] 23	616 [5451] 20	38
	15 [4]	39 [347] 72	94 [834] 69	198 [1752] 67	305 [2701] 63	401 [3549] 60	477 [4222] 58	544 [4818] 55	629 [5568] 51	75
	23 [6]		82 [724] 111	191 [1694] 109	284 [2518] 107	389 [3446] 103	463 [4098] 100	553 [4894] 99	636 [5628] 90	112
	30 [8]		80 [704] 148	188 [1661] 145	285 [2518] 141	402 [3556] 136	458 [4053] 134	543 [4802] 130	628 [5554] 124	150
	38 [10]		66 [581] 185	180 [1592] 181	276 [2445] 176	364 [3224] 173	458 [4051] 170	535 [4737] 164	615 [5441] 160	187
	45 [12]			165 [1462] 221	261 [2312] 214	362 [3200] 210	450 [3982] 207	535 [4731] 198	618 [5471] 196	224
	53 [14]			150 [1328] 257	273 [2413] 256	368 [3253] 247	449 [3975] 244	558 [4936] 241	602 [5328] 235	261
	61 [16]			134 [1183] 296	253 [2242] 292	335 [2969] 284	435 [3850] 277	524 [4639] 273	598 [5292] 269	299
	68 [18]			121 [1068] 334	232 [2056] 330	339 [3003] 327	416 [3686] 320	512 [4532] 313	599 [5299] 308	336
	76 [20]			110 [970] 372	206 [1823] 372	308 [2725] 365	401 [3552] 357	507 [4484] 352		373
	83 [22]				191 [1689] 407	285 [2520] 403	379 [3353] 397	486 [4303] 388		410
	Max. Inter.									
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>								
Theoretical Torque - Nm [lb-in]		Theoretical Torque - Nm [lb-in]								
17.3 [682] mm [in]		56 [494] 112 [987] 223 [1975] 335 [2962] 446 [3949] 558 [4936] 669 [5924] 781 [6911]								
Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]										

230		Pressure - bar [psi]						Max. Cont.	Max. Inter.	
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
233 cm ³ [14.2 in ³] / rev										
Flow - lpm [gpm]		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		
		45 [397] 6	92 [813] 4	184 [1628] 3	293 [2590] 2	375 [3323] 1				9
Max. Cont.	4 [1]	48 [429] 14	101 [890] 12	223 [1972] 11	316 [2793] 11	414 [3660] 9	493 [4366] 7	560 [4955] 4		17
	8 [2]	51 [453] 30	105 [926] 27	215 [1899] 25	329 [2911] 25	425 [3760] 23	524 [4637] 20	618 [5468] 17	710 [6286] 12	33
	15 [4]	43 [384] 63	108 [960] 59	209 [1851] 55	326 [2884] 54	435 [3846] 52	539 [4771] 47	655 [5799] 42	721 [6381] 39	66
	23 [6]		102 [603] 93	213 [1889] 88	339 [3001] 85	428 [3789] 82	536 [4747] 77	628 [5559] 73	718 [6355] 69	98
	30 [8]		89 [789] 127	207 [1830] 122	316 [2793] 120	425 [3762] 115	521 [4612] 110	639 [5653] 107	717 [6341] 98	131
	38 [10]		78 [690] 161	198 [1750] 157	311 [2752] 151	436 [3856] 148	527 [4660] 143	612 [5420] 140	703 [6218] 132	163
	45 [12]			189 [1669] 191	296 [2624] 186	425 [3764] 182	510 [4517] 176	599 [5304] 170	689 [6098] 163	196
	53 [14]			177 [1565] 224	293 [2596] 216	388 [3434] 214	495 [4384] 208	587 [5197] 205	680 [6017] 198	228
	61 [16]			150 [1326] 256	272 [2408] 255	397 [3509] 249	484 [4280] 245	574 [5077] 237	669 [5925] 227	261
	68 [18]			142 [1261] 292	264 [2333] 286	355 [3140] 282	493 [4366] 276	569 [5032] 274	655 [5799] 259	293
	76 [20]			122 [1083] 324	237 [2096] 321	347 [3068] 316	453 [4009] 309	571 [5057] 305		326
	83 [22]				210 [1855] 357	338 [2987] 351	464 [4104] 345	550 [4864] 339		358
	Max. Inter.									
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>								
Theoretical Torque - Nm [lb-in]		Theoretical Torque - Nm [lb-in]								
19.7 [777] mm [in]		64 [565] 128 [1131] 256 [2261] 383 [3392] 511 [4522] 639 [5653] 767 [6783] 894 [7914]								
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

Table for 260 series showing pressure, torque, speed, and flow performance. Includes intermittent ratings and rotor width information.

Rotor Width 22.1 [1.872] mm [in]

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39% Theoretical Torque - Nm [lb-in] 72 [633] 143 [1266] 286 [2532] 429 [3798] 572 [5064] 715 [6330] 858 [7596] 1001 [8861]

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

Table for 300 series showing pressure, torque, speed, and flow performance. Includes intermittent ratings and rotor width information.

Rotor Width 25.4 [1.000] mm [in]

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39% Theoretical Torque - Nm [lb-in] 82 [729] 165 [1457] 329 [2914] 494 [4371] 659 [5828] 823 [7285] 988 [8742] 1152 [10199]

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.		
350		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]		
348 cm ³ [21.2 in ³] / rev								Intermittent Ratings - 10% of Operation			
		Torque - Nm [lb-in], Speed rpm									
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
	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
	95 [25]				369 [3264] 271	529 [4682] 270	647 [5730] 265				273
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>									
39.4 [1.553]		Theoretical Torque - Nm [lb-in]									
mm [in]		95 [844]	191 [1688]	381 [3376]	572 [5064]	763 [6752]	954 [8439]	1144 [10127]	1335 [11815]		

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

		Pressure - bar [psi]						Max. Cont.	Max. Inter.		
375		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]		
375 cm ³ [22.8 in ³] / rev								Intermittent Ratings - 10% of Operation			
		Torque - Nm [lb-in], Speed rpm									
Flow - lpm [gpm]	2 [0.5]	76 [674] 3									6
	4 [1]	84 [745] 8	162 [1432] 7	329 [2911] 6	490 [4337] 6	639 [5652] 5	763 [6756] 3				11
	8 [2]	82 [724] 18	171 [1510] 17	361 [3196] 16	537 [4754] 16	689 [6095] 14	836 [7399] 12	955 [8449] 9			21
	15 [4]	77 [680] 39	163 [1439] 37	358 [3164] 37	537 [4756] 36	695 [6151] 32	857 [7587] 29	989 [8750] 25	1121 [9923] 20		41
	23 [6]	67 [595] 60	158 [1398] 59	354 [3130] 56	527 [4661] 56	695 [6155] 52	864 [7642] 47	1011 [8951] 40	1168 [10334] 36		61
	30 [8]	57 [508] 80	149 [1321] 80	340 [3010] 78	510 [4512] 77	695 [6154] 71	845 [7476] 65	1009 [8930] 60	1156 [10229] 51		82
	38 [10]		134 [1187] 100	322 [2849] 99	495 [4383] 96	681 [6024] 93	836 [7399] 87	1007 [8913] 80	1157 [10235] 71		102
	45 [12]		115 [1013] 121	301 [2661] 120	480 [4249] 118	645 [5711] 113	809 [7159] 108	980 [8674] 98	1141 [10098] 92		122
	53 [14]		93 [819] 141	280 [2475] 140	477 [4218] 138	633 [5602] 134	795 [7036] 128	949 [8402] 120	1117 [9887] 105		142
	61 [16]		73 [646] 161	261 [2314] 161	429 [3797] 160	598 [5296] 155	770 [6817] 151	934 [8267] 141	1085 [9605] 130		163
	68 [18]			236 [2091] 181	434 [3843] 181	597 [5282] 177	765 [6771] 168	907 [8026] 161	1080 [9554] 150		183
	76 [20]			209 [1851] 202	384 [3396] 201	561 [4969] 198	740 [6549] 191	877 [7764] 183	1027 [9091] 168		203
	83 [22]			178 [1576] 222	374 [3309] 221	530 [4694] 218	696 [6160] 213	840 [7431] 205			223
	91 [24]			141 [1246] 242	319 [2822] 241	511 [4523] 239	662 [5860] 233				244
	Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>								
31.8 [1.252]		Theoretical Torque - Nm [lb-in]									
mm [in]		103 [908]	205 [1815]	410 [3631]	615 [5446]	821 [7261]	1026 [9076]	1231 [10892]	1436 [12707]		

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

470		Pressure - bar [psi]					Max. Cont.	Peak
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]
465 cm ³ [28.3 in ³] / rev								
		Torque - Nm [lb-in], Speed rpm					Intermittent Ratings - 10% of Operation	
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	1025 [9071] 11	1196 [10586] 9
	15 [4]	94 [834] 31	200 [1774] 30	444 [3932] 28	659 [5829] 28	886 [7836] 26	1066 [9434] 23	1250 [11062] 21
	23 [6]	86 [759] 48	193 [1704] 47	438 [3880] 44	673 [5955] 44	872 [7715] 41	1073 [9499] 37	1258 [11128] 32
	30 [8]	73 [643] 64	179 [1587] 63	424 [3752] 60	663 [5863] 60	857 [7586] 57	1098 [9718] 50	1279 [11317] 43
	38 [10]	52 [464] 81	164 [1455] 80	407 [3597] 78	627 [5550] 78	851 [7533] 75	1067 [9444] 68	1276 [11288] 61
	45 [12]		141 [1248] 97	379 [3350] 94	630 [5575] 93	832 [7363] 90	1067 [9441] 83	1273 [11264] 76
	53 [14]		114 [1006] 113	350 [3094] 112	580 [5133] 111	802 [7101] 108	1013 [8964] 102	1222 [10817] 94
	61 [16]		83 [736] 130	322 [2846] 129	545 [4819] 127	796 [7040] 123	965 [8538] 119	1190 [10528] 113
	68 [18]		56 [497] 146	275 [2434] 145	526 [4657] 145	737 [6519] 142	956 [8464] 138	1166 [10317] 128
	76 [20]			235 [2078] 162	479 [4239] 161	706 [6249] 158	917 [8117] 154	1122 [9933] 143
83 [22]			202 [1790] 179	460 [4075] 178	669 [5920] 176	883 [7811] 170		
91 [24]			157 [1392] 195	385 [3410] 194	620 [5484] 190	843 [7464] 186		
Max. Cont.								66
Max. Inter.								82
								98
								115
								131
								147
								164
								180
								196

Rotor Width

39.4 [1.553]

mm [in]

Overall Efficiency - 70 - 100% [] 40 - 69% [] 0 - 39% []

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]

540		Pressure - bar [psi]					Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	
536 cm ³ [32.7 in ³] / rev								
		Torque - Nm [lb-in], Speed rpm					Intermittent Ratings - 10% of Operation	
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	1149 [10165] 4	8
	8 [2]	134 [1189] 13	240 [2120] 13	501 [4436] 12	755 [6679] 12	977 [8646] 11	1185 [10484] 10	15
	15 [4]	120 [1058] 27	232 [2055] 27	510 [4510] 26	757 [6697] 26	988 [8740] 24	1223 [10827] 23	29
	23 [6]	97 [859] 41	224 [1984] 41	505 [4469] 40	783 [6930] 40	993 [8787] 38	1225 [10838] 34	43
	30 [8]	78 [692] 56	213 [1887] 56	484 [4285] 55	750 [6635] 54	983 [8698] 53	1251 [11075] 48	57
	38 [10]	59 [523] 70	190 [1678] 70	455 [4026] 69	728 [6445] 69	959 [8487] 67	1244 [11008] 62	71
	45 [12]		176 [1554] 84	438 [3879] 83	719 [6360] 83	945 [8360] 80	1203 [10646] 77	85
	53 [14]		139 [1233] 98	418 [3703] 97	682 [6035] 96	952 [8421] 94	1183 [10467] 91	99
	61 [16]		109 [963] 112	385 [3407] 111	668 [5908] 111	899 [7957] 110	1163 [10290] 105	114
	68 [18]		83 [736] 126	356 [3154] 126	612 [5417] 125	869 [7694] 124	1116 [9876] 123	128
	76 [20]			323 [2861] 140	603 [5333] 139	829 [7335] 138	1109 [9816] 134	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. Cont.								66
Max. Inter.								82
								98
								115
								131
								147
								164
								180
								196

Rotor Width

45.5 [1.791]

mm [in]

Overall Efficiency - 70 - 100% [] 40 - 69% [] 0 - 39% []

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

750	Pressure - bar [psi]			Max. Cont.	Peak
		17 [250]	35 [500]	69 [1000]	104 [1500]

748 cm³ [45.6 in³] / rev

Intermittent Ratings - 10% of Operation

Flow - lpm [gpm]	Torque - Nm [lb-in]		Speed rpm			Theoretical rpm
2 [0.5]	147 [1299] 2	281 [2487] 1				3
4 [1]	156 [1379] 4	322 [2852] 4	652 [5768] 4	967 [8554] 3	1308 [11571] 3	6
8 [2]	158 [1403] 9	339 [3003] 9	693 [6134] 9	1027 [9088] 8	1360 [12033] 7	11
15 [4]	153 [1350] 19	331 [2933] 19	705 [6241] 19	1064 [9419] 18	1416 [12534] 16	21
23 [6]	135 [1194] 29	321 [2840] 29	697 [6166] 28	1059 [9373] 28	1408 [12462] 26	31
30 [8]	114 [1008] 40	304 [2690] 40	678 [6002] 39	1039 [9197] 38	1421 [12573] 34	41
38 [10]	82 [722] 50	271 [2395] 49	648 [5733] 49	1015 [8980] 48	1371 [12130] 47	51
45 [12]	54 [477] 60	249 [2207] 60	616 [5452] 59	983 [8699] 59	1345 [11902] 56	61
53 [14]		197 [1739] 70	577 [5104] 69	946 [8372] 68	1311 [11600] 67	71
61 [16]		150 [1325] 80	533 [4718] 79	905 [8008] 78	1271 [11249] 76	82
68 [18]		105 [927] 90	494 [4374] 90	860 [7614] 89	1225 [10843] 88	92
76 [20]		62 [552] 100	423 [3741] 100	805 [7123] 99	1173 [10385] 98	102
83 [22]			385 [3404] 110	747 [6608] 110		112
91 [24]			302 [2669] 121	670 [5932] 120		122

Max. Cont. Inter.

Theoretical rpm

Rotor Width

63.5 [2.501]

mm [in]

Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

Theoretical Torque - Nm [lb-in]

205 [1815]	410 [3631]	821 [7261]	1231 [10892]	1641 [14522]
------------	------------	------------	--------------	--------------

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

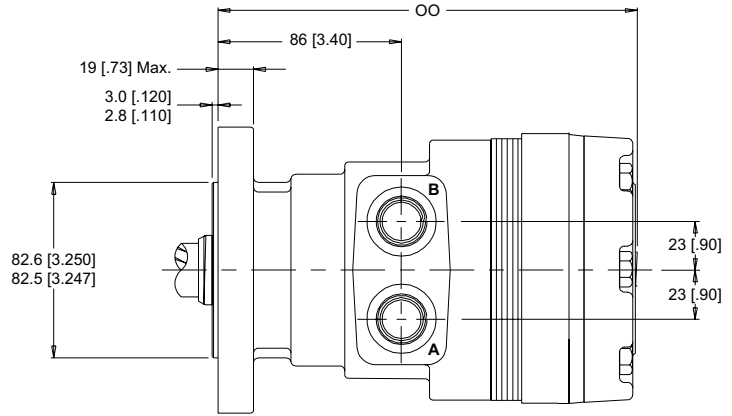
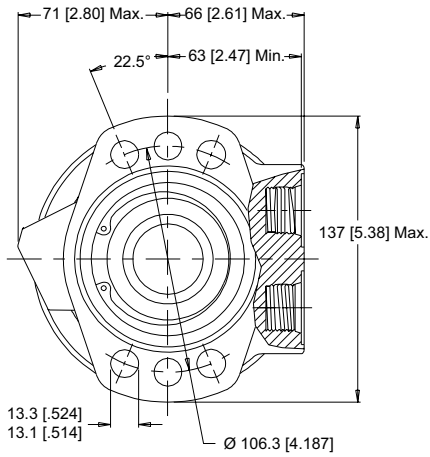
► Performance data is typical. Performance of production units varies slightly from one motor to another.

HOUSINGS

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

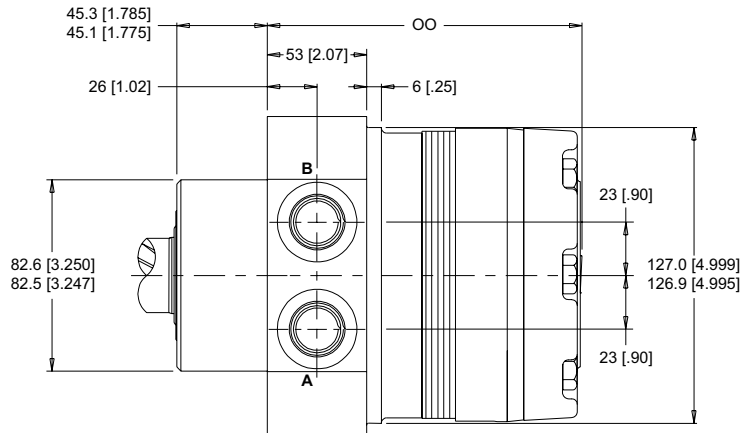
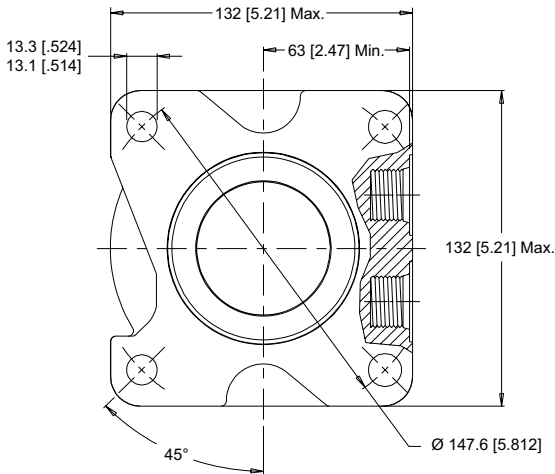
6-HOLE, SAE A MOUNT, ALIGNED PORTS

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.

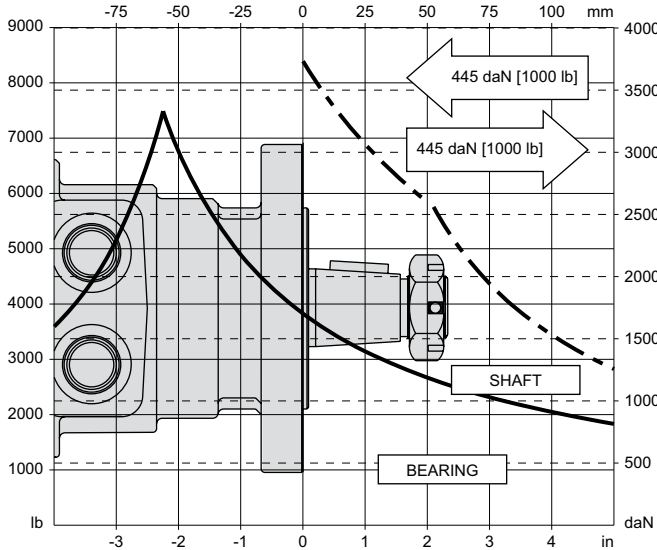


TECHNICAL INFORMATION

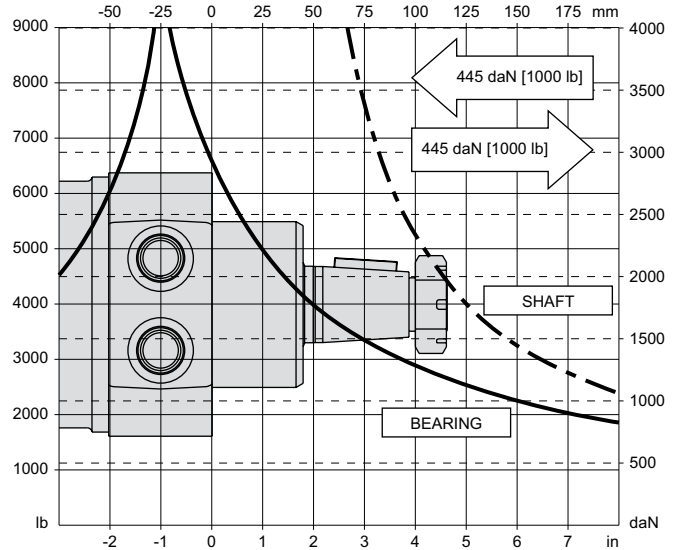
ALLOWABLE SHAFT LOAD / BEARING CURVE

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.

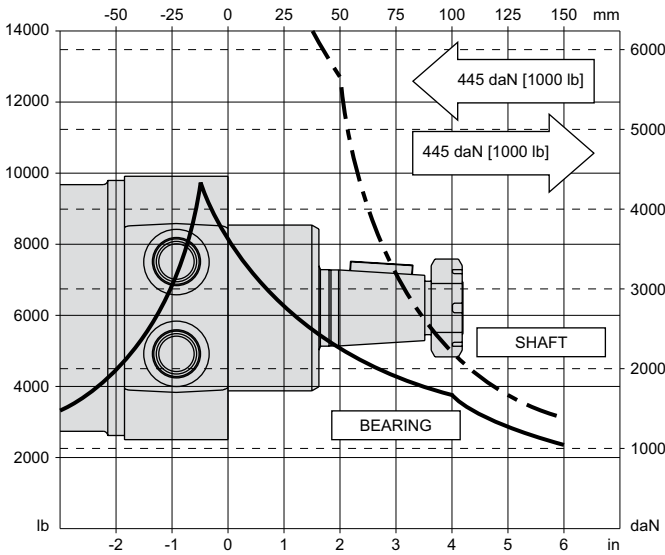
SAE A MOUNTS



T31 & T38 WHEEL MOUNTS



W31 & W38 WHEEL MOUNTS



LENGTH & WEIGHT CHART

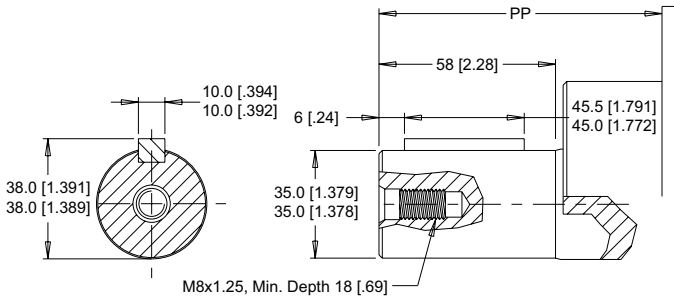
Dimension OO is the overall motor length from the rear of the motor to the mounting flange surface and are referenced on detailed housing drawings listed on page 18.

OO #	SAE A Mounts mm [in]	Wheel Mounts mm [in]	Weight 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.

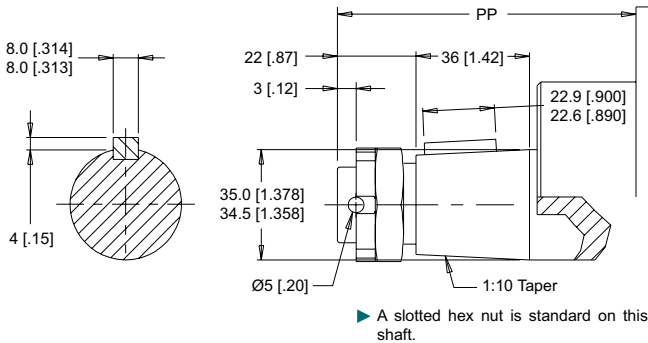
SHAFTS

27 35mm Straight



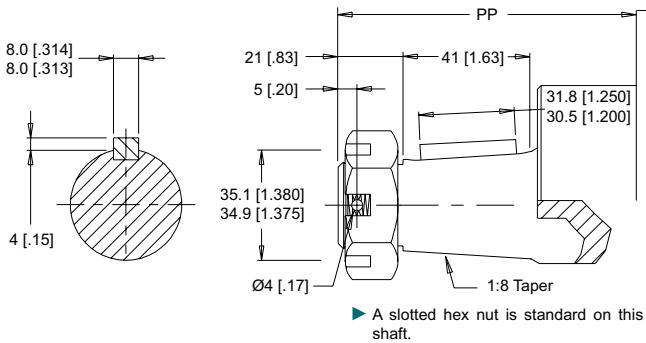
Max. Torque: 1200 Nm [10600 lb-in]

28 35mm" Tapered



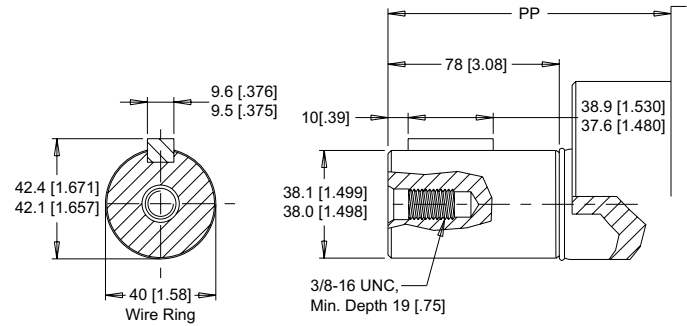
Max. Torque: 1200 Nm [10600 lb-in]

M4 1-3/8" Tapered



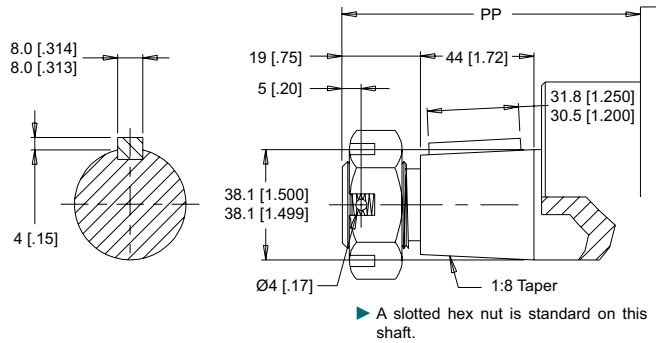
Max. Torque: 1200 Nm [10600 lb-in]

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

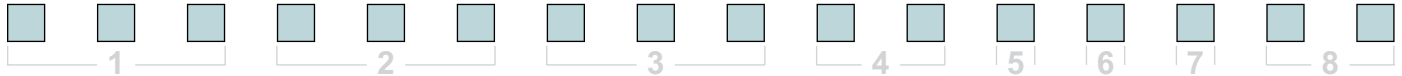
Dimension PP is the overall distance from the motor mounting surface to the end of the shaft and is referenced on detailed shaft drawings above.

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

PP #	SAE A Mounts mm [in]	Wheel Mounts 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]

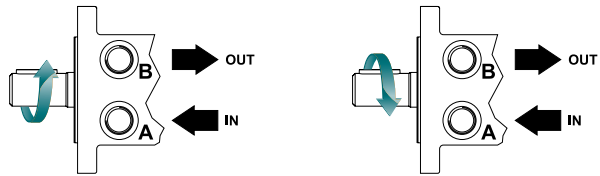


ORDERING INFORMATION



1. 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
----------	------

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