

Part number:

HYDROMA

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



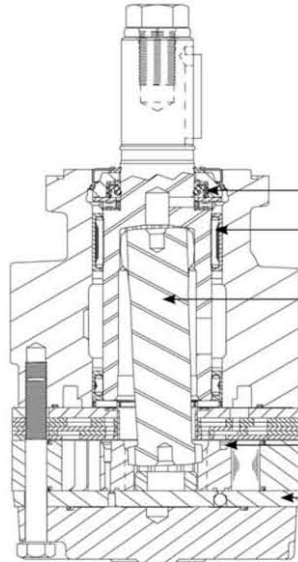
RE

SERIES HYDRAULIC MOTORS

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.



KEY FEATURES

- **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.

SPECIFICATIONS

Intermittent Ratings - 10% of Operation Peak Ratings - 1% of Operation

CODE	Displacement cc [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]

120

121 cc [7.4 in³/rev.]

		Pressure - bars [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]

Torque - Nm [lb-in], Speed rpm

Flow - lpm [gpm]	Max. Cont.	Max. Inter.	Intermittent Ratings - 10% of Operation								Theoretical rpm
			21 [187]	51 [448]	97 [859]	140 [1239]					
2 [0.5]			14	13	11	8					16
4 [1]			24 [215]	54 [474]	111 [986]	162 [1429]	225 [1991]				32
8 [2]			57 [500]	118 [1043]	176 [1554]	226 [1997]	271 [2400]	302 [2673]	343 [3036]	63	
15 [4]			58	111	186 [1642]	237 [2094]	278 [2459]	335 [2964]	359 [3179]	125	
23 [6]			49 [433]	116 [1023]	168 [1483]	232 [2051]	279 [2467]	328 [2903]	360 [3185]	188	
30 [8]			174	167	155	150	144	139	137	250	
38 [10]				111 [984]	169 [1497]	223 [1973]	283 [2505]	326 [2884]	385 [3404]	313	
45 [12]				245	214	205	200	197	188	375	
53 [14]				104 [923]	166 [1469]	218 [1930]	272 [2411]	325 [2878]	385 [3404]	438	
61 [16]				294	281	269	261	250	242	500	
				99 [872]	161 [1428]	217 [1918]	276 [2444]	321 [2839]	385 [3403]		
				358	344	331	326	321	304		
				91 [807]	155 [1372]	208 [1845]	267 [2363]	338 [2992]			
				415	413	398	391	369			
				84 [745]	145 [1283]	211 [1864]	272 [2403]	327 [2897]			
				487	475	457	447	427			

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

Theoretical Torque - Nm [lb-in]

33 [295]	67 [589]	133 [1178]	200 [1768]	266 [2357]	333 [2946]	399 [3535]	466 [4124]
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Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]

160

162 cc [9.9 in³/rev.]

		Pressure - bars [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]

Torque - Nm [lb-in], Speed rpm

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

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

Theoretical Torque - Nm [lb-in]

45 [394]	89 [788]	178 [1576]	267 [2365]	356 [3153]	445 [3941]	534 [4729]	623 [5518]
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Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]

RE

PERFORMANCE

		Pressure - bars [psi]							Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
200										
204 cc [12.4 in ³ /rev.]		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]		40 [358] 7	91 [808] 4	133 [1181] 4	294 [2602] 4	375 [3323] 3				10
	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. Cont.										
Max. Inter.										
Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
Theoretical Torque - Nm [lb-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]										

		Pressure - bars [psi]							Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
230										
232 cc [14.2 in ³ /rev.]		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]		45 [397] 6	92 [813] 4	184 [1628] 3	293 [2590] 2	375 [3323] 1				9
	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. Cont.										
Max. Inter.										
Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
Theoretical Torque - Nm [lb-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]										

		Pressure - bars [psi]							Max. Cont.	Max. Inter.	
260		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]		
261 cc [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	
	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	
	Max. Cont.										
Max. Inter.											
Overall Efficiency - 70 - 100%		<input type="checkbox"/>		40 - 69%		<input type="checkbox"/>		0 - 39%		<input checked="" type="checkbox"/>	
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]									

		Pressure - bars [psi]							Max. Cont.	Max. Inter.	
300		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]		
300 cc [18.3 in ³ /rev.]		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation		
Flow - lpm [gpm]	2 [0.5]	51 [452] 3	95 [839] 1							7	
	4 [1]	63 [557] 11	145 [1282] 10	302 [2675] 9	433 [3829] 8	510 [4513] 7	627 [5552] 4			13	
	8 [2]	62 [551] 22	158 [1400] 20	308 [2722] 19	437 [3866] 16	571 [5056] 16	679 [6011] 13	788 [6996] 9	830 [7346] 5	26	
	15 [4]	66 [588] 48	145 [1281] 47	316 [2793] 45	430 [3805] 43	577 [5107] 38	680 [6015] 33	820 [7258] 28	908 [8040] 21	51	
	23 [6]	58 [511] 75	140 [1241] 75	290 [2566] 72	424 [3755] 69	546 [4830] 65	690 [6105] 57	801 [7088] 49	946 [8372] 40	76	
	30 [8]	46 [405] 100	128 [1136] 100	305 [2699] 99	391 [3460] 96	571 [5056] 87	700 [6199] 82	826 [7313] 71	930 [8233] 62	101	
	38 [10]		111 [981] 125	282 [2493] 124	409 [3623] 121	503 [4447] 115	683 [6043] 106	794 [7028] 98	919 [8131] 88	127	
	45 [12]		92 [814] 150	261 [2313] 150	388 [3435] 148	472 [4177] 143	641 [5676] 133	783 [6927] 122	881 [7794] 113	152	
	53 [14]		77 [684] 176	245 [2165] 175	391 [3464] 175	530 [4687] 173	661 [5848] 163	809 [7157] 151	949 [8398] 138	177	
	61 [16]		63 [553] 201	224 [1983] 201	366 [3243] 199	508 [4498] 192	633 [5599] 187	796 [7044] 173	916 [8103] 163	202	
	68 [18]			201 [1780] 225	339 [2999] 225	467 [4135] 222	666 [5898] 211	804 [7115] 199	899 [7955] 194	228	
	76 [20]			172 [1522] 251	327 [2895] 251	480 [4247] 247	611 [5410] 240	745 [6596] 232	910 [8051] 217	253	
	83 [22]			144 [1276] 277	321 [2836] 276	466 [4127] 269	575 [5084] 263	732 [6474] 254		278	
	91 [24]			119 [1049] 302	281 [2483] 301	435 [3853] 300	559 [4943] 291	703 [6223] 280		303	
	95 [25]			105 [928] 315	262 [2319] 314	434 [3838] 311	553 [4894] 307	707 [6257] 294		316	
Max. Cont.											
Max. Inter.											
Overall Efficiency - 70 - 100%		<input type="checkbox"/>		40 - 69%		<input type="checkbox"/>		0 - 39%		<input checked="" type="checkbox"/>	
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]									

RE

PERFORMANCE

		Pressure - bars [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
350									
348 cc [21.2 in ³ /rev.]		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	64 [566]	134 [1183]	272 [2404]	399 [3532]				6
	4 [1]	64 [570]	134 [1189]	296 [2619]	437 [3869]				11
	8 [2]	69 [607]	145 [1285]	312 [2764]	462 [4092]	600 [5308]	742 [6571]	855 [7569]	22
	15 [4]	71 [627]	151 [1340]	313 [2767]	471 [4169]	630 [5577]	772 [6834]	889 [7869]	44
	23 [6]	62 [549]	149 [1618]	315 [2788]	474 [4191]	630 [5577]	768 [6796]	925 [8182]	66
	30 [8]	53 [472]	139 [1233]	307 [2713]	459 [4058]	626 [5537]	768 [6793]	928 [8210]	88
	38 [10]	64 [566]	134 [1183]	272 [2404]	399 [3532]				109
	45 [12]	98 [869]	265 [2346]	445 [3936]	581 [5144]	740 [6552]	891 [7889]	1044 [9237]	131
	53 [14]	86 [758]	252 [2226]	422 [3738]	570 [5044]	723 [6398]	881 [7794]	1031 [9126]	153
	61 [16]	63 [560]	235 [2079]	409 [3619]	549 [4859]	720 [6375]	850 [7522]	1012 [8952]	175
	68 [18]		220 [1948]	394 [3490]	571 [5054]	693 [6134]	839 [7428]	986 [8727]	197
	76 [20]		208 [1843]	375 [3320]	513 [4544]	683 [6044]	835 [7385]	975 [8632]	218
	83 [22]		179 [1583]	352 [3112]	554 [4906]	685 [6064]	813 [7198]	958 [8482]	240
	91 [24]		172 [1526]	360 [3186]	534 [4724]	666 [5890]			262
	95 [25]		261	369 [3264]	529 [4682]	647 [5730]			273

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

Theoretical Torque - Nm [lb-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 - bars [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
375									
375 cc [22.8 in ³ /rev.]		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	76 [674]							6
	4 [1]	84 [745]	162 [1432]	329 [2911]	490 [4337]	639 [5652]	763 [6756]		11
	8 [2]	82 [724]	171 [1510]	361 [3196]	537 [4754]	689 [6095]	836 [7399]	955 [8449]	21
	15 [4]	77 [680]	163 [1439]	358 [3164]	537 [4756]	695 [6151]	857 [7587]	989 [8750]	41
	23 [6]	67 [595]	158 [1398]	354 [3130]	527 [4661]	695 [6155]	864 [7642]	1011 [8951]	61
	30 [8]	57 [508]	149 [1321]	340 [3010]	510 [4512]	695 [6154]	845 [7476]	1009 [8930]	82
	38 [10]		134 [1187]	322 [2849]	495 [4383]	681 [6024]	836 [7399]	1007 [8913]	102
	45 [12]		115 [1013]	301 [2661]	480 [4249]	645 [5711]	809 [7159]	980 [8674]	122
	53 [14]		93 [819]	280 [2475]	477 [4218]	633 [5602]	795 [7036]	949 [8402]	142
	61 [16]		73 [646]	261 [2314]	429 [3797]	598 [5296]	770 [6817]	934 [8267]	163
	68 [18]			236 [2091]	434 [3843]	597 [5282]	765 [6771]	907 [8026]	183
	76 [20]			209 [1851]	384 [3396]	561 [4969]	740 [6549]	877 [7764]	203
	83 [22]			178 [1576]	374 [3309]	530 [4694]	696 [6160]	840 [7431]	223
	91 [24]			141 [1246]	319 [2822]	511 [4523]	662 [5860]		244

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

Theoretical Torque - Nm [lb-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]

470

Pressure - bars [psi]					Max. Cont.	Peak
17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]

465 cc [28.3 in³/rev.]

Flow - lpm [gpm]	Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		Theoretical rpm
	93 [823]	185 [1635]		610 [5402]	815 [7209]				
2 [0.5]	2	1						5	
4 [1]	97 [857]	203 [1794]	409 [3618]	610 [5402]	815 [7209]			9	
8 [2]	98 [865]	209 [1845]	435 [3851]	659 [5836]	855 [7563]	1025 [9071]	1196 [10586]	17	
15 [4]	94 [834]	200 [1774]	444 [3932]	659 [5829]	886 [7836]	1066 [9434]	1250 [11062]	33	
23 [6]	86 [759]	193 [1704]	438 [3880]	673 [5955]	872 [7715]	1073 [9499]	1258 [11128]	49	
30 [8]	73 [643]	179 [1587]	424 [3752]	663 [5863]	857 [7586]	1098 [9718]	1279 [11317]	66	
38 [10]	52 [464]	164 [1455]	407 [3597]	627 [5550]	851 [7533]	1067 [9444]	1276 [11288]	82	
45 [12]		141 [1248]	379 [3350]	630 [5575]	832 [7363]	1067 [9441]	1273 [11264]	98	
53 [14]		114 [1006]	350 [3094]	580 [5133]	802 [7101]	1013 [8964]	1222 [10817]	115	
61 [16]		83 [736]	322 [2846]	545 [4819]	796 [7040]	965 [8538]	1190 [10528]	131	
68 [18]		56 [497]	275 [2434]	526 [4657]	737 [6519]	956 [8464]	1166 [10317]	147	
76 [20]			235 [2078]	479 [4239]	706 [6249]	917 [8117]	1122 [9933]	164	
83 [22]			202 [1790]	460 [4075]	669 [5920]	883 [7811]		180	
91 [24]			157 [1392]	385 [3410]	620 [5484]	843 [7464]		196	

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]

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

540

Pressure - bars [psi]					Max. Cont.	Max. Inter.
17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	

536 cc [32.7 in³/rev.]

Flow - lpm [gpm]	Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		Theoretical rpm
	104 [921]	197 [1748]		699 [6183]	939 [8310]	1149 [10165]			
2 [0.5]	2	2						4	
4 [1]	126 [1111]	230 [2031]	467 [4136]	699 [6183]	939 [8310]	1149 [10165]		8	
8 [2]	134 [1189]	240 [2120]	501 [4436]	755 [6679]	977 [8646]	1185 [10484]		15	
15 [4]	120 [1058]	232 [2055]	510 [4510]	757 [6697]	988 [8740]	1223 [10827]		29	
23 [6]	97 [859]	224 [1984]	505 [4469]	783 [6930]	993 [8787]	1225 [10838]		43	
30 [8]	78 [692]	213 [1887]	484 [4285]	750 [6635]	983 [8698]	1251 [11075]		57	
38 [10]	59 [523]	190 [1678]	455 [4026]	728 [6445]	959 [8487]	1244 [11008]		71	
45 [12]		176 [1554]	438 [3879]	719 [6360]	945 [8360]	1203 [10646]		85	
53 [14]		139 [1233]	418 [3703]	682 [6035]	952 [8421]	1183 [10467]		99	
61 [16]		109 [963]	385 [3407]	668 [5908]	899 [7957]	1163 [10290]		114	
68 [18]		83 [736]	356 [3154]	612 [5417]	869 [7694]	1116 [9876]		128	
76 [20]			323 [2861]	603 [5333]	829 [7335]	1109 [9816]		142	
83 [22]			297 [2629]	537 [4753]	792 [7011]			156	
91 [24]			215 [1905]	491 [4349]	750 [6639]			170	

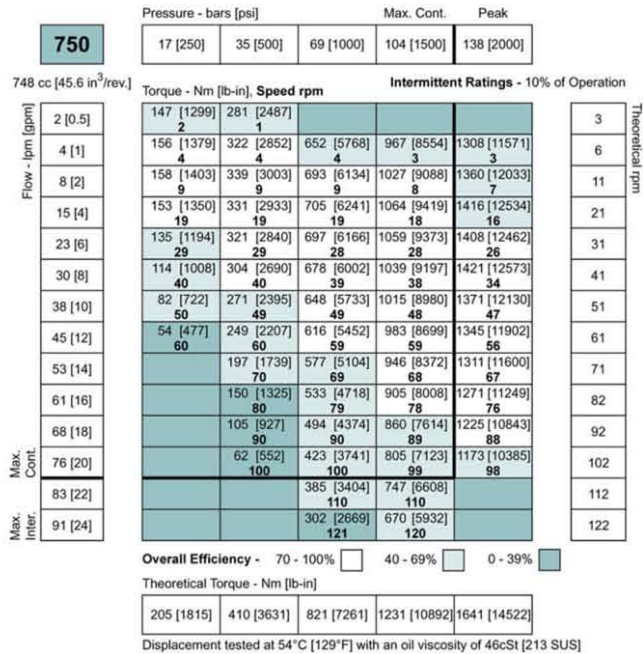
Overall Efficiency - 70 - 100% 40 - 69% 0 - 39%

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]

RE

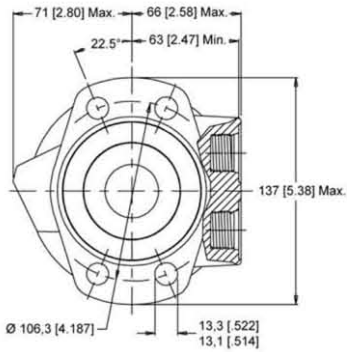
PERFORMANCE



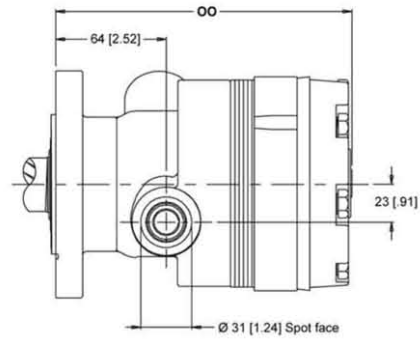
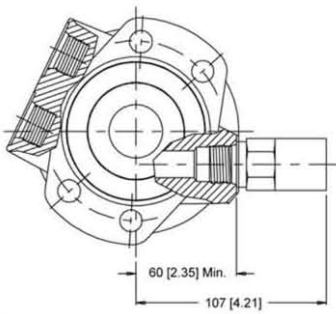
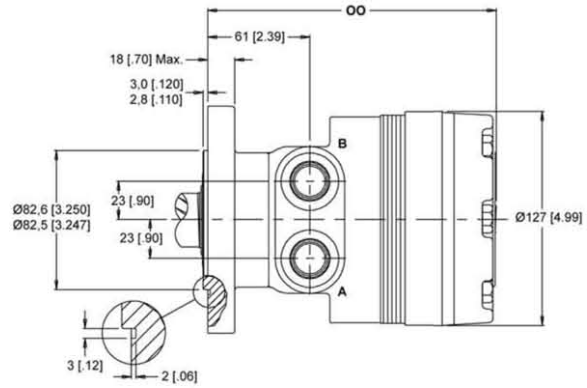
RE

500 & 501 SERIES HOUSINGS (SAE A MOUNT)

A31 4-Hole 7/8" O-Ring Aligned Ports

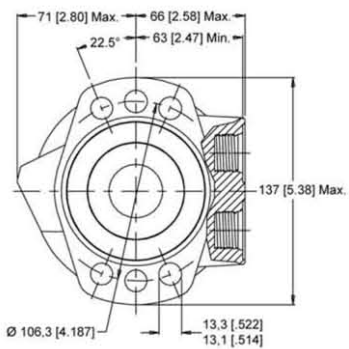


A38 4-Hole 1/2" BSP.F Aligned Ports

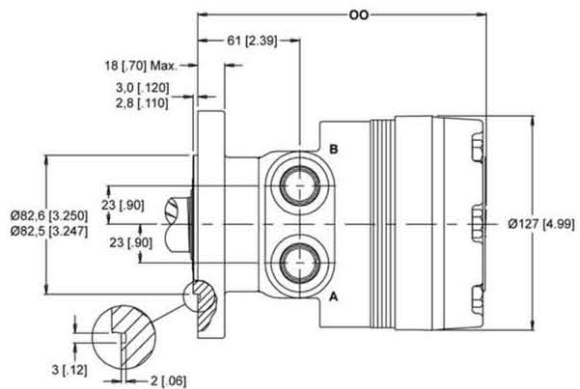


NOTE: Dimension OO is found on page 11. Optional Relief Cartridge shown installed and is available for both the A31 and A38 housings. Valve Cavity - 10 Series/2-way (7/8"-14 UNF-2B)

A51 6-Hole 7/8" O-Ring Aligned Ports



A58 6-Hole 1/2" BSP.F Aligned Ports

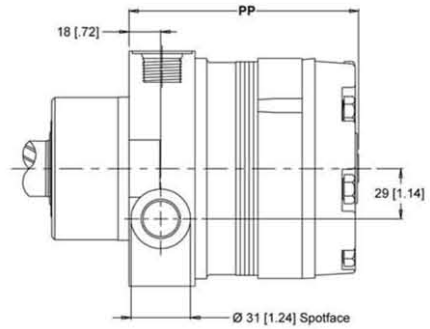
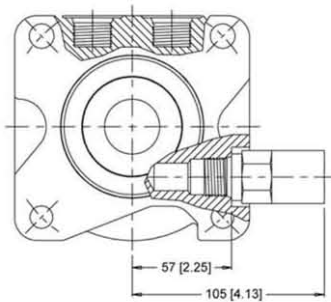
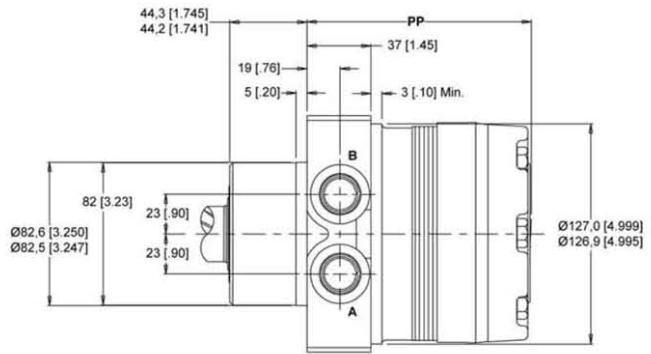
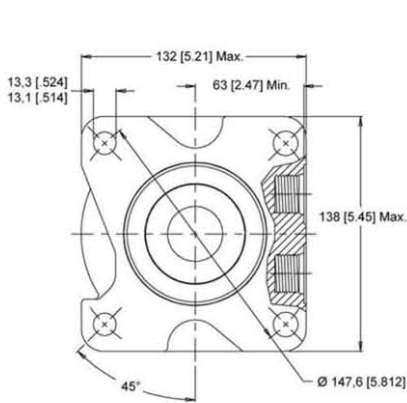


RE

500 & 501 SERIES HOUSINGS (WHEEL MOUNT)

W31 4-Hole 7/8" O-Ring Aligned Ports

W38 4-Hole 1/2" BSP.F Aligned Ports

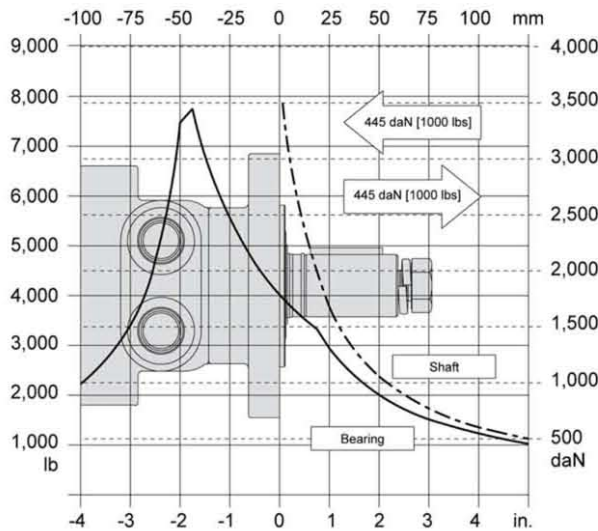


NOTE: Dimension PP is found on page 11. Optional Relief Cartridge shown installed and is available for both the W31 and W38 housings. Valve Cavity - 10 Series/2-way (7/8"-14 UNF-2B)

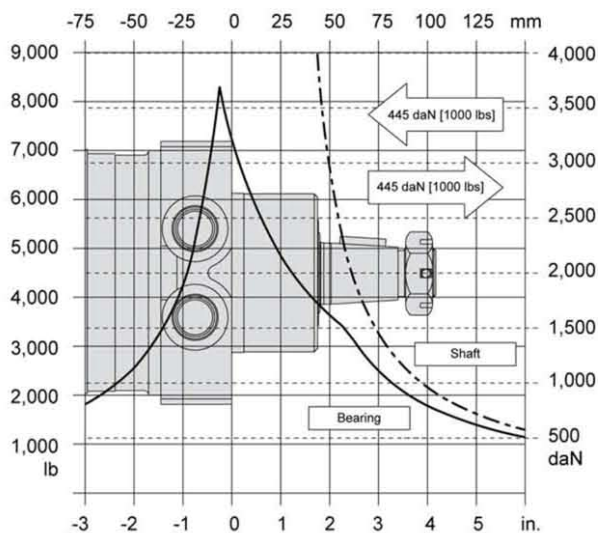
500 & 501 SERIES TECHNICAL INFORMATION

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 located below.

SAE A FLANGE



WHEEL MOUNT



LENGTH / WEIGHT CHART SAE A Mount - Dimension OO		
Code	mm [in]	kg [lb]
120	162 [6.37]	10,6 [23.4]
160	162 [6.37]	10,6 [23.4]
200	165 [6.51]	11,0 [24.2]
230	168 [6.61]	11,1 [24.4]
260	170 [6.70]	11,3 [25.0]
300	174 [6.83]	11,7 [25.8]
350	187 [7.38]	12,8 [28.2]
375	180 [7.08]	12,2 [27.0]
470	187 [7.38]	12,8 [28.2]
540	194 [7.62]	13,3 [29.4]
750	212 [8.33]	14,8 [32.5]

NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

LENGTH / WEIGHT CHART Wheel Mount - Dimension PP		
Code	mm [in]	kg [lb]
120	120 [4.72]	11,7 [25.8]
160	120 [4.72]	11,7 [25.8]
200	123 [4.86]	12,1 [26.6]
230	126 [4.95]	12,2 [26.8]
260	128 [5.05]	12,4 [27.4]
300	132 [5.18]	12,8 [28.2]
350	146 [5.73]	13,9 [30.6]
375	138 [5.43]	13,3 [29.4]
470	146 [5.73]	13,9 [30.6]
540	152 [5.97]	14,4 [31.8]
750	170 [6.68]	15,8 [34.9]

NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

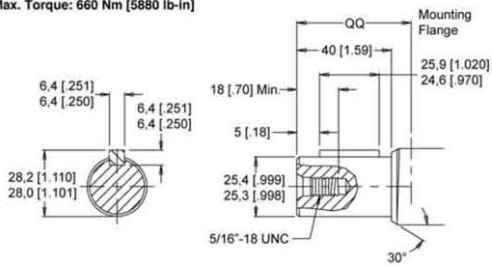
BEARING LOAD MULTIPLICATION FACTOR TABLE	
RPM	FACTOR
50	1.23
100	1.00
200	0.81
300	0.72
400	0.66
500	0.62
600	0.58
700	0.56
800	0.50

RE

500 & 501 SERIES SHAFTS

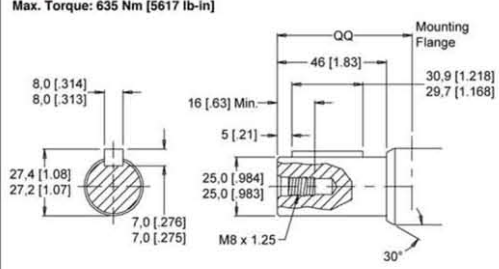
10 1" Straight

Max. Torque: 660 Nm [5880 lb-in]



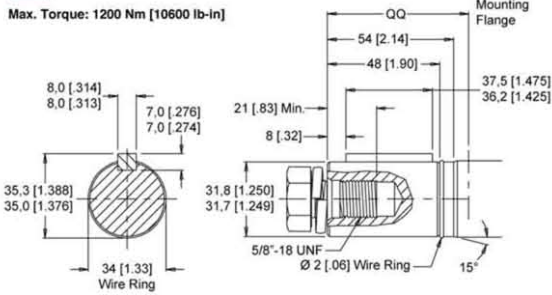
12 25mm Straight

Max. Torque: 635 Nm [5617 lb-in]



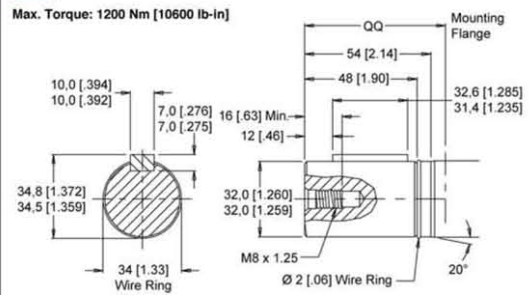
20 1-1/4" Straight

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



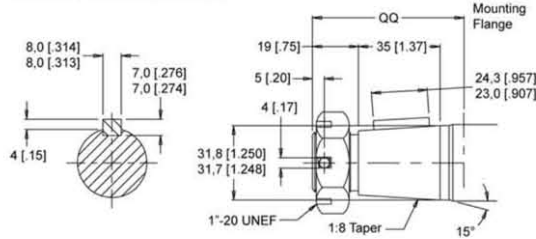
21 32mm Straight

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



22 1-1/4" Tapered

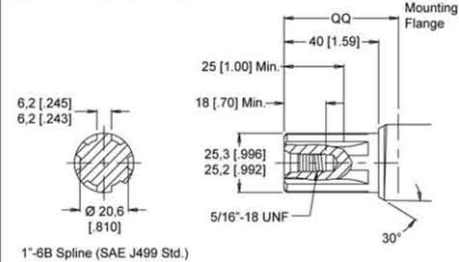
Max. Torque: 1200 Nm [10600 lb-in]



Note: A slotted nut is standard on this shaft.

02 6B Spline

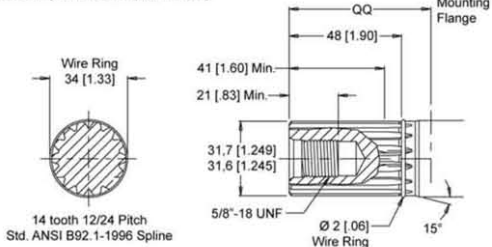
Max. Torque: 429 Nm [3800 lb-in]



1"-6B Spline (SAE J499 Std.)

23 14 Tooth Spline

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



14 tooth 12/24 Pitch
Std. ANSI B92.1-1996 Spline

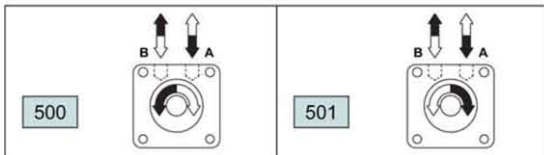
MOUNTING FLANGE TO SHAFT END Dimension QQ		
Code	SAE A Mount mm [in]	Wheel Mount mm [in]
02	50 [1.97]	91 [3.60]
10	50 [1.97]	91 [3.60]
12	56 [2.21]	98 [3.84]
20	61 [2.41]	103 [4.05]
21	61 [2.41]	103 [4.05]
22	66 [2.58]	107 [4.22]
23	61 [2.41]	103 [4.05]

500 & 501 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

500	Counterclockwise Rotation
501	Clockwise Rotation



NOTE: 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. To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor. For bi-directional applications, the 500 series is recommended. Preferred rotation is determined by internal valving design.

STEP 2 - Select a displacement option

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

STEP 3 - Select a housing option

A31	4-Hole 7/8" O-Ring Aligned Ports (S)
A38	4-Hole 1/2" BSP.F Aligned Ports (S)
A51	6-Hole 7/8" O-Ring Aligned Ports (S)
A58	6-Hole 1/2" BSP.F Aligned Ports (S)
W31	4-Hole 7/8" O-Ring Aligned Ports
W38	4-Hole 1/2" BSP.F Aligned Ports

STEP 4 - Select a shaft option

02	6B Spline	03	6B Spline Extended (S)
10	1" Straight	15	1" Straight Extended (S)
12	25mm Straight	07	1-1/4" Straight Extended (S)
20	1-1/4" Straight	08	32mm Straight Extended (S)
21	32mm Straight	25	1-1/4" Tapered Extended (S)
22	1-1/4" Tapered	09	14 Tooth Spline Extended (S)
23	14 Tooth Spline		

NOTE: Extended shafts are intended for use when ordering a speed sensor motor. Dimensional data for these shafts are found in the RE (520) series section of this catalog.

STEP 5 - Select a paint option

A	Black
B	Black (unpainted flange face)
Z	No Paint

STEP 6 - Select a valve cavity option

A	None
B	Relief Valve Cavity
C	1000 psi Relief Valve Installed
D	1250 psi Relief Valve Installed
E	1500 psi Relief Valve Installed
F	1750 psi Relief Valve Installed
G	2000 psi Relief Valve Installed
J	2500 psi Relief Valve Installed
L	3000 psi Relief Valve Installed

STEP 7 - Select an add on option

A	Standard
B	Lock Nut
C	Solid Hex Nut
W	4-Pin Dual Male Weatherpack Connector (S)
X	4-Pin M12 Dual Male Connector (S)
Y	3-Pin Single Male Weatherpack Connector (S)
Z	4-Pin M12 Single Male Connector (S)

NOTE: (S) - STEP 3 Housings available for use with speed sensors. STEP 4 Shafts available for use with speed sensors. STEP 7 Speed sensor options.

STEP 8 - Select a miscellaneous option

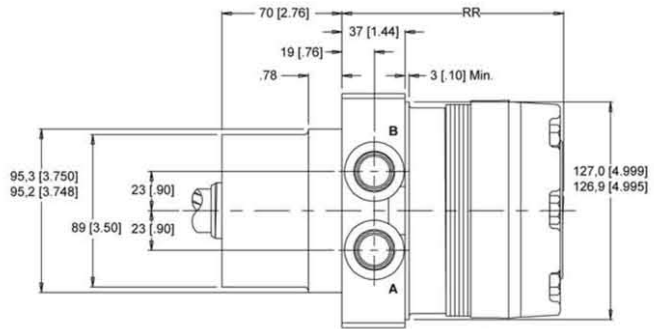
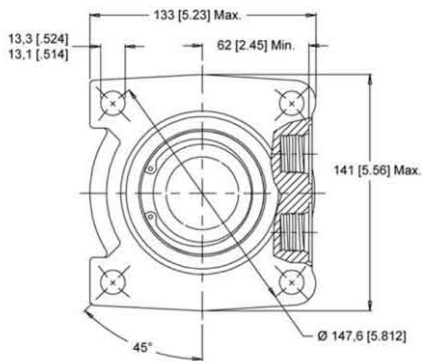
AA	None
AC	Freeturning Rotor
AE	Hydraulic Declutch with Freeturning Rotor

RE

520 & 521 SERIES HOUSINGS (WHEEL & SAE A MOUNTS)

W31 4-Hole 7/8" O-Ring Aligned Ports

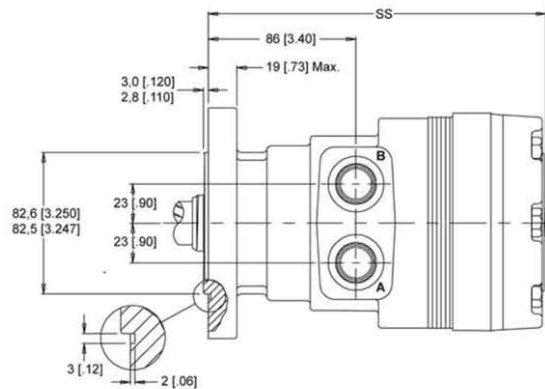
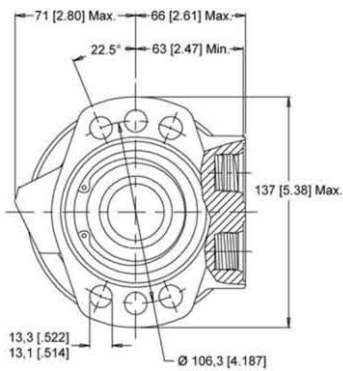
W38 4-Hole 1/2" BSP.F Aligned Ports



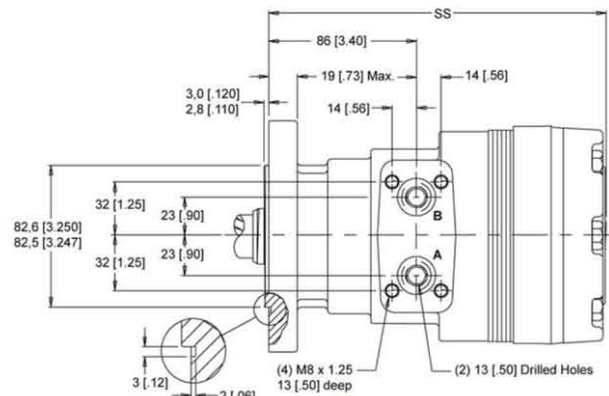
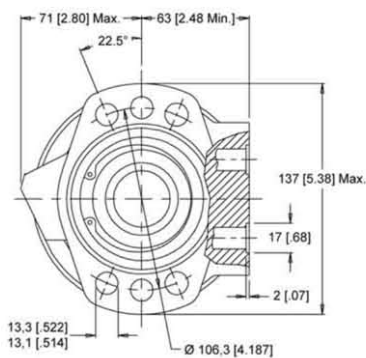
NOTE: Dimension RR is found on page 15.

A51 6-Hole 7/8" O-Ring Aligned Ports

A58 6-Hole 1/2" BSP.F Aligned Ports



A57 6-Hole Manifold Aligned Ports

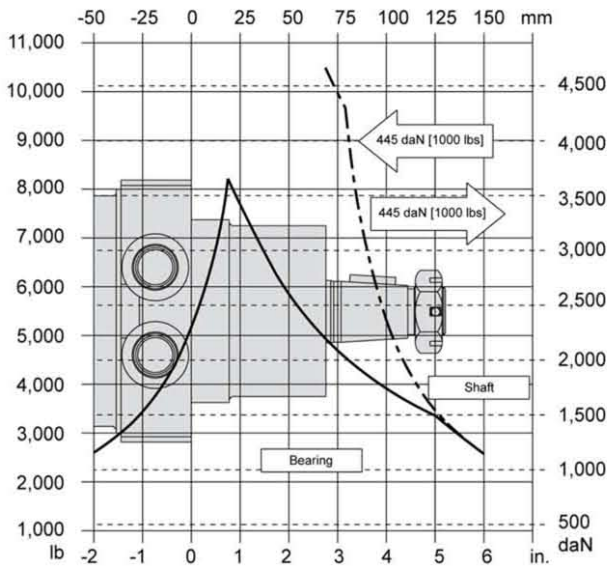


NOTE: Dimension SS is found on page 15.

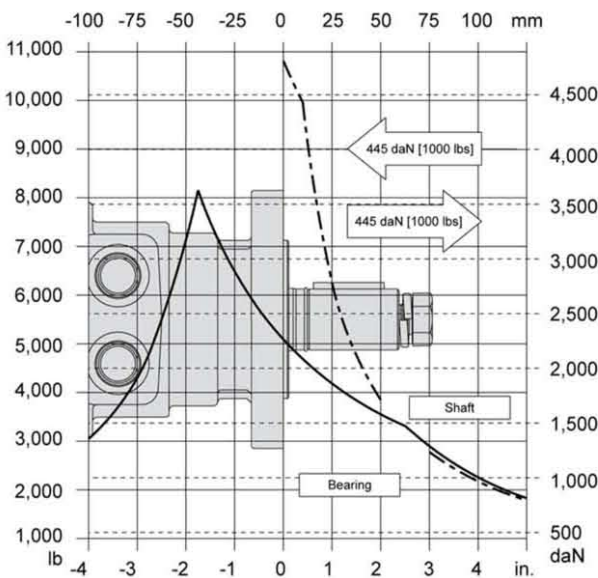
520 & 521 SERIES TECHNICAL INFORMATION

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 located on page 11.

WHEEL MOUNT



SAE A FLANGE



LENGTH / WEIGHT CHART
Wheel Mount - Dimension RR

Code	mm [in]	kg [lb]
120	120 [4.72]	12,9 [28.4]
160	120 [4.72]	12,9 [28.4]
200	123 [4.86]	13,2 [29.2]
230	126 [4.95]	13,3 [29.4]
260	128 [5.05]	13,6 [30.0]
300	132 [5.18]	14,0 [30.8]
350	146 [5.73]	15,1 [33.2]
375	138 [5.43]	14,5 [32.0]
470	146 [5.73]	15,1 [33.2]
540	152 [5.97]	15,6 [34.4]
750	170 [6.68]	17,0 [37.5]

NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

LENGTH / WEIGHT CHART
SAE A Mount - Dimension SS

Code	mm [in]	kg [lb]
120	187 [7.37]	13,3 [29.4]
160	187 [7.37]	13,3 [29.4]
200	191 [7.51]	13,7 [30.2]
230	193 [7.61]	13,8 [30.4]
260	196 [7.70]	14,1 [31.0]
300	199 [7.83]	14,4 [31.8]
350	213 [8.38]	15,5 [34.2]
375	205 [8.08]	15,0 [33.0]
470	213 [8.38]	15,5 [34.2]
540	219 [8.62]	16,1 [35.4]
750	237 [9.33]	17,5 [38.5]

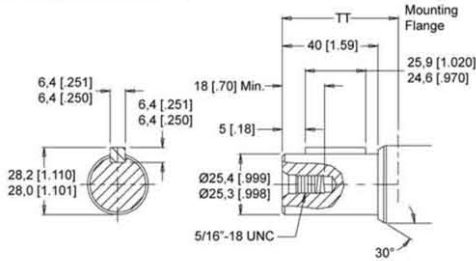
NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

RE

520 & 521 SERIES SHAFTS

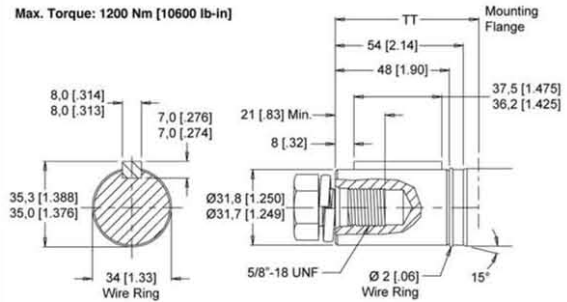
15 1" Straight

Max. Torque: 660 Nm [5880 lb-in]



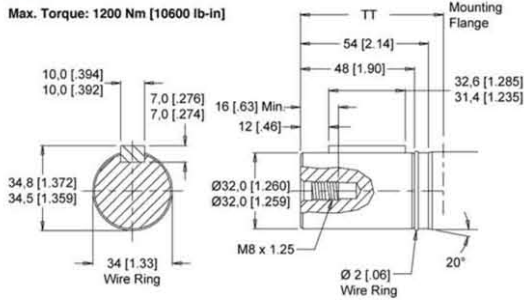
07 1-1/4" Straight

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



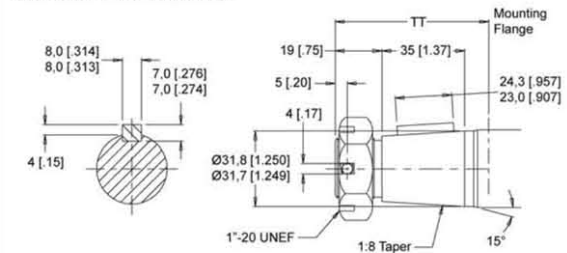
08 32mm Straight

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



25 1-1/4" Tapered

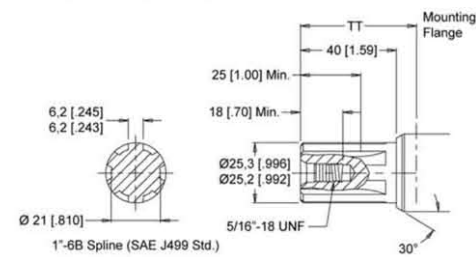
Max. Torque: 1200 Nm [10600 lb-in]



Note: A slotted nut is standard on this shaft.

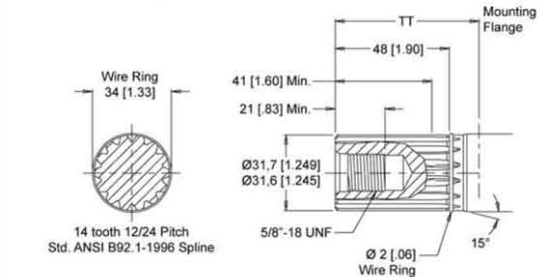
03 6B Spline

Max. Torque: 429 Nm [3800 lb-in]



09 14 Tooth Spline

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



MOUNTING FLANGE TO SHAFT END Dimension TT

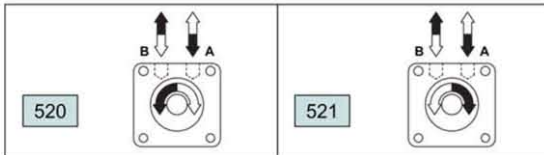
Code	SAE A Mount mm [in]	Wheel Mount mm [in]
03	67 [2.63]	135 [5.31]
07	63 [2.47]	131 [5.15]
08	62 [2.46]	130 [5.14]
09	63 [2.47]	131 [5.15]
15	51 [2.02]	119 [4.69]
25	51 [2.02]	119 [4.69]

520 & 521 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

- 520** Counterclockwise Rotation
- 521** Clockwise Rotation



NOTE: 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. To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor. For bi-directional applications, the 520 series is recommended. Preferred rotation is determined by internal valving design.

STEP 2 - Select a displacement option

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

STEP 3 - Select a housing option

- A51** 6-Hole 7/8" O-Ring Aligned Ports
- A57** 6-Hole Manifold Aligned Ports
- A58** 6-Hole 1/2" BSP.F Aligned Ports
- W31** 4-Hole 7/8" O-Ring Aligned Ports
- W38** 4-Hole 1/2" BSP.F Aligned Ports

STEP 4 - Select a shaft option

- 03** 6B Spline Extended
- 07** 1-1/4" Straight Extended
- 08** 32mm Straight Extended
- 09** 14 Tooth Spline Extended
- 15** 1" Straight Extended
- 25** 1-1/4" Tapered Extended

STEP 5 - Select a paint option

- A** Black
- B** Black (unpainted flange face)
- Z** No Paint

STEP 6 - Select a valve cavity option

- A** None

STEP 7 - Select an add on option

- A** Standard
- B** Lock Nut
- C** Solid Hex Nut

STEP 8 - Select a miscellaneous option

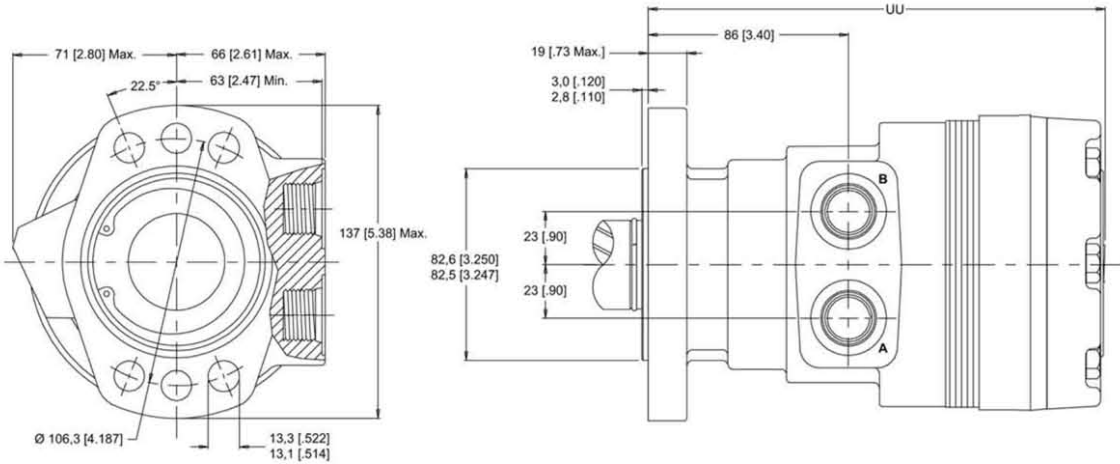
- AA** None
- AC** Freeturning Rotor
- AE** Hydraulic Declutch with Freeturning Rotor

RE

530 & 531 SERIES HOUSINGS (SAE A MOUNT)

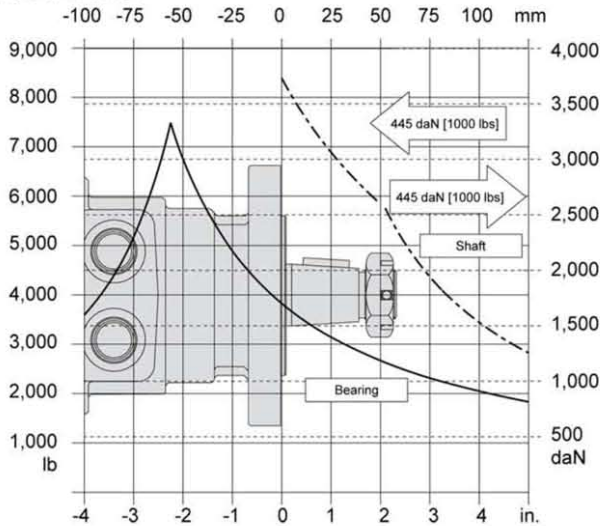
A51 6-Hole 7/8" O-Ring Aligned Ports

A58 6-Hole 1/2" BSP.F Aligned Ports



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 located on page 11.

SAE A FLANGE



LENGTH / WEIGHT CHART

SAE A Mount - Dimension UU

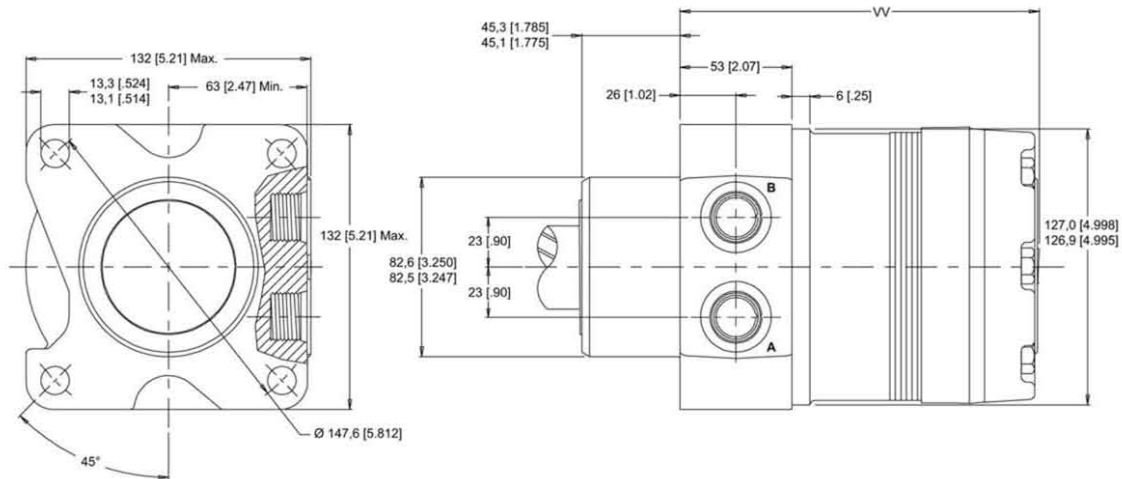
Code	mm [in]	kg [lb]
120	187 [7.37]	13,3 [29.4]
160	187 [7.37]	13,3 [29.4]
200	191 [7.51]	13,7 [30.2]
230	193 [7.61]	13,8 [30.4]
260	196 [7.70]	14,1 [31.0]
300	199 [7.83]	14,4 [31.8]
350	213 [8.38]	15,5 [34.2]
375	205 [8.08]	15,0 [33.0]
470	213 [8.38]	15,5 [34.2]
540	219 [8.62]	16,1 [35.4]
750	237 [9.33]	17,5 [38.5]

NOTE:
RE motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.

530 & 531 SERIES HOUSINGS (WHEEL MOUNT)

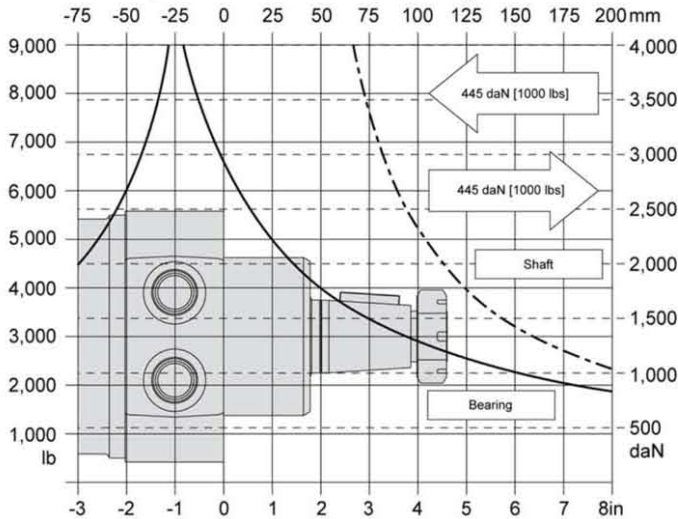
T31 4-Hole 7/8" O-Ring Aligned Ports

T38 4-Hole 1/2" BSP.F Aligned Ports



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 located on page 11.

WHEEL MOUNT (LOWER SIDE LOAD CAPACITY)



LENGTH / WEIGHT CHART		
Wheel Mount - Dimension VV		
Code	mm [in]	kg [lb]
120	156 [6.15]	14,9 [32.8]
160	156 [6.15]	14,9 [32.8]
200	159 [6.29]	15,2 [33.6]
230	162 [6.38]	15,3 [33.8]
260	165 [6.48]	15,6 [34.4]
300	168 [6.61]	16,0 [35.2]
350	182 [7.16]	17,1 [37.6]
375	174 [6.86]	16,5 [36.4]
470	182 [7.16]	17,1 [37.6]
540	188 [7.40]	17,6 [38.9]
750	206 [8.11]	19,0 [41.9]

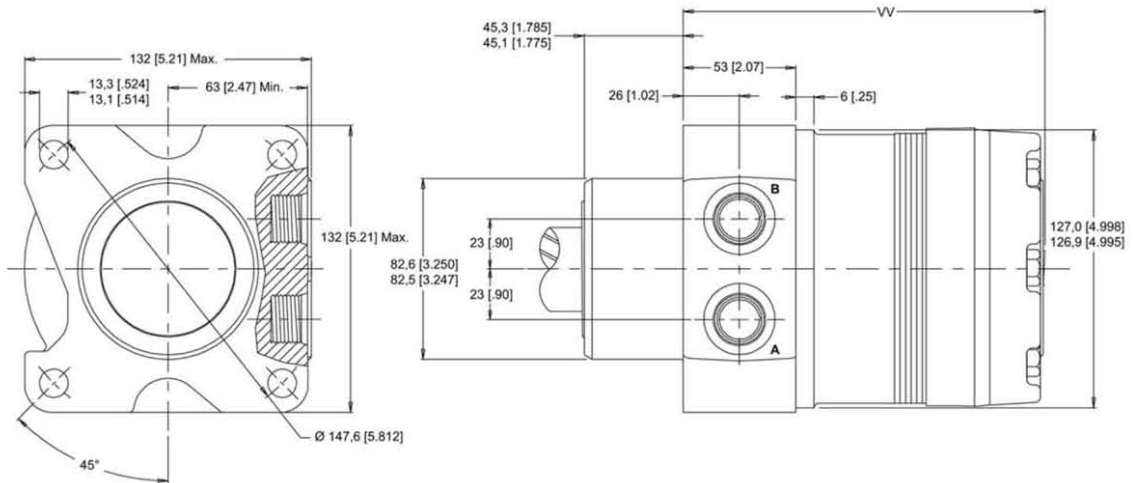
NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

RE

530 & 531 SERIES HOUSINGS (WHEEL MOUNT)

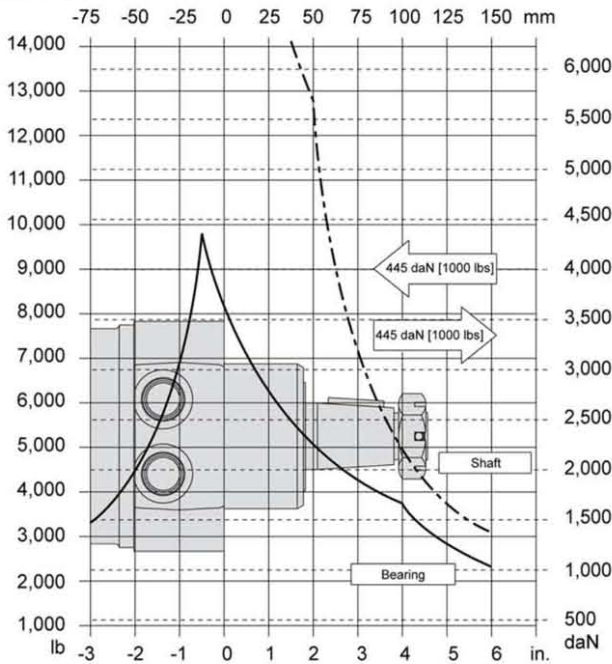
W31 4-Hole 7/8" O-Ring Aligned Ports

W38 4-Hole 1/2" BSP.F Aligned Ports



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 located on page 11.

WHEEL MOUNT



LENGTH / WEIGHT CHART

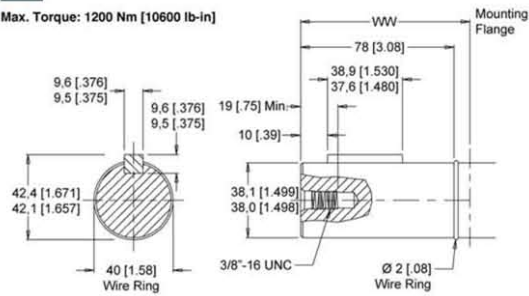
Wheel Mount - Dimension WV

Code	mm [in]	kg [lb]
120	156 [6.15]	14,9 [32.8]
160	156 [6.15]	14,9 [32.8]
200	159 [6.29]	15,2 [33.6]
230	162 [6.38]	15,3 [33.8]
260	165 [6.48]	15,6 [34.4]
300	168 [6.61]	16,0 [35.2]
350	182 [7.16]	17,1 [37.6]
375	174 [6.86]	16,5 [36.4]
470	182 [7.16]	17,1 [37.6]
540	188 [7.40]	17,6 [38.9]
750	206 [8.11]	19,0 [41.9]

NOTE:
RE motor weights vary $\pm 0,5$ kg [1 lb] depending upon motor configuration.

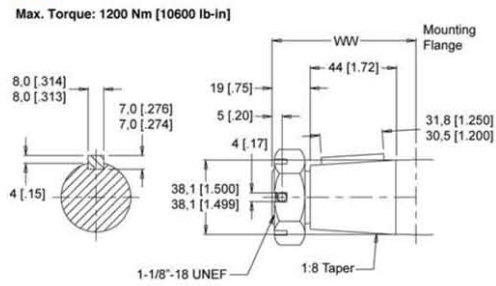
30 1-1/2" Straight

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



31 1-1/2" Tapered

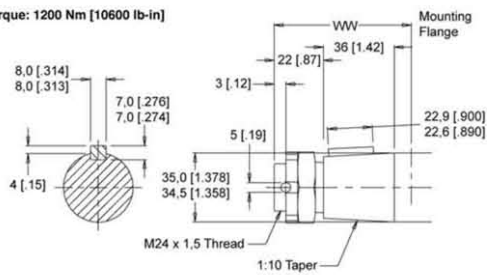
Max. Torque: 1200 Nm [10600 lb-in]



NOTE: A slotted nut is standard on this shaft.

28 35mm Tapered

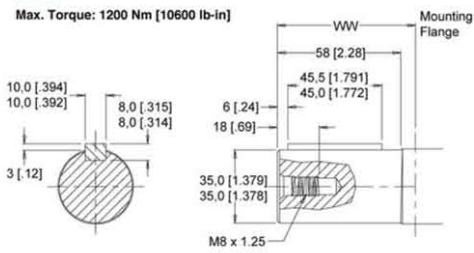
Max. Torque: 1200 Nm [10600 lb-in]



NOTE: Not available with the A51 and A58 housings only.

27 35mm Straight

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



NOTE: Not available with the A51 and A58 housings only.

MOUNTING FLANGE TO SHAFT END Dimension WW		
Code	SAE A Mount mm [in]	Wheel Mount mm [in]
27	N/A	101 [3.97]
28	N/A	105 [4.14]
30	87 [3.42]	118 [4.63]
31	84 [3.32]	115 [4.53]

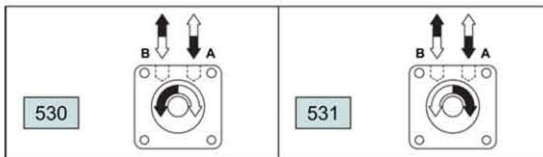
RE

530 & 531 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

- 530 Counterclockwise Rotation
- 531 Clockwise Rotation



NOTE: 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. To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor. For bi-directional applications, the 530 series is recommended. Preferred rotation is determined by internal valving design.

STEP 2 - Select a displacement option

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

STEP 3 - Select a housing option

<input type="checkbox"/> A51	6-Hole 7/8" O-Ring Aligned Ports
<input type="checkbox"/> A58	6-Hole 1/2" BSP.F Aligned Ports
<input type="checkbox"/> T31	4-Hole 7/8" O-Ring Aligned Ports
<input type="checkbox"/> T38	4-Hole 1/2" BSP.F Aligned Ports
<input type="checkbox"/> W31	4-Hole 7/8" O-Ring Aligned Ports
<input type="checkbox"/> W38	4-Hole 1/2" BSP.F Aligned Ports

STEP 4 - Select a shaft option

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

STEP 5 - Select a paint option

- A Black
- B Black (unpainted flange face)
- Z No Paint

STEP 6 - Select a valve cavity option

- A None

STEP 7 - Select an add on option

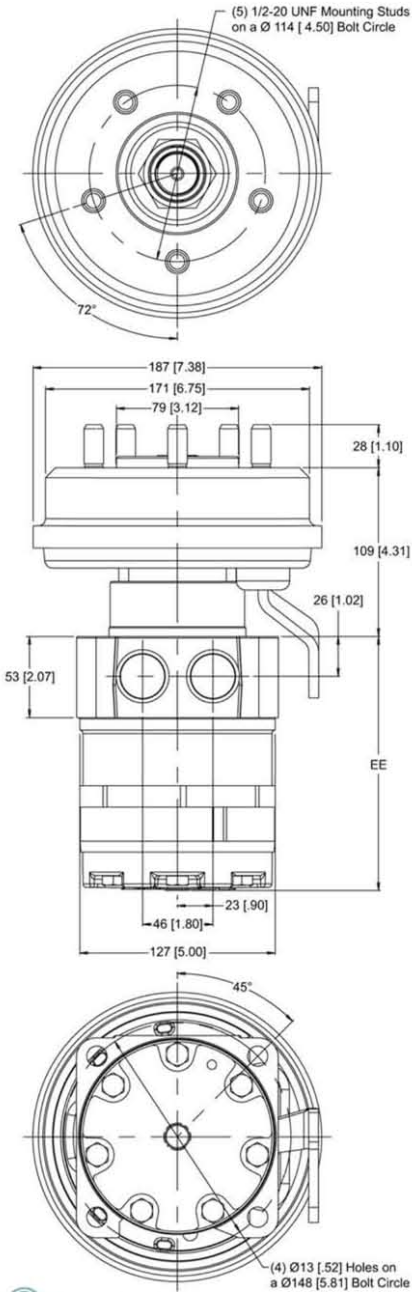
- A Standard
- B Lock Nut
- C Solid Hex Nut

STEP 8 - Select a miscellaneous option

- AA None
- AC Freeturning Rotor
- AE Hydraulic Declutch with Freeturning Rotor

510 & 511 SERIES MOTOR WITH MECHANICAL DRUM BRAKE

- X31** 4-Hole 7/8" O-Ring Aligned Ports
- X38** 4-Hole 1/2" BSP.F Aligned Ports



NOTE: Dimension EE is found on page 24.

OVERVIEW

High Efficiency RE series Motor provides exceptional low speed performance in one of the smallest wheel drive packages available today.

Self-Adjusting Brake Mechanism makes brake adjustments unnecessary by automatically adjusting for brake wear.

Standard Wheel Mount Flange adapts easily to new designs and can be retro-fitted onto older machines.

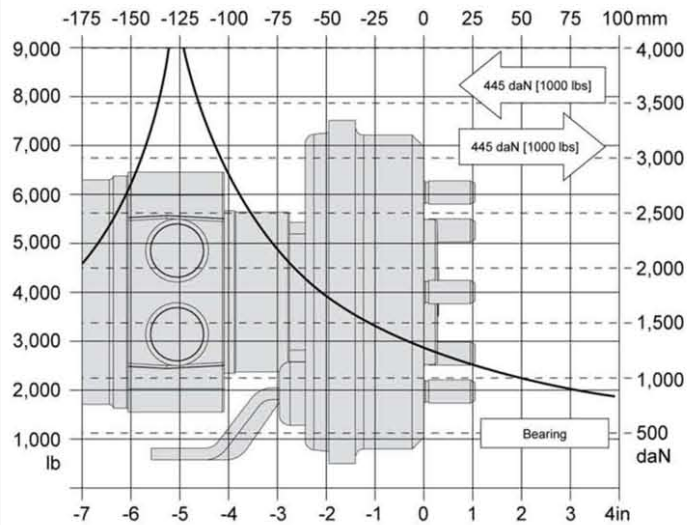
4 and 5 Bolt Wheel Hubs are available to accommodate a wide variety of wheel rims.

Labyrinth Lip Design incorporated into hub helps protect brake components from elements.

2-Position Brake Lever provides flexibility in the attachment of brake cables or actuating linkage.

TECHNICAL INFORMATION

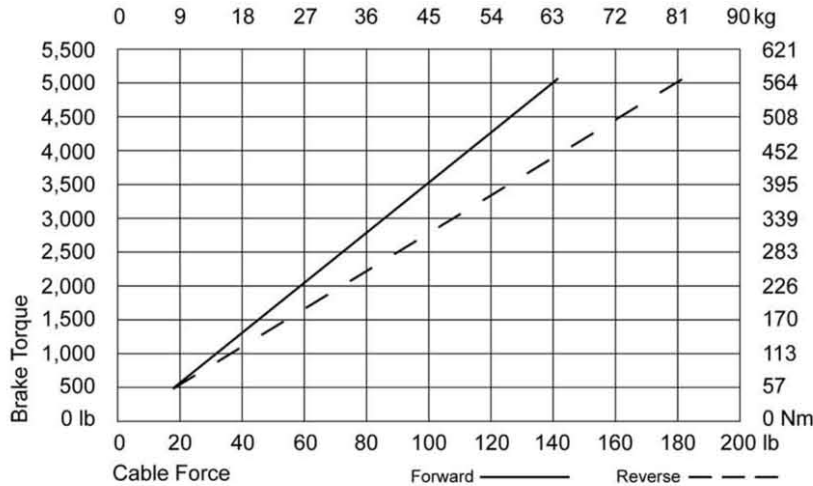
Bearing Curve: The bearing curve represents allowable bearing loads based on ISO 281 bearing capacity for an L_{10} life of 2,000 hours at 100 rpm. Radial loads for speeds other than 100 rpm may be calculated using the multiplication factor table located on page 11.



RE

510 & 511 SERIES MODEL CODE BUILDER

BRAKE HOLDING TORQUE



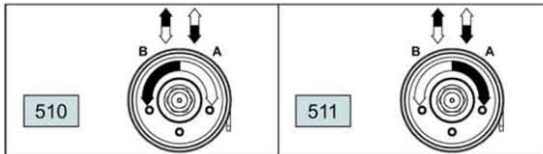
LENGTH / WEIGHT CHART Brake Mount - Dimension EE		
Code	mm [in]	kg [lb]
120	156 [6.15]	14,9 [42.9]
160	156 [6.15]	14,9 [42.9]
200	159 [6.29]	15,2 [43.7]
230	162 [6.38]	15,3 [43.9]
260	165 [6.48]	15,6 [44.5]
300	168 [6.61]	16,0 [45.3]
350	182 [7.16]	17,1 [47.7]
375	174 [6.86]	16,5 [46.5]
470	182 [7.16]	17,1 [47.7]
540	188 [7.40]	17,6 [49.0]
750	206 [8.11]	19,0 [52.0]

NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

- 510 Counterclockwise Rotation
- 511 Clockwise Rotation



NOTE: 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. To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor. For bi-directional applications, the 510 series is recommended. Preferred rotation is determined by internal valving design.

STEP 2 - Select a displacement option

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

STEP 3 - Select a housing option

- X31 4-Hole 7/8" O-Ring Aligned Ports
- X38 4-Hole 1/2" BSP.F Aligned Ports

STEP 4 - Select a shaft option

- 31 1-1/2" Tapered

STEP 5 - Select a paint option

- A Black
- Z No Paint

STEP 6 - Select a valve cavity option

- A None

STEP 7 - Select an add on option

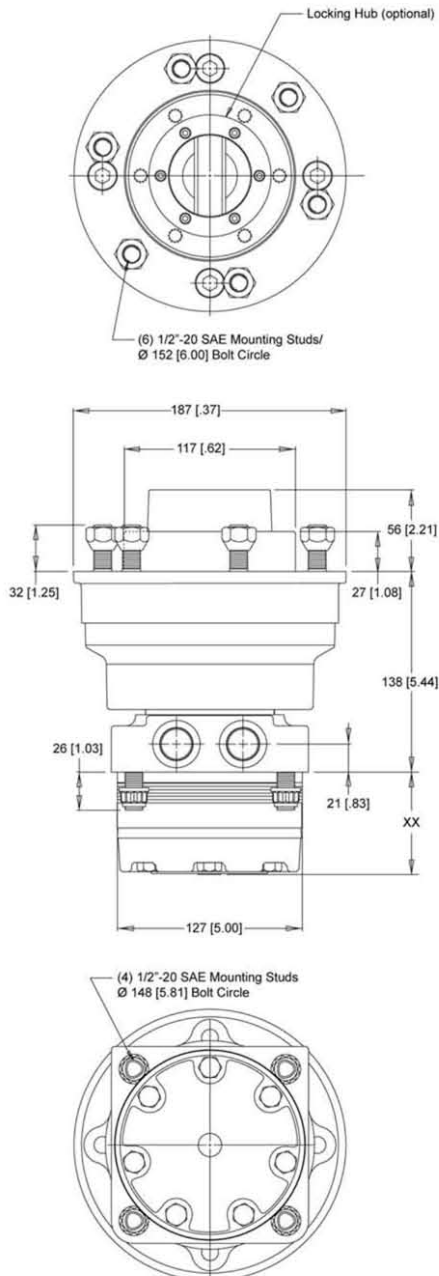
- A Standard

STEP 8 - Select a miscellaneous option

- YA Brake Drum Right Hand Position 2, 5 Bolt Hub
- ZA Brake Drum Left Hand Position 1, 5 Bolt Hub
- YE Brake Drum Right Hand Position 2, 4 Bolt Hub
- ZE Brake Drum Left Hand Position 1, 4 Bolt Hub

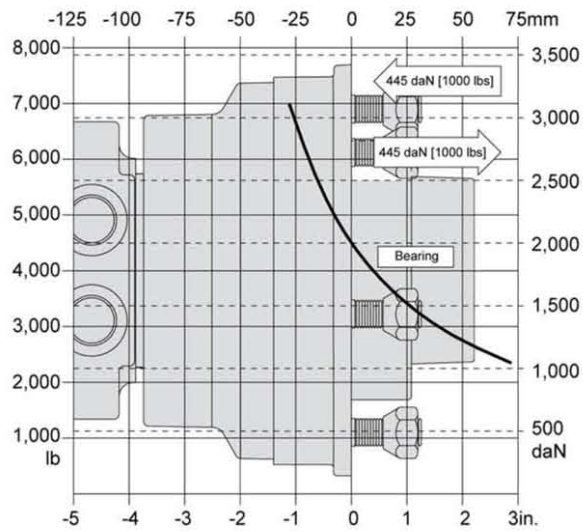
540 & 541 SERIES TECHNICAL INFORMATION

W31 4-Hole 7/8" O-Ring Aligned Ports



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 located on page 11.

WHEEL MOUNT WITH 125MM BEARING



LENGTH / WEIGHT CHART

Wheel Mount - Dimension XX

Code	mm [in]	kg [lb]
120	70 [2.77]	22,3 [49.1]
160	70 [2.77]	22,3 [49.1]
200	74 [2.90]	22,6 [49.9]
230	76 [2.99]	22,7 [50.1]
260	79 [3.09]	23,0 [50.7]
300	82 [3.22]	23,4 [51.5]
350	96 [3.77]	24,4 [53.9]
375	88 [3.47]	23,9 [52.7]
470	96 [3.77]	24,4 [53.9]
540	102 [4.01]	25,0 [55.1]
750	120 [4.72]	26,4 [58.2]

NOTE:
RE motor weights vary ± 0.5 kg [1 lb] depending upon motor configuration.

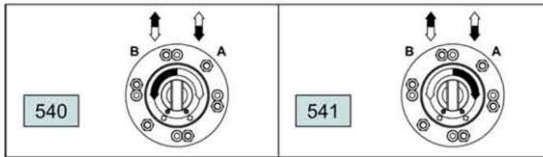
RE

540 & 541 SERIES MODEL CODE BUILDER

SERIES	DISPLACEMENT	HOUSING	SHAFT	PAINT	CAVITY	ADD ON	MISCELLANEOUS
STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7	STEP 8

STEP 1 - Select a series

- 540 Counterclockwise Rotation
- 541 Clockwise Rotation



NOTE: 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. To obtain the desired direction of shaft rotation, use the graphic above to determine the rotation code for the motor. For bi-directional applications, the 540 series is recommended. Preferred rotation is determined by internal valving design.

STEP 2 - Select a displacement option

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

STEP 3 - Select a housing option

- W31 4-Hole 7/8" O-Ring Aligned Ports

STEP 4 - Select a shaft option

- 61 6-Bolt Wheel Flange

STEP 5 - Select a paint option

- A Black
- Z No Paint

STEP 6 - Select a valve cavity option

- A None

STEP 7 - Select an add on option

- A Standard
- H Locking Hub

STEP 8 - Select a miscellaneous option

- AA None
- AC Freeturning Rotor
- AE Hydraulic Declutch with Freeturning Rotor