



whitedriveproducts



SERIES

- 600 -
- 610 -
- 620 -
- 630 -
- 640 -



MEDIUM DUTY
Hydraulic Motor & Brake

DR



OVERVIEW

Due to its case drain design, the DR Series motor is an excellent medium size motor for applications with high- duty cycles or frequent direction reversal. The case drain design produces a number of benefits including reduction of pressure on the shaft seal and the ability to provide a cooling loop for the system. The case flow also lubricates the vital drive components, extending motor life. An internal drain option is also available. A laminated manifold and three-zone orbiting valve are used to produce higher overall efficiencies and more usable power. A steel faced seal in the orbiting valve also reduces the risk of the seal extruding or melting, which is possible in competitive designs.

FEATURES / BENEFITS

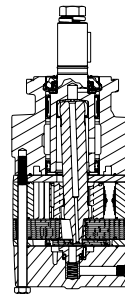
- Four Bearing Options allow load carrying capabilities of motor to be matched to application.
- Heavy-Duty Drive Link is the most durable in its class and receives case flow lubrication for reduced wear and increased life.
- Three-Zone Orbiting Valve precisely meters oil to produce exceptional volumetric efficiency.
- Rubber Energized Steel Face Seal does not extrude or melt under high pressure or high temperature.
- Standard Case Drain increases shaft seal life by reducing pressure on seal.

TYPICAL APPLICATIONS

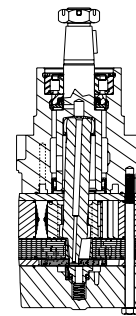
Medium-duty wheel drives, augers, mixers, winch drives, swing drives, grapple heads, feed rollers, broom drives, chippers, mining equipment, forestry equipment and more

SERIES DESCRIPTIONS

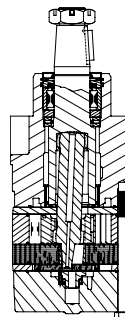
600 - Hydraulic Motor
Standard



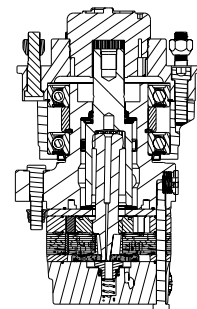
620 - Hydraulic Motor
With Medium Duty Bearing



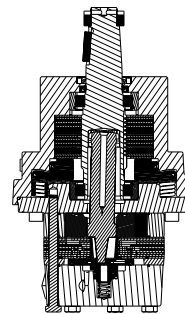
630 - Hydraulic Motor
With Heavy Duty Bearing



640 - Hydraulic Motor
With Wheel Hub



610 - Hydraulic Motor
With Integral Hydraulic 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
200	204 [12.4]	470	560	95 [25]	114 [30]	554 [4900]	644 [5700]	207 [3000]	241 [3500]	276 [4000]
260	261 [15.9]	360	440	95 [25]	114 [30]	745 [6590]	859 [7600]	207 [3000]	241 [3500]	276 [4000]
300	300 [18.3]	320	380	95 [25]	114 [30]	842 [7450]	972 [8600]	207 [3000]	241 [3500]	276 [4000]
350	348 [21.2]	270	320	95 [25]	114 [30]	972 [8600]	1107 [9800]	207 [3000]	241 [3500]	276 [4000]
375	375 [22.8]	250	300	95 [25]	114 [30]	1085 [9600]	1243 [11000]	207 [3000]	241 [3500]	276 [4000]
470	465 [28.3]	200	240	95 [25]	114 [30]	1107 [9800]	1316 [11650]	172 [2500]	207 [3000]	241 [3500]
540	536 [32.7]	180	210	95 [25]	114 [30]	1034 [9150]	1277 [11300]	138 [2000]	172 [2500]	207 [3000]
750	748 [45.6]	130	150	95 [25]	114 [30]	1040 [9200]	1390 [12300]	103 [1500]	138 [2000]	172 [2500]

▶ 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

		Pressure - bar [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
200									
204 cm ³ [12.4 in ³] / rev									
		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	38 [335] 7	77 [683] 4						10
	4 [1]	39 [342] 16	85 [748] 15	174 [1543] 13	258 [2284] 9	329 [2913] 5			19
	8 [2]	38 [339] 35	90 [795] 34	178 [1579] 32	271 [2396] 28	361 [3192] 23	454 [4016] 16	519 [4594] 11	38
	15 [4]	36 [323] 73	85 [749] 72	178 [1576] 69	283 [2506] 64	378 [3346] 57	459 [4059] 54	555 [4909] 44	75
	23 [6]		78 [690] 110	177 [1562] 106	273 [2413] 101	362 [3202] 97	462 [4085] 89	551 [4880] 80	112
	30 [8]		74 [654] 148	172 [1518] 145	268 [2368] 141	357 [3156] 133	469 [4154] 126	558 [4936] 117	150
	38 [10]			168 [1491] 184	260 [2301] 178	349 [3091] 174	444 [3933] 167	541 [4783] 156	187
	45 [12]			156 [1381] 221	255 [2256] 215	350 [3096] 209	450 [3985] 204	542 [4793] 199	224
	53 [14]			150 [1332] 259	251 [2219] 254	330 [2919] 250	435 [3850] 241	526 [4653] 231	261
	61 [16]			133 [1180] 297	241 [2129] 293	336 [2970] 286	430 [3803] 278	522 [4616] 276	299
	68 [18]			122 [1082] 335	227 [2012] 332	328 [2899] 325	417 [3692] 319	510 [4510] 310	336
	76 [20]			112 [993] 372	214 [1897] 371	309 [2732] 365	401 [3547] 356	496 [4391] 348	373
	83 [22]				199 [1757] 409	303 [2680] 404	384 [3401] 396	493 [4358] 384	410
	91 [24]				184 [1625] 447	285 [2526] 443	380 [3366] 433	474 [4192] 423	448
Max. Max. Inter. Cont.	95 [25]				166 [1472] 465	277 [2453] 461	367 [3244] 454	463 [4101] 443	466
	114 [30]					219 [1935] 558	332 [2934] 553		559

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]
----------	-----------	------------	------------	------------	------------	------------	------------

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

		Pressure - bar [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
260									
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]	47 [417] 5	109 [962] 4						8
	4 [1]	51 [454] 13	110 [972] 11	238 [2104] 11	355 [3139] 8	460 [4074] 5			15
	8 [2]	52 [462] 28	113 [1004] 27	242 [2145] 25	367 [3244] 22	485 [4292] 18	603 [5334] 14	715 [6323] 11	30
	15 [4]	49 [430] 57	111 [985] 56	239 [2115] 54	367 [3247] 51	491 [4343] 45	619 [5474] 41	746 [6598] 36	59
	23 [6]	44 [391] 87	107 [950] 86	234 [2067] 83	364 [3225] 78	487 [4311] 72	617 [5458] 67	738 [6530] 60	88
	30 [8]		100 [884] 115	228 [2016] 113	355 [3146] 107	478 [4230] 103	612 [5418] 95	733 [6487] 89	117
	38 [10]		90 [797] 145	220 [1947] 143	348 [3080] 138	468 [4143] 132	605 [5351] 123	734 [6498] 115	146
	45 [12]		84 [748] 174	212 [1877] 172	340 [3011] 168	463 [4094] 162	596 [5272] 152	722 [6390] 143	175
	53 [14]		71 [631] 203	205 [1813] 201	330 [2921] 198	452 [4004] 185	587 [5195] 179	706 [6244] 173	204
	61 [16]			191 [1688] 231	317 [2807] 228	444 [3927] 223	574 [5077] 214	703 [6221] 203	233
	68 [18]			174 [1540] 261	305 [2698] 256	429 [3798] 251	560 [4952] 246	690 [6111] 230	262
	76 [20]			156 [1383] 290	289 [2558] 289	418 [3700] 282	544 [4817] 268	675 [5977] 262	291
	83 [22]			143 [1270] 319	275 [2431] 317	405 [3585] 313	533 [4717] 300	659 [5828] 293	320
Max. Max. Inter. Cont.	91 [24]			131 [1158] 348	255 [2253] 346	387 [3421] 342	515 [4554] 333	613 [5421] 322	349
	95 [25]				239 [2115] 362	373 [3301] 357	505 [4471] 348	628 [5559] 342	364
	114 [30]				157 [1388] 434	298 [2637] 432	426 [3768] 427		436

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]

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



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]							Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
		300 cm ³ [18.3 in ³] / rev								
		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	58 [509] 5	117 [1039] 4	253 [2236] 4						7
	4 [1]	58 [517] 12	122 [1081] 11	266 [2353] 11	384 [3396] 11	509 [4501] 9	633 [5599] 9			13
	8 [2]	58 [516] 25	128 [1134] 24	267 [2360] 24	404 [3572] 23	553 [4893] 22	683 [6045] 21	813 [7198] 20	917 [8112] 20	26
	15 [4]	56 [491] 50	132 [1173] 49	274 [2425] 49	417 [3691] 48	553 [4890] 47	703 [6225] 44	836 [7397] 43	962 [8513] 42	51
	23 [6]	53 [466] 75	123 [1092] 75	269 [2384] 74	406 [3590] 73	559 [4949] 71	701 [6207] 69	831 [7356] 66	954 [8445] 63	76
	30 [8]	44 [386] 100	117 [1036] 99	256 [2263] 97	419 [3710] 96	548 [4847] 95	707 [6256] 93	846 [7485] 88	974 [8619] 85	101
	38 [10]		107 [947] 126	251 [2222] 126	390 [3448] 125	561 [4961] 121	691 [6119] 119	836 [7396] 113	976 [8637] 109	127
	45 [12]		95 [841] 151	238 [2108] 150	400 [3538] 150	529 [4685] 149	696 [6160] 144	833 [7371] 140	969 [8573] 135	152
	53 [14]		84 [748] 176	232 [2053] 175	366 [3237] 174	530 [4688] 173	676 [5978] 168	825 [7302] 164	964 [8533] 158	177
	61 [16]		71 [629] 201	217 [1920] 200	370 [3277] 198	508 [4494] 197	654 [5786] 196	803 [7104] 187	952 [8428] 182	202
	68 [18]			202 [1792] 227	339 [2996] 226	503 [4448] 221	645 [5712] 221	781 [6914] 214	933 [8253] 211	228
	76 [20]			184 [1631] 252	326 [2887] 251	467 [4129] 249	635 [5619] 244	772 [6831] 236	927 [8205] 230	253
	83 [22]			164 [1449] 277	308 [2726] 275	446 [3943] 274	604 [5346] 271	745 [6592] 269	896 [7926] 267	278
	91 [24]			147 [1304] 302	286 [2535] 301	437 [3871] 300	580 [5137] 296	723 [6401] 293	861 [7620] 285	303
	95 [25]			116 [1024] 315	291 [2574] 314	441 [3902] 312	575 [5085] 310	707 [6255] 309	848 [7500] 302	316
Max. Max. Inter. Cont.	114 [30]				204 [1805] 378	347 [3067] 376	499 [4416] 370			379

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]

Pressure - bar [psi]

17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
----------	----------	-----------	------------	------------	------------	------------	------------

Max. Cont. Max. Inter.

		Pressure - bar [psi]							Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]	
		348 cm ³ [21.2 in ³] / rev								
		Torque - Nm [lb-in], Speed rpm							Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	69 [606] 4	140 [1243] 3	262 [2318] 2						6
	4 [1]	75 [660] 10	153 [1350] 9	309 [2733] 7	454 [4014] 6					11
	8 [2]	75 [667] 21	158 [1395] 20	325 [2880] 17	489 [4326] 16	647 [5727] 14	784 [6937] 13	917 [8119] 11		22
	15 [4]	73 [648] 43	159 [1405] 42	333 [2943] 38	502 [4443] 36	677 [5988] 33	830 [7342] 31	984 [8704] 29	1123 [9935] 26	44
	23 [6]	67 [594] 65	152 [1346] 63	328 [2901] 61	502 [4439] 55	670 [5926] 51	841 [7444] 49	1010 [8940] 49	1155 [10220] 46	66
	30 [8]	56 [494] 87	143 [1268] 85	317 [2808] 83	494 [4368] 78	678 [6002] 72	833 [7376] 67	1018 [9010] 65	1172 [10367] 65	88
	38 [10]		129 [1141] 108	305 [2700] 105	477 [4219] 99	655 [5798] 92	830 [7345] 88	994 [8801] 85	1159 [10260] 83	109
	45 [12]		121 [1068] 130	291 [2578] 128	465 [4113] 122	641 [5672] 115	817 [7231] 107	991 [8766] 101	1169 [10342] 100	131
	53 [14]		103 [907] 151	275 [2437] 148	452 [4001] 145	630 [5572] 136	815 [7212] 130	972 [8604] 123	1162 [10284] 115	153
	61 [16]		85 [755] 174	258 [2281] 172	431 [3818] 168	609 [5390] 161	790 [6991] 152	983 [8696] 144	1141 [10099] 136	175
	68 [18]		66 [587] 196	246 [2174] 193	432 [3823] 190	583 [5161] 185	768 [6800] 171	944 [8355] 164	1131 [10012] 159	197
	76 [20]			223 [1969] 217	391 [3459] 211	568 [5026] 206	750 [6637] 196	925 [8186] 185	1101 [9742] 176	218
	83 [22]			193 [1704] 239	372 [3293] 236	545 [4825] 230	724 [6408] 219	909 [8049] 209	1092 [9666] 198	240
	91 [24]			169 [1492] 261	349 [3085] 257	537 [4755] 253	698 [6179] 243			262
Max. Max. Inter. Cont.	95 [25]				325 [2874] 272	507 [4491] 265	687 [6082] 254			273
	114 [30]				255 [2258] 326	429 [3796] 320	605 [5354] 315			327

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]

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

**DISPLACEMENT PERFORMANCE**

		Pressure - bar [psi]						Max. Cont.	Max. Inter.
		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]
375									
375 cm ³ [22.8 in ³] / rev									
		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	69 [611] 4							6
	4 [1]	74 [651] 9	161 [1425] 8	330 [2920] 8	494 [4369] 7	653 [5783] 6	823 [7283] 5		11
	8 [2]	76 [676] 20	173 [1527] 19	354 [3133] 18	518 [4582] 17	685 [6065] 15	860 [7611] 13	1021 [9038] 13	21
	15 [4]	73 [649] 40	158 [1399] 40	350 [3098] 38	535 [4731] 37	706 [6250] 34	883 [7814] 32	1032 [9130] 30	41
	23 [6]	66 [588] 60	159 [1407] 60	346 [3058] 59	547 [4841] 57	712 [6300] 54	899 [7956] 49	1080 [9561] 47	61
	30 [8]	57 [502] 81	147 [1301] 80	337 [2980] 79	537 [4749] 77	700 [6192] 74	898 [7948] 70	1088 [9628] 65	82
	38 [10]		134 [1190] 101	323 [2856] 100	510 [4512] 99	694 [6139] 95	887 [7849] 90	1066 [9437] 85	102
	45 [12]		124 [1097] 121	309 [2730] 120	496 [4385] 119	679 [6009] 114	883 [7817] 109	1073 [9493] 104	122
	53 [14]		109 [961] 141	290 [2563] 140	477 [4217] 138	680 [6016] 136	854 [7556] 130	1041 [9214] 123	142
	61 [16]		82 [728] 162	267 [2362] 161	453 [4005] 159	637 [5641] 157	846 [7489] 150	1041 [9209] 144	163
	68 [18]			248 [2198] 182	434 [3842] 180	619 [5474] 175	812 [7190] 171	1002 [8864] 165	183
	76 [20]			229 [2026] 202	416 [3685] 201	600 [5309] 199	790 [6994] 192	979 [8664] 183	203
	83 [22]			199 [1764] 222	385 [3406] 221	572 [5065] 219	761 [6738] 215	953 [8435] 210	223
Max. Max. Inter. Cont.	91 [24]		168 [1490] 243	362 [3204] 241	566 [5007] 240	731 [6471] 235			244
	95 [25]			347 [3073] 253	554 [4905] 250	721 [6384] 245			254
	114 [30]			261 [2314] 303	440 [3891] 301	623 [5514] 300			304

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]

Pressure - bar [psi] Max. Cont. Max. Inter.

17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]
----------	----------	-----------	------------	------------	------------	------------

465 cm³ [28.3 in³] / rev

		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	92 [815] 3	195 [1723] 2	374 [3306] 1					5
	4 [1]	109 [967] 7	188 [1661] 6	418 [3701] 5	615 [5447] 4				9
	8 [2]	99 [875] 15	217 [1924] 14	440 [3892] 13	668 [5910] 12	871 [7709] 9	1066 [9436] 7	1227 [10855] 5	17
	15 [4]	93 [825] 32	213 [1887] 30	441 [3906] 29	688 [6086] 28	907 [8027] 25	1131 [10008] 22	1343 [11886] 18	33
	23 [6]	85 [751] 48	200 [1771] 48	434 [3841] 46	686 [6074] 44	906 [8017] 40	1141 [10098] 35	1362 [12056] 30	49
	30 [8]	72 [635] 65	186 [1645] 64	422 [3738] 63	659 [5834] 61	889 [7871] 58	1142 [10106] 50	1352 [11963] 45	66
	38 [10]	53 [472] 81	169 [1493] 80	404 [3579] 79	639 [5657] 77	874 [7734] 74	1115 [9871] 66	1351 [11958] 59	82
	45 [12]		152 [1348] 97	402 [3561] 96	608 [5377] 94	855 [7563] 89	1111 [9836] 82	1340 [11861] 76	98
	53 [14]		133 [1175] 114	364 [3221] 113	598 [5292] 112	833 [7374] 107	1090 [9643] 98	1319 [11673] 90	115
	61 [16]		103 [910] 130	333 [2947] 129	569 [5037] 128	803 [7110] 123	1063 [9410] 114	1294 [11450] 104	131
	68 [18]		75 [661] 146	305 [2701] 144	555 [4908] 143	764 [6765] 141	1021 [9033] 133	1267 [11214] 124	147
	76 [20]			281 [2489] 163	507 [4490] 162	745 [6597] 156	985 [8719] 150	1236 [10940] 141	164
	83 [22]			227 [2011] 179	473 [4189] 178	714 [6322] 176	948 [8391] 168	1182 [10462] 162	180
Max. Max. Inter. Cont.	91 [24]		193 [1705] 194	432 [3827] 192	687 [6079] 191	915 [8093] 186			196
	95 [25]			423 [3743] 204	651 [5759] 201	896 [7928] 191			205
	114 [30]			321 [2840] 244	538 [4761] 242	784 [6938] 238			245

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]

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



DISPLACEMENT PERFORMANCE

		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]	108 [953] 3	215 [1900] 2				4
	4 [1]	107 [946] 6	225 [1995] 6	476 [4212] 5	710 [6284] 5	920 [8138] 3	8
	8 [2]	113 [998] 13	241 [2133] 12	498 [4403] 11	748 [6620] 11	980 [8674] 9	15
	15 [4]	115 [1014] 28	242 [2137] 27	508 [4491] 26	779 [6893] 25	1038 [9188] 24	29
	23 [6]	102 [902] 42	234 [2067] 42	505 [4465] 40	771 [6821] 38	1019 [9022] 36	43
	30 [8]	89 [792] 56	222 [1962] 56	494 [4373] 55	764 [6759] 52	1020 [9029] 48	57
	38 [10]	71 [630] 70	201 [1782] 70	477 [4224] 68	750 [6639] 66	1016 [8994] 62	71
	45 [12]	47 [417] 84	188 [1661] 84	455 [4027] 84	729 [6455] 81	1001 [8858] 76	85
	53 [14]		158 [1397] 98	430 [3803] 97	702 [6214] 96	995 [8803] 89	99
	61 [16]		132 [1170] 113	403 [3564] 112	670 [5930] 110	944 [8353] 106	114
	68 [18]		97 [856] 127	366 [3236] 127	640 [5664] 126	935 [8276] 120	128
	76 [20]		63 [554] 141	335 [2962] 140	604 [5345] 139	878 [7767] 135	142
	83 [22]			303 [2680] 155	562 [4972] 153	838 [7420] 152	156
	91 [24]			242 [2141] 169	522 [4622] 167	813 [7194] 164	170
	95 [25]			226 [1998] 176	490 [4338] 175	772 [6832] 174	177
	114 [30]			98 [864] 211	380 [3365] 210	659 [5834] 209	212

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]

Pressure - bar [psi] Max. Cont. Max. Inter.

750

748 cm³ [45.6 in³] / rev

		Torque - Nm [lb-in], Speed rpm					
Flow - lpm [gpm]	2 [0.5]	126 [1118] 1	277 [2450] 1				3
	4 [1]	156 [1378] 4	287 [2537] 3	627 [5552] 3	922 [8155] 2		6
	8 [2]	153 [1357] 9	322 [2853] 9	664 [5873] 8	986 [8722] 7	1308 [11579] 6	11
	15 [4]	148 [1312] 20	327 [2898] 19	686 [6071] 18	1027 [9085] 17	1374 [12161] 16	21
	23 [6]	139 [1230] 30	323 [2860] 29	691 [6113] 28	1040 [9200] 27	1393 [12328] 25	31
	30 [8]	123 [1085] 40	306 [2712] 40	681 [6026] 39	1040 [9207] 36	1380 [12211] 34	41
	38 [10]	99 [874] 50	291 [2571] 49	666 [5897] 48	1035 [9162] 47	1399 [12382] 45	51
	45 [12]	75 [664] 60	274 [2423] 59	643 [5688] 58	1018 [9012] 57	1392 [12318] 55	61
	53 [14]	46 [408] 70	239 [2113] 70	616 [5451] 69	996 [8814] 68	1372 [12146] 64	71
	61 [16]		190 [1682] 81	575 [5089] 80	958 [8479] 78	1327 [11742] 76	82
	68 [18]		150 [1325] 91	535 [4738] 90	921 [8150] 88	1299 [11494] 86	92
	76 [20]		107 [949] 101	486 [4298] 100	878 [7771] 100	1253 [11090] 97	102
	83 [22]			449 [3978] 111	822 [7273] 110	1198 [10598] 108	112
	91 [24]			384 [3401] 121	761 [6736] 120	1143 [10117] 117	122
	95 [25]			369 [3268] 126	737 [6523] 125	1111 [9830] 124	127
	114 [30]			116 [1025] 151	494 [4374] 149		152

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.



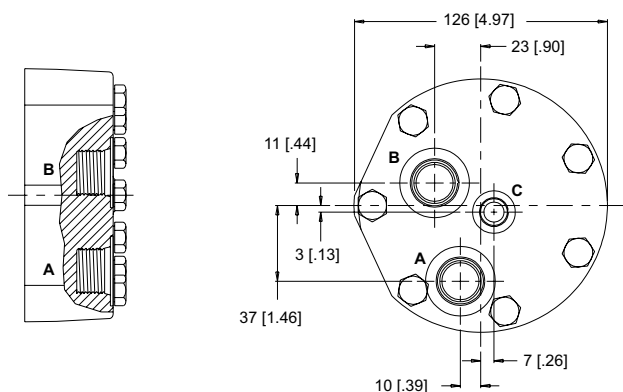
PORTING

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

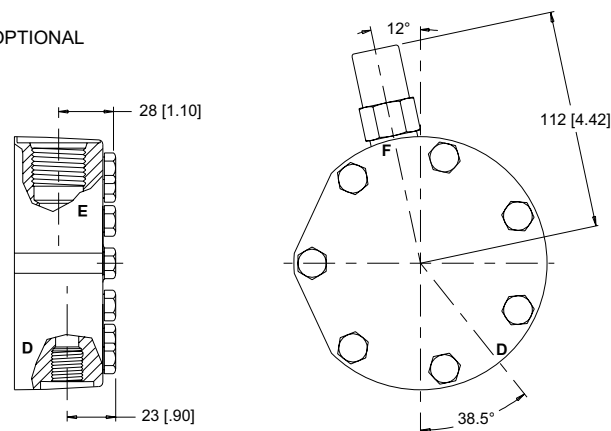
END PORTED - OFFSET

1 Main Ports **A, B:** 7/8-14 UNF
Drain Port **C:** 7/16-20 UNF

STANDARD



OPTIONAL

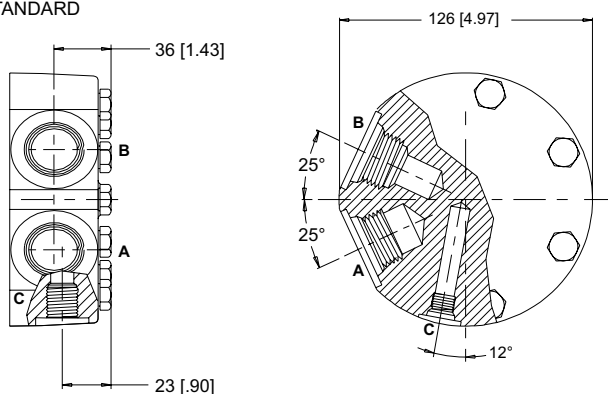


D: Internal Drain E: 10 Series/2-Way Valve Cavity 7/8-14 UNF F: Valve Cartridge Installed

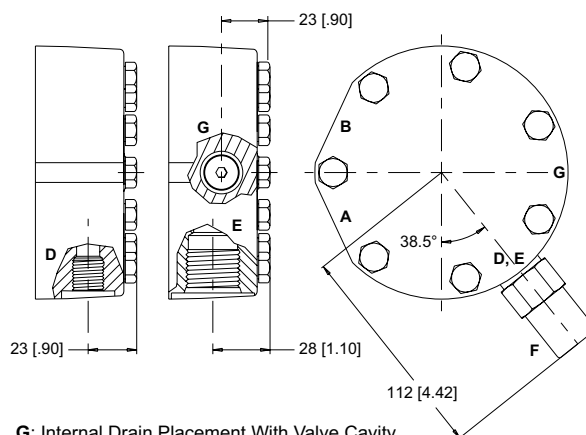
SIDE PORTED - RADIAL

2 Main Ports **A, B:** G 3/4
Drain Port **C:** G 1/4

STANDARD



OPTIONAL



D: Internal Drain E: 10 Series/2-Way Valve Cavity 7/8-14 UNF F: Valve Cartridge Installed G: Internal Drain Placement With Valve Cavity

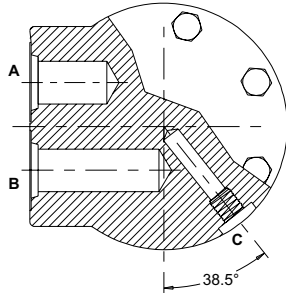
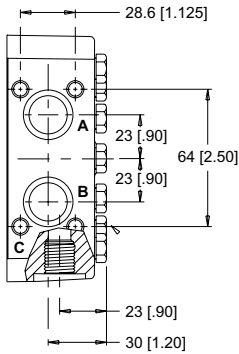
PORTING

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

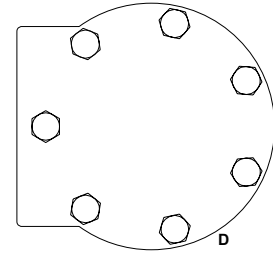
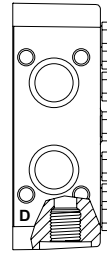
SIDE PORTED - MANIFOLD ALIGNED

3 Main Ports **A, B:** 11/16" Drilled
Drain Port **C:** 7/16-20 UNF

STANDARD



OPTIONAL

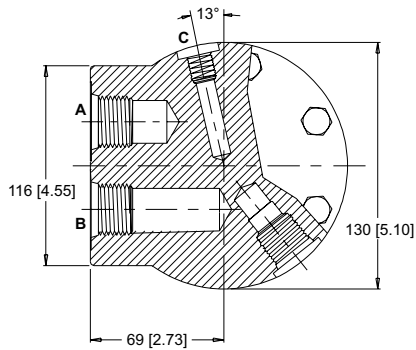
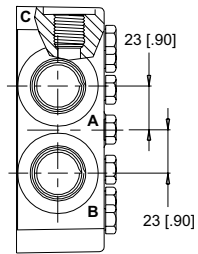


D: Internal Drain

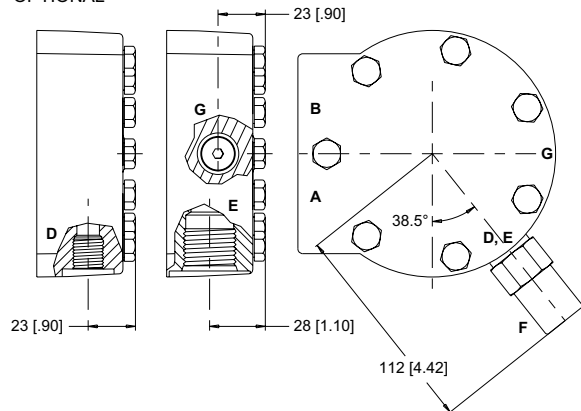
SIDE PORTED - ALIGNED

6 Main Ports **A, B:** 1 1/16-12 UN
Drain Port **C:** 7/16-20 UNF

STANDARD



OPTIONAL



D: Internal Drain E: 10 Series/2-Way Valve Cavity 7/8-14 UNF F: Valve Cartridge Installed G: Internal Drain Placement With Valve Cavity

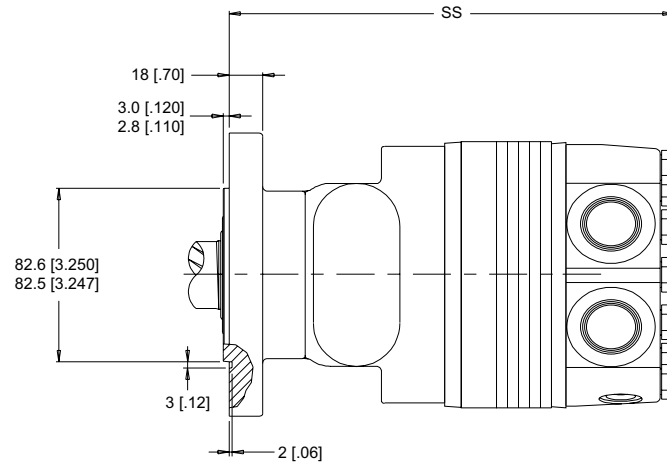
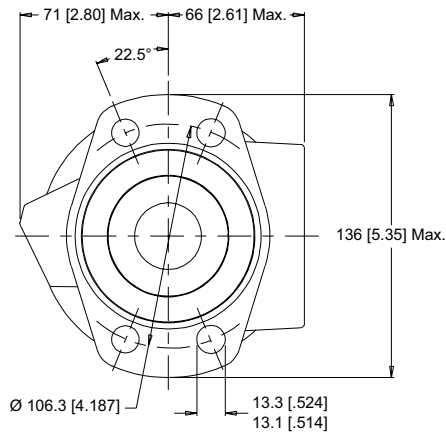
HOUSINGS

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

4-HOLE, MAGNETO MOUNT

A2 End Ports

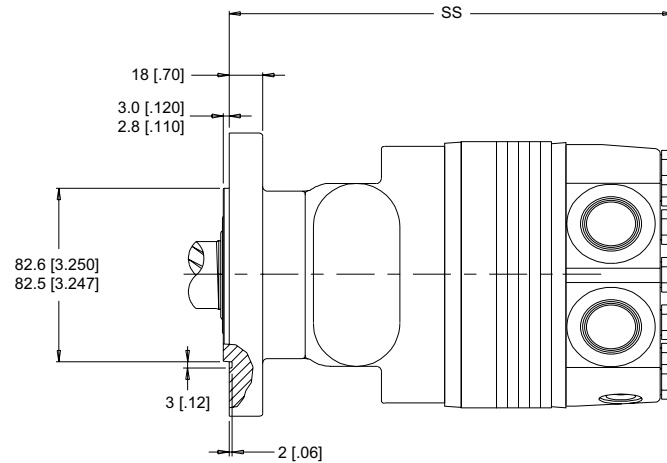
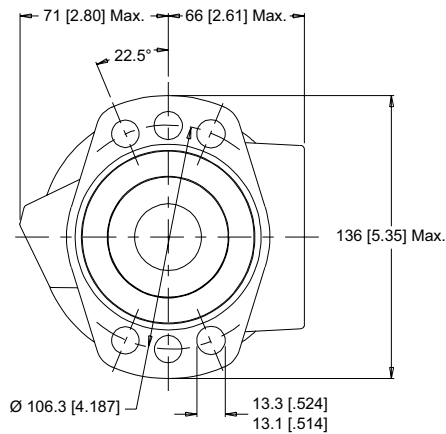
A8 Side Ports



6-HOLE, SAE A MOUNT

A4 End Ports

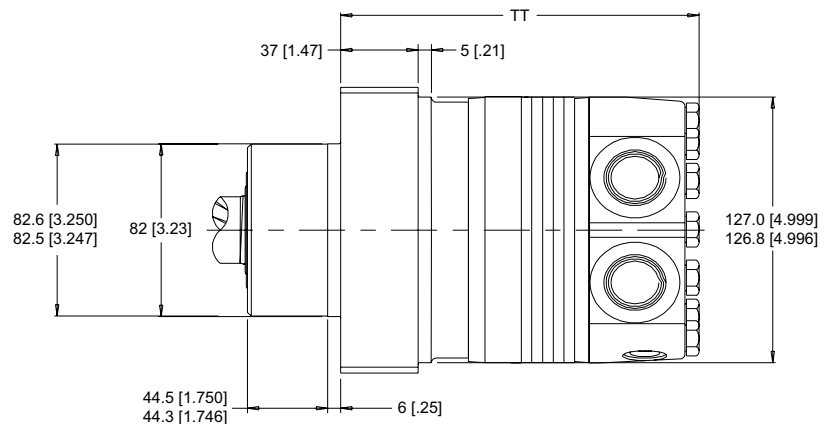
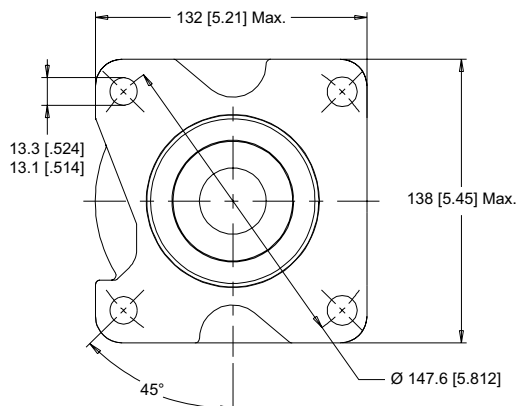
A9 Side Ports



4-HOLE, WHEEL MOUNT

W2 End Ports

W8 Side Ports



► Dimensions SS & TT are charted on page 10. Porting options listed on pages 7-8.

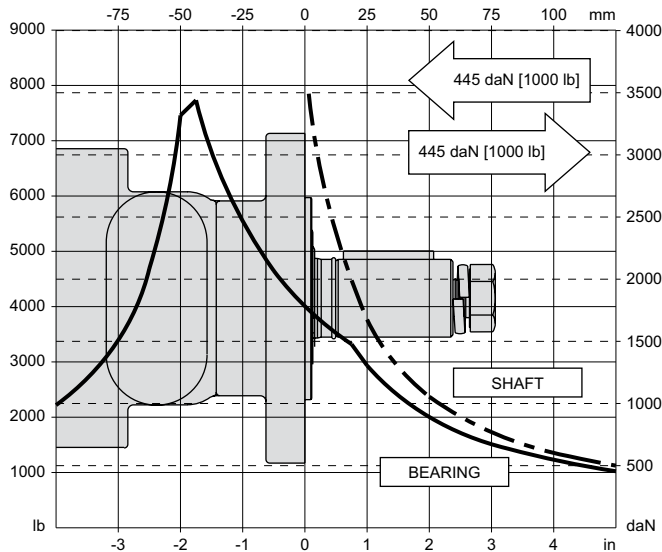


TECHNICAL INFORMATION

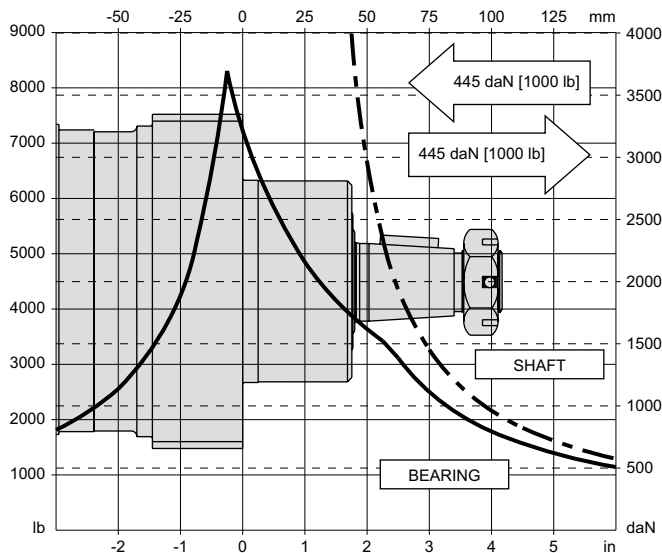
ALLOWABLE SHAFT LOAD / BEARING CURVE

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 below.

MAGNETO & SAE A MOUNTS



WHEEL MOUNTS



LENGTH & WEIGHT CHART

Dimensions SS & TT are the overall motor lengths from the rear of the motor to the mounting flange surface and are referenced on detailed housing drawings listed on page 9.

SS	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	205 [8.08]	208 [8.19]	15.9 [35.0]
260	210 [8.26]	213 [8.37]	16.3 [36.0]
300	213 [8.39]	216 [8.50]	16.6 [36.6]
350	227 [8.95]	230 [9.06]	17.8 [39.2]
375	219 [8.75]	222 [8.75]	17.1 [37.8]
470	227 [8.95]	230 [9.06]	17.8 [39.2]
540	233 [9.18]	236 [9.29]	18.3 [40.3]
750	251 [9.89]	254 [10.00]	19.7 [43.5]

TT	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	163 [6.42]	166 [6.53]	13.4 [29.6]
260	168 [6.61]	171 [6.72]	13.9 [30.6]
300	171 [6.74]	174 [6.85]	14.6 [32.2]
350	185 [7.29]	188 [7.40]	15.7 [34.7]
375	177 [6.99]	180 [7.10]	15.2 [33.4]
470	185 [7.29]	188 [7.40]	15.7 [34.7]
540	191 [7.53]	194 [7.64]	16.2 [35.8]
750	209 [8.24]	212 [8.35]	17.7 [39.1]

► All DR series motor weights can vary ± 0.9 kg [2 lb] depending on model configurations such as housing, shaft, endcover, options etc.

BEARING LOAD MULTIPLICATION FACTOR TABLE

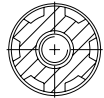
RPM	FACTOR	RPM	FACTOR
50	1.23	500	0.62
100	1.00	600	0.58
200	0.81	700	0.56
300	0.72	800	0.50
400	0.66		



SHAFTS

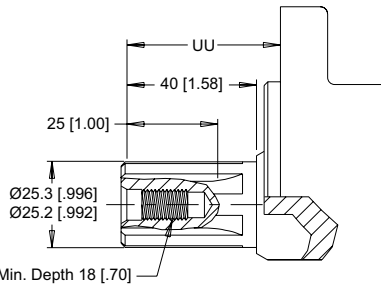
02 1" 6B Spline

6B Spline
SAE J499 Standard

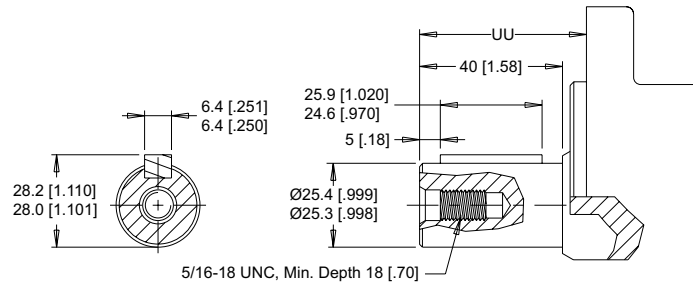


5/16-18 UNC, Min. Depth 18 [.70]

03 1" 6B Spline Extended



10 1" Straight



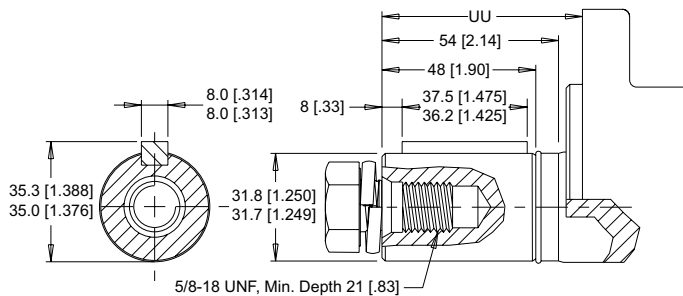
15 1" Straight Extended

Max. Torque: 678 Nm [6000 lb-in]

Max. Torque: 655 Nm [5800 lb-in]

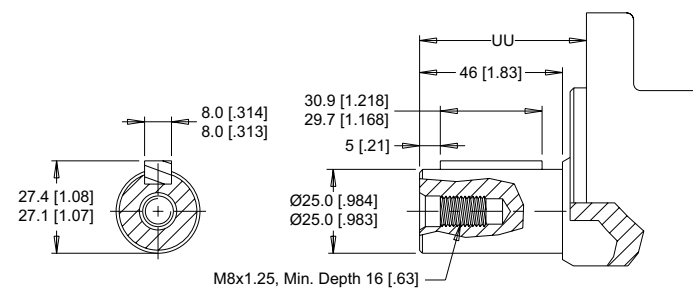
07 1-1/4" Straight Extended

20 1-1/4" Straight



5/8-18 UNF, Min. Depth 21 [.83]

12 25mm Straight



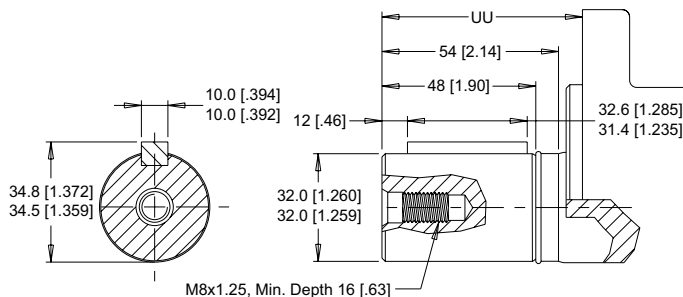
M8x1.25, Min. Depth 16 [.63]

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

Max. Torque: 678 Nm [6000 lb-in]

08 32mm Straight Extended

21 32mm Straight

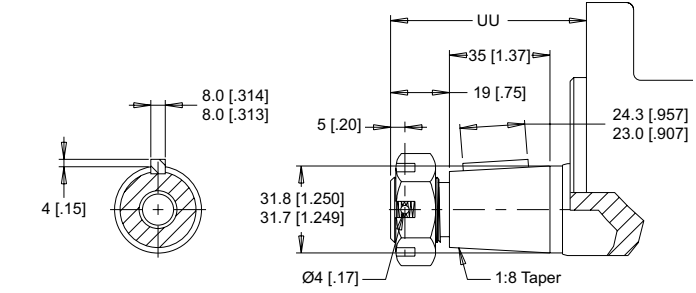


M8x1.25, Min. Depth 16 [.63]

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

22 1-1/4" Tapered

25 1-1/4" Tapered Extended



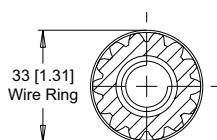
► A slotted hex nut is standard on this shaft.

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

09 14 Tooth Spline Extended

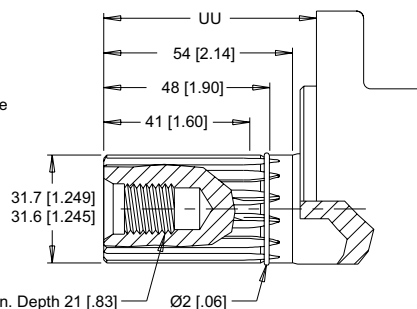
23 14 Tooth Spline

14 Tooth Spline 12/24 Pitch
Standard ANSI B92.1-1996 Spline



Wire Ring

5/8-18 UNF, Min. Depth 21 [.83]



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

MOUNTING / SHAFT LENGTH CHART

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

UU	Magneto & A Mounts	Wheel Mounts
#	mm [in]	mm [in]
02	50 [1.97]	91 [3.60]
03	76 [3.01]	118 [4.64]
07	88 [3.45]	129 [5.09]
08	88 [3.45]	129 [5.09]
09	88 [3.45]	129 [5.09]
10	50 [1.97]	91 [3.60]
12	56 [2.21]	98 [3.84]
15	76 [3.01]	118 [4.64]
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]
25	92 [3.62]	134 [5.26]

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

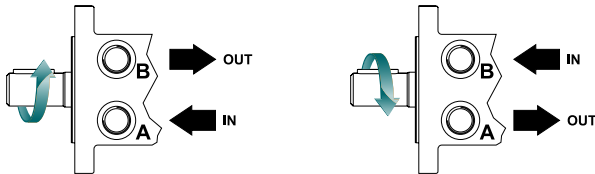


ORDERING INFORMATION

1		2		3a			

1. CHOOSE SERIES DESIGNATION

600 Standard Motor



► The 600 series is bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

200	204 cm ³ /rev [12.4 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
350	348 cm ³ /rev [21.2 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]

3a. SELECT MOUNT TYPE

▼ END MOUNTS

A2	4-Hole, Magneto Mount
A4	6-Hole, SAE A Mount
W2	4-Hole, Wheel Mount

▼ SIDE MOUNTS

A8	4-Hole, Magneto Mount
A9	6-Hole, SAE A Mount
W8	4-Hole, Wheel Mount

3b. SELECT PORT SIZE

▼ END PORT OPTIONS

1	7/8-14 UNF Offset
----------	-------------------

▼ SIDE PORT OPTIONS

2	G 3/4, Radial
3	11/16" Hole, Aligned Manifold
5	1 1/16-12 UN, Radial
6	1 1/16-12 UN, Aligned
7	G 3/4, Radial

► Speed sensor option is not available on wheel mounts.

4. SELECT A SHAFT OPTION

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

► Extended shafts are designed for use with one of the speed sensor options listed in STEP 7.

3b	4	5	6	7	8		

5. SELECT A PAINT OPTION

A	Black
B	Black, Unpainted Mounting Surface
Z	No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

A	None	F	121 bar [1750 psi] Relief
B	Valve Cavity Only	G	138 bar [2000 psi] Relief
C	69 bar [1000 psi] Relief	J	173 bar [2500 psi] Relief
D	86 bar [1250 psi] Relief	L	207 bar [3000 psi] Relief
E	104 bar [1500 psi] Relief		

► Valve cavity is not available on port option 3.

7. SELECT AN ADD-ON OPTION

A	Standard
B	Lock Nut
C	Solid Hex Nut
W	Speed Sensor, Dual, 4-Pin Male Weatherpack Connector
X	Speed Sensor, Dual, 4-Pin M12 Male Connector
Y	Speed Sensor, Single, 3-Pin Male Weatherpack Connector
Z	Speed Sensor, Single, 4-Pin M12 Male Connector

8. SELECT A MISCELLANEOUS OPTION

AA	None
AB	Internal Drain
AC	Freeturning Rotor
AD	Internal Drain & Freeturning Rotor

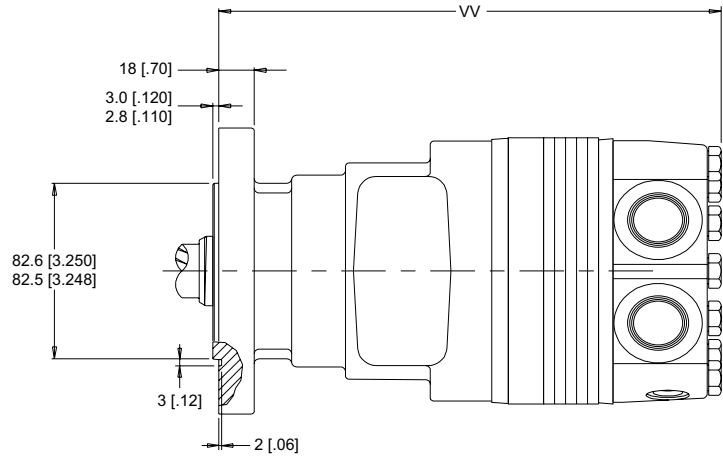
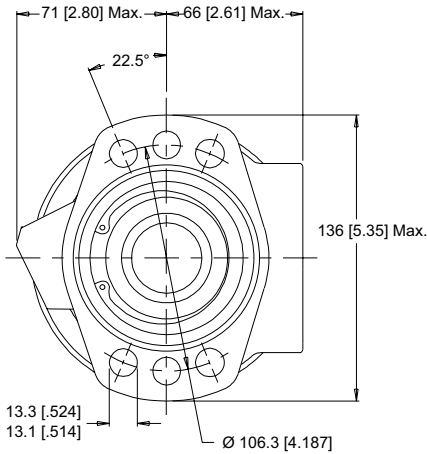
HOUSINGS

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

6-HOLE, SAE A MOUNT

A4 End Ports

A9 Side Ports



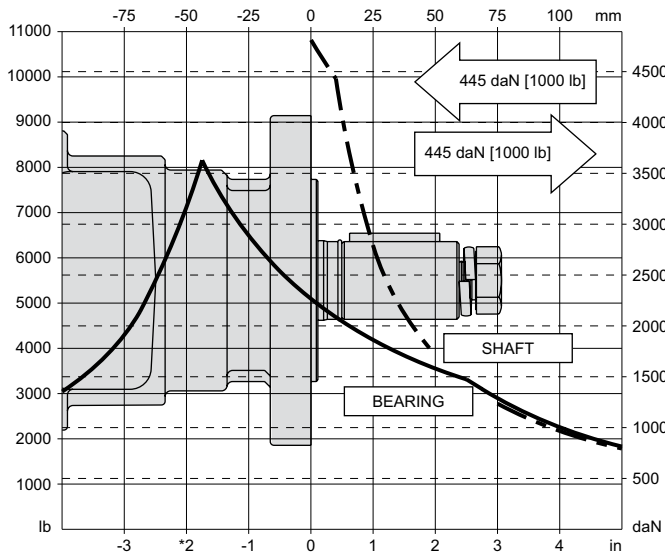
► Porting options listed on pages 7-8.

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 10.

SAE A MOUNTS



LENGTH & WEIGHT CHART

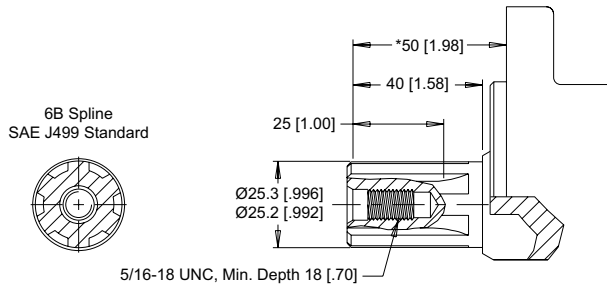
Dimension VV is the overall motor length from the rear of the motor to the mounting flange surface and are referenced on detailed housing drawings listed above.

VV	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	231 [9.08]	234 [9.19]	16.1 [35.4]
260	235 [9.27]	238 [9.38]	16.2 [35.6]
300	239 [9.40]	242 [9.51]	16.9 [37.2]
350	253 [9.95]	256 [10.06]	18.0 [39.6]
375	245 [9.65]	248 [9.76]	17.4 [38.3]
470	253 [9.95]	256 [10.06]	18.0 [39.6]
540	259 [10.19]	262 [10.30]	18.5 [40.7]
750	277 [10.90]	280 [11.01]	20.0 [44.0]

► All DR series motor weights can vary ± 0.9 kg [2 lb] depending on model configurations such as housing, shaft, endcover, options etc.

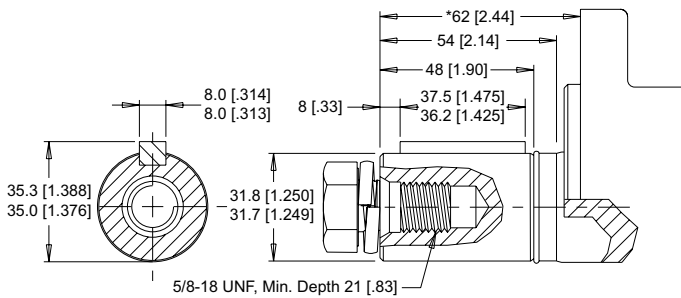
SHAFTS

03 1" 6B Spline



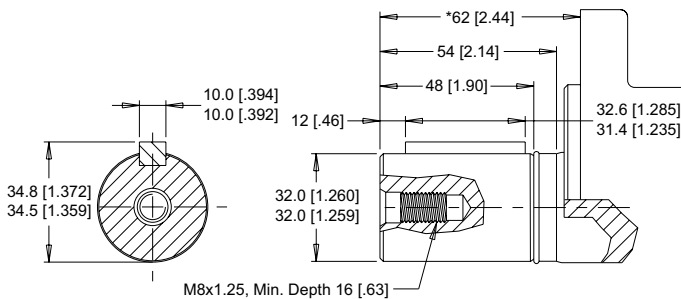
Max. Torque: 678 Nm [6000 lb-in]

07 1-1/4" Straight



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

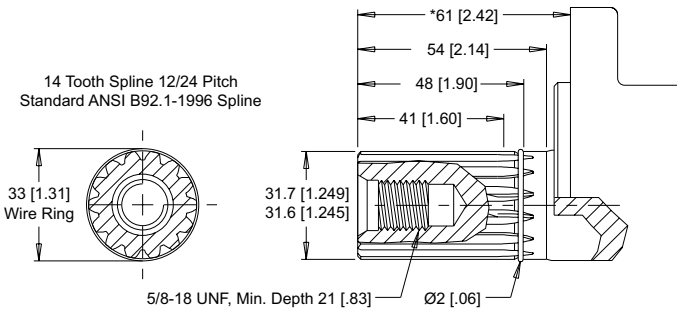
08 32mm Straight



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

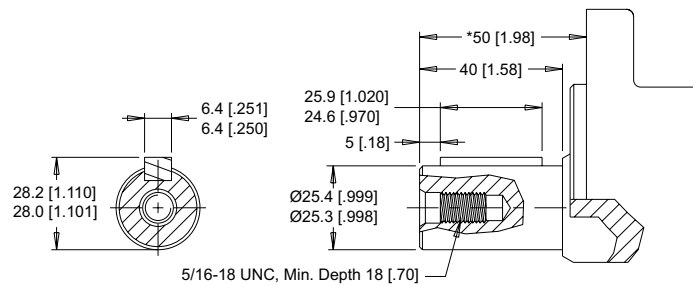
► *Shaft lengths vary ± 0.8 mm [0.030 in.]

09 14 Tooth Spline



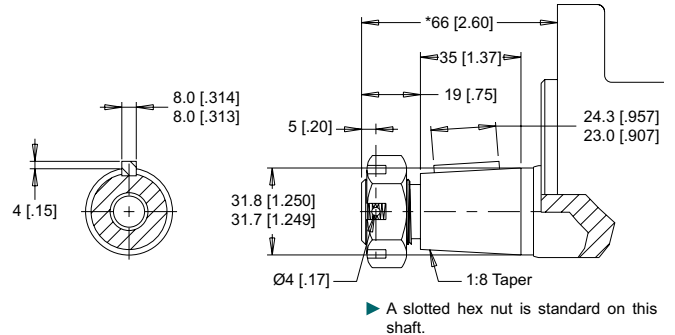
Max. Torque: 1200 Nm [10600 lb-in]

15 1" Straight



Max. Torque: 655 Nm [5800 lb-in]

25 1-1/4" Tapered



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

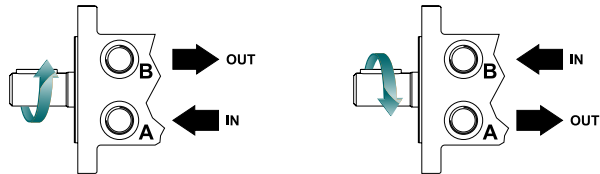


ORDERING INFORMATION

	1		2		3a		

1. CHOOSE SERIES DESIGNATION

620 Hydraulic Motor With Medium Duty Bearing



► The 620 series is bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

200	204 cm ³ /rev [12.4 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
350	348 cm ³ /rev [21.2 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]

3a. SELECT MOUNT TYPE

▼ END MOUNTS

A4 6-Hole, SAE A Mount

▼ SIDE MOUNTS

A9 6-Hole, SAE A Mount

3b. SELECT PORT SIZE

▼ END PORT OPTIONS

1 7/8-14 UNF Offset

▼ SIDE PORT OPTIONS

- 2** G 3/4, Radial
- 3** 11/16" Hole, Aligned Manifold
- 5** 1 1/16-12 UN, Radial
- 6** 1 1/16-12 UN, Aligned
- 7** G 3/4, Radial

4. SELECT A SHAFT OPTION

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

3b	4	5	6	7	8		

5. SELECT A PAINT OPTION

- A** Black
- B** Black, Unpainted Mounting Surface
- Z** No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

A	None	F	121 bar [1750 psi] Relief
B	Valve Cavity Only	G	138 bar [2000 psi] Relief
C	69 bar [1000 psi] Relief	J	173 bar [2500 psi] Relief
D	86 bar [1250 psi] Relief	L	207 bar [3000 psi] Relief
E	104 bar [1500 psi] Relief		

► Valve cavity is not available on port option 3.

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

- AA** None
- AB** Internal Drain
- AC** Freeturning Rotor
- AD** Internal Drain & Freeturning Rotor

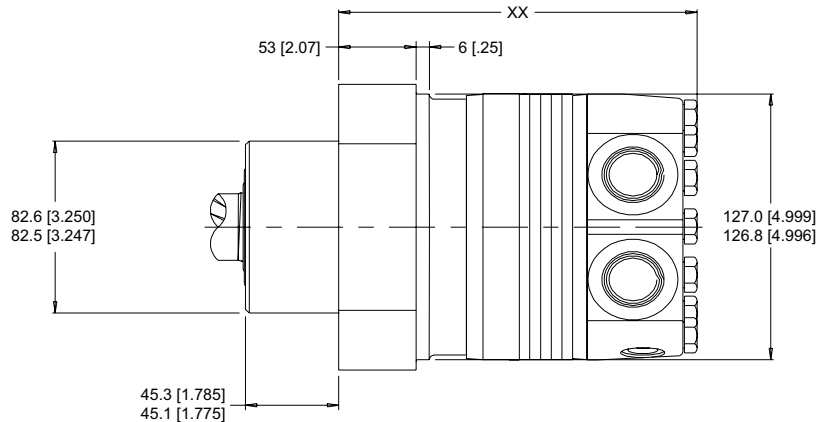
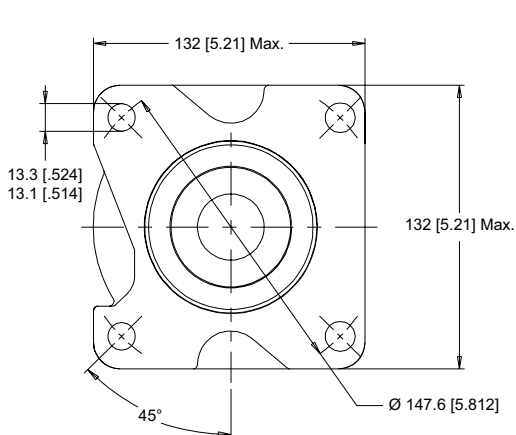
HOUSINGS

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

4-HOLE, WHEEL MOUNT

W2 End Ports

W8 Side Ports



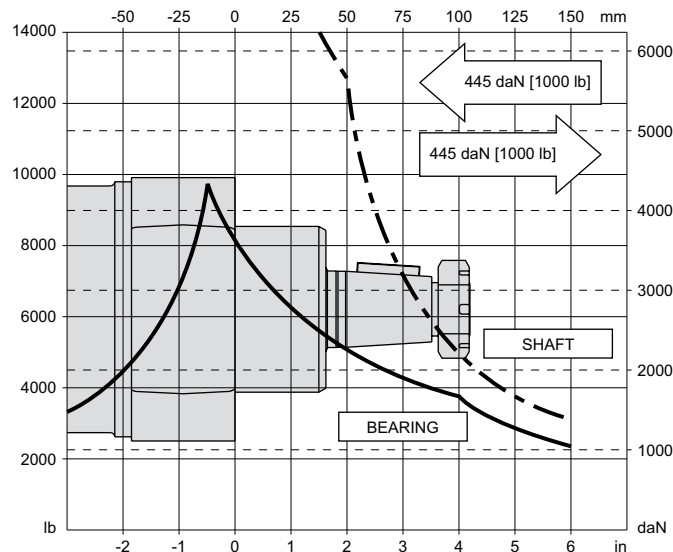
► Porting options listed on pages 7-8.

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 10.

WHEEL MOUNTS



LENGTH & WEIGHT CHART

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

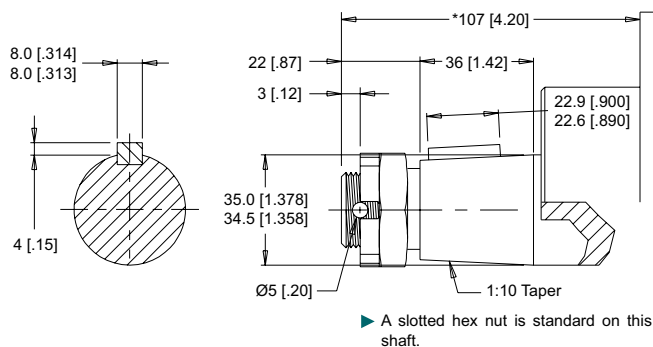
XX	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	199 [7.75]	202 [7.86]	17.5 [38.5]
260	204 [8.04]	207 [8.15]	17.9 [39.5]
300	207 [8.17]	210 [8.28]	18.2 [40.1]
350	221 [8.72]	224 [8.83]	19.3 [42.6]
375	214 [8.42]	217 [8.53]	18.7 [41.2]
470	221 [8.72]	224 [8.83]	19.3 [42.6]
540	227 [8.96]	230 [9.07]	19.8 [43.7]
750	245 [9.67]	248 [9.78]	21.3 [47.0]

► All DR series motor weights can vary ± 0.9 kg [2 lb] depending on model configurations such as housing, shaft, endcover, options etc.



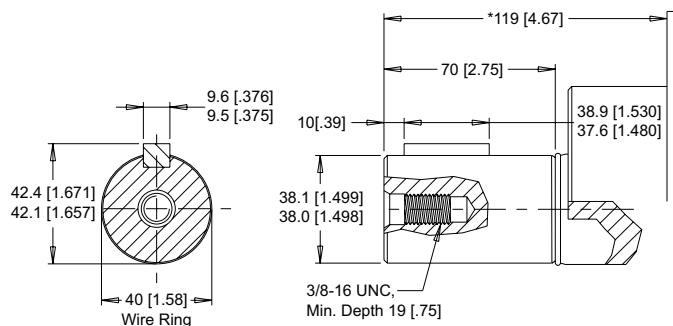
SHAFTS

28 35mm Tapered



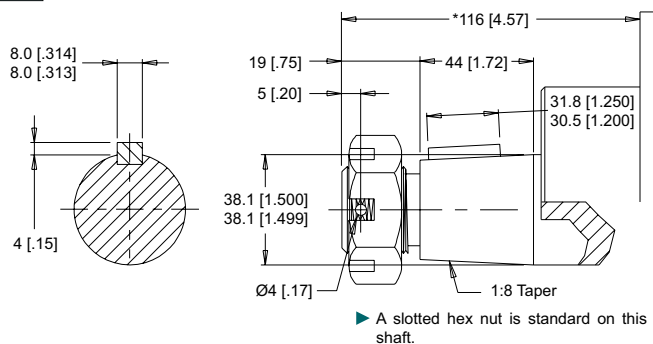
Max. Torque: 1200 Nm [10600 lb-in]

30 1-1/2" Straight



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

31 1-1/2" Tapered



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

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

DR (630 Series)

Hydraulic Motor With Heavy Duty Bearing

whitedriveproducts

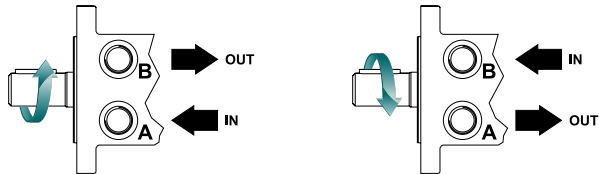


ORDERING INFORMATION

1		2		3a			

1. CHOOSE SERIES DESIGNATION

630 Hydraulic Motor With Heavy Duty Bearing



► The 630 series is bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

200	204 cm ³ /rev [12.4 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
350	348 cm ³ /rev [21.2 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]

3a. SELECT MOUNT TYPE

- ▼ END MOUNTS
- W2** 4-Hole, Wheel Mount
- ▼ SIDE MOUNTS
- W8** 4-Hole, Wheel Mount

3b. SELECT PORT SIZE

- ▼ END PORT OPTIONS
- 1** 7/8-14 UNF Offset
- ▼ SIDE PORT OPTIONS
- 2** G 3/4, Radial
- 3** 11/16" Hole, Aligned Manifold
- 5** 1 1/16-12 UN, Radial
- 6** 1 1/16-12 UN, Aligned
- 7** G 3/4, Radial

4. SELECT A SHAFT OPTION

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

3b	4	5	6	7	8		

5. SELECT A PAINT OPTION

- A** Black
- B** Black, Unpainted Mounting Surface
- Z** No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- | | |
|------------------------------------|------------------------------------|
| A None | F 121 bar [1750 psi] Relief |
| B Valve Cavity Only | G 138 bar [2000 psi] Relief |
| C 69 bar [1000 psi] Relief | J 173 bar [2500 psi] Relief |
| D 86 bar [1250 psi] Relief | L 207 bar [3000 psi] Relief |
| E 104 bar [1500 psi] Relief | |

► Valve cavity is not available on port option 3.

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

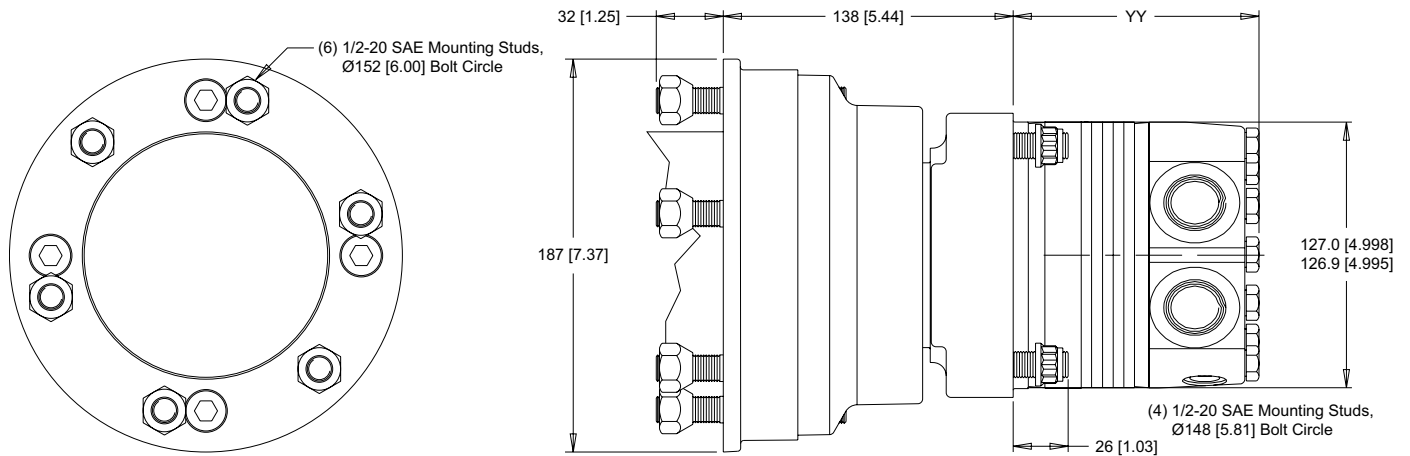
- AA** None
- AB** Internal Drain
- AC** Freeturning Rotor
- AD** Internal Drain & Freeturning Rotor

HOUSINGS

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

4-HOLE, WHEEL HUB MOUNT

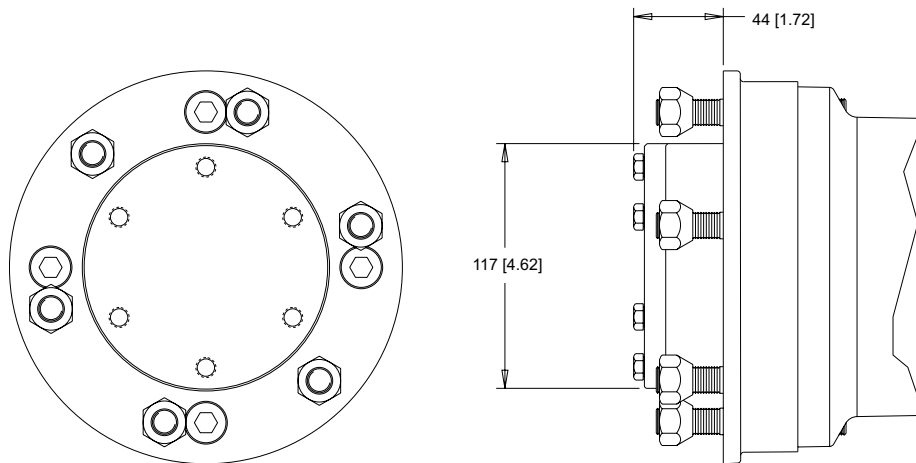
W2 End Ports **W8** Side Ports



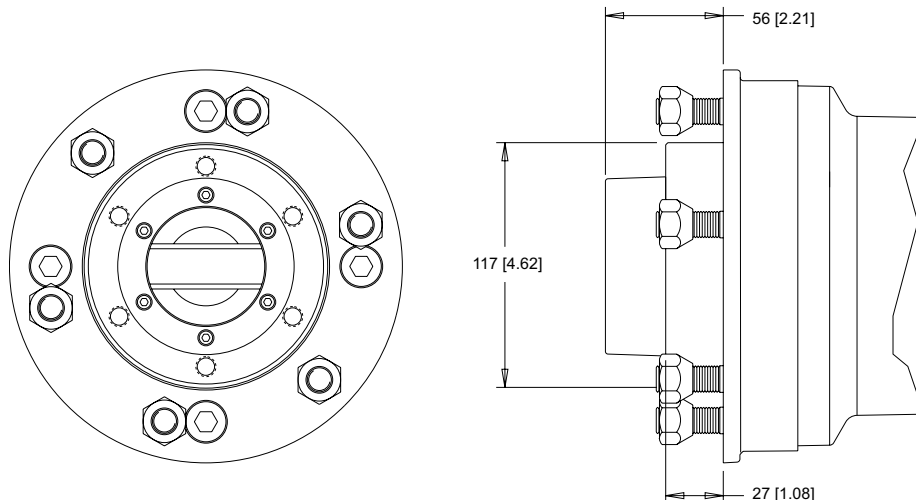
► Dimension YY is charted on page 20. Porting options listed on pages 7-8.

HUB OPTION DETAILS

STANDARD HUB



LOCKING HUB



DR (640 Series)

Hydraulic Motor With Wheel Hub

whitedriveproducts



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 10.

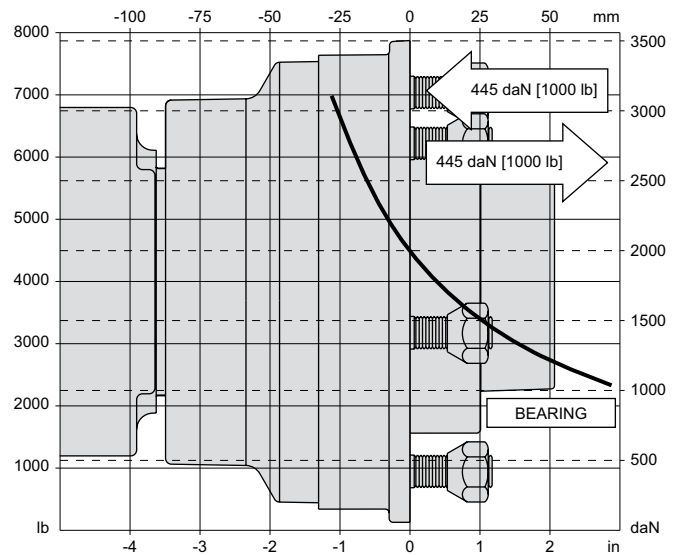
LENGTH & WEIGHT CHART

Dimension YY 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 19.

YY	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	109 [4.31]	112 [4.42]	24.4 [53.9]
260	114 [4.50]	117 [4.61]	24.8 [54.7]
300	117 [4.63]	120 [4.74]	25.2 [55.5]
350	131 [5.18]	134 [5.29]	26.3 [57.9]
375	124 [4.88]	127 [4.99]	25.7 [56.7]
470	131 [5.18]	134 [5.29]	26.3 [57.9]
540	138 [5.42]	141 [5.53]	26.8 [59.1]
750	156 [6.21]	159 [6.24]	28.2 [62.2]

► All DR series motor weights can vary ± 0.9 kg [2 lb] depending on model configurations such as housing, shaft, endcover, options etc.

WHEEL HUB MOUNTS

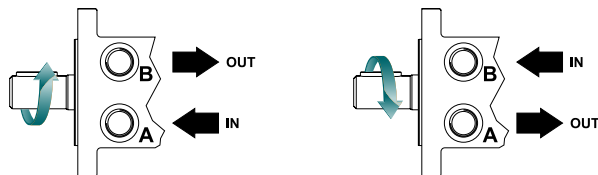


ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

640 Hydraulic Motor With Wheel Hub



► The 640 series is bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

200	204 cm ³ /rev [12.4 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
350	348 cm ³ /rev [21.2 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]

3a. SELECT MOUNT TYPE

- ▼ END MOUNTS
- W2** 4-Hole, Wheel Mount
- ▼ SIDE MOUNTS
- W8** 4-Hole, Wheel Mount

3b. SELECT PORT SIZE

- ▼ END PORT OPTIONS
- 1** 7/8-14 UNF Offset
- ▼ SIDE PORT OPTIONS
- 2** G 3/4, Radial
- 3** 11/16" Hole, Aligned Manifold
- 5** 1 1/16-12 UN, Radial
- 6** 1 1/16-12 UN, Aligned
- 7** G 3/4, Radial

4. SELECT A SHAFT OPTION

- 61** 6-Bolt Wheel Flange

5. SELECT A PAINT OPTION

- A** Black
- Z** No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- | | |
|------------------------------------|------------------------------------|
| A None | F 121 bar [1750 psi] Relief |
| B Valve Cavity Only | G 138 bar [2000 psi] Relief |
| C 69 bar [1000 psi] Relief | J 173 bar [2500 psi] Relief |
| D 86 bar [1250 psi] Relief | L 207 bar [3000 psi] Relief |
| E 104 bar [1500 psi] Relief | |

► Valve cavity is not available on port option 3.

7. SELECT AN ADD-ON OPTION

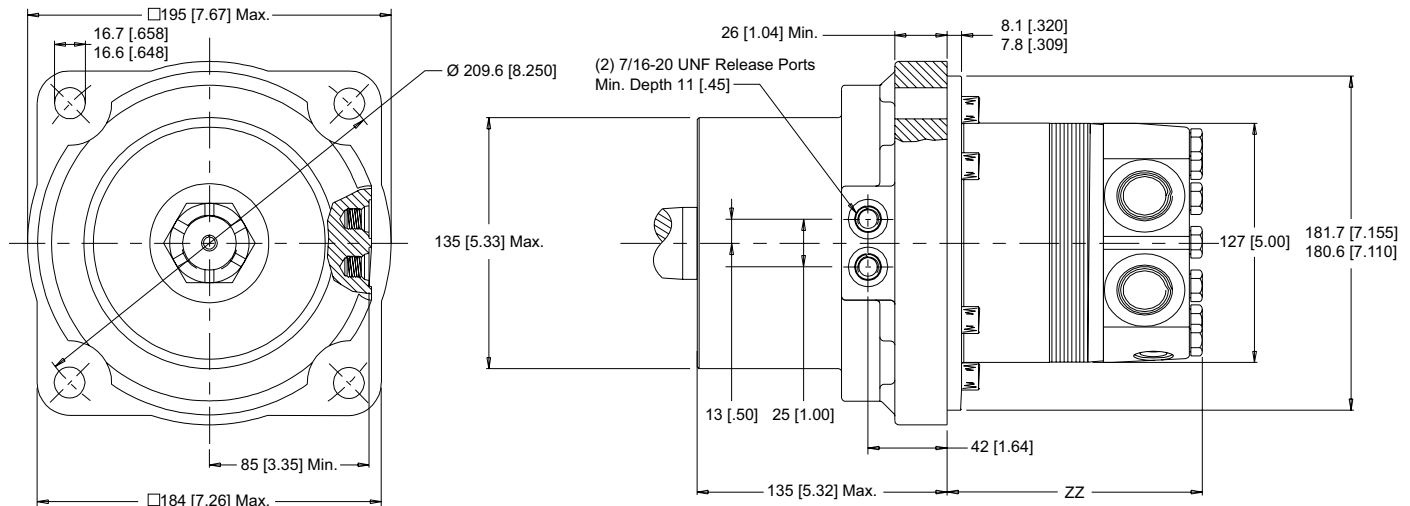
- A** Standard
- H** Locking Hub

8. SELECT A MISCELLANEOUS OPTION

- AA** None
- AB** Internal Drain
- AC** Freeturning Rotor
- AD** Internal Drain & Freeturning Rotor

**HOUSINGS**

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

4-HOLE, WHEEL BRAKE MOUNT**W2** End Ports**W8** Side Ports

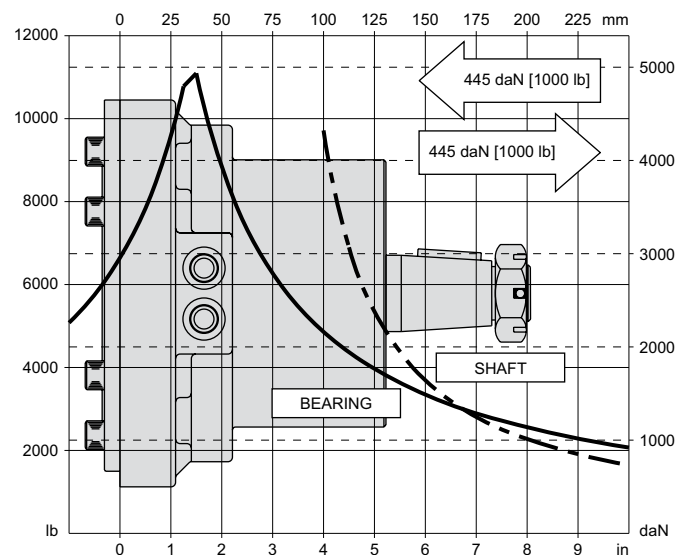
► Porting options listed on pages 7-8.

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 10.

SPECIFICATIONS

Rated brake torque 1582 Nm [14000 lb-in]
 Initial release pressure 19 bar [275 psi]
 Full release pressure 33 bar [475 psi]
 Maximum release pressure 207 bar [3000 psi]
 Release volume 13-16 cm³ [0.8 - 1.0 in³]

WHEEL BRAKE MOUNTS**LENGTH & WEIGHT CHART**

Dimension ZZ is the overall motor length from the rear of the motor to the mounting surface.

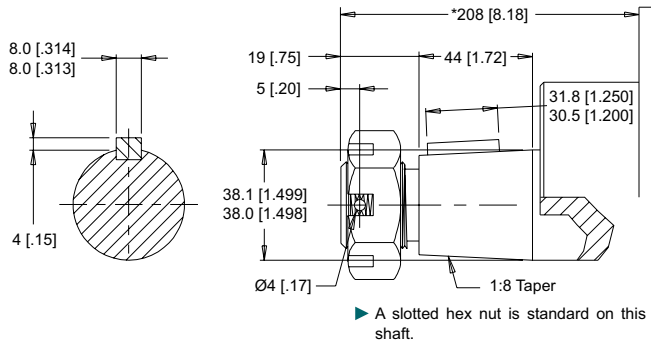
► 610 series motor/brake weights can vary $\pm$ 1kg [2 lb] depending on model configurations such as housing, shaft, endcover, options etc.

ZZ	Endcovers on pg. 7	Endcovers on pg. 8	Weight
#	mm [in]	mm [in]	kg [lb]
200	104 [4.11]	107 [4.22]	26.5 [58.4]
260	109 [4.30]	112 [4.41]	26.9 [59.4]
300	112 [4.43]	115 [4.54]	27.2 [60.0]
350	126 [4.98]	129 [5.09]	28.3 [62.5]
375	119 [4.68]	122 [4.79]	27.7 [61.1]
470	126 [4.98]	129 [5.09]	28.3 [62.5]
540	132 [5.22]	135 [5.33]	28.8 [63.6]
750	150 [5.93]	153 [6.04]	30.3 [66.9]



SHAFTS

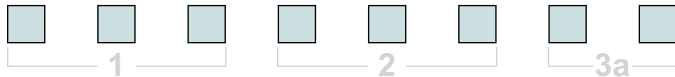
31 1-1/2" Tapered



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

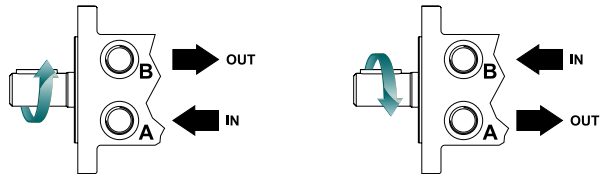
*Shaft lengths vary ± 0.8 mm [0.030 in.]

ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

610 Hydraulic Motor With Integral Hydraulic Brake



The 610 series is bi-directional. Reversing the inlet hose will reverse shaft rotation.

2. SELECT A DISPLACEMENT OPTION

200	204 cm ³ /rev [12.4 in ³ /rev]	375	375 cm ³ /rev [22.8 in ³ /rev]
260	261 cm ³ /rev [15.9 in ³ /rev]	470	465 cm ³ /rev [28.3 in ³ /rev]
300	300 cm ³ /rev [18.3 in ³ /rev]	540	536 cm ³ /rev [32.7 in ³ /rev]
350	348 cm ³ /rev [21.2 in ³ /rev]	750	748 cm ³ /rev [45.6 in ³ /rev]

3a. SELECT MOUNT TYPE

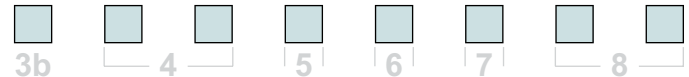
- END MOUNTS**
- W2** 4-Hole, Wheel Mount
- SIDE MOUNTS**
- W8** 4-Hole, Wheel Mount

3b. SELECT PORT SIZE

- END PORT OPTIONS**
- 1** 7/8-14 UNF Offset
- SIDE PORT OPTIONS**
- 2** G 3/4, Radial
- 3** 11/16" Hole, Aligned Manifold
- 5** 1 1/16-12 UN, Radial
- 6** 1 1/16-12 UN, Aligned
- 7** G 3/4, Radial

4. SELECT A SHAFT OPTION

31 1-1/2" Tapered



5. SELECT A PAINT OPTION

- A** Black
- Z** No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

A None	F 121 bar [1750 psi] Relief
B Valve Cavity Only	G 138 bar [2000 psi] Relief
C 69 bar [1000 psi] Relief	J 173 bar [2500 psi] Relief
D 86 bar [1250 psi] Relief	L 207 bar [3000 psi] Relief
E 104 bar [1500 psi] Relief	

Valve cavity is not available on port option 3.

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

- AA** None
- AC** Freeturning Rotor

North America

White Drive Products, Inc.
P.O. Box 2700
Hopkinsville, KY. USA 42241
Phone: +1.270.885.1110
Fax: +1.270.886.8462
infousa@whitedriveproducts.com

Europe

White Drive Products GmbH
Mannsnetterstrasse 34
D-88145 Opfenbach, Germany
Phone: +49.8385.924988.0
Fax: +49.8385.924988.9
infoeu@whitedriveproducts.com

Asia

White (China) Drive Products Co., Ltd.
1-8 Ning Zhen Gong Lu
Zhenjiang, 212021, Jiangsu, China
Phone: +86 511 5729988
Fax: +86 511 5728921
infochina@whitedriveproducts.com

Delivering The Power
To Get Work Done !



whitedriveproducts