



whitedriveproducts



SERIES

- 400 -
- 401 -
- 410 -
- 411 -
- 420 -
- 421 -
- 430 -
- 431 -



MEDIUM DUTY
Hydraulic Motor & Brake

CE

OVERVIEW

The combination of compact size, light weight and low speed efficiency make the CE motor the best wheel drive motor available. To reduce overall motor length and weight, all unnecessary material was removed from the housing and the valve was placed in the face of the rotor. The pressure-compensated balance plate allows the motor to maintain high volumetric efficiencies at startup and high mechanical efficiencies during running conditions. All of these features unite to make the CE Series motor 10-25% lighter and more compact than competitive designs, making it perfect for applications with strict weight and size requirements.

FEATURES / BENEFITS

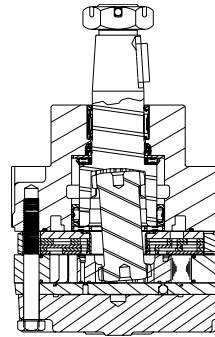
- Needle Roller Bearing is in optimum location to allow load to be placed as close to center line of bearing as possible.
- Three Bearing Options allow load carrying capability of motor to be matched to application.
- Valve-In-Rotor Design provides cost effective, efficient distribution of oil and reduces overall motor length.
- Pressure-Compensated Balance Plate improves volumetric efficiency at low flows and high pressure.

TYPICAL APPLICATIONS

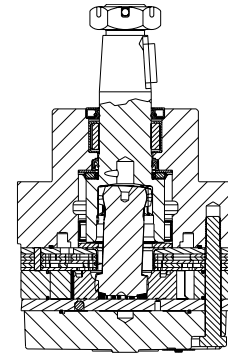
Medium-duty wheel drives, grapple heads, feed rollers, broom drives and more

SERIES DESCRIPTIONS

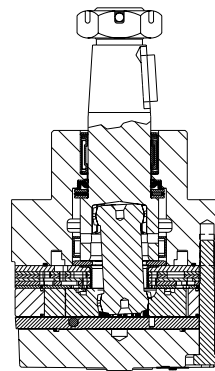
400/401 - Hydraulic Motor
Standard



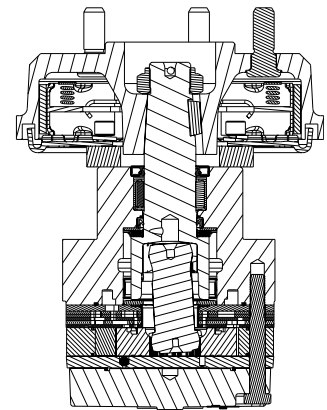
420/421 - Hydraulic Motor
With Medium Duty Bearing



430/431 - Hydraulic Motor
With Heavy Duty Bearing



410/411 - Hydraulic Motor
With Integral Drum Brake



SPECIFICATIONS

CODE	Displacement cm ³ [in ³ /rev]	Max. Speed rpm		Max. Flow lpm [gpm]		Max. Torque Nm [lb-in]		Max. Pressure bar [psi]		
		cont.	inter.	cont.	inter.	cont.	inter.	cont.	inter.	peak
120	121 [7.4]	360	490	45 [12]	61 [16]	322 [2850]	356 [3150]	207 [3000]	224 [3250]	241 [3500]
160	162 [9.9]	370	470	61 [16]	76 [20]	424 [3750]	501 [4430]	207 [3000]	224 [3250]	241 [3500]
200	204 [12.4]	300	370	61 [16]	76 [20]	525 [4650]	593 [5250]	207 [3000]	224 [3250]	241 [3500]
230	232 [14.2]	260	320	61 [16]	76 [20]	559 [4950]	646 [5720]	207 [3000]	224 [3250]	241 [3500]
260	261 [15.9]	260	350	68 [18]	91 [24]	706 [6250]	760 [6730]	207 [3000]	224 [3250]	241 [3500]
300	300 [18.3]	250	320	76 [20]	95 [25]	802 [7100]	862 [7630]	207 [3000]	224 [3250]	241 [3500]
350	348 [21.2]	220	270	76 [20]	95 [25]	904 [8000]	1017 [9000]	207 [3000]	224 [3250]	241 [3500]
375	375 [22.8]	200	250	76 [20]	95 [25]	972 [8600]	1040 [9200]	207 [3000]	224 [3250]	241 [3500]
470	465 [28.3]	160	200	76 [20]	95 [25]	1040 [9200]	1153 [10200]	172 [2500]	189 [2750]	207 [3000]
540	536 [32.7]	140	170	76 [20]	95 [25]	1003 [8875]	1209 [10700]	138 [2000]	172 [2500]	207 [3000]
750	748 [45.6]	100	130	76 [20]	95 [25]	1082 [9575]	1237 [10950]	103 [1500]	121 [1750]	138 [2000]

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



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]						Max. Cont.	Peak			
120		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
121 cm ³ [7.4 in ³] / rev								Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], Speed rpm										
Flow - lpm [gpm]	2 [0.5]	21 [184] 14	47 [418] 13	84 [745] 10	114 [1008] 7						16	
	4 [1]	26 [226] 26	52 [459] 23	109 [969] 23	157 [1387] 21	203 [1793] 18	260 [2305] 13	290 [2566] 10	281 [2490] 7	32		
	8 [2]		52 [456] 58	110 [977] 56	161 [1424] 51	208 [1845] 47	269 [2382] 33	310 [2746] 29	347 [3066] 25	63		
	15 [4]		48 [422] 119	110 [975] 112	169 [1497] 103	225 [1992] 95	271 [2399] 91	327 [2896] 83	369 [3269] 82	125		
	23 [6]		46 [409] 187	106 [934] 182	158 [1402] 177	204 [1803] 173	248 [2199] 168	297 [2630] 160	372 [3290] 143	188		
	30 [8]			99 [876] 248	157 [1389] 244	207 [1829] 240	253 [2241] 233	323 [2857] 205	371 [3282] 201	250		
	38 [10]			96 [853] 306	156 [1379] 298	207 [1834] 293	257 [2278] 286	297 [2633] 279	359 [3178] 269	313		
	45 [12]			85 [749] 371	151 [1337] 360	206 [1823] 352	256 [2267] 345	305 [2695] 341	344 [3042] 335	375		
	53 [14]			77 [684] 437	137 [1215] 428	197 [1745] 418	251 [2222] 409	296 [2618] 404		438		
	61 [16]			71 [633] 499	135 [1191] 490	194 [1717] 482	244 [2163] 467	304 [2687] 454		500		
		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
		Theoretical Torque - Nm [lb-in]										
		33 [295]	67 [589]	133 [1178]	200 [1768]	266 [2357]	333 [2946]	399 [3535]	466 [4124]			
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]										
		Rotor Width										
		13.8 [542]										
		mm [in]										

		Pressure - bar [psi]						Max. Cont.	Peak			
160		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
162 cm ³ [9.9 in ³] / rev								Intermittent Ratings - 10% of Operation				
		Torque - Nm [lb-in], Speed rpm										
Flow - lpm [gpm]	2 [0.5]	32 [287] 11	72 [634] 11	152 [1341] 10	215 [1906] 9	282 [2493] 8	326 [2888] 6	366 [3238] 4	412 [3643] 1	12		
	4 [1]	36 [318] 22	78 [690] 21	145 [1287] 20	225 [1991] 19	290 [2567] 16	346 [3060] 14	366 [3236] 8	416 [3680] 7	24		
	8 [2]	33 [296] 45	73 [649] 44	145 [1287] 43	227 [2010] 40	292 [2586] 36	357 [3156] 33	413 [3654] 31	464 [4108] 28	47		
	15 [4]	44 [386] 92	71 [630] 91	146 [1296] 88	226 [2000] 86	299 [2646] 79	364 [3226] 74	426 [3768] 71	485 [4289] 66	94		
	23 [6]		70 [623] 133	146 [1294] 131	225 [1991] 128	296 [2617] 122	365 [3232] 117	428 [3786] 115	492 [4352] 111	140		
	30 [8]		66 [583] 181	141 [1251] 177	216 [1916] 175	286 [2533] 171	350 [3102] 165	414 [3663] 159	476 [4210] 152	187		
	38 [10]		61 [537] 224	138 [1224] 223	212 [1873] 219	282 [2497] 213	347 [3072] 211	411 [3641] 204	473 [4183] 196	234		
	45 [12]		56 [495] 272	130 [1150] 265	207 [1829] 264	279 [2465] 262	344 [3046] 256	407 [3603] 249	470 [4157] 242	280		
	53 [14]			123 [1088] 318	196 [1737] 313	269 [2384] 306	332 [2939] 297	400 [3540] 295	464 [4111] 284	327		
	61 [16]			114 [1010] 362	187 [1659] 356	263 [2327] 351	329 [2910] 344	395 [3499] 334	458 [4053] 330	374		
68 [18]			102 [903] 410	180 [1593] 407	250 [2209] 401	319 [2822] 385	389 [3438] 382		420			
76 [20]			96 [846] 455	174 [1536] 448	248 [2193] 438	316 [2798] 430	379 [3353] 423		467			
		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/>										
		Theoretical Torque - Nm [lb-in]										
		45 [394]	89 [788]	178 [1576]	267 [2365]	356 [3153]	445 [3941]	534 [4729]	623 [5518]			
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]										
		Rotor Width										
		13.8 [542]										
		mm [in]										

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

DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]						Max. Cont.	Peak			
200		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
204 cm ³ [12.4 in ³] / rev												
		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation				
Flow - lpm [gpm]	2 [0.5]	40 [358] 8	92 [817] 8	180 [1596] 8	269 [2378] 7	348 [3083] 6					10	Theoretical rpm
	4 [1]	46 [409] 17	89 [787] 15	180 [1597] 15	276 [2440] 12	359 [3177] 11	427 [3782] 9	489 [4328] 8			19	
	8 [2]	45 [395] 36	91 [807] 34	190 [1684] 32	284 [2509] 31	369 [3268] 28	451 [3989] 25	523 [4630] 23	586 [5189] 19		38	
	15 [4]	40 [358] 73	92 [817] 72	188 [1662] 69	284 [2492] 67	373 [3303] 63	453 [4006] 60	530 [4693] 56	607 [5371] 51		75	
	23 [6]		86 [760] 111	181 [1600] 107	278 [2457] 104	365 [3228] 100	451 [3989] 95	524 [4636] 90	605 [5353] 85		112	
	30 [8]		75 [663] 148	174 [1539] 145	267 [2363] 142	359 [3176] 137	441 [3905] 132	518 [4584] 125	597 [5286] 120		150	
	38 [10]		62 [549] 185	162 [1430] 184	257 [2272] 181	347 [3072] 177	429 [3798] 171	507 [4488] 164	587 [5198] 157		187	
	45 [12]			146 [1290] 222	244 [2159] 217	339 [2996] 213	429 [3798] 204	506 [4476] 198	583 [5161] 193		224	
	53 [14]			129 [1145] 259	227 [2005] 217	328 [2905] 250	410 [3628] 244	492 [4354] 236	571 [5049] 226		261	
	61 [16]			112 [994] 298	208 [1842] 297	316 [2795] 284	399 [3534] 281	484 [4285] 273	562 [4971] 266		299	
68 [18]			90 [799] 334	207 [1833] 330	304 [2689] 327	395 [3493] 320	481 [4260] 316			336		
76 [20]			75 [665] 366	178 [1576] 365	282 [2495] 361	372 [3288] 361	465 [4115] 351			373		
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>										
17.3 [.682]		Theoretical Torque - Nm [lb-in]										
mm [in]		56 [494]	112 [987]	223 [1975]	335 [2962]	446 [3949]	558 [4936]	669 [5924]	781 [6911]			
Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]												

		Pressure - bar [psi]						Max. Cont.	Peak			
230		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	241 [3500]			
233 cm ³ [14.2 in ³] / rev												
		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation				
Flow - lpm [gpm]	2 [0.5]	46 [406] 7	98 [866] 7	209 [1849] 6	300 [2659] 5	380 [3367] 2					9	Theoretical rpm
	4 [1]	49 [435] 14	105 [925] 13	215 [1903] 12	321 [2839] 11	413 [3651] 8	488 [4315] 6	543 [4808] 3			17	
	8 [2]	50 [438] 30	107 [945] 28	221 [1954] 26	329 [2909] 26	430 [3803] 22	520 [4599] 18	594 [5260] 13	662 [5856] 9		33	
	15 [4]	45 [401] 62	102 [900] 61	214 [1895] 59	325 [2872] 57	426 [3773] 53	522 [4623] 47	610 [5395] 41	683 [6045] 34		66	
	23 [6]	39 [342] 96	92 [812] 96	203 [1801] 93	317 [2808] 91	412 [3645] 87	486 [4304] 80	560 [4953] 72	642 [5678] 66		98	
	30 [8]		84 [743] 128	197 [1739] 125	304 [2691] 122	410 [3627] 119	506 [4479] 112	600 [5313] 103	647 [5728] 95		131	
	38 [10]		72 [634] 162	186 [1650] 159	292 [2585] 156	402 [3556] 153	493 [4363] 146	584 [5169] 136	634 [5613] 126		163	
	45 [12]			167 [1477] 192	282 [2494] 191	393 [3479] 185	491 [4349] 178	576 [5094] 167	658 [5822] 155		196	
	53 [14]			152 [1343] 225	260 [2301] 225	374 [3310] 220	470 [4160] 208	555 [4910] 201	657 [5818] 186		228	
	61 [16]			135 [1198] 259	250 [2209] 259	362 [3207] 253	464 [4110] 244	553 [4895] 232	637 [5637] 220		261	
68 [18]			115 [1021] 291	231 [2044] 289	344 [3042] 286	447 [3956] 279	540 [4777] 266			293		
76 [20]			93 [822] 325	210 [1859] 323	327 [2898] 319	432 [3825] 311	529 [4677] 299			326		
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>										
19.7 [.777]		Theoretical Torque - Nm [lb-in]										
mm [in]		64 [565]	128 [1131]	256 [2261]	383 [3392]	511 [4522]	639 [5653]	767 [6783]	894 [7914]			
Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]												

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



DISPLACEMENT PERFORMANCE

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

261 cm³ [15.9 in³] / rev

		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		
Flow - lpm [gpm]	2 [0.5]	58 [514] 6	127 [1120] 5	242 [2140] 4	347 [3068] 3	425 [3759] 1				8
	4 [1]	62 [547] 12	124 [1097] 10	248 [2191] 9	354 [3133] 8	446 [3950] 6	495 [4377] 2			15
	8 [2]	61 [543] 26	130 [1150] 23	249 [2200] 20	372 [3295] 20	478 [4234] 17	562 [4972] 13	633 [5599] 7		30
	15 [4]	61 [536] 54	125 [1109] 51	258 [2284] 48	377 [3339] 46	501 [4436] 42	600 [5306] 36	700 [6192] 30	781 [6915] 21	59
	23 [6]	57 [500] 84	121 [1067] 81	245 [2169] 74	376 [3326] 74	498 [4406] 69	609 [5391] 60	713 [6309] 53	815 [7214] 45	88
	30 [8]		111 [981] 113	242 [2143] 107	369 [3268] 105	489 [4327] 100	607 [5374] 89	711 [6290] 81	810 [7167] 71	117
	38 [10]		103 [909] 142	230 [2034] 137	357 [3161] 134	483 [4273] 128	595 [5267] 119	700 [6198] 109	762 [6740] 98	146
	45 [12]		87 [771] 173	216 [1915] 169	345 [3057] 166	452 [4002] 161	578 [5111] 152	645 [5708] 143	741 [6557] 129	175
	53 [14]		75 [664] 203	202 [1786] 201	331 [2928] 195	434 [3841] 191	553 [4897] 183	657 [5811] 170	759 [6718] 157	204
	61 [16]		61 [538] 232	191 [1687] 131	313 [2769] 226	435 [3847] 220	553 [4892] 210	656 [5803] 199	746 [6601] 189	233
	68 [18]			168 [1486] 258	295 [2614] 255	414 [3664] 248	526 [4652] 242	638 [5642] 229	742 [6567] 215	262
	76 [20]			152 [1345] 287	277 [1455] 286	403 [3570] 281	520 [4598] 271	631 [5585] 257		291
	83 [22]			129 [1143] 319	249 [2208] 319	381 [3372] 312	493 [4365] 299	620 [5489] 287		320
	91 [24]			104 [924] 348	233 [2063] 346	358 [3166] 335	471 [4168] 333	551 [4875] 332		349

Rotor Width

22.1 [8.72]

mm [in]

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

Theoretical Torque - Nm [lb-in]

72 [633]	143 [1266]	286 [2532]	429 [3798]	572 [5064]	715 [6330]	858 [7596]	1001 [8861]
----------	------------	------------	------------	------------	------------	------------	-------------

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

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

300 cm³ [18.3 in³] / rev

		Torque - Nm [lb-in], Speed rpm						Intermittent Ratings - 10% of Operation		
Flow - lpm [gpm]	2 [0.5]	63 [559] 5	136 [1202] 4	285 [2518] 3	413 [3656] 3	513 [4537] 2	580 [5129] 1			7
	4 [1]	56 [493] 12	139 [1230] 10	272 [2410] 10	386 [3418] 8	483 [4272] 6	546 [4834] 4			13
	8 [2]	59 [522] 23	134 [1185] 21	302 [2676] 19	427 [3781] 19	521 [4611] 16	587 [5196] 14	673 [5952] 10	743 [6572] 5	26
	15 [4]	57 [503] 47	134 [1189] 44	296 [2620] 40	407 [3602] 38	497 [4398] 37	602 [5324] 34	696 [6161] 29	774 [6852] 23	51
	23 [6]	50 [447] 73	125 [1109] 70	286 [2534] 64	439 [3886] 62	559 [4946] 61	677 [5992] 55	789 [6978] 48	877 [7762] 43	76
	30 [8]		111 [986] 97	279 [2468] 93	424 [3752] 92	567 [5020] 86	685 [6059] 77	807 [7142] 72	920 [8139] 64	101
	38 [10]		96 [853] 126	261 [2306] 121	417 [3687] 118	532 [4712] 112	659 [5832] 104	805 [7121] 95	903 [7994] 86	127
	45 [12]		78 [689] 150	228 [2013] 149	367 [3252] 146	501 [4434] 140	643 [5694] 130	766 [6781] 121	890 [7875] 109	152
	53 [14]		59 [525] 176	213 [1889] 174	385 [3410] 171	495 [4383] 166	623 [5509] 155	748 [6618] 143	812 [7186] 136	177
	61 [16]			181 [1603] 200	349 [3085] 196	474 [4195] 194	620 [5484] 181	731 [6471] 172	850 [7519] 157	202
	68 [18]			159 [1405] 227	319 [2823] 225	479 [4241] 219	578 [5112] 212	718 [6356] 196	830 [7348] 186	228
	76 [20]			126 [1115] 252	289 [2560] 251	418 [3703] 248	561 [4962] 240	703 [6221] 225	811 [7180] 207	253
	83 [22]			104 [919] 277	261 [2309] 276	390 [3454] 274	555 [4907] 263	679 [6011] 252		278
	91 [24]			67 [590] 302	218 [1925] 301	389 [3441] 299	530 [4686] 293	652 [5766] 282		303
95 [25]			56 [496] 314	197 [1740] 313	364 [3225] 310	484 [4281] 309	632 [5594] 298		316	

Rotor Width

25.4 [1.000]

mm [in]

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

Theoretical Torque - Nm [lb-in]

82 [729]	165 [1457]	329 [2914]	494 [4371]	659 [5828]	823 [7285]	988 [8742]	1152 [10199]
----------	------------	------------	------------	------------	------------	------------	--------------

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

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

DISPLACEMENT PERFORMANCE

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

348 cm³ [21.2 in³] / rev

Flow - lpm [gpm]	Torque - Nm [lb-in], Speed rpm								Intermittent Ratings - 10% of Operation		
	2 [0.5]	70 [617]	147 [1297]	269 [2383]							6
4 [1]	73 [649]	149 [1318]	291 [2580]	412 [3647]						11	
8 [2]	76 [670]	159 [1403]	313 [2767]	453 [4007]	557 [4927]	668 [5915]	782 [6919]			22	
15 [4]	69 [609]	159 [1409]	324 [2868]	463 [4101]	596 [5273]	714 [6316]	820 [7261]	927 [8204]		44	
23 [6]	62 [544]	149 [1319]	321 [2837]	478 [4228]	606 [5363]	736 [6514]	845 [7475]	950 [8410]		66	
30 [8]	45 [395]	128 [1134]	304 [2693]	467 [4134]	622 [5502]	776 [6870]	906 [8022]	987 [8734]		88	
38 [10]		109 [962]	288 [2550]	455 [4027]	621 [5500]	754 [6670]	907 [8028]	1029 [9105]		109	
45 [12]		94 [833]	268 [2376]	439 [3889]	588 [5205]	758 [6712]	901 [7970]	1031 [9120]		131	
53 [14]		65 [575]	244 [2162]	409 [3619]	572 [5059]	727 [6433]	879 [7777]	1025 [9070]		153	
61 [16]			220 [1947]	385 [3406]	549 [4855]	697 [6172]	855 [7570]	1000 [8853]		175	
68 [18]			186 [1644]	361 [3195]	520 [4599]	685 [6062]	825 [7297]	967 [8555]		197	
76 [20]			147 [1301]	324 [2863]	483 [4275]	637 [5634]	790 [6993]	944 [8357]		218	
83 [22]			109 [960]	289 [2560]	443 [3921]	605 [5357]	770 [6814]			240	
91 [24]			77 [684]	251 [2225]	431 [3814]	588 [5207]	733 [6488]			262	
95 [25]			56 [493]	226 [2004]	409 [3621]	570 [5048]	727 [6435]			273	

Rotor Width

39.4 [1.553]

mm [in]

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]

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

375 cm³ [22.8 in³] / rev

Flow - lpm [gpm]	Torque - Nm [lb-in], Speed rpm								Intermittent Ratings - 10% of Operation		
	2 [0.5]	78 [687]	162 [1438]	321 [2840]	447 [3958]	592 [5237]					6
4 [1]	78 [694]	163 [1443]	333 [2951]	474 [4193]	606 [5366]	730 [6457]				11	
8 [2]	81 [721]	169 [1495]	339 [3001]	485 [4288]	625 [5533]	756 [6692]	851 [7532]			21	
15 [4]	74 [651]	166 [1470]	321 [2837]	465 [4117]	611 [5404]	748 [6624]	876 [7754]	991 [8766]		41	
23 [6]	62 [547]	155 [1372]	341 [3015]	515 [4557]	670 [5931]	785 [6946]	884 [7825]	1005 [8896]		61	
30 [8]	47 [412]	138 [1223]	320 [2836]	503 [4453]	664 [5880]	834 [7385]	976 [8633]	1067 [9442]		82	
38 [10]		118 [1048]	303 [2684]	495 [4382]	647 [5726]	801 [7090]	922 [8161]	1058 [9364]		102	
45 [12]		98 [870]	288 [2547]	469 [4147]	635 [5620]	804 [7115]	972 [8605]	1121 [9920]		122	
53 [14]		71 [625]	261 [2308]	435 [3849]	603 [5337]	786 [6953]	938 [8298]	1104 [9771]		142	
61 [16]		55 [487]	241 [2134]	423 [3744]	593 [5248]	758 [6706]	922 [8160]	1086 [9614]		163	
68 [18]			204 [1805]	391 [3461]	564 [4988]	723 [6402]	893 [7899]	1053 [9320]		183	
76 [20]			219 [1942]	365 [3231]	533 [4714]	662 [5860]	864 [7643]	1030 [9112]		203	
83 [22]			132 [1173]	316 [2795]	514 [4552]	675 [5970]	807 [7141]			223	
91 [24]			100 [881]	290 [2567]	475 [4202]	640 [5667]	792 [7012]			244	
95 [25]			80 [711]	261 [2313]	465 [4113]	616 [5454]	779 [6891]			254	

Rotor Width

31.8 [1.252]

mm [in]

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]

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



DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]						Max. Cont.	Peak
470		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	173 [2500]	207 [3000]	
		465 cm ³ [28.3 in ³] / rev						Intermittent Ratings - 10% of Operation	
		Torque - Nm [lb-in], Speed rpm							
Flow - lpm [gpm]	2 [0.5]	99 [878] 4	210 [1862] 3	420 [3713] 3					Theoretical rpm
	4 [1]	102 [899] 8	210 [1856] 7	424 [3748] 7	597 [5285] 7	774 [6847] 6			
	8 [2]	102 [906] 16	222 [1968] 15	438 [3875] 15	620 [5488] 14	782 [6922] 13	957 [8470] 11	1106 [9788] 9	
	15 [4]	95 [836] 32	208 [1837] 31	407 [3600] 30	605 [5351] 28	782 [6922] 25	961 [8504] 23	1143 [10118] 20	
	23 [6]	79 [700] 48	196 [1736] 48	426 [3772] 46	620 [5483] 44	814 [7204] 41	969 [8580] 36	1149 [10172] 31	
	30 [8]	61 [544] 65	179 [1588] 65	411 [3638] 63	630 [5578] 61	847 [7498] 57	1046 [9253] 48	1191 [10541] 44	
	38 [10]	40 [352] 81	159 [1405] 80	387 [3429] 80	618 [5471] 77	825 [7301] 73	1036 [9167] 67	1245 [11019] 55	
	45 [12]		125 [1105] 97	367 [3245] 96	587 [5197] 94	800 [7076] 90	1005 [8891] 82	1232 [10898] 72	
	53 [14]		103 [912] 113	340 [3007] 113	572 [5066] 111	767 [6787] 106	985 [8720] 100	1208 [10688] 91	
	61 [16]		63 [557] 130	306 [2712] 129	527 [4662] 128	744 [6581] 124	955 [8451] 116	1162 [10285] 105	
Max. Cont.	68 [18]		260 [2298] 146	494 [4370] 145	708 [6262] 142	921 [8148] 135	1149 [10169] 126		
	76 [20]		219 [1941] 163	456 [4035] 163	673 [5954] 158	883 [7815] 151	1090 [9647] 140		
	83 [22]		174 [1542] 179	417 [3687] 178	634 [5612] 176	847 [7496] 168			
Max. Inter.	91 [24]		138 [1225] 195	373 [3302] 194	605 [5354] 193	808 [7147] 186			
	95 [25]			348 [3079] 204	552 [4885] 203	769 [6808] 197			
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
39.4 [1.553] mm [in]		Theoretical Torque - Nm [lb-in]							
		127 [1127]	255 [2253]	509 [4506]	764 [6760]	1018 [9013]	1273 [11266]	1528 [13519]	
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]							

		Pressure - bar [psi]						Max. Cont.	Max. Inter
540		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	172 [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]	106 [940] 3	230 [2035] 2						Theoretical rpm
	4 [1]	105 [927] 6	223 [1975] 6	455 [4023] 6	655 [5797] 5	868 [7684] 3			
	8 [2]	112 [991] 13	237 [2100] 13	488 [4321] 12	719 [6358] 10	911 [8065] 8	1087 [9617] 3		
	15 [4]	107 [944] 27	246 [2174] 26	503 [4455] 25	745 [6593] 24	952 [8426] 21	1131 [10005] 16		
	23 [6]	96 [854] 42	230 [2033] 41	516 [4571] 40	756 [6686] 40	1007 [8911] 36	1233 [10911] 30		
	30 [8]	69 [613] 56	208 [1843] 56	476 [4214] 54	760 [6724] 54	993 [8787] 49	1206 [10676] 42		
	38 [10]	59 [521] 70	184 [1631] 70	456 [4035] 69	720 [6367] 67	968 [8568] 64	1223 [10821] 56		
	45 [12]	30 [264] 84	155 [1376] 83	418 [3702] 83	688 [6089] 83	926 [8195] 78	1205 [10668] 69		
	53 [14]		123 [1089] 98	391 [3456] 98	630 [5576] 97	892 [7896] 95	1149 [10165] 88		
	61 [16]		90 [793] 113	361 [3197] 113	635 [5622] 112	896 [7925] 109	1137 [10061] 106		
Max. Cont.	68 [18]		51 [452] 127	328 [2901] 126	592 [5238] 125	862 [7632] 124	1116 [9873] 118		
	76 [20]			278 [2460] 141	550 [4869] 140	816 [7222] 140	1076 [9526] 132		
	83 [22]			224 [1980] 154	447 [3954] 153	720 [6369] 151			
Max. Inter.	91 [24]		180 [1590] 169	449 [3971] 168	754 [6673] 167				
	95 [25]		153 [1358] 176	426 [3768] 174	689 [6095] 173				
Rotor Width		Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
45.5 [1.791] mm [in]		Theoretical Torque - Nm [lb-in]							
		147 [1302]	294 [2604]	588 [5207]	883 [7811]	1177 [10414]	1471 [13018]		
		Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]							

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

DISPLACEMENT PERFORMANCE

		Pressure - bar [psi]		Max. Cont.		Peak	
750		17 [250]	35 [500]	69 [1000]	104 [1500]	138 [2000]	
748 cm ³ [45.6 in ³] / rev							
		Torque - Nm [lb-in], Speed rpm				Intermittent Ratings - 10% of Operation	
Flow - lpm [gpm]	2 [0.5]	108 [957] 2	231 [2041] 1				3
	4 [1]	174 [1540] 4	340 [3010] 4	651 [5760] 4	950 [8408] 4	1233 [10916] 3	6
	8 [2]	166 [1467] 9	367 [3246] 9	695 [6154] 9	1020 [9024] 9	1302 [11518] 7	11
	15 [4]	170 [1501] 19	359 [3181] 19	719 [6366] 19	1086 [9607] 18	1325 [11729] 16	21
	23 [6]	167 [1477] 29	344 [3048] 29	699 [6190] 28	1015 [8979] 27	1346 [11916] 25	31
	30 [8]	129 [1142] 40	324 [2866] 39	700 [6191] 38	1053 [9316] 37	1345 [11898] 35	41
	38 [10]	111 [979] 50	295 [2606] 49	656 [5809] 48	1039 [9191] 47	1390 [12305] 44	51
	45 [12]	69 [614] 60	254 [2246] 59	631 [5586] 58	987 [8736] 57	1365 [12079] 56	61
	53 [14]	47 [413] 69	227 [2009] 68	591 [5232] 66	957 [8469] 65	1346 [11913] 64	71
	61 [16]		198 [1756] 80	555 [4909] 79	931 [8243] 77	1294 [11455] 74	82
	68 [18]		136 [1203] 91	517 [4571] 90	879 [7778] 90	1230 [10884] 87	92
	76 [20]		93 [827] 100	453 [4010] 99	820 [7257] 98	1191 [10540] 97	102
	83 [22]			409 [3620] 109	786 [6958] 108		112
	91 [24]			340 [3010] 120	747 [6609] 119		122
	95 [25]			318 [2810] 126	693 [6130] 125		127
Max. Cont.							
Max. Inter.							
Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input checked="" type="checkbox"/>							
Rotor Width		Theoretical Torque - Nm [lb-in]					
63.5 [2.501] mm [in]		205 [1815]	410 [3631]	821 [7261]	1231 [10892]	1641 [14522]	
Displacement tested at 54°C [129°F] with an oil viscosity of 46cSt [213 SUS]							

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

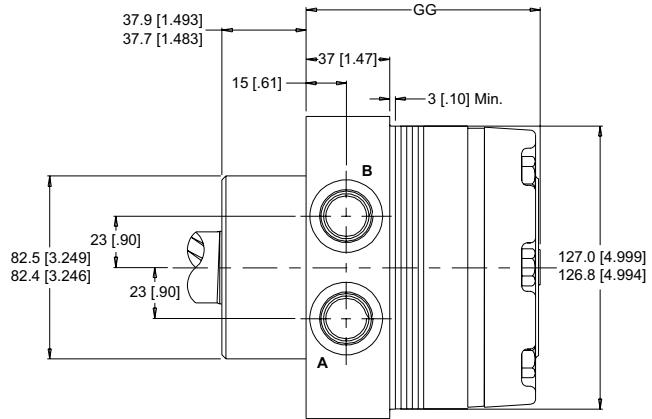
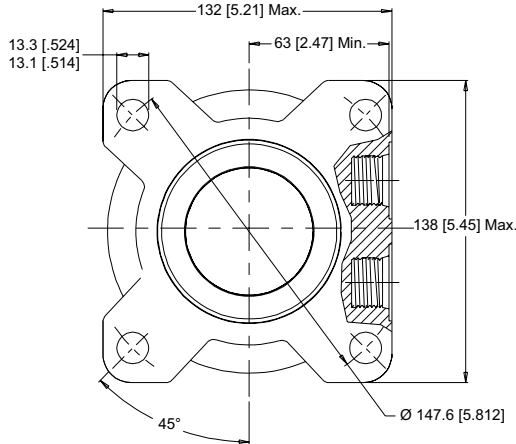
HOUSINGS

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

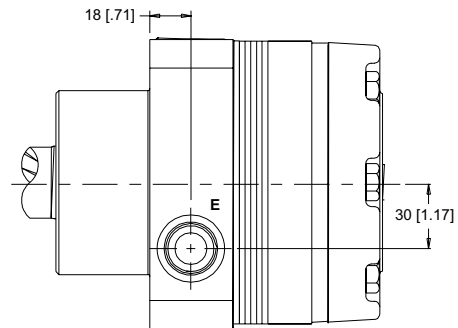
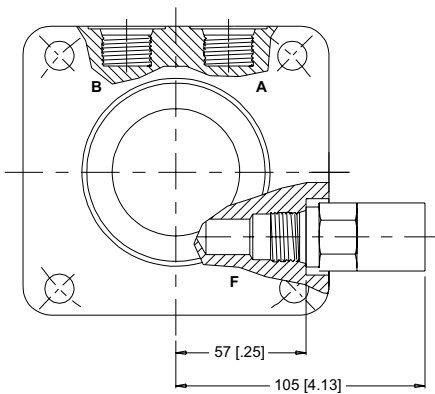
4-HOLE, WHEEL MOUNT, ALIGNED PORTS

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

STANDARD



OPTIONAL VALVE CAVITY



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

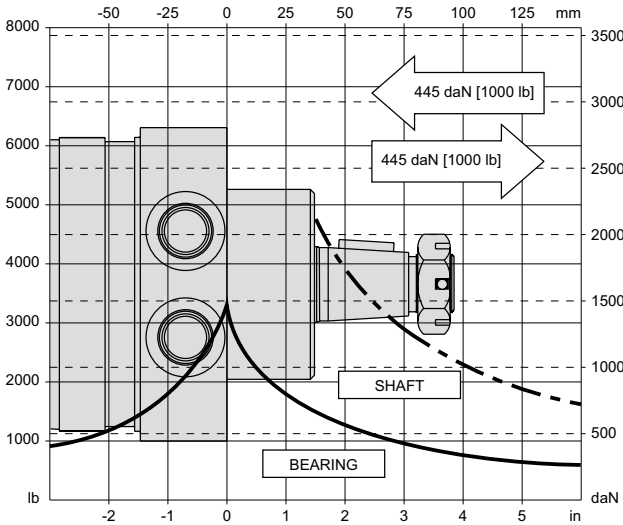
► Dimension GG is charted on page 10.

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.

WHEEL MOUNTS



LENGTH & WEIGHT CHART

Dimension GG is the overall motor length from the rear of the motor to the mounting flange surface and is referenced on detailed housing drawings listed on pages 9, 12 & 15.

GG	Length	Weight
#	mm [in]	kg [lb]
120	99 [3.91]	10.9 [24.1]
160	99 [3.91]	10.9 [24.1]
200	103 [4.05]	11.3 [24.8]
230	105 [4.15]	11.4 [25.2]
260	108 [4.24]	11.6 [25.6]
300	111 [4.37]	11.9 [26.3]
350	125 [4.92]	13.1 [28.8]
375	117 [4.62]	12.4 [27.4]
470	125 [4.92]	13.1 [28.8]
540	131 [5.16]	13.6 [30.0]
750	149 [5.87]	15.0 [33.1]

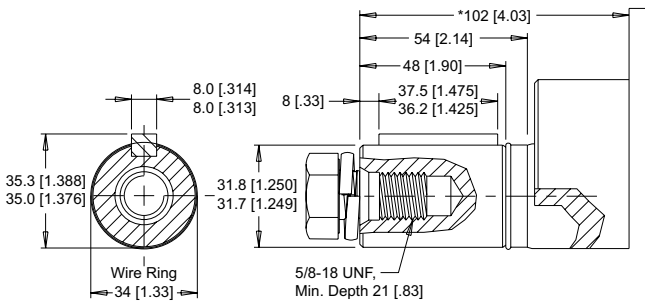
► All CE series motor weights can vary ± 0.5 kg [1 lb] depending on model configurations such as housing, shaft, endcover, options etc.

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		

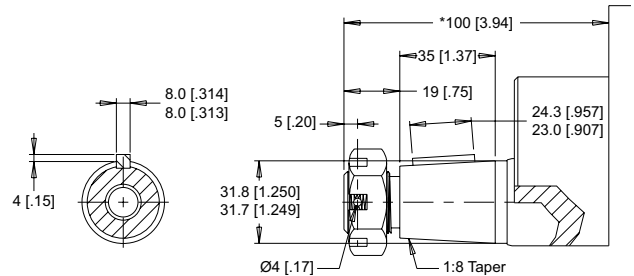
SHAFTS

20 1-1/4" Straight



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

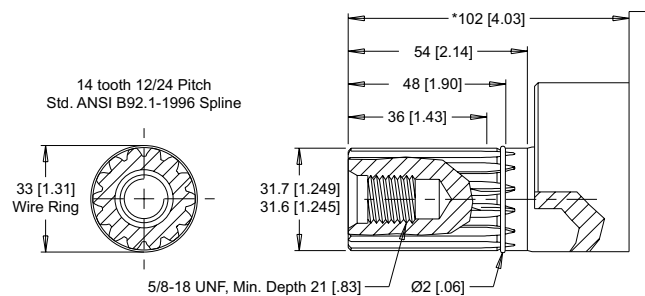
22 1-1/4" Tapered



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

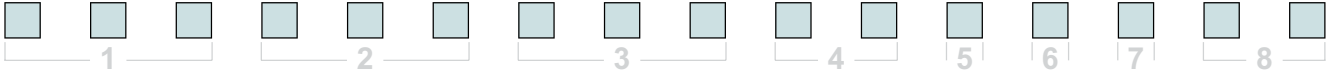
► A slotted hex nut is standard on this shaft.

23 14 Tooth Spline



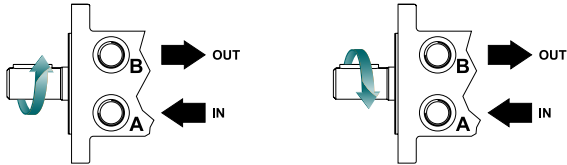
Max. Torque: 1200 Nm [10600 lb-in]

ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

- 400** Counterclockwise Rotation
- 401** Clockwise Rotation



► The 400 & 401 series are bi-directional. Reversing the inlet hose will reverse shaft rotation. For applications requiring the motor to rotate in only one direction, shaft seal life may be prolonged by pressurizing the A port of the motor.

2. SELECT A DISPLACEMENT OPTION

- | | |
|--|---|
| <ul style="list-style-type: none"> 120 121 cm³/rev [7.4 in³/rev] 160 162 cm³/rev [9.9 in³/rev] 200 204 cm³/rev [12.4 in³/rev] 230 232 cm³/rev [14.2 in³/rev] 260 261 cm³/rev [15.9 in³/rev] 300 300 cm³/rev [18.3 in³/rev] | <ul style="list-style-type: none"> 350 348 cm³/rev [21.2 in³/rev] 375 375 cm³/rev [22.8 in³/rev] 470 465 cm³/rev [28.3 in³/rev] 540 536 cm³/rev [32.7 in³/rev] 750 748 cm³/rev [45.6 in³/rev] |
|--|---|

3. SELECT A MOUNT & PORT OPTION

- W31** 4-Hole, Wheel Mount, Aligned Ports, 7/8-14 UNF
- W38** 4-Hole, Wheel Mount, Aligned Ports, G 1/2

4. SELECT A SHAFT OPTION

- 20** 1-1/4" Straight
- 22** 1-1/4" Tapered
- 23** 14 Tooth Spline

5. SELECT A PAINT OPTION

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

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- | | |
|---|--|
| <ul style="list-style-type: none"> A None B Valve Cavity Only C 69 bar [1000 psi] Relief D 86 bar [1250 psi] Relief | <ul style="list-style-type: none"> E 104 bar [1500 psi] Relief F 121 bar [1750 psi] Relief G 138 bar [2000 psi] Relief |
|---|--|

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

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

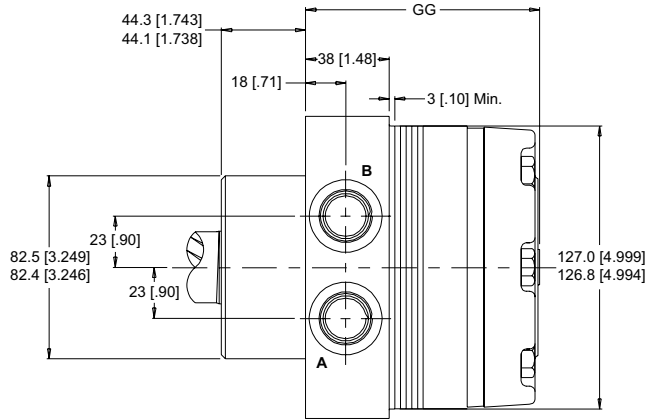
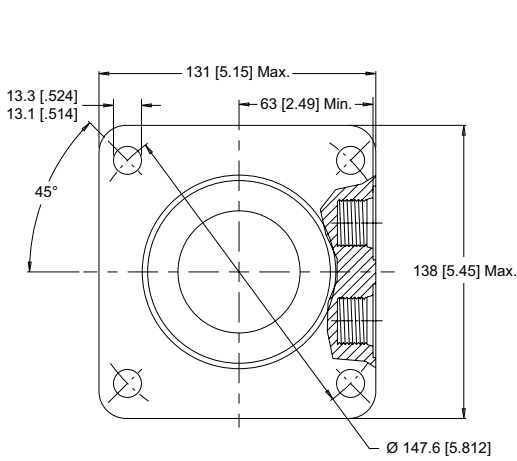
CE (420/421 Series)
Hydraulic Motor With Medium Duty Bearing

HOUSINGS

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

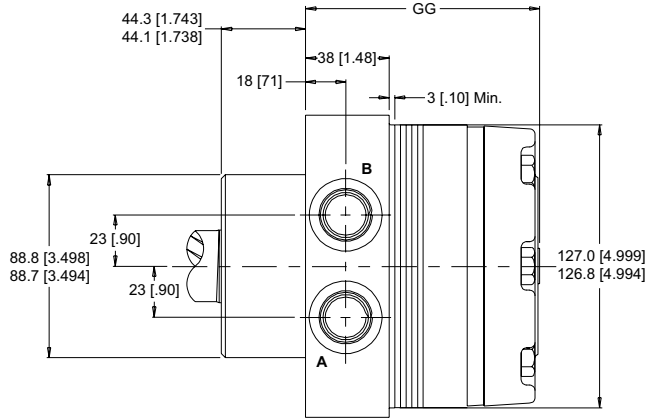
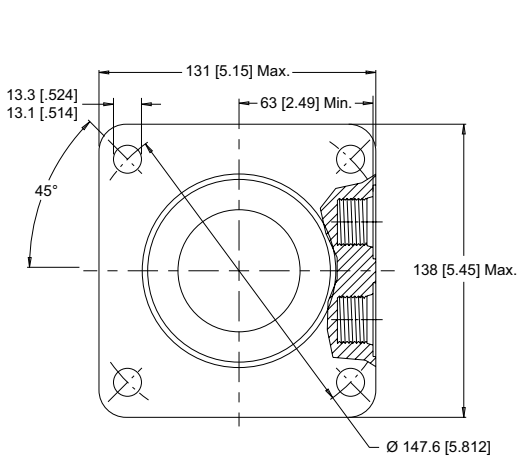
4-HOLE, 3.5" PILOT WHEEL MOUNT, ALIGNED PORTS

P31 7/8-14 UNF **P38** G 1/2



4-HOLE, 3.25" PILOT WHEEL MOUNT, ALIGNED PORTS

W31 7/8-14 UNF **W35** 9/16-18 UNF **W38** G 1/2



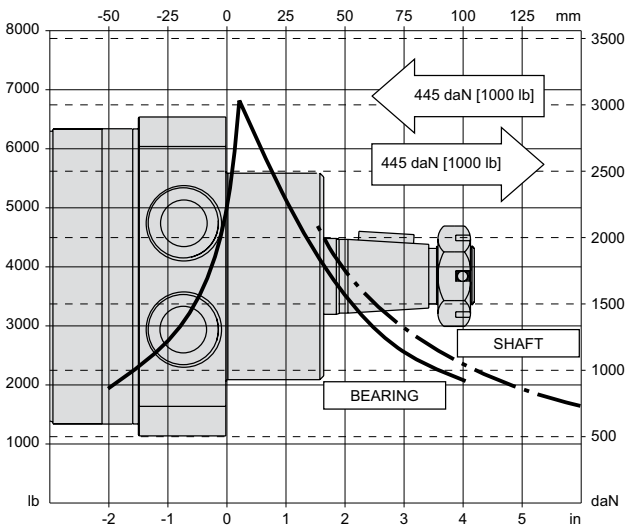
► Dimension GG is charted on page 10.

TECHNICAL INFORMATION

ALLOWABLE SHAFT LOAD / BEARING CURVE

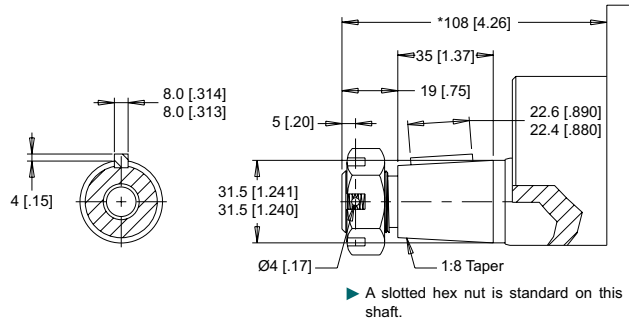
The bearing curve represents allowable bearing loads based on ISO 281 bearing capacity for an L_{10} life of 2,000 hours at 100 rpm. Radial loads for speeds other than 100 rpm may be calculated using the multiplication factor table on page 10.

WHEEL MOUNTS



SHAFTS

22 1-1/4" Tapered



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

CE (420/421 Series)

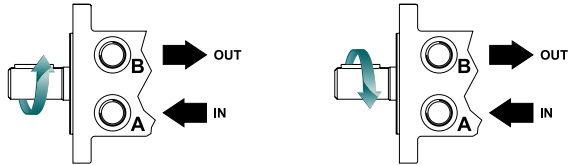
Hydraulic Motor With Medium Duty Bearing

ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

- 420** Counterclockwise Rotation **421** Clockwise Rotation



► The 420 & 421 series are bi-directional. Reversing the inlet hose will reverse shaft rotation. For applications requiring the motor to rotate in only one direction, shaft seal life may be prolonged by pressurizing the A port of the motor.

2. SELECT A DISPLACEMENT OPTION

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

3. SELECT A MOUNT & PORT OPTION

P31	4-Hole, 3.25" Pilot Wheel Mount, Aligned Ports, 7/8-14 UNF
P38	4-Hole, 3.25" Pilot Wheel Mount, Aligned Ports, G 1/2
W31	4-Hole, 3.50" Pilot Wheel Mount, Aligned Ports, 7/8-14 UNF
W35	4-Hole, 3.50" Pilot Wheel Mount, Aligned Ports, 9/16-18 UNF
W38	4-Hole, 3.50" Pilot Wheel Mount, Aligned Ports, G 1/2

4. SELECT A SHAFT OPTION

- 22** 1-1/4" Tapered

5. SELECT A PAINT OPTION

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

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- A** None

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

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

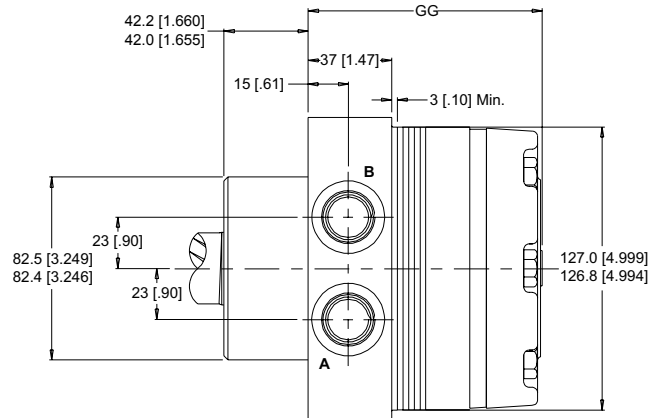
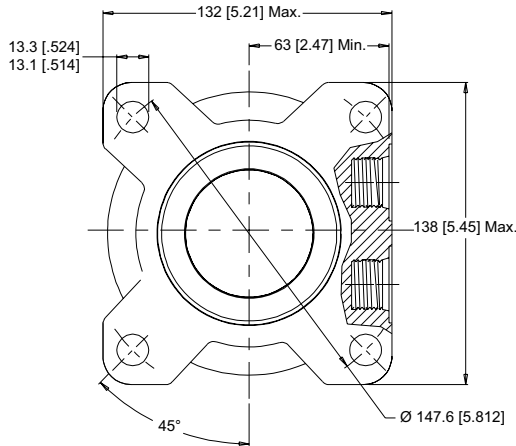
HOUSINGS

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

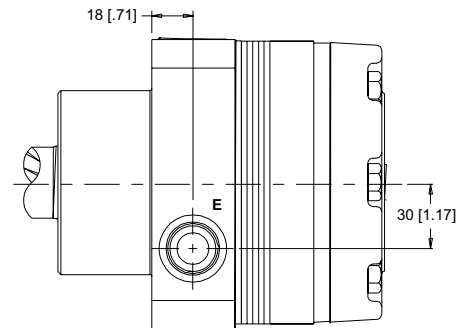
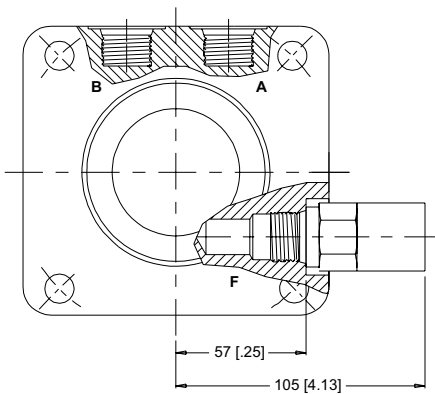
4-HOLE, WHEEL MOUNT, ALIGNED PORTS

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

STANDARD



OPTIONAL VALVE CAVITY



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

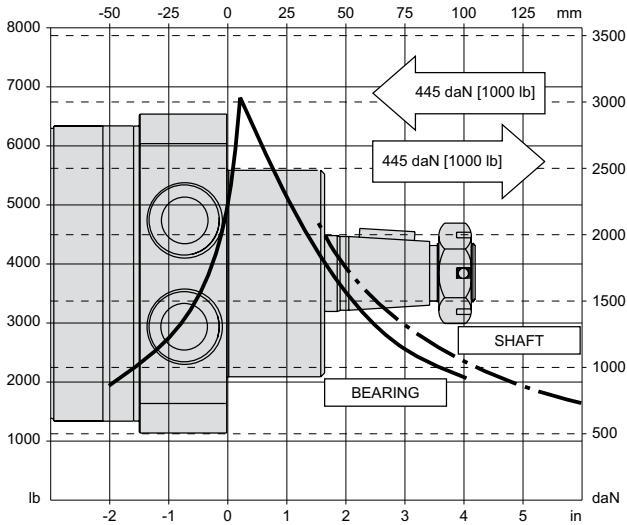
► Dimension GG is charted on page 10.

TECHNICAL INFORMATION

ALLOWABLE SHAFT LOAD / BEARING CURVE

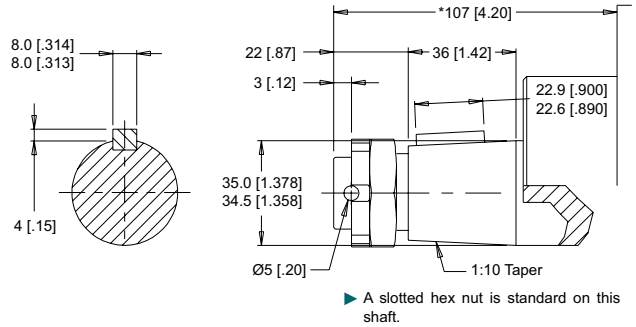
The bearing curve represents allowable bearing loads based on ISO 281 bearing capacity for an L_{10} life of 2,000 hours at 100 rpm. Radial loads for speeds other than 100 rpm may be calculated using the multiplication factor table on page 10.

WHEEL MOUNTS



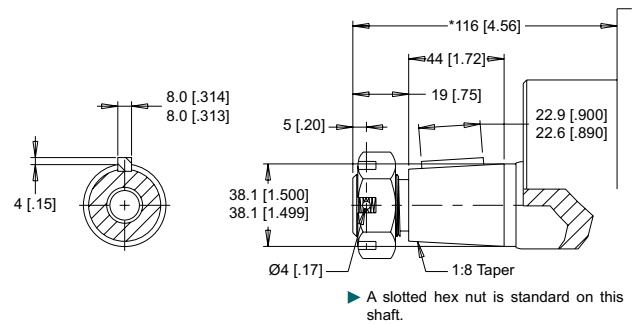
SHAFTS

28 35mm Tapered



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

31 1-1/2" Tapered

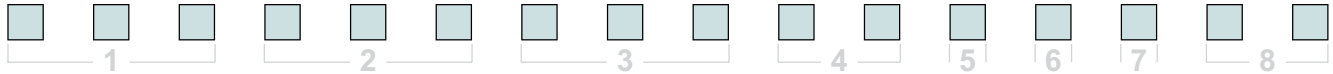


Max. Torque: 1200 Nm [10600 lb-in]

* Mounting flange length may vary by ± .8 [0.030].

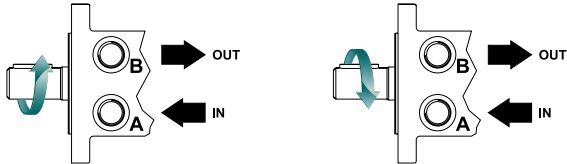


ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

- 430** Counterclockwise Rotation
- 431** Clockwise Rotation



► The 430 & 431 series are bi-directional. Reversing the inlet hose will reverse shaft rotation. For applications requiring the motor to rotate in only one direction, shaft seal life may be prolonged by pressurizing the A port of the motor.

2. SELECT A DISPLACEMENT OPTION

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

3. SELECT A MOUNT & PORT OPTION

- W31** 4-Hole, Wheel Mount, Aligned Ports, 7/8-14 UNF
- W38** 4-Hole, Wheel Mount, Aligned Ports, G 1/2

4. SELECT A SHAFT OPTION

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

5. SELECT A PAINT OPTION

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

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

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

7. SELECT AN ADD-ON OPTION

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

8. SELECT A MISCELLANEOUS OPTION

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

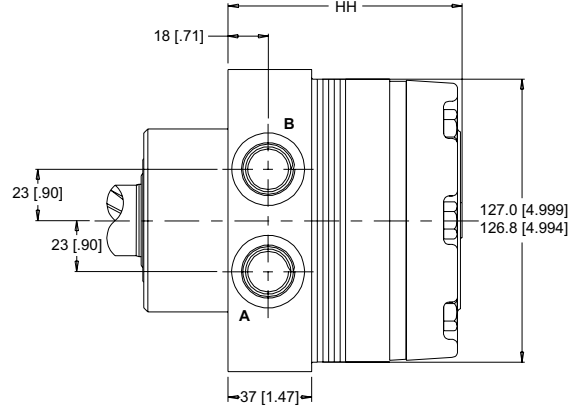
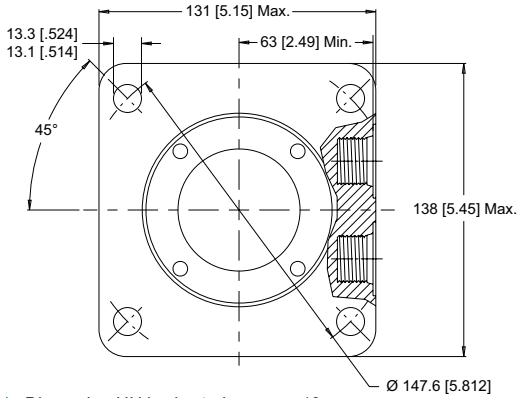
CE (410/411 Series)
Hydraulic Motor With Integral Drum Brake

HOUSINGS

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

4-HOLE, WHEEL BRAKE MOUNT, ALIGNED PORTS

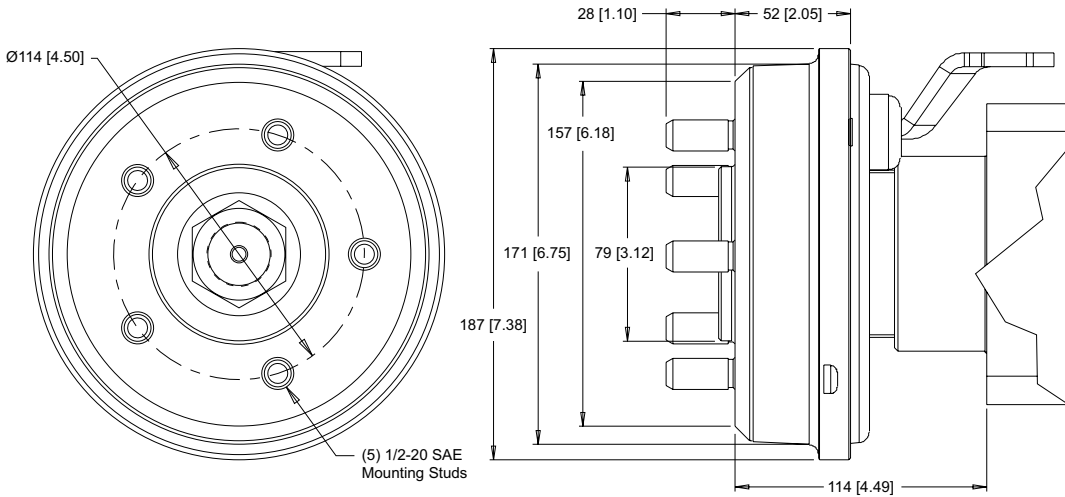
K31 7/8-14 UNF **K35** 9/16-18 UNF **K38** G 1/2



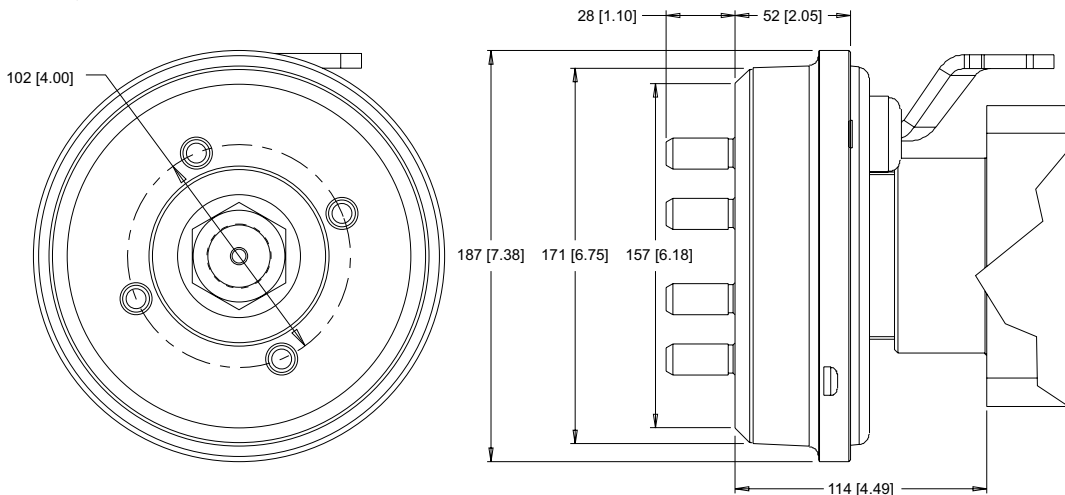
► Dimension HH is charted on page 19.

HUB OPTION DETAILS

5-BOLT, WHEEL HUB

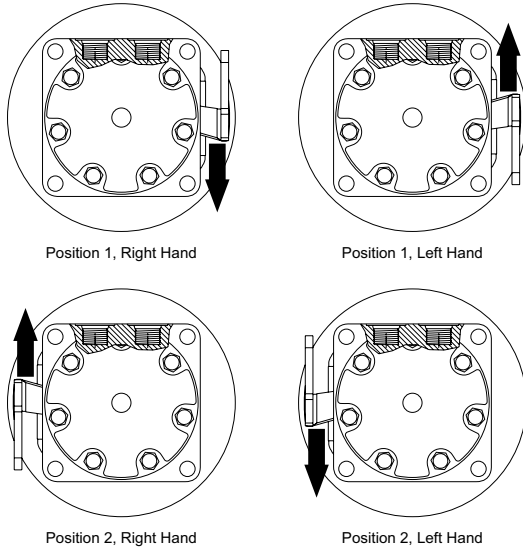


4-BOLT, WHEEL HUB

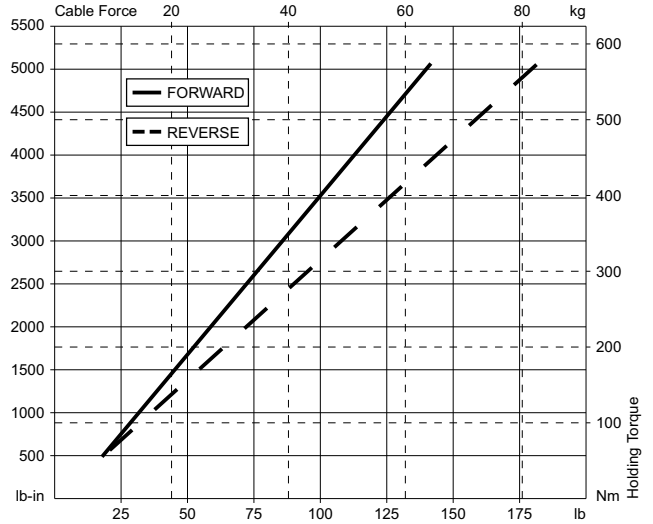


TECHNICAL INFORMATION

BRAKE LEVER POSITION & PULL DIRECTION



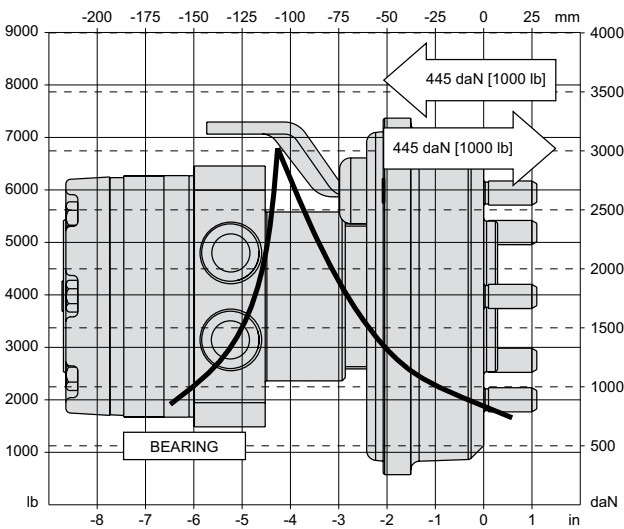
BRAKE HOLDING TORQUE



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.

MOTOR BRAKE



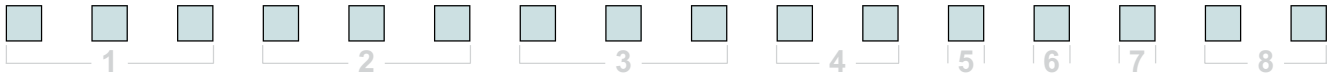
LENGTH & WEIGHT CHART

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

HH	Length	Weight
#	mm [in]	kg [lb]
120	99 [3.91]	16.0 [35.2]
160	99 [3.91]	16.0 [35.2]
200	103 [4.05]	16.3 [35.9]
230	105 [4.15]	16.5 [36.3]
260	108 [4.24]	16.7 [36.7]
300	111 [4.37]	17.0 [37.4]
350	125 [4.92]	18.1 [39.9]
375	117 [4.62]	17.5 [38.5]
470	125 [4.92]	18.1 [39.9]
540	131 [5.16]	18.7 [41.1]
750	149 [5.87]	20.1 [44.2]

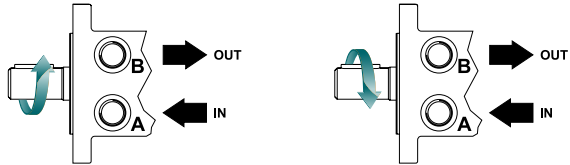
► 410/411 motor/brake weights can vary ± 0.5 kg [1 lb] depending on model configurations such as housing, shaft, endcover, options etc.

ORDERING INFORMATION



1. CHOOSE SERIES DESIGNATION

- 410** Counterclockwise Rotation **411** Clockwise Rotation



► The 410 & 411 series are bi-directional. Reversing the inlet hose will reverse shaft rotation. For applications requiring the motor to rotate in only one direction, shaft seal life may be prolonged by pressurizing the A port of the motor.

2. SELECT A DISPLACEMENT OPTION

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

3. SELECT A MOUNT & PORT OPTION

- K31** 4-Hole, Wheel Brake Mount, Aligned Ports, 7/8-14 UNF
- K35** 4-Hole, Wheel Brake Mount, Aligned Ports, 9/16-18 UNF
- K38** 4-Hole, Wheel Brake Mount, Aligned Ports, G 1/2

4. SELECT A SHAFT OPTION

- 22** 1-1/4" Tapered

5. SELECT A PAINT OPTION

- A** Black
- Z** No Paint

6. SELECT A VALVE CAVITY / CARTRIDGE OPTION

- A** None

7. SELECT AN ADD-ON OPTION

- A** Standard

8. SELECT A MISCELLANEOUS OPTION

- YA** 5 Bolt Hub, Position 2, Right Hand
- YB** 5 Bolt Hub, Position 2, Left Hand
- YE** 4 Bolt Hub, Position 2, Right Hand
- YF** 4 Bolt Hub, Position 2, Left Hand
- ZA** 5 Bolt Hub, Position 1, Left Hand
- ZB** 5 Bolt Hub, Position 1, Right Hand
- ZE** 4 Bolt Hub, Position 1, Left Hand
- ZF** 4 Bolt Hub, Position 1, Right Hand

North America

White Drive Products, Inc.
P.O. Box 1127
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

CE Catalog
01 G 1H

www.whitedriveproducts.com

Central Hydraulics, Inc.

1-800-264-9571
21 of 21

www.CenHyd.com