

MODELS BMPH/BMP



The BMP and BMPH **ROTORTORC™** gear set, shaft distribution flow, hydraulic motors are a compact, highly efficient, low speed-high torque design which can be used in either parallel or series systems.

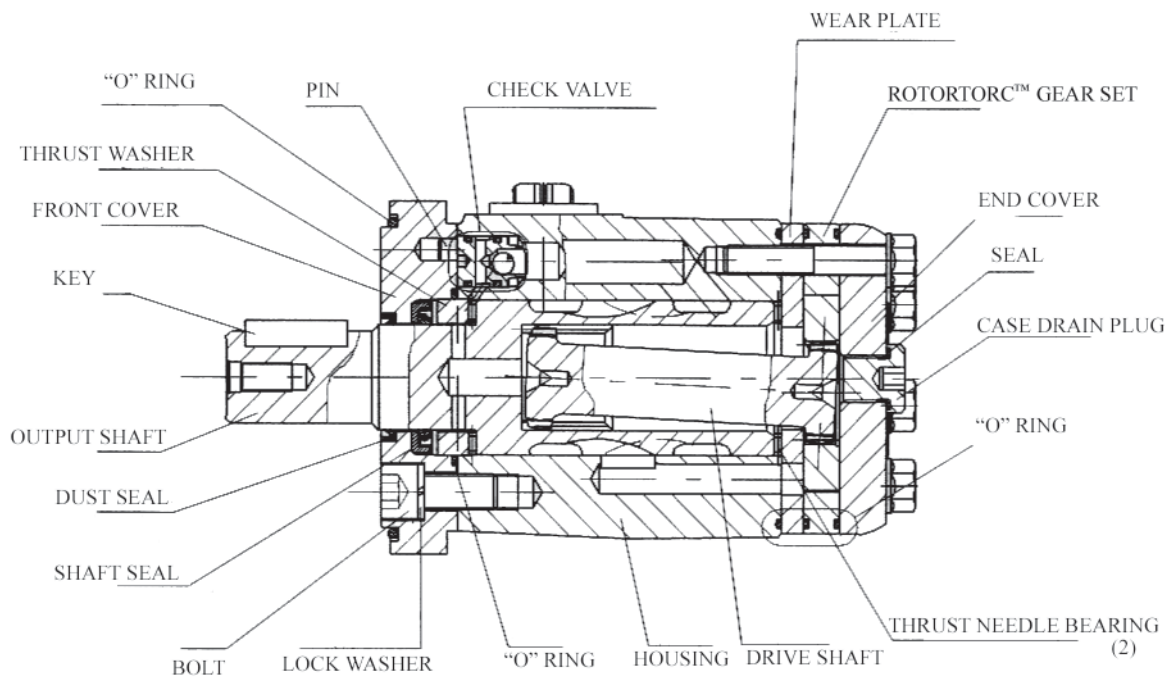
These low weight advanced construction design motors are manufactured in accordance with the requirements of the ISO 9000-2000 quality system.

Technical Specifications - BMPH/BMP

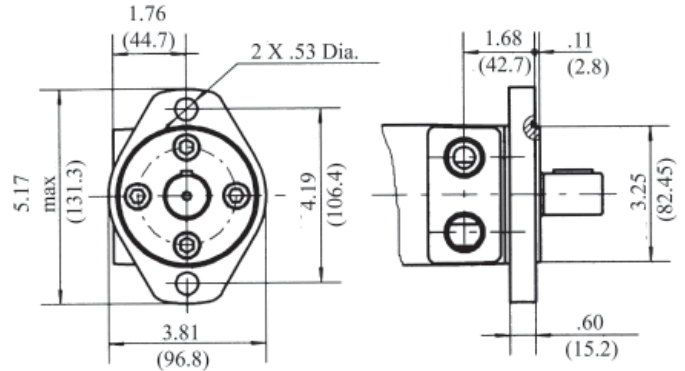
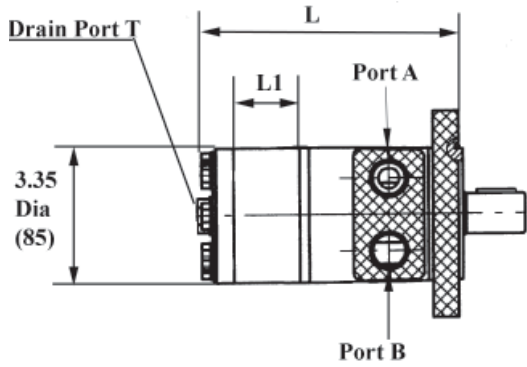
| MODEL | BMPH36 | BMPH50 | BMPH80 | BMPH100 | BMPH125 | BMPH160 | BMPH200 | BMPH250 | BMPH315 | BMPH400 | |
|--|----------------|----------------|----------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|------------|
| | BMP36 | BMP50 | BMP80 | BMP100 | BMP125 | BMP160 | BMP200 | BMP250 | BMP315 | BMP400 | |
| Displacement Cm^3/Rev (In^3/Rev) | 36.0 (2.20) | 51.7 (3.15) | 77.7 (4.74) | 96.2 (5.87) | 118 (7.20) | 156 (9.51) | 190 (11.59) | 231 (14.09) | 312 (19.03) | 387 (23.61) | |
| Maximum Speed RPM | Cont | 1050 | 880 | 740 | 590 | 475 | 370 | 295 | 240 | 190 | 150 |
| | Int. | 1270 | 975 | 825 | 675 | 595 | 465 | 370 | 295 | 235 | 185 |
| Max Torque NM / (in.lbs) | Cont | 58 (512) | 81 (717) | 129 (1140) | 161 (1425) | 202 (1790) | 245 (2170) | 286 (2530) | 360 (3185) | 406 (3575) | 435 (3850) |
| | Int. | 76 (670) | 108 (956) | 171 (1514) | 213 (1885) | 268 (2372) | 342 (3026) | 390 (3450) | 456 (4035) | 505 (4470) | 533 (4717) |
| Max Differential Mpa / (PSI) | Cont | 12.5 (1840) | 12.5 (1840) | 12.5 (1840) | 12.5 (1840) | 12.5 (1840) | 12.5 (1840) | 11 (1625) | 11 (1625) | 11 (1625) | 10 (1450) |
| | Int. | 16.5 (2425) | 16.5 (2425) | 16.5 (2425) | 16.5 (2425) | 16.5 (2425) | 16.5 (2425) | 16.5 (2425) | 14 (2060) | 14 (2060) | 14 (2060) |
| Max Flow L/min / (gpm) | Cont | 38 (10) | 45 (11.85) | 60 (15.8) | 60 (15.8) | 60 (15.8) | 60 (15.8) | 60 (15.8) | 60 (15.8) | 60 (15.8) | 60 (15.8) |
| | Int. | 45 (12) | 50 (13.15) | 75 (19.75) | 75 (19.75) | 75 (19.75) | 75 (19.75) | 75 (19.75) | 75 (19.75) | 75 (19.75) | 75 (19.75) |
| Weight Kg / (lbs) | | 5.5 (12.1) | 5.6 (12.3) | 5.7 (12.54) | 5.9 (13) | 6 (13.2) | 6.2 (13.65) | 6.4 (14.1) | 6.6 (14.5) | 6.9 (15.2) | 7.4 (16.3) |

Continuous = maximum of continuous operation

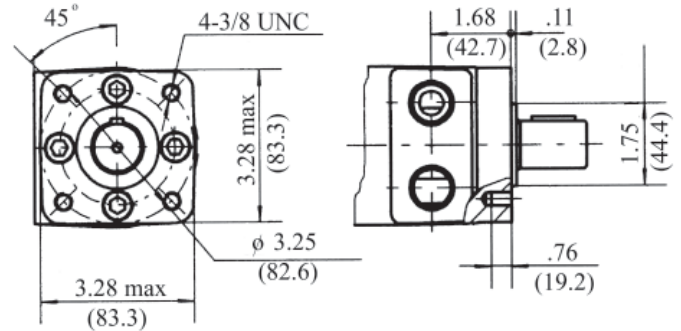
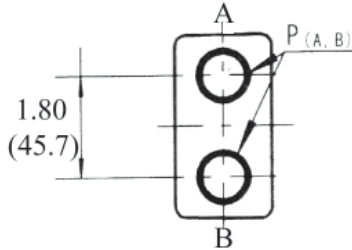
Intermittent = maximum operating range for 6 seconds per minute



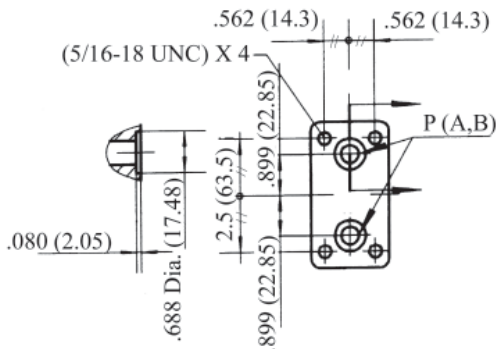
BMPH INSTALLATION DATA



H2 - SAE -"A" 2 BOLT

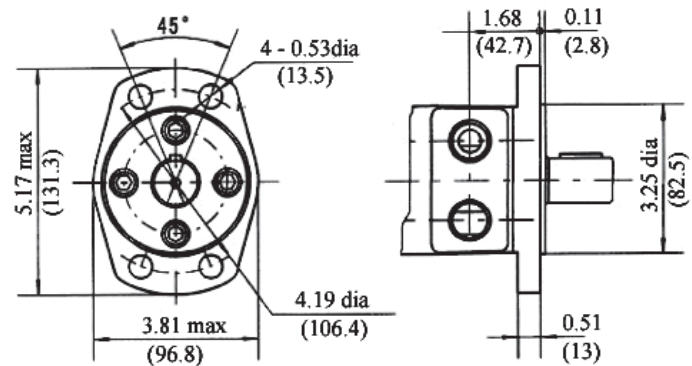


H4 - SAE -"A" 4 BOLT



Manifold Mount

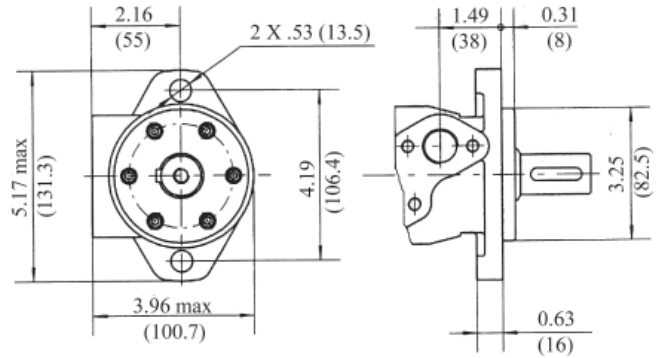
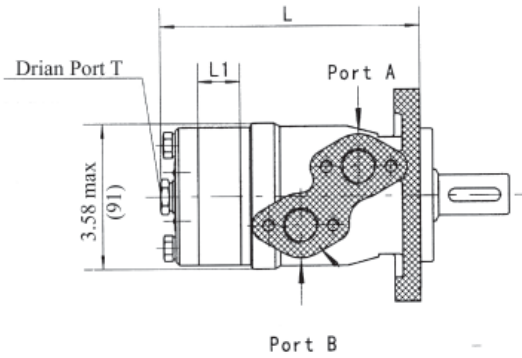
| MODEL BMPH | L | | L1 | |
|---------------|--------|-------|--------|------|
| | inches | mm | inches | mm |
| BMPH 36 | 5.51 | 140 | 0.27 | 6.8 |
| BMPH 50 | 5.55 | 141 | 0.28 | 7 |
| BMPH 80 | 5.69 | 144.5 | 0.41 | 10.5 |
| BMPH 100 | 5.79 | 147 | 0.51 | 13 |
| BMPH 125 | 5.91 | 150 | 0.63 | 16 |
| BMPH 160 | 6.10 | 155 | 0.83 | 21 |
| BMPH 200 | 6.30 | 160 | 1.02 | 26 |
| BMPH 250 | 6.54 | 166 | 1.26 | 32 |
| BMPH 315 | 7.72 | 176 | 1.65 | 42 |
| BMPH 400 | 7.32 | 186 | 2.04 | 52 |



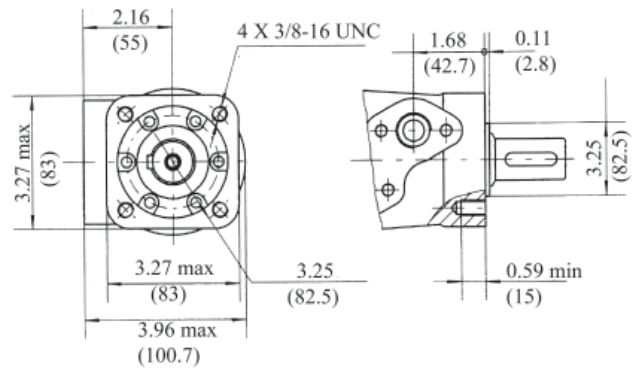
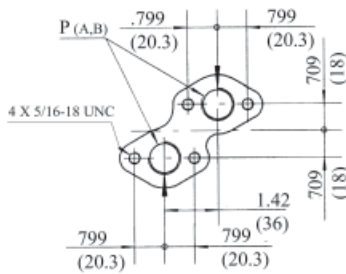
H6 - Magneto

| PORT SIZES | SAE | NPT |
|------------|-------------|-------------|
| P (A,B) | 7/8-14 SAE | 1/2-14 NPTF |
| T | 7/16-20 SAE | 7/16-20 SAE |

BMP INSTALLATION DATA



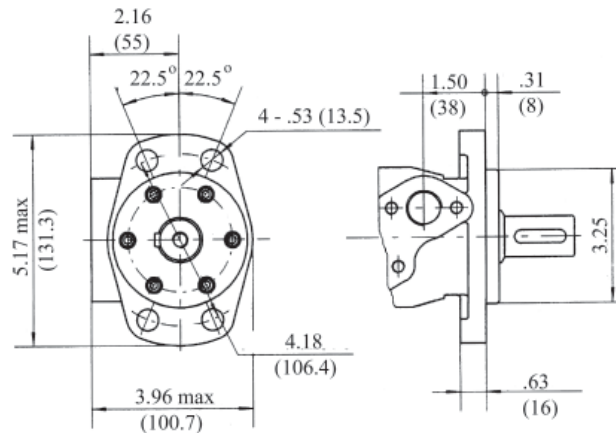
H2 - SAE -"A" 2 BOLT



H4 - SAE -"A" 4 BOLT

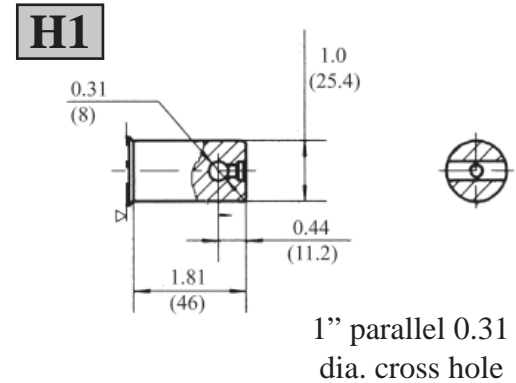
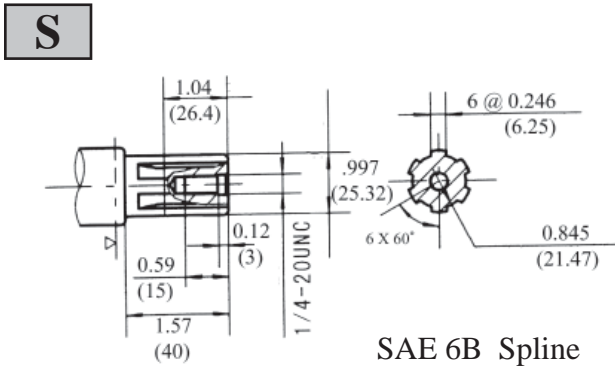
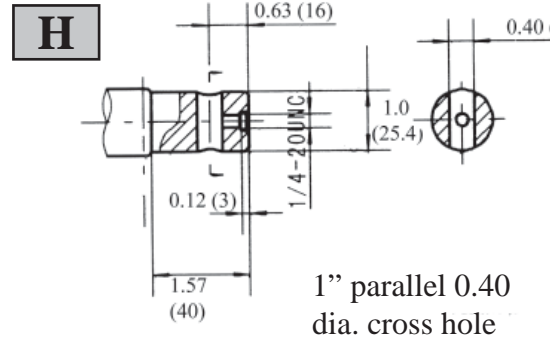
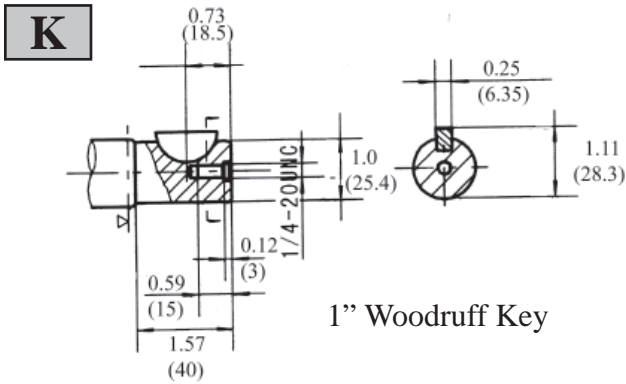
| PORT SIZES | SAE | NPT |
|------------|-------------|-------------|
| P (A,B) | 7/8-14 SAE | 1/2-14 NPTF |
| T | 7/16-20 SAE | 7/16-20 SAE |

| MODEL BMP | L | | L1 | |
|-----------|--------|-------|--------|------|
| | inches | mm | inches | mm |
| BMP 36 | 5.36 | 136 | 0.27 | 6.8 |
| BMP 50 | 5.40 | 137 | 0.28 | 7 |
| BMP 80 | 5.53 | 140.5 | 0.41 | 10.5 |
| BMP 100 | 5.63 | 143 | 0.51 | 13 |
| BMP 125 | 5.75 | 146 | 0.63 | 16 |
| BMP 160 | 5.94 | 151 | 0.83 | 21 |
| BMP 200 | 6.18 | 157 | 1.02 | 26 |
| BMP 250 | 6.34 | 162 | 1.26 | 32 |
| BMP 315 | 6.77 | 172 | 1.65 | 42 |
| BMP 400 | 7.16 | 182 | 2.04 | 52 |

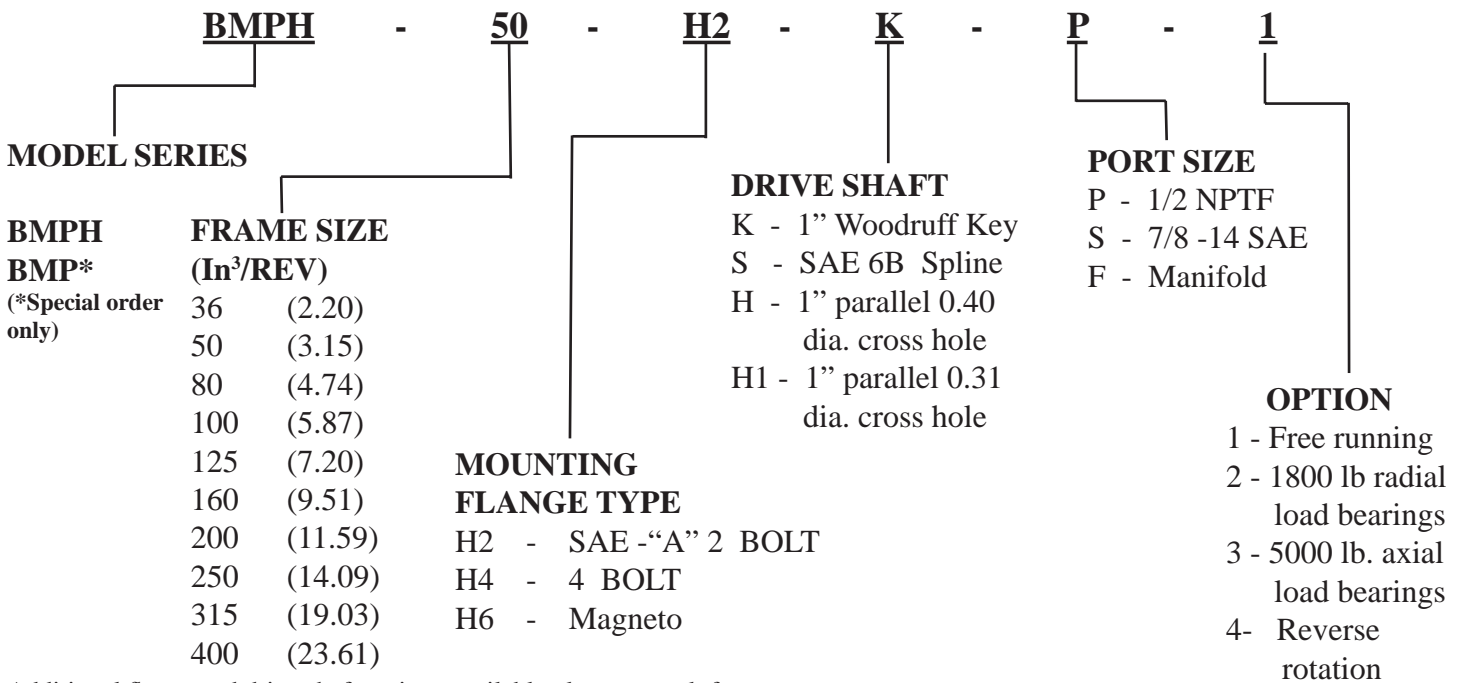


H6 - Magneto

MODEL BMP & BMPH DRIVE SHAFT DATA



BMPH & BMP MODEL NUMBER DATA



Additional flange and drive shaft options available please consult factory

| BMP/BMPH 36 | | 36 Cm³/Rev 2.20 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|--------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 12.5 (1840) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 13 (115) | 24 (212) | 29 (256) | 34 (300) | 43 (380) | 48 (424) | 55 (486) | 74 (654) |
| | | 214 rpm | 205 rpm | 200 rpm | 194 rpm | 187 rpm | 179 rpm | 168 rpm | 138 |
| | 15 (3.95) | 13 (115) | 25 (221) | 29 (256) | 34 (300) | 43 (380) | 48 (424) | 56 (495) | 75 (663) |
| | | 406 rpm | 398 rpm | 391 rpm | 383 rpm | 374 rpm | 366 rpm | 353 rpm | 324 |
| | 20 (5.25) | 13 (115) | 24 (212) | 29 (256) | 34 (300) | 43 (380) | 48 (424) | 56 (495) | 76 (672) |
| | | 541 rpm | 534 rpm | 528 rpm | 521 rpm | 513 rpm | 500 rpm | 486 rpm | 458 |
| | 30 (7.90) | 12 (106) | 24 (212) | 29 (256) | 34 (300) | 43 (380) | 48 (424) | 56 (495) | 76 (672) |
| | | 814 rpm | 804 rpm | 792 rpm | 778 rpm | 763 rpm | 749 rpm | 726 rpm | 701 |
| Max Cont. | 40 (10.50) | 12 (106) | 23 (203) | 28 (247) | 32 (283) | 41 (362) | 47 (415) | 55 (486) | 75 (663) |
| | | 1090 rpm | 1078 rpm | 1064 rpm | 1048 rpm | 1024 rpm | 998 rpm | 977 rpm | 943 |
| Max Int. | 45 (11.90) | 11 (97) | 22 (194) | 26 (230) | 32 (283) | 41 (362) | 46 (407) | 54 (477) | |
| | | 1232 rpm | 1218 rpm | 1196 rpm | 1175 rpm | 1149 rpm | 1118 rpm | 1080 rpm | |

| BMP/BMPH 50 | | 51.7 Cm³/Rev 3.15 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|--------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 12.5 (1840) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 17 (150) | 38 (336) | 44 (390) | 50 (443) | 63 (558) | 70 (620) | 79 (700) | 104 (920) |
| | | 154 rpm | 149 rpm | 144 rpm | 141 rpm | 135 rpm | 129 rpm | 123 rpm | 92 rpm |
| | 15 (3.95) | 19 (168) | 38 (336) | 44 (389) | 50 (443) | 64 (566) | 71 (628) | 80 (708) | 105 (930) |
| | | 292 rpm | 286 rpm | 238 rpm | 277 rpm | 273 rpm | 267 rpm | 262 rpm | 231 rpm |
| | 20 (5.25) | 17 (150) | 38 (336) | 44 (389) | 51 (451) | 64 (566) | 71 (628) | 80 (708) | 107 (947) |
| | | 390 rpm | 385 rpm | 328 rpm | 326 rpm | 374 rpm | 367 rpm | 360 rpm | 332 rpm |
| | 30 (7.90) | 16 (142) | 37 (328) | 44 (389) | 50 (443) | 64 (566) | 71 (628) | 80 (708) | 108 (956) |
| | | 586 rpm | 579 rpm | 572 rpm | 568 rpm | 562 rpm | 556 rpm | 546 rpm | 516 rpm |
| Max Cont. | 45 (11.90) | 14 (126) | 34 (304) | 42 (374) | 49 (435) | 63 (558) | 70 (620) | 80 (708) | 107 (947) |
| | | 879 rpm | 868 rpm | 862 rpm | 855 rpm | 849 rpm | 840 rpm | 833 rpm | 799 rpm |
| Max Int. | 50 (13.20) | 13 (118) | 33 (296) | 41 (368) | 48 (427) | 62 (550) | 68 (605) | 79 (700) | |
| | | 975 rpm | 962 rpm | 955 rpm | 949 rpm | 943 rpm | 937 rpm | 927 rpm | |

| BMP/BMPH 80 | | 77.7 Cm³/Rev 4.74 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|--------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 12.5 (1840) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 29 (256) | 60 (531) | 70 (620) | 80 (708) | 101 (894) | 111 (982) | 128 (1133) | 168 (1487) |
| | | 97 rpm | 94 rpm | 91 rpm | 88 rpm | 84 rpm | 79 rpm | 74 rpm | 50 rpm |
| | 15 (3.95) | 29 (256) | 61 (539) | 71 (628) | 81 (717) | 101 (894) | 114 (1009) | 129 (1142) | 170 (1505) |
| | | 184 rpm | 181 rpm | 178 rpm | 175 rpm | 171 rpm | 167 rpm | 162 rpm | 140 rpm |
| | 20 (5.25) | 28 (248) | 60 (531) | 71 (628) | 81 (717) | 101 (894) | 112 (991) | 129 (1142) | 170 (1505) |
| | | 247 rpm | 243 rpm | 241 rpm | 238 rpm | 235 rpm | 231 rpm | 225 rpm | 205 rpm |
| | 30 (7.90) | 25 (221) | 58 (513) | 69 (610) | 79 (699) | 100 (855) | 111 (982) | 128 (1133) | 171 (1513) |
| | | 370 rpm | 366 rpm | 363 rpm | 360 rpm | 356 rpm | 351 rpm | 346 rpm | 323 rpm |
| | 35 (9.20) | 24 (212) | 57 (504) | 68 (602) | 78 (690) | 99 (876) | 110 (974) | 126 (1115) | 171 (1513) |
| | | 432 rpm | 427 rpm | 424 rpm | 421 rpm | 416 rpm | 412 rpm | 407 rpm | 387 rpm |
| | 45 (11.90) | 22 (195) | 54 (478) | 66 (584) | 77 (681) | 97 (858) | 109 (965) | 124 (1097) | 169 (1496) |
| | | 555 rpm | 550 rpm | 546 rpm | 542 rpm | 538 rpm | 532 rpm | 528 rpm | 503 rpm |
| | 50 (13.20) | 20 (177) | 53 (469) | 54 (566) | 75 (664) | 96 (850) | 107 (947) | 123 (1089) | 168 (1487) |
| | | 616 rpm | 609 rpm | 606 rpm | 603 rpm | 599 rpm | 594 rpm | 588 rpm | 561 rpm |
| Max Cont. | 60 (15.85) | 19 (168) | 52 (460) | 63 (558) | 74 (655) | 95 (841) | 107 (947) | 123 (1089) | 168 (1487) |
| | | 740 rpm | 732 rpm | 727 rpm | 723 rpm | 718 rpm | 713 rpm | 707 rpm | 675 rpm |
| Max Int. | 75 (19.75) | 16 (142) | 47 (416) | 59 (522) | 72 (637) | 91 (805) | 105 (929) | 121 (1071) | |
| | | 827 rpm | 820 rpm | 817 rpm | 813 rpm | 808 rpm | 804 rpm | 796 rpm | |

| BMP/BMPH 100 | | 96.2 Cm³/Rev 5.87 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|--------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 12.5 (1840) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 36 (319) | 75 (664) | 88 (779) | 101 (984) | 126 (1115) | 141 (1248) | 160 (1460) | 210 (1859) |
| | | 78 rpm | 75 rpm | 73 rpm | 70 rpm | 67 rpm | 63 rpm | 56 rpm | 34 rpm |
| | 15 (3.95) | 35 (310) | 75 (664) | 89 (788) | 101 (894) | 128 (1133) | 141 (1248) | 160 (1416) | 213 (1885) |
| | | 149 rpm | 145 rpm | 143 rpm | 141 rpm | 137 rpm | 134 rpm | 129 rpm | 109 rpm |
| | 20 (5.25) | 33 (292) | 74 (665) | 88 (779) | 101 (984) | 126 (1115) | 140 (1239) | 161 (1451) | 212 (1876) |
| | | 199 rpm | 196 rpm | 195 rpm | 191 rpm | 189 rpm | 185 rpm | 179 rpm | 161 rpm |
| | 30 (7.90) | 31 (274) | 72 (637) | 85 (752) | 98 (867) | 123 (1089) | 137 (1212) | 157 (1389) | 213 (1885) |
| | | 299 rpm | 296 rpm | 293 rpm | 291 rpm | 288 rpm | 284 rpm | 280 rpm | 259 rpm |
| | 35 (9.20) | 29 (257) | 69 (611) | 83 (735) | 96 (850) | 121 (1070) | 135 (1195) | 155 (1372) | 212 (1876) |
| | | 349 rpm | 345 rpm | 344 rpm | 341 rpm | 337 rpm | 335 rpm | 330 rpm | 310 rpm |
| | 45 (11.90) | 28 (248) | 66 (584) | 81 (717) | 94 (832) | 119 (1053) | 133 (1177) | 153 (1354) | 208 (1841) |
| | 449 rpm | 445 rpm | 442 rpm | 439 rpm | 435 rpm | 432 rpm | 428 rpm | 405 rpm | |
| 50 (13.20) | 24 (217) | 65 (575) | 78 (690) | 93 (823) | 117 (1035) | 132 (1168) | 152 (1345) | 207 (1832) | |
| | 498 rpm | 493 rpm | 491 rpm | 490 rpm | 486 rpm | 481 rpm | 477 rpm | 457 rpm | |
| Max Cont. | 60 (15.85) | 23 (204) | 63 (558) | 77 (681) | 92 (814) | 116 (1027) | 131 (1159) | 151 (1336) | 207 (1832) |
| | | 598 rpm | 593 rpm | 589 rpm | 587 rpm | 583 rpm | 578 rpm | 573 rpm | 549 rpm |
| Max Int. | 75 (19.75) | 20 (117) | 57 (504) | 74 (655) | 88 (779) | 113 (1000) | 129 (1142) | 150 (1328) | |
| | | 673 rpm | 667 rpm | 664 rpm | 661 rpm | 657 rpm | 654 rpm | 648 rpm | |

| BMP/BMPH 125 | | 117.9 Cm³/Rev 7.20 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|---|----------------|-----------------|-----------------|------------------|------------------|--------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 12.5 (1840) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 45 (398) | 94 (832) | 111 (982) | 127 (1124) | 158 (1398) | 176 (1558) | 201 (1719) | 263 (2328) |
| | | 62 rpm | 60 rpm | 59 rpm | 56 rpm | 54 rpm | 50 rpm | 46 rpm | 26 rpm |
| | 15 (3.95) | 44 (389) | 94 (832) | 111 (982) | 127 (1124) | 160 (1416) | 177 (1566) | 202 (1788) | 267 (2363) |
| | | 118 rpm | 115 rpm | 114 rpm | 113 rpm | 110 rpm | 108 rpm | 105 rpm | 86 rpm |
| | 20 (5.25) | 42 (372) | 93 (823) | 110 (974) | 127 (1124) | 159 (1407) | 176 (1558) | 202 (1788) | 268 (2372) |
| | | 158 rpm | 156 rpm | 155 rpm | 152 rpm | 150 rpm | 148 rpm | 144 rpm | 129 rpm |
| | 30 (7.90) | 40 (354) | 91 (805) | 108 (956) | 124 (1097) | 156 (1381) | 174 (1540) | 198 (1752) | 268 (378) |
| | | 238 rpm | 235 rpm | 233 rpm | 231 rpm | 229 rpm | 225 rpm | 222 rpm | 205 rpm |
| | 35 (9.20) | 38 (356) | 89 (788) | 106 (938) | 122 (1080) | 154 (1363) | 172 (1522) | 196 (1735) | 267 (2363) |
| | | 227 rpm | 274 rpm | 273 rpm | 272 rpm | 268 rpm | 266 rpm | 263 rpm | 247 rpm |
| | 45 (11.90) | 37 (327) | 85 (752) | 103 (912) | 120 (1062) | 151 (1336) | 170 (1505) | 194 (1717) | 263 (2328) |
| | 356 rpm | 353 rpm | 352 rpm | 349 rpm | 347 rpm | 343 rpm | 341 rpm | 321 rpm | |
| 50 (13.20) | 33 (292) | 84 (743) | 100 (885) | 118 (1044) | 149 (1319) | 167 (1478) | 192 (1699) | 260 (2301) | |
| | 396 rpm | 392 rpm | 390 rpm | 390 rpm | 387 rpm | 383 rpm | 380 rpm | 363 rpm | |
| Max Cont. | 60 (15.85) | 32 (283) | 81 (717) | 99 (876) | 116 (1027) | 147 (1301) | 166 (1469) | 191 (1690) | 259 (2292) |
| | | 421 rpm | 471 rpm | 469 rpm | 467 rpm | 465 rpm | 461 rpm | 457 rpm | 436 rpm |
| Max Int. | 75 (20.8) | 26 (230) | 75 (664) | 93 (823) | 110 (974) | 142 (1257) | 159 (1407) | 185 (1837) | |
| | | 594 rpm | 588 rpm | 587 rpm | 581 rpm | 576 rpm | 584 rpm | 579 rpm | |

| BMP/BMPH 160 | | 156 Cm³/Rev 9.51 in³/Rev | | | | | Max Cont. | Max Int. | |
|----------------------------|-------------------|---|----------------|-----------------|-----------------|------------------|------------------|------------------|--------------------|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 14 (2060) | 16.5 (2429) |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 57 (505) | 121(1070) | 142 (1260) | 162 (1435) | 202 (1790) | 225 (1990) | 243 (2150) | 334 (2955) |
| | | 48 rpm | 47 rpm | 46 rpm | 44 rpm | 42 rpm | 40 rpm | 39 rpm | 24 rpm |
| | 15 (3.95) | 56 (496) | 121 (1071) | 142 (1260) | 162 (1435) | 204 (1805) | 227 (2010) | 245 (2170) | 341 (3020) |
| | | 93 rpm | 90 rpm | 90 rpm | 89 rpm | 88 rpm | 86 rpm | 86 rpm | 75 rpm |
| | 20 (5.25) | 55 (487) | 120 (1060) | 140 (1240) | 162 (1435) | 203 (1795) | 226 (2000) | 244 (2160) | 342 (3025) |
| | | 123 rpm | 122 rpm | 121 rpm | 119 rpm | 117 rpm | 116 rpm | 116 rpm | 104 rpm |
| | 30 (7.90) | 54 (478) | 117 (1035) | 139 (1230) | 160 (1415) | 201 (1780) | 224 (1980) | 242 (2140) | 340 (3010) |
| | | 185 rpm | 183 rpm | 182 rpm | 180 rpm | 178 rpm | 176 rpm | 175 rpm | 163 rpm |
| | 35 (9.20) | 52 (460) | 115 (1020) | 137 (1215) | 159 (1410) | 199 (1760) | 220 (1950) | 242 (2140) | 337 (2980) |
| | | 215 rpm | 213 rpm | 213 rpm | 211 rpm | 210 rpm | 208 rpm | 207 rpm | 196 rpm |
| | 45 (11.90) | 50 (442) | 112 (995) | 134 (1185) | 156 (1380) | 196 (1735) | 220 (1950) | 238 (2105) | 335 (2965) |
| | 277 rpm | 275 rpm | 275 rpm | 273 rpm | 271 rpm | 269 rpm | 268 rpm | 256 rpm | |
| 50 (13.20) | 45 (398) | 110 (975) | 132 (1170) | 153 (1355) | 194 (1720) | 216 (1975) | 233 (1975) | 330 (2920) | |
| | 308 rpm | 307 rpm | 305 rpm | 303 rpm | 302 rpm | 299 rpm | 299 rpm | 287 rpm | |
| Max Cont. | 60 (15.85) | 44 (390) | 106 (940) | 130 (1150) | 151 (1340) | 192 (1670) | 214 (1895) | 231 (2045) | 328 (2905) |
| | | 370 rpm | 368 rpm | 368 rpm | 364 rpm | 362 rpm | 360 rpm | 359 rpm | 347 rpm |
| Max Int. | 75 (19.75) | 32 (283) | 96 (850) | 119 (1055) | 142 (1260) | 182 (1610) | 205 (1815) | 222 (19650) | |
| | | 458 rpm | 463 rpm | 457 rpm | 456 rpm | 453 rpm | 451 rpm | 451 rpm | |

| BMP/BMPH 200 | | 190 Cm³/Rev 11.59 in³/Rev | | | | Max Cont | Max Int. | | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|------------------|--|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 15 (2208) | |
| F L O W | LPM (GPM) | Torque Mn (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 73 (646) | 153 (1354) | 179 (1584) | 204 (1805) | 256 (2266) | 283 (2505) | 385 (3407) | |
| | | 39 rpm | 37 rpm | 36 rpm | 35 rpm | 32 rpm | 28 rpm | 12 rpm | |
| | 15 (3.95) | 73 (646) | 152 (1345) | 180 (1593) | 205 (1814) | 259 (2292) | 266 (2354) | 390 (3407) | |
| | | 74 rpm | 72 rpm | 71 rpm | 71 rpm | 70 rpm | 68 rpm | 58 rpm | |
| | 20 (5.25) | 71 (628) | 151 (1336) | 178 (1575) | 204 (1805) | 256 (2266) | 285 (2522) | 390 (3452) | |
| | | 99 rpm | 98 rpm | 97 rpm | 95 rpm | 94 rpm | 91 rpm | 81 rpm | |
| | 30 (7.90) | 68 (602) | 149 (1319) | 175 (1549) | 202 (1788) | 254 (2248) | 283 (2505) | 388 (3434) | |
| | | 148 rpm | 147 rpm | 146 rpm | 144 rpm | 142 rpm | 139 rpm | 128 rpm | |
| | 35 (9.20) | 65 (575) | 146 (1292) | 173 (1531) | 200 (1770) | 252 (2230) | 281 (2487) | 386 (3416) | |
| | | 173 rpm | 172 rpm | 171 rpm | 169 rpm | 168 rpm | 165 rpm | 155 rpm | |
| | 45 (11.9) | 63 (558) | 142 (1237) | 170 (1505) | 196 (1735) | 247 (2186) | 277 (2451) | 382 (3380) | |
| | | 222 rpm | 221 rpm | 220 rpm | 218 rpm | 216 rpm | 214 rpm | 203 rpm | |
| | 50 (13.2) | 58 (513) | 138 (1221) | 166 (1469) | 193 (1708) | 244 (2159) | 272 (2407) | 378 (3345) | |
| | | 247 rpm | 245 rpm | 244 rpm | 244 rpm | 242 rpm | 239 rpm | 229 rpm | |
| Max Cont. | 60 (15.85) | 56 (496) | 136 (1204) | 163 (1443) | 191 (1690) | 241 (2133) | 269 (2381) | 375 (3319) | |
| | | 296 rpm | 294 rpm | 293 rpm | 292 rpm | 290 rpm | 287 rpm | 277 rpm | |
| Max Int. | 75 (19.75) | 42 (372) | 121 (1070) | 150 (1328) | 177 (1566) | 226 (2000) | | | |
| | | 370 rpm | 367 rpm | 367 rpm | 365 rpm | 364 rpm | | | |

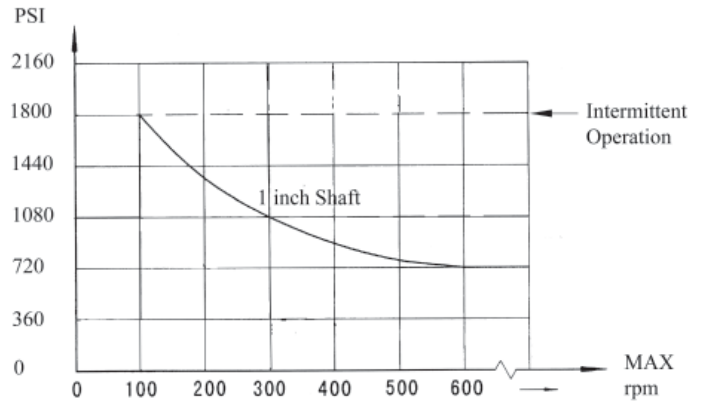
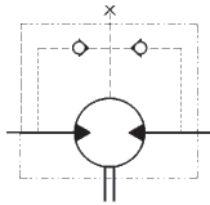
| BMP/BMPH 250 | | 231 Cm³/Rev 14.09 in³/Rev | | | | Max Cont | Max Int. | | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|------------------|------------------|--|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 11 (1620) | 14 (2060) | |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | | |
| | 8 (2.10) | 93 (823) | 195 (1726) | 226 (2000) | 259 (2292) | 325 (2876) | 357 (3159) | | |
| | | 31 rpm | 29 rpm | 29 rpm | 27 rpm | 25 rpm | 24 rpm | | |
| | 15 (3.95) | 92 (814) | 192 (1699) | 226 (2000) | 260 (2301) | 325 (2876) | 360 (3186) | 456 (4036) | |
| | | 60 rpm | 58 rpm | 57 rpm | 57 rpm | 55 rpm | 55 rpm | | |
| | 20 (5.25) | 90 (797) | 191 (1690) | 225 (1991) | 258 (2283) | 322 (2850) | 356 (3151) | 455 (4027) | |
| | | 79 rpm | 78 rpm | 77 rpm | 76 rpm | 75 rpm | 75 rpm | 65 rpm | |
| | 30 (7.90) | 86 (761) | 188 (1664) | 221 (1956) | 255 (2257) | 319 (2823) | 354 (3153) | 452 (4000) | |
| | | 119 rpm | 118 rpm | 117 rpm | 116 rpm | 114 rpm | 114 rpm | 103 rpm | |
| | 35 (9.20) | 82 (726) | 184 (1628) | 217 (1920) | 251 (2221) | 317 (2805) | 350 (3098) | 448 (3965) | |
| | | 138 rpm | 137 rpm | 135 rpm | 133 rpm | 133 rpm | 124 rpm | | |
| | 45 (11.9) | 79 (699) | 179 (1584) | 214 (1894) | 246 (2177) | 312 (2761) | 345 (3053) | 442 (3912) | |
| | | 179 rpm | 178 rpm | 177 rpm | 176 rpm | 173 rpm | 173 rpm | 163 rpm | |
| | 50 (13.2) | 74 (655) | 174 (1540) | 209 (1850) | 243 (2151) | 306 (2708) | 339 (3000) | 438 (3876) | |
| | | 198 rpm | 197 rpm | 197 rpm | 195 rpm | 194 rpm | 193 rpm | 185 rpm | |
| Max Cont. | 60 (15.85) | 71 (628) | 171 (1513) | 206 (1823) | 239 (2115) | 303 (2682) | 336 (2974) | 433 (3832) | |
| | | 237 rpm | 236 rpm | 236 rpm | 234 rpm | 232 rpm | 232 rpm | 224 rpm | |
| Max Int. | 75 (19.75) | 53 (469) | 153 (1353) | 189 (1673) | 221 (1956) | 280 (2478) | 312 (2761) | | |
| | | 297 rpm | 295 rpm | 295 rpm | 293 rpm | 292 rpm | 291 rpm | | |

| BMP/BMPH 315 | | 312 Cm³/Rev 19.03 in³/Rev | | | | Max Cont | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|------------------|--------------------|--|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 10 (1470) | 12.5 (1840) | |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | |
| | 8 (2.10) | 116 (1027) | 243 (2151) | 282 (2496) | 313 (2770) | 388 (3434) | | |
| | | 25 rpm | 24 rpm | 22 rpm | 16 rpm | 13 rpm | | |
| | 15 (3.95) | 115 (1018) | 243 (2151) | 284 (2513) | 324 (2867) | 406 (3593) | 503 (4452) | |
| | | 47 rpm | 46 rpm | 45 rpm | 43 rpm | 41 rpm | 20 rpm | |
| | 20 (5.25) | 114 (1009) | 242 (2142) | 282 (2496) | 323 (2859) | 405 (3584) | 505 (4469) | |
| | | 63 rpm | 62 rpm | 61 rpm | 58 rpm | 56 rpm | 44 rpm | |
| | 30 (7.90) | 109 (956) | 237 (2097) | 277 (2451) | 319 (2823) | 401 (3549) | 501 (4433) | |
| | | 94 rpm | 93 rpm | 92 rpm | 90 rpm | 88 rpm | 77 rpm | |
| | 35 (9.20) | 105 (929) | 232 (2053) | 273 (2416) | 314 (2779) | 397 (3513) | 497 (4398) | |
| | | 110 rpm | 109 rpm | 108 rpm | 106 rpm | 103 rpm | 93 rpm | |
| | 45 (11.9) | 99 (876) | 226 (2000) | 268 (2372) | 309 (2735) | 391 (3460) | 491 (4345) | |
| | | 141 rpm | 141 rpm | 139 rpm | 137 rpm | 135 rpm | 124 rpm | |
| | 50 (13.2) | 92 (814) | 218 (1929) | 262 (2319) | 304 (3960) | 384 (3398) | 486 (4301) | |
| | | 157 rpm | 157 rpm | 155 rpm | 154 rpm | 151 rpm | 141 rpm | |
| Max Cont. | 60 (15.85) | 89 (788) | 215 (1903) | 258 (2283) | 299 (2646) | 379 (3554) | 479 (4239) | |
| | | 189 rpm | 188 rpm | 187 rpm | 185 rpm | 182 rpm | 171 rpm | |
| Max Int. | 75 (19.75) | 69 (611) | 194 (1717) | 237 (2097) | 278 (2460) | 355 (3141) | | |
| | | 236 rpm | 235 rpm | 234 rpm | 232 rpm | 229 rpm | | |

| BMP/BMPH 400 | | 387 Cm³/Rev 23.61 in³/Rev | | | | Max Cont | Max Int. | |
|----------------------------|-------------------|--|----------------|-----------------|-----------------|-------------------|--------------------|--|
| Pressure Mpa (psi) | | 3 (440) | 6 (880) | 7 (1030) | 8 (1175) | 8.5 (1251) | 12.5 (1840) | |
| F L O W | LPM (GPM) | Torque Nm (in.Lbs) Speed Specification | | | | | | |
| | 8 (2.10) | 147 (140) | 304 (2690) | 354 (3133) | | | | |
| | | 20 rpm | 19 rpm | 16 rpm | | | | |
| | 15 (3.95) | 147 (1301) | 308 (2726) | 359 (3177) | 408 (3611) | 435 (3850) | 532 (4708) | |
| | | 37 rpm | 36 rpm | 35 rpm | 33 rpm | 32 rpm | 25 rpm | |
| | 20 (5.25) | 144 (1274) | 305 (2699) | 358 (3168) | 406 (3602) | 435 (34850) | 533 (4717) | |
| | | 50 rpm | 49 rpm | 47 rpm | 45 rpm | 43 rpm | 38 rpm | |
| | 30 (7.90) | 139 (1230) | 302 (2664) | 352 (3115) | 402 (3558) | 430 (3806) | 530 (4691) | |
| | | 74 rpm | 73 rpm | 72 rpm | 70 rpm | 68 rpm | 62 rpm | |
| | 35 (9.20) | 133 (1177) | 294 (2602) | 345 (3053) | 396 (3505) | 423 (3744) | 525 (4646) | |
| | | 86 rpm | 86 rpm | 85 rpm | 82 rpm | 80 rpm | 75 rpm | |
| | 45 (11.9) | 125 (1106) | 287 (2540) | 339 (3000) | 389 (3443) | 416 (3682) | 517 (4575) | |
| | | 111 rpm | 111 rpm | 109 rpm | 106 rpm | 105 rpm | 100 rpm | |
| | 50 (13.2) | 117 (1035) | 278 (2460) | 330 (2920) | 282 (3381) | 409 (3620) | 509 (4505) | |
| | 124 rpm | 124 rpm | 122 rpm | 120 rpm | 119 rpm | 113 rpm | | |
| Max Cont. | 60 (15.85) | 112 (991) | 274 (2425) | 326 (2177) | 377 (3337) | 404 (3575) | 505 (4469) | |
| | | 149 rpm | 149 rpm | 147 rpm | 145 rpm | 144 rpm | 137 rpm | |
| Max Int. | 75 (19.75) | 88 (779) | 246 (2177) | 298 (2637) | 351 (3106) | 376 (3328) | | |
| | | 185 rpm | 185 rpm | 185 rpm | 182 rpm | 181 rpm | | |

MODEL BMPH/BMP TECHNICAL DATA

SHAFT SEAL RATED PRESSURE



CASE DRAIN

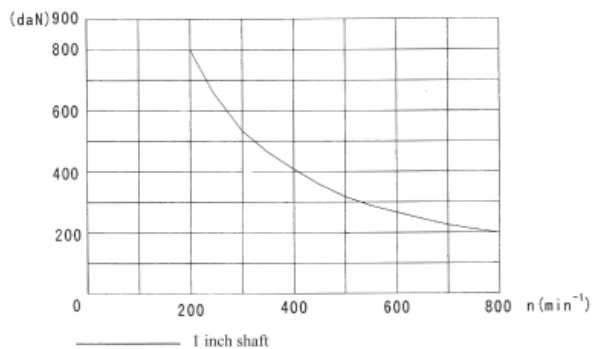
In applications without a motor drain line, the pressure exerted on the shaft seal is marginally in excess of the return line pressure. When the drain line is used the pressure exerted on the shaft seal is equal to the return line pressure.

SHAFT ROTATION DIRECTION

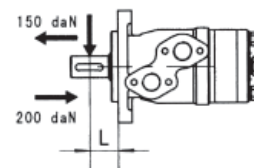


RADIAL FORCES

Status of the shaft's radial force



$$F_r = \frac{800}{n} \cdot \frac{2500}{95+1} \text{ daN}$$



F_r =Radial Force (daN)
 L =Distance (mm)
 n =Speed (rpm)

Rhomb-flange $L=30\text{mm}$
 Square-flange $L=24\text{mm}$

BMPH CROSS REFERENCE DATA

| DISPLACEMENT FOR CHIEF MOTOR Cm ³ /Rev (In ³ /Rev) | | | | | | | | | | | | | | |
|--|-------------------|----------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| MOUNT | SHAFT | PORTS | BRAND | 51.7 (3.15) | 77.7 (4.74) | 96.2 (5.87) | 117.9 (7.2) | 155.5 (9.5) | 189.9 (11.6) | 231 (14.1) | 312 (19) | 387 (23.6) | | |
| 4 BOLT FLANGE | Woodruff Keyed | 1/2" NPT | CHIEF | BMPH-50-H4-K-P | BMPH-80-H4-K-P | BMPH-100-H4-K-P | BMPH-125-H4-K-P | BMPH-160-H4-K-P | BMPH-200-H4-K-P | BMPH-250-H4-K-P | BMPH-315-H4-K-P | BMPH-400-H4-K-P | | |
| | | | PRINCE | ADM50-4RP | ADM75-4RP | ADM100-4RP | N/A | ADM150-4RP | ADM200-4RP | ADM300-4RP | ADM400-4RP | ADM500-4RP | ADM600-4RP | |
| | | | CHAR-LYNN® | 101-1001 | 101-1002 | 101-1003 | 101-1755 | 101-1004 | 101-1005 | 101-1007 | 101-1008 | 101-1009 | 101-1010 | |
| | | DANFOSS | 151-2121 | 151-2122 | 151-2123 | 151-2124 | 151-2125 | 151-2126 | 151-2127 | 151-2128 | 151-2129 | 151-2130 | 151-2131 | |
| | | Manifold | CHIEF | BMPH-50-H4-K-S | BMPH-80-H4-K-S | BMPH-100-H4-K-S | BMPH-125-H4-K-S | BMPH-160-H4-K-S | BMPH-200-H4-K-S | BMPH-250-H4-K-S | BMPH-315-H4-K-S | BMPH-400-H4-K-S | BMPH-500-H4-K-S | BMPH-600-H4-K-S |
| | | | PRINCE | ADM50-4RO | ADM75-4RO | ADM100-4RO | N/A | ADM150-4RO | ADM200-4RO | ADM300-4RO | ADM400-4RO | ADM500-4RO | ADM600-4RO | ADM700-4RO |
| | CHAR-LYNN® | | 101-1009 | 101-1010 | 101-1011 | 101-1751 | 101-1012 | 101-1013 | 101-1014 | 101-1015 | 101-1016 | 101-1017 | 101-1018 | |
| | DANFOSS | 151-2041 | 151-2042 | 151-2043 | 151-2044 | 151-2045 | 151-2046 | 151-2047 | 151-2048 | 151-2049 | 151-2050 | 151-2051 | 151-2052 | |
| | Splined | 1/2" NPT | CHIEF | BMPH-50-H4-K-F | BMPH-80-H4-K-F | BMPH-100-H4-K-F | BMPH-125-H4-K-F | BMPH-160-H4-K-F | BMPH-200-H4-K-F | BMPH-250-H4-K-F | BMPH-315-H4-K-F | BMPH-400-H4-K-F | BMPH-500-H4-K-F | |
| | | | PRINCE | ADM50-4RT | ADM75-4RT | ADM100-4RT | N/A | ADM150-4RT | ADM200-4RT | ADM300-4RT | ADM400-4RT | ADM500-4RT | ADM600-4RT | |
| | | | CHAR-LYNN® | 101-1017 | 101-1018 | 101-1019 | 101-1759 | 101-1020 | 101-1021 | 101-1022 | 101-1023 | 101-1024 | 101-1025 | |
| | | DANFOSS | 151-2201 | 151-2202 | 151-2203 | 151-2201 | 151-2205 | 151-2206 | 151-2207 | 151-2208 | 151-2209 | 151-2210 | 151-2211 | |
| Manifold | | CHIEF | BMPH-50-H4-S-P | BMPH-80-H4-S-P | BMPH-100-H4-S-P | BMPH-125-H4-S-P | BMPH-160-H4-S-P | BMPH-200-H4-S-P | BMPH-250-H4-S-P | BMPH-315-H4-S-P | BMPH-400-H4-S-P | BMPH-500-H4-S-P | | |
| | | PRINCE | ADM50-4SP | ADM75-4SP | ADM100-4SP | N/A | ADM150-4SP | ADM200-4SP | ADM300-4SP | ADM400-4SP | ADM500-4SP | ADM600-4SP | | |
| | CHAR-LYNN® | 101-1049 | 101-1050 | 101-1051 | 101-1766 | 101-1052 | 101-1053 | 101-1054 | 101-1055 | 101-1056 | 101-1057 | | | |
| DANFOSS | 151-2131 | 151-2132 | 151-2133 | 151-2134 | 151-2135 | 151-2136 | 151-2137 | 151-2138 | 151-2139 | 151-2140 | 151-2141 | | | |
| 2 BOLT FLANGE | Woodruff Keyed | 1/2" NPT | CHIEF | BMPH-50-H2-K-P | BMPH-80-H2-K-P | BMPH-100-H2-K-P | BMPH-125-H2-K-P | BMPH-160-H2-K-P | BMPH-200-H2-K-P | BMPH-250-H2-K-P | BMPH-315-H2-K-P | BMPH-400-H2-K-P | | |
| | | | PRINCE | ADM50-2RP | ADM75-2RP | ADM100-2RP | N/A | ADM150-2RP | ADM200-2RP | ADM300-2RP | ADM400-2RP | ADM500-2RP | ADM600-2RP | |
| | | | CHAR-LYNN® | 101-1025 | 101-1026 | 101-1027 | 101-1706 | 101-1028 | 101-1029 | 101-1030 | 101-1031 | 101-1032 | 101-1033 | |
| | | DANFOSS | 151-2081 | 151-2082 | 151-2083 | 151-2084 | 151-2085 | 151-2086 | 151-2087 | 151-2088 | 151-2089 | 151-2090 | | |
| | | Manifold | CHIEF | BMPH-50-H2-K-S | BMPH-80-H2-K-S | BMPH-100-H2-K-S | BMPH-125-H2-K-S | BMPH-160-H2-K-S | BMPH-200-H2-K-S | BMPH-250-H2-K-S | BMPH-315-H2-K-S | BMPH-400-H2-K-S | BMPH-500-H2-K-S | |
| | | | PRINCE | ADM50-2RO | ADM75-2RO | ADM100-2RO | N/A | ADM150-2RO | ADM200-2RO | ADM300-2RO | ADM400-2RO | ADM500-2RO | ADM600-2RO | |
| | CHAR-LYNN® | | 101-1033 | 101-1034 | 101-1035 | 101-1702 | 101-1036 | 101-1037 | 101-1038 | 101-1039 | 101-1040 | 101-1041 | | |
| | DANFOSS | 151-2001 | 151-2002 | 151-2003 | 151-2004 | 151-2005 | 151-2006 | 151-2007 | 151-2008 | 151-2009 | 151-2010 | 151-2011 | | |
| | Splined | 1/2" NPT | CHIEF | BMPH-50-H2-K-F | BMPH-80-H2-K-F | BMPH-100-H2-K-F | BMPH-125-H2-K-F | BMPH-160-H2-K-F | BMPH-200-H2-K-F | BMPH-250-H2-K-F | BMPH-315-H2-K-F | BMPH-400-H2-K-F | BMPH-500-H2-K-F | |
| | | | PRINCE | ADM50-4RT | ADM75-4RT | ADM100-4RT | N/A | ADM150-4RT | ADM200-4RT | ADM300-4RT | ADM400-4RT | ADM500-4RT | ADM600-4RT | |
| | | | CHAR-LYNN® | 101-1041 | 101-1042 | 101-1043 | 101-11710 | 101-1044 | 101-1045 | 101-1046 | 101-1047 | 101-1048 | 101-1049 | |
| | | DANFOSS | 151-2161 | 151-2162 | 151-2163 | 151-2164 | 151-2165 | 151-2166 | 151-2167 | 151-2168 | 151-2169 | 151-2170 | 151-2171 | |
| Manifold | | CHIEF | BMPH-50-H2-S-P | BMPH-80-H2-S-P | BMPH-100-H2-S-P | BMPH-125-H2-S-P | BMPH-160-H2-S-P | BMPH-200-H2-S-P | BMPH-250-H2-S-P | BMPH-315-H2-S-P | BMPH-400-H2-S-P | BMPH-500-H2-S-P | | |
| | | PRINCE | ADM50-2SP | ADM75-2SP | ADM100-2SP | N/A | ADM150-2SP | ADM200-2SP | ADM300-2SP | ADM400-2SP | ADM500-2SP | ADM600-2SP | | |
| | CHAR-LYNN® | 101-1073 | 101-1074 | 101-1075 | 101-1727 | 101-1076 | 101-1077 | 101-1078 | 101-1079 | 101-1080 | 101-1081 | | | |
| DANFOSS | 151-2091 | 151-2092 | 151-2093 | 151-2094 | 151-2095 | 151-2096 | 151-2097 | 151-2098 | 151-2099 | 151-2100 | 151-2101 | | | |

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Note: The cross reference information in this chart is to be used only as a reference for guideline purposes only. After selecting a model from above, review motor specifications to determine compatibility with specific application.