

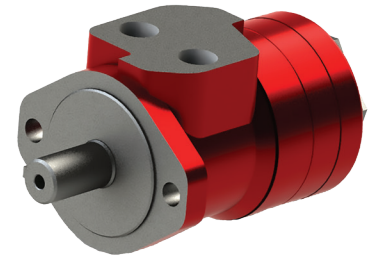
MH SERIES

LOW SPEED HIGH TORQUE MOTORS



HIGH EFFICIENCY TORQUE MOTORS

The MH Series Low Speed High Torque Motor is available in 16 displacement sizes. The MH Series motor features roller gerotor design for smooth performance, high efficiency and durability for low speed operation.



KEY FEATURES

- High pressure shaft offers superior life and performance
- Spool valve design gives smooth operation over a wide speed and torque range
- Roller gerotor design reduces sliding friction between the rotor and stator
- Three Pressure Zone Design provides lower case pressure and extended shaft seal life

TECH SPECS

| MODEL NO. | DISPL. in ³ (cc) | MAX RPM* (continuous) | MAX FLOW* | | MAX TORQUE* | | MAX PRESSURE* | |
|-----------|--------------------------------|--------------------------|-----------|-----|-------------|-----|---------------|-----|
| | | | GPM | LPM | lb.in. | Nm | PSI | BAR |
| MH040 | 2.5 (40) | 1,116 | 12 | 45 | 823 | 93 | 2,250 | 155 |
| MH050 | 3.1 (51) | 898 | 12 | 45 | 1,000 | 113 | 2,250 | 155 |
| MH060 | 3.6 (59) | 890 | 14 | 53 | 1,221 | 138 | 2,250 | 155 |
| MH070 | 4.3 (71) | 865 | 16 | 61 | 1,558 | 176 | 2,500 | 172 |
| MH080 | 4.9 (80) | 765 | 16 | 61 | 1,735 | 196 | 2,500 | 172 |
| MH090 | 5.4 (88) | 691 | 16 | 61 | 1,965 | 222 | 2,500 | 172 |
| MH100 | 6.1 (100) | 610 | 16 | 61 | 2,177 | 246 | 2,500 | 172 |
| MH115 | 6.9 (113) | 539 | 16 | 61 | 2,513 | 284 | 2,500 | 172 |
| MH130 | 7.9 (129) | 472 | 16 | 61 | 2,797 | 316 | 2,500 | 172 |
| MH160 | 9.8 (160) | 379 | 16 | 61 | 3,540 | 400 | 2,500 | 172 |
| MH200 | 12.1 (198) | 308 | 16 | 61 | 4,088 | 462 | 2,500 | 172 |
| MH240 | 14.4 (236) | 249 | 16 | 61 | 4,850 | 548 | 2,500 | 172 |
| MH250 | 15.1 (248) | 244 | 16 | 61 | 4,974 | 562 | 2,500 | 172 |
| MH290 | 17.8 (291) | 210 | 16 | 61 | 4,655 | 526 | 2,000 | 138 |
| MH320 | 19.6 (322) | 188 | 16 | 61 | 4,584 | 518 | 1,750 | 121 |
| MH400 | 24.4 (400) | 152 | 16 | 61 | 4,873 | 551 | 1,500 | 104 |

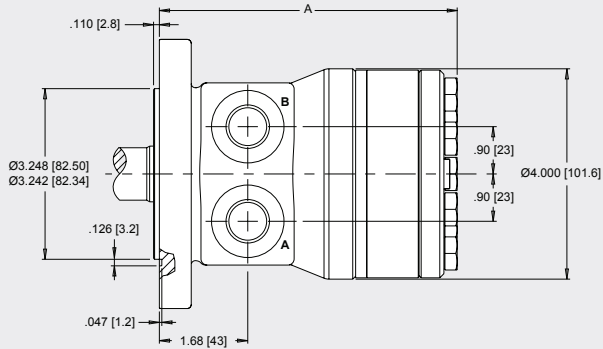
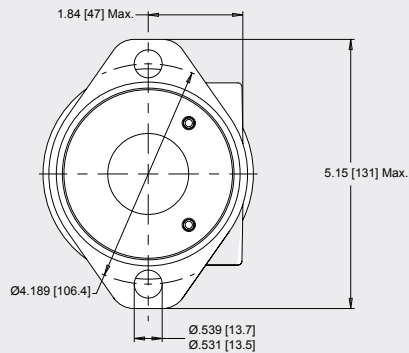
*Reference only, see performance data.

**Other options available, call for information and availability.

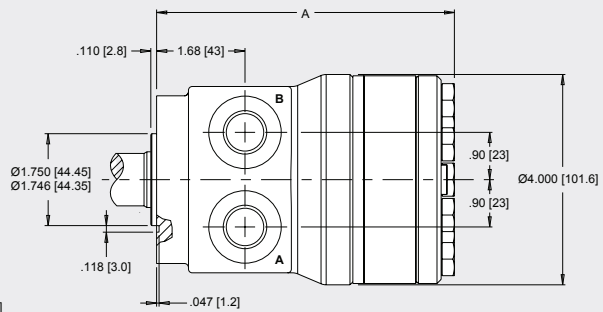
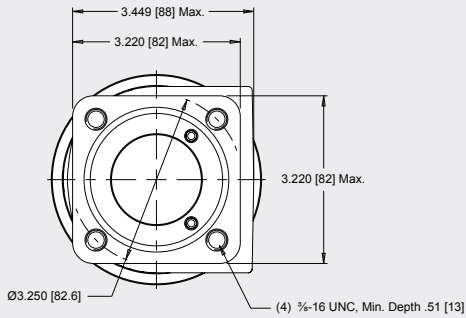
DIMENSIONS

2-Bolt, SAE A Flange - Code: "A"

Port Locations: 3/8" O-Ring - Code: "FM" Dash Size: -10



4-Bolt Square flange - Code: "U"

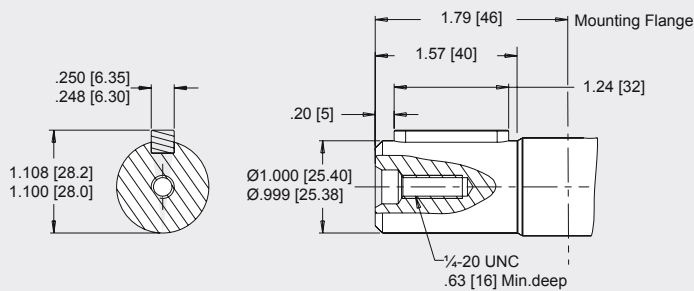


DIMENSION "A"

| Model | in | mm | Model | in | mm | Model | in | mm | Model | in | mm |
|-------|------|-----|-------|------|-----|-------|------|-----|-------|------|-----|
| 040 | 4.98 | 127 | 080 | 5.28 | 134 | 130 | 5.67 | 144 | 250 | 6.60 | 168 |
| 050 | 5.06 | 128 | 090 | 5.34 | 136 | 160 | 5.92 | 150 | 290 | 6.92 | 176 |
| 060 | 5.13 | 130 | 100 | 5.44 | 138 | 200 | 6.22 | 158 | 320 | 7.17 | 182 |
| 070 | 5.21 | 132 | 115 | 5.54 | 141 | 240 | 6.53 | 166 | 400 | 7.77 | 197 |

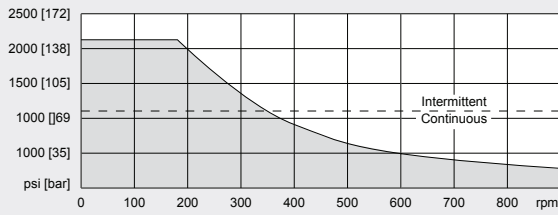
SHAFT OPTIONS

1" Straight - Code: "01"



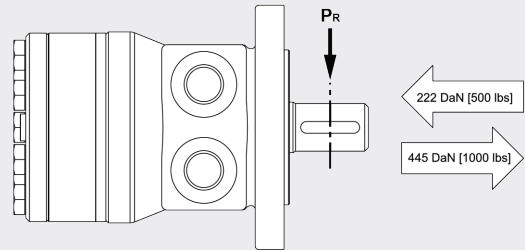
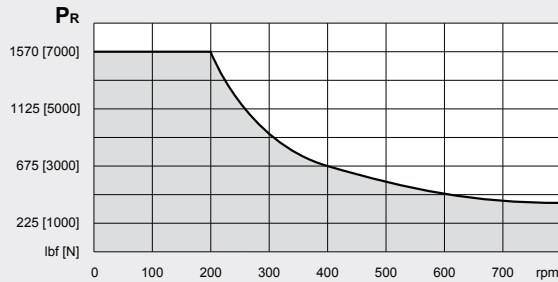
TECHNICAL SPECIFICATIONS

Permissible Shaft Seal Pressure: The curve below represents allowable seal pressure at various speeds. Operation in the gray area results in maintaining the rated life of the shaft seal. Actual shaft seal pressure depends on motor configurations.



*With check valve and drain connections, the shaft seal pressure equals pressure in the drain line. With check valves and no drain connection, shaft seal pressure equals the output pressure. With no check valves and no drain connection, the shaft seal pressure equals the average of input and output pressure.

Allowable Shaft Load/Bearing Curve: The bearing curve below represents the side load capacity of the motor at the centerline of the key for various motor speeds. Operating conditions within the shaded area will maintain acceptable oil film lubrication with recommended fluids. Operating conditions outside the shaded area are susceptible to motor failure due to oil starvation and/or excessive heat generation. Fluids with low lubricity or low viscosity may require the maximum load and speed ratings to be derated to provide acceptable motor life and performance.



MODEL NUMBER CONSTRUCTION

M-H-100-01-U-FM-XXX-RR

Type: _____
M (Motor)

Series: _____
H

Displacement: _____

| DISPLACEMENT | | | |
|--------------|------------------------------------|------------|------------------------------------|
| Model Code | in ³ (cm ³) | Model Code | in ³ (cm ³) |
| 040 | 2.5 (40) | 130 | 7.9 (129) |
| 050 | 3.1 (50) | 160 | 9.8 (160) |
| 060 | 3.6 (59) | 200 | 12.1 (198) |
| 070 | 4.3 (71) | 240 | 14.4 (236) |
| 080 | 4.9 (79) | 250 | 15.3 (250) |
| 090 | 5.4 (88) | 290 | 17.8 (291) |
| 100 | 6.1 (100) | 320 | 19.6 (322) |
| 115 | 6.9 (113) | 400 | 24.4 (400) |

Special Features:
RR - Red Paint

Product attributes:
XXX - None

Ports:
FM - 3/8"-14 O-Ring

Mounting Flange:
A - 2-Bolt, SAE A
U - 4-Bolt Square

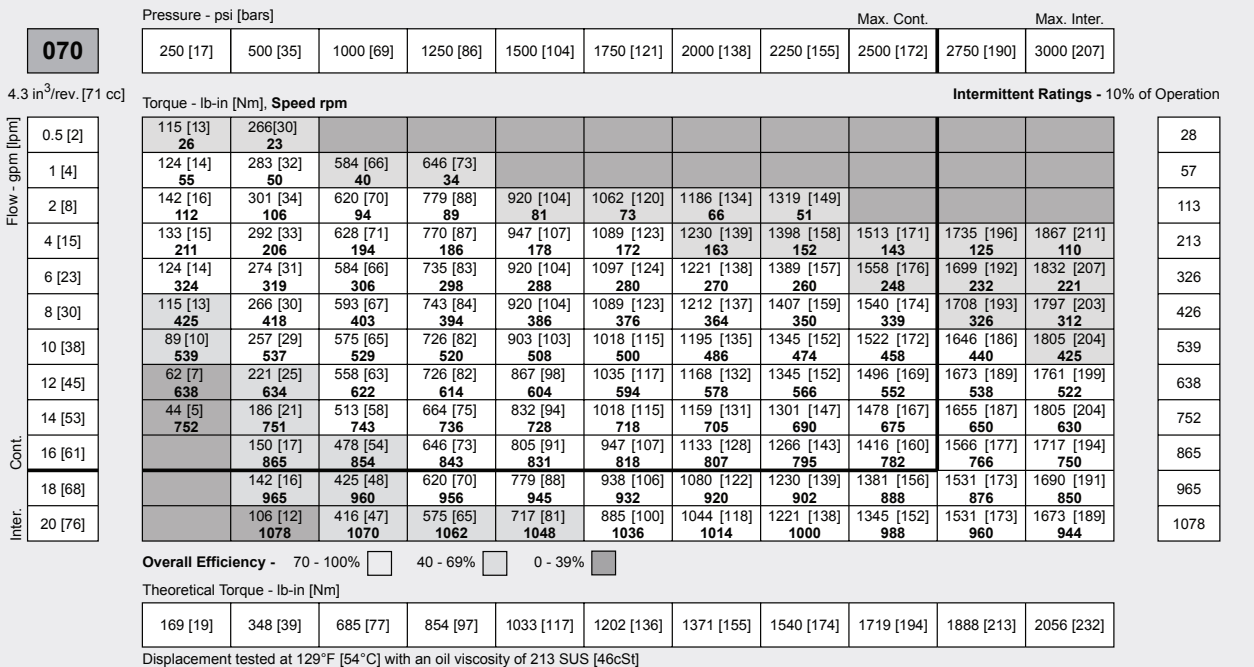
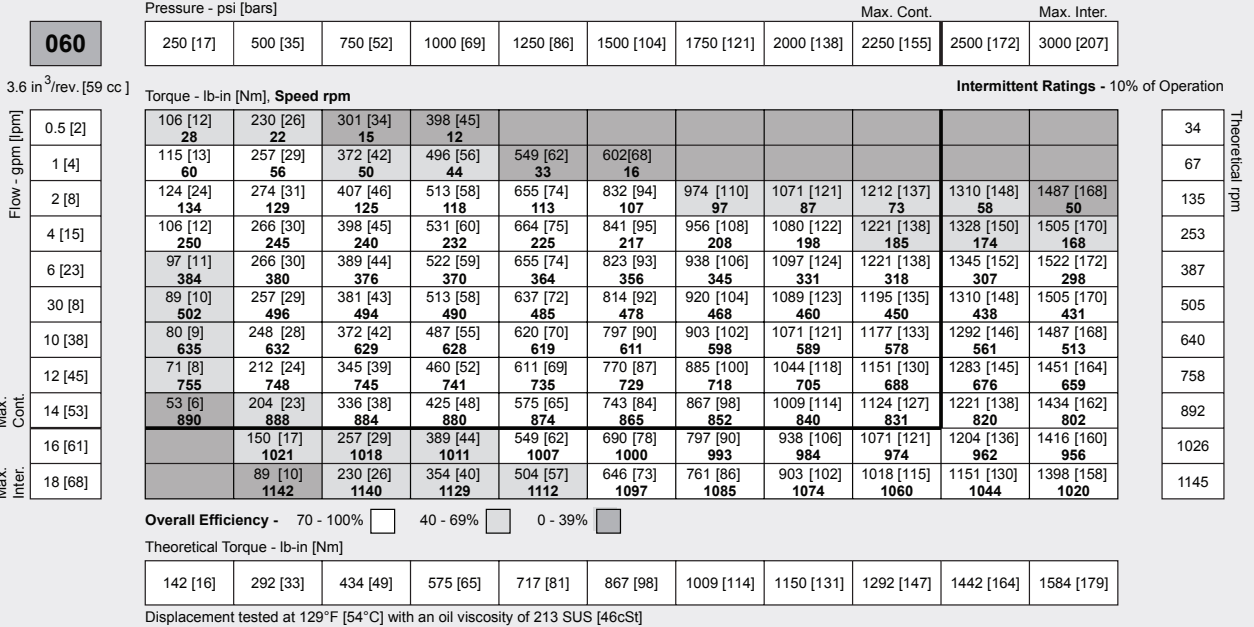
Shaft:
01 = 1" Straight (SAE B-B)

PERFORMANCE DATA

| | | Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. | | | |
|-----------------------------------|--|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|------------|--|
| | | 250 [17] | 500 [35] | 750 [52] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 3000 [207] | | |
| 040 | | | | | | | | | | | | | | |
| 2.46 in ³ /rev [40 cc] | | Torque - Nm [lb-in], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | |
| Flow - gpm [lpm] | 0.5 [2] | 80 [9] 43 | 177 [20] 40 | 283 [32] 35 | 354 [40] 29 | 327 [37] 24 | | | | | | | 50 | |
| | 1 [4] | 88 [10] 95 | 186 [21] 91 | 265 [30] 82 | 372 [42] 73 | 460 [52] 62 | 549 [62] 51 | | | | | | 100 | |
| | 2 [8] | 80 [9] 188 | 168 [19] 180 | 248 [28] 170 | 363 [41] 160 | 451 [51] 144 | 566 [64] 137 | 637 [72] 126 | 699 [79] 115 | 788 [89] 102 | 876 [99] 88 | | 199 | |
| | 4 [15] | 62 [7] 365 | 159 [18] 355 | 239 [27] 343 | 354 [40] 324 | 434 [49] 312 | 549 [62] 295 | 646 [73] 293 | 735 [83] 275 | 823 [93] 257 | 903 [102] 237 | 1071 [121] 198 | 373 | |
| | 6 [23] | 53 [6] 560 | 150 [17] 548 | 230 [26] 532 | 345 [39] 515 | 425 [48] 502 | 540 [61] 485 | 619 [70] 471 | 726 [82] 451 | 796 [90] 432 | 894 [101] 444 | 1080 [122] 398 | 572 | |
| | 8 [30] | 53 [6] 728 | 142 [16] 716 | 221 [25] 706 | 327 [37] 684 | 416 [47] 667 | 522 [59] 648 | 602 [68] 634 | 717 [81] 629 | 779 [88] 618 | 876 [99] 601 | 1088 [123] 545 | 746 | |
| | 10 [38] | 44 [5] 942 | 124 [14] 936 | 195 [22] 927 | 310 [35] 918 | 398 [45] 904 | 504 [57] 890 | 602 [68] 874 | 690 [78] 852 | 761 [86] 835 | 858 [97] 812 | 1044 [118] 743 | 945 | |
| | 12 [45] | 27 [3] 1116 | 115 [13] 1113 | 186 [21] 1100 | 301 [34] 1082 | 381 [43] 1056 | 487 [55] 1028 | 593 [67] 1004 | 681 [77] 976 | 743 [84] 952 | 841 [95] 916 | 1027 [116] 870 | 1119 | |
| | 14 [53] | | 88 [10] 1316 | 177 [20] 1301 | 274 [31] 1278 | 345 [39] 1253 | 460 [52] 1230 | 558 [63] 1206 | 664 [75] 1184 | 726 [82] 1154 | 823 [93] 1116 | 1018 [115] 1078 | 1318 | |
| | 16 [61] | | 71 [8] 1515 | 168 [19] 1497 | 257 [29] 1469 | 336 [38] 1442 | 434 [49] 1415 | 531 [60] 1399 | 665 [74] 1378 | 708 [80] 1355 | 796 [90] 1330 | 1000 [113] 1298 | 1517 | |
| | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | | | |
| | Theoretical Torque - Nm [lb-in] | | 97 [11] | 195 [22] | 301 [34] | 398 [45] | 496 [56] | 593 [67] | 690 [78] | 796 [90] | 894 [101] | 991 [112] | 1167 [132] | |
| | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | | | |

| | | Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. | | | |
|-----------------------------------|--|--------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|---|------------|--|
| | | 250 [17] | 500 [35] | 750 [52] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 3000 [207] | | |
| 050 | | | | | | | | | | | | | | |
| 3.12 in ³ /rev [51 cc] | | Torque - lb-in [Nm], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | |
| Flow - gpm [lpm] | 0.5 [2] | 115 [13] 39 | 230 [26] 35 | 354 [40] 29 | 487 [55] 20 | 575 [65] 10 | | | | | | | 39 | |
| | 1 [4] | 124 [14] 78 | 239 [27] 72 | 372 [42] 60 | 496 [56] 48 | 593 [67] 33 | 690 [78] 16 | | | | | | 78 | |
| | 2 [8] | 106 [12] 158 | 230 [26] 154 | 363 [41] 146 | 478 [54] 138 | 584 [66] 129 | 690 [78] 117 | 805 [91] 105 | 885 [100] 94 | 956 [108] 80 | 991 [112] 66 | | 156 | |
| | 4 [15] | 89 [10] 298 | 221 [25] 294 | 336 [38] 290 | 460 [52] 282 | 566 [64] 275 | 690 [78] 263 | 814 [92] 250 | 903 [102] 235 | 991 [112] 220 | 1044 [118] 202 | 1310 [148] 189 | 293 | |
| | 6 [23] | 80 [9] 458 | 204 [23] 455 | 327 [37] 450 | 451 [51] 442 | 549 [62] 432 | 673 [76] 420 | 797 [90] 410 | 912 [103] 396 | 1000 [113] 380 | 1080 [122] 360 | 1345 [152] 336 | 449 | |
| | 8 [30] | 80 [9] 591 | 186 [21] 589 | 301 [34] 586 | 434 [49] 582 | 531 [60] 576 | 655 [74] 566 | 761 [86] 548 | 894 [101] 532 | 982 [111] 516 | 1097 [124] 500 | 1354 [153] 484 | 586 | |
| | 10 [38] | 71 [8] 758 | 177 [20] 754 | 266 [30] 750 | 398 [45] 741 | 513 [58] 730 | 620 [70] 715 | 735 [83] 700 | 850 [96] 680 | 956 [108] 658 | 1062 [120] 634 | 1310 [148] 612 | 742 | |
| | 12 [45] | 44 [5] 898 | 142 [16] 895 | 230 [26] 888 | 372 [42] 880 | 487 [55] 866 | 593 [67] 850 | 708 [80] 830 | 805 [91] 810 | 912 [103] 786 | 1027 [116] 765 | 1274 [144] 736 | 879 | |
| | 14 [53] | 9 [1] 1052 | 124 [14] 1044 | 230 [26] 1034 | 336 [38] 1020 | 451 [51] 1006 | 558 [63] 990 | 681 [77] 980 | 761 [86] 964 | 867 [98] 944 | 982 [111] 920 | 1230 [139] 924 | 1035 | |
| | 16 [61] | | 89 [10] 1218 | 195 [22] 1212 | 292 [33] 1204 | 407 [46] 1192 | 504 [57] 1180 | 628 [71] 1168 | 726 [82] 1154 | 823 [93] 1136 | 929 [105] 1115 | 1151 [130] 1086 | 1191 | |
| | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | | | |
| | Theoretical Torque - lb-in [Nm] | | 123 [14] | 253 [29] | 375 [42] | 498 [56] | 621 [70] | 750 [85] | 873 [99] | 996 [113] | 1118 [126] | 1241 [140] | 1494 [169] | |
| | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | | | |

PERFORMANCE DATA



PERFORMANCE DATA

080

| Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. |
|-----------------------|----------|-----------|-----------|------------|------------|------------|------------|------------|-------------|
| 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 3000 [207] |

4.9 in³/rev. [80 cc]

| | |
|------------------|---------|
| Flow - gpm [lpm] | 0.5 [2] |
| | 1 [4] |
| | 2 [8] |
| | 4 [15] |
| | 6 [23] |
| | 8 [30] |
| | 10 [38] |
| | 12 [45] |
| | 14 [53] |
| | 16 [61] |
| Inter. | 18 [68] |
| | 20 [76] |

| Torque - lb-in [Nm], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|-----|
| 177 [20] | 363 [41] | 717 [81] | | | | | | | | | | 25 |
| 24 | 22 | 18 | | | | | | | | | | 50 |
| 168 [19] | 372 [42] | 726 [82] | 858 [97] | 974 [110] | 1195 [135] | | | | | | | 100 |
| 49 | 46 | 42 | 36 | 28 | 22 | | | | | | | 187 |
| 150 [17] | 372 [42] | 735 [83] | 841 [95] | 1044 [118] | 1212 [137] | 1460 [165] | 1611 [182] | | | | | 286 |
| 99 | 96 | 92 | 84 | 79 | 70 | 62 | 54 | | | | | 374 |
| 142 [16] | 345 [39] | 717 [81] | 823 [93] | 1053 [119] | 1221 [138] | 1478 [167] | 1637 [185] | 1717 [194] | 2053 [232] | | | 473 |
| 187 | 185 | 180 | 174 | 163 | 154 | 144 | 132 | 120 | 105 | | | 560 |
| 133 [15] | 319 [36] | 699 [79] | 797 [90] | 1018 [115] | 1195 [135] | 1496 [169] | 1628 [184] | 1726 [195] | 2071 [234] | | | 660 |
| 291 | 285 | 276 | 270 | 262 | 253 | 243 | 231 | 218 | 206 | | | 760 |
| 115 [13] | 283 [32] | 673 [76] | 779 [88] | 1018 [115] | 1177 [133] | 1469 [166] | 1593 [180] | 1735 [196] | 2106 [238] | | | 847 |
| 374 | 370 | 361 | 352 | 343 | 330 | 320 | 308 | 295 | 280 | | | 946 |
| 89 [10] | 248 [28] | 628 [71] | 761 [86] | 1000 [113] | 1151 [130] | 1434 [162] | 1549 [175] | 1699 [192] | 2053 [232] | | | |
| 474 | 470 | 463 | 454 | 444 | 435 | 425 | 414 | 402 | 393 | | | |
| 62 [7] | 230 [26] | 602 [68] | 735 [83] | 956 [108] | 1115 [126] | 1398 [158] | 1487 [168] | 1646 [186] | 2000 [226] | | | |
| 561 | 558 | 552 | 543 | 534 | 524 | 515 | 504 | 492 | 478 | | | |
| 35 [4] | 186 [21] | 558 [63] | 708 [80] | 920 [104] | 1071 [121] | 1354 [153] | 1434 [162] | 1593 [180] | 1947 [220] | | | |
| 660 | 656 | 650 | 641 | 632 | 622 | 612 | 602 | 590 | 576 | | | |
| 9 [1] | 150 [17] | 513 [58] | 690 [78] | 876 [99] | 1027 [116] | 1283 [145] | 1381 [156] | 1611 [182] | 1885 [213] | | | |
| 765 | 760 | 757 | 748 | 740 | 730 | 718 | 707 | 695 | 676 | | | |
| | 106 [12] | 469 [53] | 673 [76] | 832 [94] | 982 [111] | 1204 [136] | 1345 [152] | 1549 [175] | 1841 [208] | | | |
| | 850 | 845 | 836 | 828 | 820 | 810 | 798 | 786 | 772 | | | |
| | 44 [5] | 443 [50] | 637 [72] | 779 [88] | 929 [105] | 1124 [127] | 1266 [143] | 1460 [165] | 1770 [200] | | | |
| | 948 | 944 | 939 | 932 | 923 | 913 | 900 | 889 | 878 | | | |

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

Theoretical Torque - lb-in [Nm]

| | | | | | | | | | |
|----------|----------|----------|-----------|------------|------------|------------|------------|------------|------------|
| 192 [22] | 396 [45] | 781 [88] | 973 [110] | 1177 [133] | 1369 [155] | 1562 [176] | 1754 [198] | 1946 [220] | 2342 [265] |
|----------|----------|----------|-----------|------------|------------|------------|------------|------------|------------|

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

090

| Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. | |
|-----------------------|----------|-----------|-----------|------------|------------|------------|------------|------------|-------------|------------|
| 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 2750 [190] | 3000 [207] |

5.4 in³/rev. [88 cc]

| | |
|------------------|---------|
| Flow - gpm [lpm] | 0.5 [2] |
| | 1 [4] |
| | 2 [8] |
| | 4 [15] |
| | 6 [23] |
| | 8 [30] |
| | 10 [38] |
| | 12 [45] |
| | 14 [53] |
| | 16 [61] |
| Inter. | 18 [68] |
| | 20 [76] |

| Torque - lb-in [Nm], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | |
|--------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---|--|-----|
| 159 [18] | 354 [40] | 664 [75] | | | | | | | | | | 23 |
| 23 | 22 | 17 | | | | | | | | | | 45 |
| 177 [20] | 389 [44] | 779 [88] | 991 [112] | 1044 [118] | 1133 [128] | | | | | | | 91 |
| 45 | 42 | 35 | 31 | 27 | 21 | | | | | | | 170 |
| 195 [22] | 389 [44] | 770 [87] | 1009 [114] | 1186 [134] | 1398 [158] | 1549 [175] | 1752 [198] | 1912 [216] | | | | 260 |
| 91 | 88 | 81 | 77 | 72 | 68 | 60 | 52 | 42 | | | | 340 |
| 177 [20] | 389 [44] | 779 [88] | 991 [112] | 1186 [134] | 1363 [154] | 1611 [182] | 1805 [204] | 1965 [222] | 2142 [242] | 2319 [262] | | 430 |
| 169 | 166 | 160 | 156 | 152 | 146 | 140 | 130 | 122 | 110 | 96 | | 510 |
| 168 [19] | 354 [40] | 761 [86] | 974 [110] | 1159 [131] | 1345 [152] | 1558 [176] | 1735 [196] | 1929 [218] | 2142 [242] | 2327 [263] | | 601 |
| 260 | 257 | 250 | 245 | 238 | 232 | 225 | 215 | 205 | 193 | 186 | | 692 |
| 150 [17] | 336 [38] | 735 [83] | 956 [108] | 1115 [126] | 1327 [150] | 1531 [173] | 1717 [194] | 1912 [216] | 2106 [238] | 2283 [258] | | 772 |
| 339 | 336 | 328 | 324 | 318 | 308 | 300 | 292 | 280 | 270 | 258 | | 864 |
| 124 [14] | 292 [33] | 681 [77] | 938 [106] | 1080 [122] | 1292 [146] | 1504 [170] | 1664 [188] | 1858 [210] | 2053 [232] | 2239 [253] | | |
| 430 | 429 | 426 | 424 | 417 | 411 | 402 | 393 | 380 | 366 | 354 | | |
| 80 [9] | 265 [30] | 646 [73] | 912 [103] | 1062 [120] | 1283 [145] | 1451 [164] | 1628 [184] | 1823 [206] | 2018 [228] | 2177 [246] | | |
| 510 | 508 | 504 | 500 | 496 | 488 | 480 | 472 | 462 | 448 | 434 | | |
| 44 [5] | 221 [25] | 611 [69] | 856 [97] | 1009 [114] | 1239 [140] | 1416 [160] | 1575 [178] | 1788 [202] | 2000 [226] | 2159 [244] | | |
| 601 | 600 | 596 | 594 | 591 | 586 | 578 | 566 | 552 | 540 | 528 | | |
| | 177 [20] | 584 [66] | 797 [90] | 965 [109] | 1186 [134] | 1381 [156] | 1531 [173] | 1770 [200] | 1947 [220] | 2142 [242] | | |
| | 691 | 688 | 684 | 678 | 670 | 664 | 654 | 642 | 630 | 610 | | |
| | 142 [16] | 558 [63] | 743 [84] | 929 [105] | 1133 [128] | 1345 [152] | 1487 [168] | 1708 [193] | 1894 [214] | 2088 [236] | | |
| | 772 | 770 | 768 | 766 | 764 | 754 | 742 | 722 | 712 | 700 | | |
| | 88 [10] | 513 [58] | 699 [79] | 885 [100] | 1071 [121] | 1310 [148] | 1442 [163] | 1646 [186] | 1814 [205] | 2000 [226] | | |
| | 864 | 863 | 858 | 848 | 844 | 835 | 825 | 812 | 800 | 778 | | |

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

Theoretical Torque - lb-in [Nm]

| | | | | | | | | | | |
|----------|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|
| 215 [24] | 429 [49] | 859 [97] | 1073 [121] | 1288 [146] | 1502 [170] | 1717 [194] | 1932 [218] | 2146 [243] | 2361 [267] | 2576 [291] |
|----------|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|

Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [45cSt]

PERFORMANCE DATA

| | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---------------|--|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|-------------|--|--|-----|----|-----------------|-----|
| 100 | | Pressure - psi [bars] | | | | | | | | | | Max. Cont. | | Max. Inter. | | | | | | |
| | | 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 2750 [190] | 3000 [207] | | | | | | | | |
| 6.1 in ³ /rev. [100 cc] | | Torque - lb-in [Nm], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | | | | | | | |
| Flow - gpm [lpm] | Max. Cont. | 0.5 [2] | 159 [18] 17 | 327 [37] 13 | 681 [77] 12 | 805 [91] 11 | | | | | | | | | | | | 20 | Theoretical rpm | |
| | | 1 [4] | 230 [26] 38 | 434 [49] 37 | 743 [84] 33 | 938 [106] 31 | 1062 [120] 29 | 1239 [140] 15 | 1416 [160] 7 | | | | | | | | | 40 | | |
| | | 2 [8] | 221 [25] 80 | 442 [50] 78 | 867 [98] 75 | 1106 [125] 70 | 1327 [150] 68 | 1549 [175] 65 | 1761 [199] 61 | 1673 [189] 20 | | | | | | | | | | 80 |
| | | 4 [15] | 230 [26] 150 | 407 [46] 148 | 858 [97] 142 | 1097 [124] 139 | 1310 [148] 136 | 1549 [175] 131 | 1752 [198] 128 | 1982 [224] 122 | 2168 [245] 118 | 2363 [267] 111 | 2558 [289] 85 | | | | | | | 150 |
| | | 6 [23] | 203 [23] 229 | 425 [48] 226 | 850 [96] 221 | 1088 [123] 218 | 1310 [148] 215 | 1531 [173] 212 | 1770 [200] 208 | 1973 [223] 201 | 2177 [246] 197 | 2381 [269] 189 | 2531 [286] 162 | | | | | | | 230 |
| | | 8 [30] | 186 [21] 296 | 398 [45] 292 | 823 [93] 285 | 1071 [121] 282 | 1292 [146] 280 | 1487 [168] 280 | 1726 [195] 274 | 1956 [221] 270 | 2159 [244] 265 | 2345 [265] 255 | 2513 [284] 208 | | | | | | | 300 |
| | | 10 [38] | 150 [17] 378 | 363 [41] 375 | 805 [91] 367 | 1018 [115] 370 | 1248 [141] 367 | 1460 [165] 364 | 1673 [189] 363 | 1903 [215] 361 | 2106 [238] 353 | 2336 [264] 338 | 2496 [282] 310 | | | | | | | 380 |
| | | 12 [45] | 123 [14] 450 | 319 [36] 448 | 788 [89] 442 | 1027 [116] 438 | 1239 [140] 433 | 1434 [162] 426 | 1664 [188] 420 | 1858 [210] 412 | 2071 [234] 404 | 2283 [258] 390 | 2478 [280] 355 | | | | | | | 450 |
| | | 14 [53] | 106 [12] 528 | 301 [34] 526 | 735 [83] 520 | 965 [109] 518 | 1186 [134] 514 | 1389 [158] 508 | 1602 [181] 500 | 1814 [205] 490 | 2017 [228] 480 | 2265 [256] 468 | 2460 [278] 440 | | | | | | | 530 |
| | | 16 [61] | 88 [10] 610 | 248 [28] 608 | 699 [79] 600 | 912 [103] 596 | 1142 [129] 590 | 1345 [152] 582 | 1522 [172] 576 | 1752 [198] 568 | 1973 [225] 556 | 2248 [254] 542 | 2443 [276] 525 | | | | | | | 610 |
| 18 [68] | 53 [6] 680 | 186 [21] 677 | 628 [71] 666 | 832 [94] 660 | 1071 [121] 653 | 1292 [146] 645 | 1496 [169] 635 | 1699 [192] 624 | 1903 [215] 610 | 2221 [251] 594 | 2407 [272] 574 | | | | | | 680 | | | |
| 20 [76] | | 133 [15] 760 | 558 [63] 754 | 752 [85] 750 | 991 [112] 742 | 1177 [133] 730 | 1416 [160] 715 | 1637 [185] 702 | 1788 [202] 688 | 2195 [248] 666 | 2363 [267] 636 | | | | | | 760 | | | |
| | | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | | | | | | | | |
| | | Theoretical Torque - lb-in [Nm] | | | | | | | | | | | | | | | | | | |
| | | 239 [27] | 496 [56] | 974 [110] | 1212 [137] | 1469 [166] | 1708 [193] | 1947 [220] | 2186 [247] | 2434 [275] | 2682 [303] | 2921 [330] | | | | | | | | |
| | | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | |
|------------------------------------|------------|--|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---|-------------------|-------------|--|--|-----|----|-----|
| 115 | | Pressure - bars [psi] | | | | | | | | | | Max. Cont. | | Max. Inter. | | | | | |
| | | 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 2750 [190] | 3000 [207] | | | | | | | |
| 6.9 in ³ /rev. [113 cc] | | Torque - lb-in [Nm], Speed rpm | | | | | | | | | | Intermittent Ratings - 10% of Operation | | | | | | | |
| Flow - gpm [lpm] | Max. Cont. | 0.5 [2] | 204 [23] 17 | 469 [53] 12 | | | | | | | | | | | | | | 18 | |
| | | 1 [4] | 221 [25] 35 | 496 [56] 34 | 841 [95] 30 | 1044 [118] 19 | | | | | | | | | | | | | 35 |
| | | 2 [8] | 221 [25] 70 | 522 [59] 69 | 1035 [117] 65 | 1274 [144] 62 | 1522 [172] 60 | 1788 [202] 56 | | | | | | | | | | | 71 |
| | | 4 [15] | 212 [24] 130 | 513 [58] 129 | 991 [112] 127 | 1274 [144] 125 | 1531 [173] 122 | 1788 [202] 117 | 1991 [225] 114 | 2221 [251] 108 | | | | | | | | | 133 |
| | | 6 [23] | 195 [22] 200 | 451 [51] 199 | 982 [111] 197 | 1239 [140] 194 | 1513 [171] 191 | 1779 [201] 186 | 1982 [224] 183 | 2221 [251] 176 | 2513 [284] 170 | 2717 [307] 153 | | | | | | | 204 |
| | | 8 [30] | 186 [21] 264 | 469 [53] 262 | 956 [108] 258 | 1186 [134] 256 | 1478 [167] 254 | 1735 [196] 251 | 1965 [222] 248 | 2221 [251] 240 | 2460 [278] 232 | 2699 [305] 226 | 2894 [327] 210 | | | | | | 265 |
| | | 10 [38] | 142 [16] 336 | 407 [46] 334 | 929 [105] 330 | 1159 [131] 326 | 1451 [164] 323 | 1690 [191] 318 | 1920 [217] 312 | 2186 [247] 306 | 2398 [271] 300 | 2646 [299] 292 | 2894 [327] 281 | | | | | | 336 |
| | | 12 [45] | 106 [12] 397 | 381 [43] 396 | 894 [101] 390 | 1168 [132] 387 | 1425 [161] 382 | 1655 [187] 379 | 1929 [218] 371 | 2115 [239] 363 | 2381 [269] 355 | 2566 [290] 344 | 2823 [319] 339 | | | | | | 398 |
| | | 14 [53] | 53 [6] 468 | 310 [35] 464 | 858 [97] 456 | 1106 [125] 452 | 1389 [157] 448 | 1584 [179] 444 | 1832 [207] 442 | 2097 [237] 436 | 2292 [259] 430 | 2558 [289] 422 | 2788 [315] 415 | | | | | | 469 |
| | | 16 [61] | | 301 [34] 539 | 796 [90] 534 | 1044 [118] 531 | 1319 [149] 524 | 1540 [174] 521 | 1770 [200] 518 | 2062 [233] 506 | 2248 [254] 498 | 2522 [285] 495 | 2779 [314] 479 | | | | | | 540 |
| 18 [68] | | 257 [29] 601 | 743 [84] 596 | 1009 [114] 594 | 1239 [140] 589 | 1522 [172] 583 | 1788 [202] 572 | 1956 [221] 566 | 2239 [253] 557 | 2496 [282] 547 | 2646 [299] 544 | | | | | | 602 | | |
| 20 [76] | | 150 [17] 672 | 646 [73] 668 | 912 [103] 664 | 1168 [132] 658 | 1425 [161] 655 | 1646 [186] 648 | 1894 [214] 638 | 2124 [240] 627 | 2354 [266] 621 | 2593 [293] 607 | | | | | | 673 | | |
| | | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | | | | | | | |
| | | Theoretical Torque - lb-in [Nm] | | | | | | | | | | | | | | | | | |
| | | 274 [31] | 549 [62] | 1097 [124] | 1372 [155] | 1646 [186] | 1920 [217] | 2195 [248] | 2469 [279] | 2743 [310] | 3018 [341] | 3292 [372] | | | | | | | |
| | | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | | | | | | | |

PERFORMANCE DATA

130

Pressure - psi [bars]

Max. Cont.

Max. Inter.

| | | | | | | | | | | |
|----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
| 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 2750 [190] | 3000 [207] |
|----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|

7.9 in³/rev. [129 cc]

Torque - lb-in [Nm], Speed rpm

Intermittent Ratings - 10% of Operation

| |
|----------|
| 0.52 [2] |
| 1 [4] |
| 2 [8] |
| 4 [15] |
| 6 [23] |
| 8 [30] |
| 10 [38] |
| 12 [45] |
| 14 [53] |
| 16 [61] |
| 18 [68] |
| 20 [76] |

| | | | | | | | | | | |
|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 301 [34] 15 | 531 [60] 6 | | | | | | | | | |
| 283 [32] 30 | 566 [64] 29 | 1097 [124] 18 | 1239 [140] 10 | 1637 [185] 6 | | | | | | |
| 274 [31] 59 | 575 [65] 58 | 1115 [126] 51 | 1274 [144] 46 | 1752 [198] 38 | 1974 [223] 24 | 2195 [248] 10 | | | | |
| 274 [31] 115 | 584 [66] 112 | 1151 [130] 106 | 1451 [164] 102 | 1726 [195] 97 | 1956 [221] 92 | 2257 [255] 86 | 2522 [285] 80 | 2761 [312] 74 | 3053 [345] 66 | |
| 266 [30] 177 | 575 [65] 175 | 1151 [130] 167 | 1434 [162] 163 | 1735 [196] 157 | 2036 [230] 152 | 2345 [265] 142 | 2558 [289] 138 | 2797 [316] 132 | 3115 [352] 121 | 3319 [375] 114 |
| 248 [28] 232 | 566 [64] 227 | 1133 [128] 218 | 1389 [157] 213 | 1699 [192] 208 | 1974 [223] 200 | 2292 [259] 189 | 2513 [284] 184 | 2770 [313] 176 | 3036 [343] 168 | 3310 [374] 162 |
| 177 [20] 294 | 531 [60] 289 | 1106 [125] 280 | 1389 [157] 275 | 1664 [188] 268 | 1965 [222] 260 | 2248 [254] 251 | 2496 [282] 243 | 2770 [313] 234 | 3089 [349] 221 | 3275 [370] 214 |
| 133 [15] 353 | 487 [55] 351 | 1062 [120] 343 | 1345 [152] 338 | 1646 [186] 331 | 1912 [216] 321 | 2159 [244] 311 | 2487 [281] 299 | 2717 [307] 289 | 3018 [341] 277 | 3266 [369] 264 |
| 115 [13] 411 | 416 [47] 408 | 1035 [117] 398 | 1328 [150] 392 | 1602 [181] 386 | 1876 [212] 378 | 2186 [247] 366 | 2416 [273] 357 | 2744 [310] 347 | 2965 [335] 335 | 3213 [363] 325 |
| 62 [7] 472 | 372 [42] 470 | 938 [106] 465 | 1239 [140] 462 | 1505 [170] 456 | 1832 [207] 447 | 2115 [239] 435 | 2345 [265] 426 | 2620 [296] 409 | 2903 [328] 396 | 3195 [361] 388 |
| | 319 [36] 529 | 903 [102] 522 | 1168 [132] 517 | 1469 [166] 507 | 1752 [198] 500 | 1982 [224] 489 | 2319 [262] 482 | 2584 [292] 468 | 2859 [323] 445 | 3106 [351] 430 |
| | 283 [32] 588 | 832 [94] 585 | 1089 [123] 580 | 1398 [158] 570 | 1682 [190] 562 | 1938 [219] 550 | 2248 [254] 535 | 2496 [282] 520 | 2726 [308] 510 | 3071 [347] 490 |

| |
|-----|
| 15 |
| 30 |
| 59 |
| 118 |
| 177 |
| 235 |
| 294 |
| 353 |
| 411 |
| 472 |
| 529 |
| 588 |

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

Theoretical Torque - lb-in [Nm]

| | | | | | | | | | | |
|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 310 [35] | 628 [71] | 1257 [142] | 1566 [177] | 1876 [212] | 2195 [248] | 2504 [283] | 2814 [318] | 3133 [354] | 3442 [389] | 3761 [425] |
|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|

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

160

Pressure - psi [bars]

Max. Cont.

Max. Inter.

| | | | | | | | | | | |
|----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|
| 17 [250] | 35 [500] | 69 [1000] | 86 [1250] | 104 [1500] | 121 [1750] | 138 [2000] | 155 [2250] | 172 [2500] | 190 [2750] | 207 [3000] |
|----------|----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|

9.8 in³/rev. [160 cc]

Torque - lb-in [Nm], Speed rpm

Intermittent Ratings - 10% of Operation

| |
|---------|
| 0.5 [2] |
| 1 [4] |
| 2 [8] |
| 4 [15] |
| 6 [23] |
| 8 [30] |
| 10 [38] |
| 12 [45] |
| 14 [53] |
| 16 [61] |
| 18 [68] |
| 20 [76] |

| | | | | | | | | | | |
|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 266 [30] 12 | 584 [66] 11 | 965 [109] 5 | | | | | | | | |
| 283 [32] 24 | 620 [70] 23 | 1204 [136] 21 | 1451 [164] 20 | 1611 [182] 14 | 2213 [250] 6 | | | | | |
| 336 [38] 48 | 673 [76] 47 | 1389 [157] 42 | 1602 [181] 38 | 1788 [202] 34 | 2345 [265] 28 | 2567 [290] 22 | | | | |
| 345 [39] 92 | 690 [78] 89 | 1469 [166] 84 | 1814 [205] 82 | 2142 [242] 77 | 2434 [275] 73 | 2805 [317] 70 | 3169 [358] 67 | 3540 [400] 62 | | |
| 354 [40] 140 | 699 [79] 137 | 1416 [160] 132 | 1797 [203] 128 | 2177 [246] 123 | 2567 [290] 118 | 2832 [320] 114 | 3133 [354] 110 | 3505 [396] 106 | 3575 [404] 100 | 3894 [440] 94 |
| 301 [34] 184 | 646 [73] 178 | 1451 [164] 172 | 1770 [200] 170 | 2168 [245] 164 | 2549 [288] 160 | 2797 [316] 152 | 3098 [350] 147 | 3434 [388] 142 | 3788 [428] 134 | 3965 [448] 129 |
| 283 [32] 235 | 637 [72] 230 | 1381 [156] 222 | 1735 [196] 218 | 2124 [240] 212 | 2496 [282] 208 | 2761 [312] 200 | 3071 [347] 192 | 3443 [389] 184 | 3735 [422] 178 | 4018 [454] 172 |
| 212 [24] 278 | 620 [70] 272 | 1336 [151] 264 | 1699 [192] 259 | 2089 [236] 253 | 2460 [278] 247 | 2744 [310] 242 | 3044 [344] 235 | 3381 [382] 227 | 3708 [419] 216 | 3983 [450] 210 |
| 177 [20] 327 | 531 [60] 322 | 144 [144] 312 | 1646 [186] 306 | 2053 [232] 300 | 2354 [266] 295 | 2708 [306] 289 | 2991 [338] 281 | 3310 [374] 276 | 3717 [420] 267 | 3965 [448] 258 |
| 106 [12] 379 | 460 [52] 374 | 1186 [134] 360 | 1575 [178] 355 | 1929 [218] 350 | 2248 [254] 342 | 2628 [297] 338 | 2956 [334] 333 | 3283 [371] 323 | 3549 [401] 316 | 3912 [442] 308 |
| | 407 [46] 420 | 1151 [130] 409 | 1513 [171] 400 | 1903 [215] 394 | 2195 [248] 387 | 2575 [291] 380 | 2885 [326] 374 | 3195 [361] 368 | 3478 [393] 358 | 3788 [428] 346 |
| | 336 [38] 469 | 1062 [120] 453 | 1434 [162] 448 | 1760 [199] 442 | 2124 [240] 435 | 2460 [278] 428 | 2867 [324] 421 | 3159 [357] 412 | 3452 [390] 401 | 3761 [425] 392 |

| |
|-----|
| 13 |
| 25 |
| 50 |
| 94 |
| 144 |
| 188 |
| 238 |
| 281 |
| 331 |
| 381 |
| 425 |
| 475 |

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

Theoretical Torque - lb-in [Nm]

| | | | | | | | | | | |
|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 383 [43] | 789 [89] | 1556 [176] | 1939 [219] | 2345 [265] | 2728 [308] | 3111 [352] | 3495 [395] | 3901 [441] | 4284 [484] | 4667 [527] |
|----------|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|

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

PERFORMANCE DATA

| | | Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. | | |
|------------------|---------|---|-----------|------------|------------|------------|------------|------------|------------|---|-------------|------------|-----|
| | | 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [172] | 2750 [190] | 3000 [207] | |
| | | 200 | | | | | | | | | | | |
| | | 12.1 in ³ /rev. [198 cc] | | | | | | | | | | | |
| | | Torque - lb-in [Nm], Speed rpm | | | | | | | | Intermittent Ratings - 10% of Operation | | | |
| Flow - gpm [lpm] | 0.5 [2] | 336 [38] | 770 [87] | 1522 [172] | 1779 [201] | | | | | | | | 10 |
| | 1 [4] | 416 [47] | 912 [103] | 1451 [164] | 1779 [201] | 2159 [244] | 2611 [295] | 2903 [328] | | | | | 20 |
| | 2 [8] | 407 [46] | 850 [96] | 1699 [192] | 2133 [241] | 2531 [286] | 2920 [330] | 3292 [372] | 3690 [417] | 3788 [428] | | | 40 |
| | 4 [15] | 389 [44] | 841 [95] | 1717 [194] | 2133 [241] | 2531 [286] | 2947 [333] | 3319 [376] | 3708 [419] | 4080 [461] | 4407 [498] | 4814 [544] | 76 |
| | 6 [23] | 354 [40] | 814 [92] | 1699 [192] | 2124 [240] | 2549 [288] | 2947 [333] | 3319 [375] | 3726 [421] | 4080 [461] | 4469 [505] | 4814 [544] | 116 |
| | 8 [30] | 292 [33] | 770 [87] | 1655 [187] | 2088 [236] | 2513 [284] | 2920 [330] | 3327 [374] | 3726 [421] | 4088 [462] | 4460 [504] | 4796 [542] | 152 |
| | 10 [38] | 204 [23] | 708 [80] | 1593 [180] | 2035 [230] | 2460 [278] | 2876 [325] | 3283 [371] | 3673 [415] | 4062 [459] | 4407 [498] | 4779 [540] | 192 |
| | 12 [45] | 186 [21] | 646 [73] | 1531 [173] | 1973 [223] | 2398 [271] | 2814 [318] | 3221 [364] | 3619 [409] | 4009 [453] | 4345 [491] | 4717 [533] | 227 |
| | 14 [53] | 88 [10] | 566 [64] | 1460 [165] | 1894 [214] | 2319 [262] | 2735 [309] | 3150 [356] | 3540 [400] | 3929 [444] | 4274 [483] | 4646 [525] | 268 |
| | 16 [61] | | 487 [55] | 1372 [155] | 1805 [204] | 2239 [253] | 2655 [300] | 3062 [346] | 3460 [391] | 3841 [434] | 4177 [472] | 4549 [514] | 308 |
| Cont. | 18 [68] | | 407 [46] | 1265 [143] | 1690 [191] | 2124 [240] | 2540 [287] | 2938 [332] | 3336 [377] | 3717 [420] | 4044 [457] | 4283 [484] | 343 |
| | 20 [76] | | 265 [30] | 1150 [130] | 1584 [179] | 2009 [227] | 2434 [275] | 2841 [321] | 3230 [365] | 3619 [409] | 3805 [430] | 4142 [468] | 384 |
| Inter. | | | 266 [30] | 374 [44] | 367 [43] | 363 [43] | 355 [43] | 349 [43] | 343 [43] | 333 [43] | 324 [43] | 314 [43] | |
| | | | 308 [36] | 300 [36] | 298 [36] | 291 [36] | 286 [36] | 279 [36] | 271 [36] | 264 [36] | 255 [36] | 248 [36] | |
| | | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | |
| | | Theoretical Torque - lb-in [Nm] | | | | | | | | | | | |
| | | 481 [54] | 963 [109] | 1929 [218] | 2407 [272] | 2888 [326] | 3369 [381] | 3850 [435] | 4332 [489] | 4813 [544] | 5294 [598] | 5776 [653] | |
| | | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | |

| | | Pressure - psi [bars] | | | | | | | | Max. Cont. | Max. Inter. | | |
|------------------|---------|---|------------|------------|------------|------------|------------|------------|------------|---|-------------|------------|------------|
| | | 250 [17] | 500 [35] | 1000 [69] | 1250 [86] | 1500 [104] | 1750 [121] | 2000 [138] | 2250 [155] | 2500 [173] | 2750 [190] | 3000 [207] | |
| | | 240 | | | | | | | | | | | |
| | | 14.4 in ³ /rev. [236 cc] | | | | | | | | | | | |
| | | Torque - lb-in [Nm], Speed rpm | | | | | | | | Intermittent Ratings - 10% of Operation | | | |
| Flow - lpm [gpm] | 0.5 [2] | 416 [47] | 867 [98] | 1743 [197] | 2186 [247] | | | | | | | | 8 |
| | 1 [4] | 443 [50] | 929 [105] | 1859 [210] | 2301 [260] | 2717 [310] | 3133 [354] | 3575 [404] | | | | | 16 |
| | 2 [8] | 469 [53] | 982 [111] | 1982 [224] | 2451 [277] | 2894 [329] | 3336 [377] | 3752 [424] | 4151 [469] | 4522 [511] | 5151 [582] | | 32 |
| | 4 [15] | 460 [52] | 1000 [114] | 2062 [236] | 2575 [290] | 3062 [346] | 3531 [399] | 3974 [449] | 4390 [496] | 4788 [541] | 5292 [598] | 5646 [638] | 63 |
| | 6 [23] | 416 [47] | 956 [109] | 2009 [227] | 2522 [285] | 3027 [342] | 3513 [397] | 3974 [449] | 4425 [500] | 4850 [548] | 5266 [595] | 5682 [642] | 95 |
| | 8 [30] | 372 [42] | 903 [104] | 1956 [221] | 2469 [280] | 2974 [336] | 3460 [391] | 3938 [445] | 4398 [497] | 4841 [547] | 5248 [592] | 5664 [640] | 126 |
| | 10 [38] | 310 [35] | 832 [95] | 1885 [213] | 2398 [272] | 2903 [328] | 3398 [384] | 3867 [437] | 4328 [489] | 4788 [541] | 5195 [587] | 5620 [635] | 158 |
| | 12 [45] | 204 [23] | 752 [85] | 1797 [203] | 2319 [262] | 2823 [319] | 3319 [375] | 3788 [428] | 4248 [480] | 4699 [531] | 5089 [575] | 5514 [623] | 189 |
| | 14 [53] | | 655 [75] | 1699 [192] | 2213 [250] | 2726 [308] | 3310 [365] | 3699 [418] | 4160 [470] | 4602 [520] | 4991 [564] | 5407 [611] | 220 |
| | Cont. | 16 [61] | | 593 [68] | 1593 [180] | 2106 [238] | 2611 [295] | 3106 [350] | 3584 [405] | 4053 [458] | 4496 [510] | 4876 [551] | 5310 [600] |
| 18 [68] | | | 487 [56] | 1460 [165] | 1956 [221] | 2469 [281] | 2965 [335] | 3434 [388] | 3894 [440] | 4337 [490] | 4797 [545] | 5222 [590] | 283 |
| Inter. | 20 [76] | | 40 [40] | 1345 [154] | 1841 [210] | 2336 [264] | 2832 [320] | 3310 [376] | 3770 [428] | 4221 [480] | 4691 [530] | 5133 [580] | 315 |
| | | | 315 [37] | 307 [37] | 303 [37] | 295 [37] | 290 [37] | 282 [37] | 272 [37] | 261 [37] | 250 [37] | 238 [37] | |
| | | Overall Efficiency - 70 - 100% <input type="checkbox"/> 40 - 69% <input type="checkbox"/> 0 - 39% <input type="checkbox"/> | | | | | | | | | | | |
| | | Theoretical Torque - lb-in [Nm] | | | | | | | | | | | |
| | | 584 [66] | 1168 [132] | 2345 [265] | 2929 [331] | 3513 [397] | 4097 [463] | 4681 [529] | 5265 [595] | 5850 [661] | 6442 [728] | 7027 [794] | |
| | | Displacement tested at 129°F [54°C] with an oil viscosity of 213 SUS [46cSt] | | | | | | | | | | | |

