

# Torque Ratings – G-Series (Hydraulic)

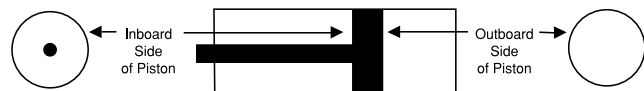
All Published Torques are Guaranteed Minimum Values.

## Double-Acting Actuators

### G-Series

| Actuator Model | See Bettis' Definitions | Direction of Rotation | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |      |
|----------------|-------------------------|-----------------------|--|------|------|------|------|------|------|------|------|------|------|------|------|
|                |                         |                       | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |      |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |      |
| G01101.5       | Start/End               | ○                     |  |      |      |      |      |      |      | 2167 | 2476 | 3095 | 3405 | 3714 | 4209 |
|                | Minimum                 | ○                     |  |      |      |      |      |      |      | 1143 | 1307 | 1633 | 1797 | 1960 | 2222 |
|                | Start/End               | ●                     |  |      |      |      |      |      |      | 1429 | 1633 | 2042 | 2246 | 2450 | 2777 |
|                | Minimum                 | ●                     |  |      |      |      |      |      |      | 754  | 862  | 1078 | 1185 | 1293 | 1466 |
| G01101.7       | Start/End               | ○                     |  |      |      |      |      | 1685 | 2359 | 2949 | 3370 | 4213 |      |      |      |
|                | Minimum                 | ○                     |  |      |      |      |      | 889  | 1245 | 1556 | 1779 | 2223 |      |      |      |
|                | Start/End               | ●                     |  |      |      |      |      | 1135 | 1589 | 1986 | 2270 | 2837 | 3121 | 3405 | 3858 |
|                | Minimum                 | ●                     |  |      |      |      |      | 599  | 839  | 1048 | 1198 | 1497 | 1647 | 1797 | 2036 |
| G01102.0       | Start/End               | ○                     |  |      |      | 1761 | 2201 | 3081 | 3852 | 4402 |      |      |      |      |      |
|                | Minimum                 | ○                     |  |      |      | 929  | 1162 | 1626 | 2033 | 2323 |      |      |      |      |      |
|                | Start/End               | ●                     |  |      |      | 1321 | 1651 | 2311 | 2889 | 3301 | 4127 |      |      |      |      |
|                | Minimum                 | ●                     |  |      |      | 697  | 871  | 1220 | 1525 | 1742 | 2178 |      |      |      |      |
| G01102.2       | Start/End               | ○                     |  | 1393 | 1811 | 2228 | 2786 | 3900 |      |      |      |      |      |      |      |
|                | Minimum                 | ○                     |  | 735  | 956  | 1176 | 1470 | 2058 |      |      |      |      |      |      |      |
|                | Start/End               | ●                     |  | 1118 | 1453 | 788  | 2235 | 3129 | 3912 | 4471 |      |      |      |      |      |
|                | Minimum                 | ●                     |  | 590  | 767  | 944  | 1180 | 1652 | 2065 | 2359 |      |      |      |      |      |
| G01102.5       | Start/End               | ○                     |  | 1719 | 2235 | 2751 | 3439 |      |      |      |      |      |      |      |      |
|                | Minimum                 | ○                     |  | 907  | 1180 | 1452 | 1815 |      |      |      |      |      |      |      |      |
|                | Start/End               | ●                     |  | 1444 | 1878 | 2311 | 2889 | 4044 |      |      |      |      |      |      |      |
|                | Minimum                 | ●                     |  | 762  | 991  | 1220 | 1525 | 2134 |      |      |      |      |      |      |      |
| G01103.0       | Start/End               | ○                     | 1733                                       | 2476 | 3219 | 3962 |      |      |      |      |      |      |      |      |      |
|                | Minimum                 | ○                     | 915  | 1307 | 1699 | 2091 |      |      |      |      |      |      |      |      |      |
|                | Start/End               | ●                     | 1541                                       | 2201 | 2861 | 3521 | 4402 |      |      |      |      |      |      |      |      |
|                | Minimum                 | ●                     | 813  | 1162 | 1510 | 1859 | 2323 |      |      |      |      |      |      |      |      |
| G01103.5       | Start/End               | ○                     | 2359                                       | 3370 | 4381 |      |      |      |      |      |      |      |      |      |      |
|                | Minimum                 | ○                     | 1245                                       | 1779 | 2312 |      |      |      |      |      |      |      |      |      |      |
|                | Start/End               | ●                     | 2167                                       | 3095 | 4024 |      |      |      |      |      |      |      |      |      |      |
|                | Minimum                 | ●                     | 1143                                       | 1633 | 2124 |      |      |      |      |      |      |      |      |      |      |
| G2101.7        | Start/End               | ○                     |  |      |      |      | 2040 | 2856 | 3570 | 4080 | 5100 | 5609 | 6119 |      |      |
|                | Minimum                 | ○                     |  |      |      |      | 1077 | 1507 | 1884 | 2153 | 2691 | 2961 | 3230 |      |      |
|                | Start/End               | ●                     |  |      |      |      | 1374 | 1923 | 2404 | 2748 | 3434 | 3778 | 4121 | 4671 |      |
|                | Minimum                 | ●                     |  |      |      |      | 725  | 1015 | 1269 | 1450 | 1813 | 1994 | 2175 | 2465 |      |
| G2102.0        | Start/End               | ○                     |  |      | 1732 | 2131 | 2664 | 3730 | 4662 | 5328 | 6661 |      |      |      |      |
|                | Minimum                 | ○                     |  |      | 914  | 1125 | 1406 | 1969 | 2461 | 2812 | 3515 |      |      |      |      |
|                | Start/End               | ●                     |  |      | 1299 | 1599 | 1998 | 2797 | 3497 | 3996 | 4995 | 5495 | 5995 | 6794 |      |
|                | Minimum                 | ●                     |  |      | 685  | 844  | 1055 | 1476 | 1846 | 2109 | 2636 | 2900 | 3164 | 3586 |      |
| G2102.2        | Start/End               | ○                     |  | 1686 | 2192 | 2698 | 3372 | 4721 | 5901 | 6744 |      |      |      |      |      |
|                | Minimum                 | ○                     |  | 890  | 1157 | 1424 | 1780 | 2491 | 3114 | 3559 |      |      |      |      |      |
|                | Start/End               | ●                     |  | 1353 | 1759 | 2165 | 2706 | 3788 | 4735 | 5412 | 6765 |      |      |      |      |
|                | Minimum                 | ●                     |  | 714  | 928  | 1142 | 1428 | 1999 | 2499 | 2856 | 3570 |      |      |      |      |
| G2102.5        | Start/End               | ○                     |  | 2081 | 2706 | 3330 | 4163 | 5828 |      |      |      |      |      |      |      |
|                | Minimum                 | ○                     |  | 1099 | 1428 | 1758 | 2197 | 3076 |      |      |      |      |      |      |      |
|                | Start/End               | ●                     |  | 1748 | 2273 | 2797 | 3497 | 4896 | 6119 |      |      |      |      |      |      |
|                | Minimum                 | ●                     |  | 923  | 1200 | 1476 | 1846 | 2584 | 3230 |      |      |      |      |      |      |
| Actuator Model | See Bettis' Definitions | Direction of Rotation | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |      |
|                |                         |                       | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |      |
|                |                         |                       | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |      |

- NOTE: ○ Standard configuration produces counterclockwise rotation when the outboard side of piston is pressurized. Outboard side of piston equals > torque.
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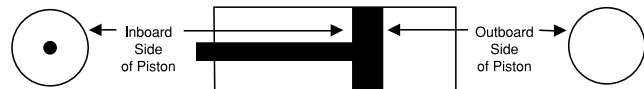
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|----------------|-------------------------|-----------------------|--|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                         |                       | 35   | 50   | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |      |       |       |       |       |       |       |       |       |       |       |
| G2103.0        | Start/End               | ○                     | 2098                                       | 2997 | 3896  | 4796  | 5995  |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 1107                                       | 1582 | 2056  | 2531  | 3164  |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 1865                                       | 2664 | 3464  | 4263  | 5328  |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 984  | 1406 | 1828  | 2250  | 2812  |       |       |       |       |       |       |       |
| G2103.5        | Start/End               | ○                     | 2856                                       | 4080 | 5304  | 6527  |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 1507                                       | 2153 | 2799  | 3445  |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 2623                                       | 3747 | 4871  | 5995  |       |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 1384                                       | 1977 | 2571  | 3164  |       |       |       |       |       |       |       |       |
| G2104.0        | Start/End               | ○                     | 3730                                       | 5328 |       |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 1969                                       | 2812 |       |       |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 3497                                       | 4995 | 6494  |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 1846                                       | 2636 | 3427  |       |       |       |       |       |       |       |       |       |
| G3102.0        | Start/End               | ○                     |  |      |       | 2595  | 3243  | 4541  | 5676  | 6487  | 8109  | 8919  | 9730  | 11028 |
|                | Minimum                 | ○                     |  |      |       | 1369  | 1712  | 2397  | 2996  | 3424  | 4280  | 4707  | 5135  | 5820  |
|                | Start/End               | ●                     |  |      |       | 1581  | 1976  | 2767  | 3459  | 3953  | 4941  | 5435  | 5929  | 6720  |
|                | Minimum                 | ●                     |  |      |       | 835   | 1043  | 1460  | 1825  | 2086  | 2608  | 2869  | 3129  | 3547  |
| G3102.2        | Start/End               | ○                     |  |      |       | 3284  | 4105  | 5747  | 7184  | 8210  | 10262 |       |       |       |
|                | Minimum                 | ○                     |  |      |       | 1733  | 2167  | 3033  | 3791  | 4333  | 5416  |       |       |       |
|                | Start/End               | ●                     |  |      |       | 2270  | 2838  | 3973  | 4967  | 5676  | 7095  | 7805  | 8514  | 9649  |
|                | Minimum                 | ●                     |  |      |       | 1198  | 1498  | 2097  | 2621  | 2996  | 3745  | 4119  | 4494  | 5093  |
| G3102.5        | Start/End               | ○                     |  |      | 3294  | 4054  | 5068  | 7095  | 8869  | 10136 |       |       |       |       |
|                | Minimum                 | ○                     |  |      | 1739  | 2140  | 2675  | 3745  | 4681  | 5349  |       |       |       |       |
|                | Start/End               | ●                     |  |      | 2471  | 3041  | 3801  | 5321  | 6652  | 7602  | 9502  | 10452 | 11403 |       |
|                | Minimum                 | ●                     |  |      | 1304  | 1605  | 2006  | 2808  | 3511  | 4012  | 5015  | 5517  | 6018  |       |
| G3103.0        | Start/End               | ○                     |  | 3649 | 4744  | 5838  | 7298  | 10217 |       |       |       |       |       |       |
|                | Minimum                 | ○                     |  | 1926 | 2504  | 3081  | 3852  | 5392  |       |       |       |       |       |       |
|                | Start/End               | ●                     |  | 3015 | 3920  | 4825  | 6031  | 8443  | 10554 |       |       |       |       |       |
|                | Minimum                 | ●                     |  | 1591 | 2069  | 2546  | 3183  | 4456  | 5570  |       |       |       |       |       |
| G3103.5        | Start/End               | ○                     | 3477                                       | 4967 | 6456  | 7946  | 9933  |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 1835                                       | 2621 | 3408  | 4194  | 5242  |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 3033                                       | 4333 | 5633  | 6933  | 8666  |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 1601                                       | 2287 | 2973  | 3659  | 4574  |       |       |       |       |       |       |       |
| G3104.0        | Start/End               | ○                     | 4541                                       | 6487 | 8433  | 10379 |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 2397                                       | 3424 | 4451  | 5478  |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 4097                                       | 5853 | 7609  | 9365  | 11707 |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 2163                                       | 3089 | 4016  | 4943  | 6179  |       |       |       |       |       |       |       |
| G3104.5        | Start/End               | ○                     | 5747                                       | 8210 | 10673 |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 3033                                       | 4333 | 5633  |       |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 5304                                       | 7576 | 9849  |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 2799                                       | 3999 | 5198  |       |       |       |       |       |       |       |       |       |
| G4102.5        | Start/End               | ○                     |  |      |       | 4923  | 6154  | 8615  | 10769 | 12308 | 15385 | 16923 | 18462 | 20923 |
|                | Minimum                 | ○                     |  |      |       | 2598  | 3248  | 4547  | 5684  | 6496  | 8120  | 8932  | 9744  | 11043 |
|                | Start/End               | ●                     |  |      |       | 3151  | 3938  | 5514  | 6892  | 7877  | 9846  | 10831 | 11815 | 13391 |
|                | Minimum                 | ●                     |  |      |       | 1663  | 2079  | 2910  | 3638  | 4157  | 5197  | 5716  | 6236  | 7067  |
| Actuator Model | See Bettis' Definitions | Direction of Rotation | Pressure Torque Output Start/Min./End (Nm) |      |       |       |       |       |       |       |       |       |       |       |
|                |                         |                       | 35   | 50   | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
|                |                         |                       | Operating Pressure (Bar)                   |      |       |       |       |       |       |       |       |       |       |       |

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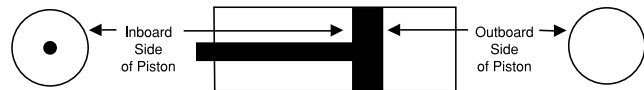
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## Double-Acting Actuators

### G-Series (cont.)

| Actuator Model | See Bettis' Definitions | Direction of Rotation | Operating Pressure (Bar)                   |       |       |       |       |       |       |       |       |       |       |       |
|----------------|-------------------------|-----------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                         |                       | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |       |       |       |       |       |       |       |       |       |       |       |
| G4103.0        | Start/End               | ○                     |  |       | 5760  | 7089  | 8862  | 12406 | 15508 | 17723 | 22154 |       |       |       |
|                | Minimum                 | ○                     |  |       | 3040  | 3742  | 4677  | 6548  | 8185  | 9354  | 11692 |       |       |       |
|                | Start/End               | ●                     |  |       | 4320  | 5317  | 6646  | 9305  | 11631 | 13292 | 16615 | 18277 | 19938 | 22597 |
|                | Minimum                 | ●                     |  |       | 2280  | 2806  | 3508  | 4911  | 6138  | 7015  | 8769  | 9646  | 10523 | 11926 |
| G4103.5        | Start/End               | ○                     |  | 6031  | 7840  | 9649  | 12062 | 16886 | 21108 |       |       |       |       |       |
|                | Minimum                 | ○                     |  | 3183  | 4138  | 5093  | 6366  | 8912  | 11140 |       |       |       |       |       |
|                | Start/End               | ●                     |  | 4923  | 6400  | 7877  | 9846  | 13785 | 17231 | 19692 |       |       |       |       |
|                | Minimum                 | ●                     |  | 2598  | 3378  | 4157  | 5197  | 7275  | 9094  | 10393 |       |       |       |       |
| G4104.0        | Start/End               | ○                     | 5514                                       | 7877  | 10240 | 12603 | 15754 | 22055 |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 2910                                       | 4157  | 5404  | 6652  | 8315  | 11640 |       |       |       |       |       |       |
|                | Start/End               | ●                     | 4738                                       | 6769  | 8800  | 10831 | 13538 | 18954 | 23692 |       |       |       |       |       |
|                | Minimum                 | ●                     | 2501                                       | 3573  | 4644  | 5716  | 7145  | 10003 | 12504 |       |       |       |       |       |
| G4104.5        | Start/End               | ○                     | 6978                                       | 9969  | 12960 | 15951 | 19938 |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 3683                                       | 5262  | 6840  | 8418  | 10523 |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 6203                                       | 8862  | 11520 | 14178 | 17723 |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 3274                                       | 4677  | 6080  | 7483  | 9354  |       |       |       |       |       |       |       |
| G4105.0        | Start/End               | ○                     | 8615                                       | 12308 | 16000 | 19692 |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 4547                                       | 6496  | 8444  | 10393 |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 7840                                       | 11200 | 14560 | 17920 | 22400 |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 4138                                       | 5911  | 7684  | 9458  | 11822 |       |       |       |       |       |       |       |
| G4106.0        | Start/End               | ○                     | 12406                                      | 17723 | 23040 |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 6548                                       | 9354  | 12160 |       |       |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 11631                                      | 16615 | 21600 |       |       |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 6138                                       | 8769  | 11400 |       |       |       |       |       |       |       |       |       |
| G5103.5        | Start/End               | ○                     |  |       |       | 12487 | 15609 | 21853 | 27316 | 31218 | 39023 | 42925 | 46827 | 53071 |
|                | Minimum                 | ○                     |  |       |       | 6590  | 8238  | 11533 | 14417 | 16476 | 20595 | 22655 | 24714 | 28010 |
|                | Start/End               | ●                     |  |       |       | 8410  | 10512 | 14717 | 18396 | 21024 | 26280 | 28909 | 31537 | 35741 |
|                | Minimum                 | ●                     |  |       |       | 4438  | 5548  | 7767  | 9709  | 11096 | 13870 | 15257 | 16644 | 18864 |
| G5104.0        | Start/End               | ○                     |  |       | 13252 | 16310 | 20387 | 28542 | 35678 | 40775 | 50968 |       |       |       |
|                | Minimum                 | ○                     |  |       | 6994  | 8608  | 10760 | 15064 | 18830 | 21520 | 26900 |       |       |       |
|                | Start/End               | ●                     |  |       | 9939  | 12232 | 15290 | 21407 | 26758 | 30581 | 38226 | 42049 | 45871 | 51988 |
|                | Minimum                 | ●                     |  |       | 5245  | 6456  | 8070  | 11298 | 14122 | 16140 | 20175 | 22192 | 24210 | 27438 |
| G5104.5        | Start/End               | ○                     |  | 12901 | 16772 | 20642 | 25803 | 36124 | 45155 | 51605 |       |       |       |       |
|                | Minimum                 | ○                     |  | 6809  | 8852  | 10894 | 13618 | 19065 | 23832 | 27236 |       |       |       |       |
|                | Start/End               | ●                     |  | 10353 | 13459 | 16565 | 20706 | 28988 | 36235 | 41412 | 51765 |       |       |       |
|                | Minimum                 | ●                     |  | 5464  | 7103  | 8742  | 10928 | 15299 | 19124 | 21856 | 27320 |       |       |       |
| G5105.0        | Start/End               | ○                     | 11149                                      | 15928 | 20706 | 25484 | 31855 | 44597 |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 5884                                       | 8406  | 10928 | 13450 | 16812 | 23537 |       |       |       |       |       |       |
|                | Start/End               | ●                     | 9365                                       | 13379 | 17393 | 21407 | 26758 | 37462 | 46827 | 53517 |       |       |       |       |
|                | Minimum                 | ●                     | 4943                                       | 7061  | 9180  | 11298 | 14122 | 19771 | 24714 | 28245 |       |       |       |       |
| G5106.0        | Start/End               | ○                     | 16055                                      | 22936 | 29816 | 36697 | 45871 |       |       |       |       |       |       |       |
|                | Minimum                 | ○                     | 8473                                       | 12105 | 15736 | 19368 | 24210 |       |       |       |       |       |       |       |
|                | Start/End               | ●                     | 14271                                      | 20387 | 26503 | 32620 | 40775 |       |       |       |       |       |       |       |
|                | Minimum                 | ●                     | 7532                                       | 10760 | 13988 | 17216 | 21520 |       |       |       |       |       |       |       |
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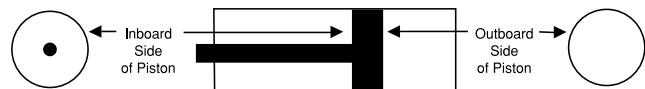
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### G-Series (cont.)

| Actuator Model | See Bettis' Definitions | Direction of Rotation | Operating Pressure (Bar)                   |       |        |        |        |       |       |       |        |        |        |        |  |  |
|----------------|-------------------------|-----------------------|--|-------|--------|--------|--------|-------|-------|-------|--------|--------|--------|--------|--|--|
|                |                         |                       | 35   | 50    | 65     | 80     | 100    | 140   | 175   | 200   | 250    | 275    | 300    | 340    |  |  |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |       |        |        |        |       |       |       |        |        |        |        |  |  |
| G5107.0        | Start/End               | ○                     | 21853                                      | 31218 | 40583  | 49949  |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 11533                                      | 16476 | 21419  | 26362  |        |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 20069                                      | 28670 | 37271  | 45871  |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 10592                                      | 15131 | 19671  | 24210  |        |       |       |       |        |        |        |        |  |  |
| G5108.0        | Start/End               | ○                     | 28542                                      | 40775 | 53007  |        |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 15064                                      | 21520 | 27976  |        |        |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 26758                                      | 38226 | 49694  |        |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 14122                                      | 20175 | 26227  |        |        |       |       |       |        |        |        |        |  |  |
| G7104.0        | Start/End               | ○                     |  |       |        |        | 25021  | 35029 | 43786 | 50042 | 62552  | 68807  | 75062  | 85071  |  |  |
|                | Minimum                 | ○                     |  |       |        |        | 13205  | 18488 | 23109 | 26411 | 33014  | 36315  | 39616  | 44898  |  |  |
|                | Start/End               | ●                     |  |       |        |        | 17104  | 23946 | 29932 | 34208 | 42760  | 47036  | 51312  | 58154  |  |  |
|                | Minimum                 | ●                     |  |       |        |        | 9027   | 12638 | 15797 | 18054 | 22568  | 24825  | 27081  | 30692  |  |  |
| G7104.5        | Start/End               | ○                     |  |       |        | 25334  | 31667  | 44334 | 55417 | 63334 | 79167  | 87084  | 95001  |        |  |  |
|                | Minimum                 | ○                     |  |       |        | 13370  | 16713  | 23398 | 29248 | 33426 | 41783  | 45961  | 50139  |        |  |  |
|                | Start/End               | ●                     |  |       |        | 19000  | 23750  | 33250 | 41563 | 47500 | 59375  | 65313  | 71251  | 80751  |  |  |
|                | Minimum                 | ●                     |  |       |        | 10028  | 12535  | 17549 | 21936 | 25070 | 31337  | 34471  | 37604  | 42618  |  |  |
| G7105.0        | Start/End               | ○                     |  |       |        | 31276  | 39095  | 54733 | 68416 | 78190 | 97737  |        |        |        |  |  |
|                | Minimum                 | ○                     |  |       |        | 16507  | 20633  | 28887 | 36109 | 41267 | 51584  |        |        |        |  |  |
|                | Start/End               | ●                     |  |       |        | 24943  | 31178  | 43650 | 54562 | 62356 | 77946  | 85740  | 93535  |        |  |  |
|                | Minimum                 | ●                     |  |       |        | 13164  | 16455  | 23037 | 28797 | 32910 | 41138  | 45252  | 49366  |        |  |  |
| G7106.0        | Start/End               | ○                     |  | 28148 | 36593  | 45037  | 56297  | 78815 | 98519 |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     |  | 14856 | 19313  | 23770  | 29712  | 41597 | 51996 |       |        |        |        |        |  |  |
|                | Start/End               | ●                     |  | 24190 | 31447  | 38704  | 48380  | 67732 | 84665 | 96760 |        |        |        |        |  |  |
|                | Minimum                 | ●                     |  | 12767 | 16597  | 20427  | 25534  | 35747 | 44684 | 51068 |        |        |        |        |  |  |
| G7107.0        | Start/End               | ○                     | 26819                                      | 38313 | 49807  | 61301  | 76626  |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 14155                                      | 20221 | 26287  | 32353  | 40442  |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 24048                                      | 34355 | 44661  | 54968  | 68709  | 96193 |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 12692                                      | 18132 | 23571  | 29011  | 36263  | 50769 |       |       |        |        |        |        |  |  |
| G7108.0        | Start/End               | ○                     | 35029                                      | 50042 | 65054  | 80066  | 100083 |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 18488                                      | 26411 | 34334  | 42257  | 52822  |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 32258                                      | 46083 | 59908  | 73733  | 92166  |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 17025                                      | 24322 | 31618  | 38915  | 48643  |       |       |       |        |        |        |        |  |  |
| G7109.0        | Start/End               | ○                     | 44334                                      | 63334 | 82334  | 101334 |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 23398                                      | 33426 | 43454  | 53482  |        |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 41563                                      | 59375 | 77188  | 95001  |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 21936                                      | 31337 | 40738  | 50139  |        |       |       |       |        |        |        |        |  |  |
| G7110.0        | Start/End               | ○                     | 54733                                      | 78190 | 101647 |        |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ○                     | 28887                                      | 41267 | 53647  |        |        |       |       |       |        |        |        |        |  |  |
|                | Start/End               | ●                     | 51962                                      | 74232 | 96501  |        |        |       |       |       |        |        |        |        |  |  |
|                | Minimum                 | ●                     | 27424                                      | 39178 | 50931  |        |        |       |       |       |        |        |        |        |  |  |
| G8105.0        | Start/End               | ○                     |  |       |        |        |        | 64869 | 81086 | 92670 | 115837 | 127421 | 139004 | 157538 |  |  |
|                | Minimum                 | ○                     |  |       |        |        |        | 34236 | 42795 | 48909 | 61136  | 67250  | 73363  | 83145  |  |  |
|                | Start/End               | ●                     |  |       |        |        |        | 45246 | 56557 | 64637 | 80796  | 88876  | 96955  | 109883 |  |  |
|                | Minimum                 | ●                     |  |       |        |        |        | 23880 | 29850 | 34114 | 42642  | 46907  | 51171  | 57994  |  |  |
| Actuator Model | See Bettis' Definitions | Direction of Rotation | Pressure Torque Output Start/Min./End (Nm) |       |        |        |        |       |       |       |        |        |        |        |  |  |
|                |                         |                       | 35   | 50    | 65     | 80     | 100    | 140   | 175   | 200   | 250    | 275    | 300    | 340    |  |  |
|                |                         |                       | Operating Pressure (Bar)                   |       |        |        |        |       |       |       |        |        |        |        |  |  |

- NOTE:
- Standard configuration produces counterclockwise rotation when the outboard side of piston is pressurized. Outboard side of piston equals > torque.
  - Standard configuration produces clockwise rotation when the inboard side of piston is pressurized. Inboard side of piston equals < torque.



# Torque Ratings – G-Series (Hydraulic)

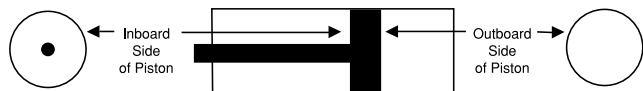
All Published Torques are Guaranteed Minimum Values.

## Double-Acting Actuators

### G-Series (cont.)

| Actuator Model | See Bettis' Definitions | Direction of Rotation | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |        |
|----------------|-------------------------|-----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                |                         |                       | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |        |        |        |        |        |        |        |        |        |        |        |
| G8106.0        | Start/End               | ○                     |  |        |        | 53378  | 66722  | 93411  | 116764 | 133444 | 166805 |        |        |        |
|                | Minimum                 | ○                     |  |        |        | 28172  | 35214  | 49300  | 61625  | 70429  | 88036  |        |        |        |
|                | Start/End               | ●                     |  |        |        | 42165  | 52706  | 73788  | 92235  | 105412 | 131764 | 144941 | 158117 |        |
|                | Minimum                 | ●                     |  |        |        | 22254  | 27817  | 38944  | 48680  | 55634  | 69542  | 76497  | 83451  |        |
| G8107.0        | Start/End               | ○                     |  |        | 59030  | 72653  | 90816  | 127143 | 158928 |        |        |        |        |        |
|                | Minimum                 | ○                     |  |        | 31155  | 38345  | 47931  | 67103  | 83879  |        |        |        |        |        |
|                | Start/End               | ●                     |  |        | 49920  | 61440  | 76800  | 107520 | 134400 | 153600 |        |        |        |        |
|                | Minimum                 | ●                     |  |        | 26347  | 32427  | 40533  | 56747  | 70933  | 81067  |        |        |        |        |
| G8108.0        | Start/End               | ○                     |  | 59308  | 77101  | 94894  | 118617 | 166064 |        |        |        |        |        |        |
|                | Minimum                 | ○                     |  | 31302  | 40692  | 50083  | 62603  | 87645  |        |        |        |        |        |        |
|                | Start/End               | ●                     |  | 52300  | 67990  | 83681  | 104601 | 146441 |        |        |        |        |        |        |
|                | Minimum                 | ●                     |  | 27603  | 35884  | 44165  | 55206  | 72288  |        |        |        |        |        |        |
| G8109.0        | Start/End               | ○                     | 52544                                      | 75062  | 97581  | 120100 | 150125 |        |        |        |        |        |        |        |
|                | Minimum                 | ○                     | 27731                                      | 39616  | 51501  | 63386  | 79232  |        |        |        |        |        |        |        |
|                | Start/End               | ●                     | 47638                                      | 68054  | 88470  | 108887 | 136108 |        |        |        |        |        |        |        |
|                | Minimum                 | ●                     | 25142                                      | 35917  | 46693  | 57468  | 71835  |        |        |        |        |        |        |        |
| G8110.0        | Start/End               | ○                     | 64869                                      | 92670  | 120470 | 148271 |        |        |        |        |        |        |        |        |
|                | Minimum                 | ○                     | 34236                                      | 48909  | 63582  | 78254  |        |        |        |        |        |        |        |        |
|                | Start/End               | ●                     | 59963                                      | 85661  | 111360 | 137058 |        |        |        |        |        |        |        |        |
|                | Minimum                 | ●                     | 31647                                      | 45210  | 58773  | 72336  |        |        |        |        |        |        |        |        |
| G8112.0        | Start/End               | ○                     | 93411                                      | 133444 |        |        |        |        |        |        |        |        |        |        |
|                | Minimum                 | ○                     | 49300                                      | 70429  |        |        |        |        |        |        |        |        |        |        |
|                | Start/End               | ●                     | 88505                                      | 126436 | 164367 |        |        |        |        |        |        |        |        |        |
|                | Minimum                 | ●                     | 46711                                      | 66730  | 86749  |        |        |        |        |        |        |        |        |        |
| G10106.0       | Start/End               | ○                     |  |        |        |        |        | 122602 | 153252 | 175145 | 218932 | 240825 | 262718 | 297747 |
|                | Minimum                 | ○                     |  |        |        |        |        | 64706  | 80883  | 92438  | 115547 | 127102 | 138657 | 157144 |
|                | Start/End               | ●                     |  |        |        |        |        | 86630  | 108288 | 123757 | 154697 | 170166 | 185636 | 210387 |
|                | Minimum                 | ●                     |  |        |        |        |        | 45721  | 57152  | 65316  | 81645  | 89810  | 97974  | 111038 |
| G10107.0       | Start/End               | ○                     |  |        |        | 95357  | 119196 | 166875 | 208593 | 238392 | 297990 | 327789 |        |        |
|                | Minimum                 | ○                     |  |        |        | 50327  | 62909  | 88073  | 110091 | 125818 | 157273 | 173000 |        |        |
|                | Start/End               | ●                     |  |        |        | 74802  | 93502  | 130903 | 163629 | 187004 | 233755 | 257131 | 280506 | 317907 |
|                | Minimum                 | ●                     |  |        |        | 39479  | 49348  | 69088  | 86360  | 98697  | 123371 | 135708 | 148045 | 167784 |
| G10108.0       | Start/End               | ○                     |  |        | 101195 | 124548 | 155685 | 217959 | 272448 | 311370 |        |        |        |        |
|                | Minimum                 | ○                     |  |        | 53409  | 65734  | 82167  | 115034 | 143792 | 164334 |        |        |        |        |
|                | Start/End               | ●                     |  |        | 84494  | 103993 | 129991 | 181987 | 227484 | 259981 | 324977 |        |        |        |
|                | Minimum                 | ●                     |  |        | 44594  | 54885  | 68606  | 96049  | 120061 | 137212 | 171516 |        |        |        |
| G10109.0       | Start/End               | ○                     |  | 98519  | 128075 | 157631 | 197039 | 275854 |        |        |        |        |        |        |
|                | Minimum                 | ○                     |  | 51996  | 67595  | 83194  | 103993 | 145590 |        |        |        |        |        |        |
|                | Start/End               | ●                     |  | 85672  | 111374 | 137076 | 171345 | 239882 | 299853 |        |        |        |        |        |
|                | Minimum                 | ●                     |  | 45216  | 58781  | 72345  | 90432  | 126605 | 158256 |        |        |        |        |        |
| G10110.0       | Start/End               | ○                     |  | 121629 | 158117 | 194606 | 243258 |        |        |        |        |        |        |        |
|                | Minimum                 | ○                     |  | 64193  | 83451  | 102709 | 128386 |        |        |        |        |        |        |        |
|                | Start/End               | ●                     |  | 108782 | 141416 | 174051 | 217563 | 304589 |        |        |        |        |        |        |
|                | Minimum                 | ●                     |  | 57413  | 74636  | 91860  | 114825 | 160755 |        |        |        |        |        |        |
| Actuator Model | See Bettis' Definitions | Direction of Rotation | Pressure Torque Output Start/Min./End (Nm) |        |        |        |        |        |        |        |        |        |        |        |
|                |                         |                       | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |
|                |                         |                       | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |        |

- NOTE:
- Standard configuration produces counterclockwise rotation when the outboard side of piston is pressurized. Outboard side of piston equals > torque.
  - Standard configuration produces clockwise rotation when the inboard side of piston is pressurized. Inboard side of piston equals < torque.



# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Double-Acting Actuators

### G-Series (cont.)

| Actuator Model | See Bettis' Definitions | Direction of Rotation | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |     |
|----------------|-------------------------|-----------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
|                |                         |                       | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340 |
|                |                         |                       | Pressure Torque Output Start/Min./End (Nm) |        |        |        |        |        |        |        |        |        |        |     |
| G10112.0       | Start/End               | ○                     | 122602                                     | 175145 | 227689 | 280233 |        |        |        |        |        |        |        |     |
|                | Minimum                 | ○                     | 64706                                      | 92438  | 120169 | 147901 |        |        |        |        |        |        |        |     |
|                | Start/End               | ●                     | 113609                                     | 162298 | 210988 | 259677 | 324597 |        |        |        |        |        |        |     |
|                | Minimum                 | ●                     | 59960                                      | 85657  | 111355 | 137052 | 171315 |        |        |        |        |        |        |     |
| G10114.0       | Start/End               | ○                     | 166875                                     | 238392 | 309910 |        |        |        |        |        |        |        |        |     |
|                | Minimum                 | ○                     | 88073                                      | 125818 | 163564 |        |        |        |        |        |        |        |        |     |
|                | Start/End               | ●                     | 157882                                     | 225545 | 293209 |        |        |        |        |        |        |        |        |     |
|                | Minimum                 | ●                     | 83326                                      | 119038 | 154749 |        |        |        |        |        |        |        |        |     |
| G13108.0       | Start/End               | ○                     |  |        |        |        | 200166 | 280233 | 350291 | 400332 | 500415 | 550457 | 600499 |     |
|                | Minimum                 | ○                     |  |        |        |        | 105643 | 147901 | 184876 | 211287 | 264108 | 290519 | 316930 |     |
|                | Start/End               | ●                     |  |        |        |        | 150125 | 210174 | 262718 | 300249 | 375312 | 412843 | 450374 |     |
|                | Minimum                 | ●                     |  |        |        |        | 79232  | 110925 | 138657 | 158465 | 198081 | 217889 | 237697 |     |
| G13109.0       | Start/End               | ○                     |  |        |        | 202668 | 253335 | 354669 | 443337 | 506671 | 633338 |        |        |     |
|                | Minimum                 | ○                     |  |        |        | 106964 | 133705 | 187187 | 233983 | 267410 | 334262 |        |        |     |
|                | Start/End               | ●                     |  |        |        | 162635 | 203294 | 284611 | 355764 | 406588 | 508234 | 559058 | 609881 |     |
|                | Minimum                 | ●                     |  |        |        | 85835  | 107294 | 150212 | 187764 | 214588 | 268235 | 295058 | 321882 |     |
| G13110.0       | Start/End               | ○                     |  |        | 203294 | 250208 | 312760 | 437864 | 547329 | 625519 |        |        |        |     |
|                | Minimum                 | ○                     |  |        | 107294 | 132054 | 165068 | 231095 | 288868 | 330135 |        |        |        |     |
|                | Start/End               | ●                     |  |        | 170767 | 210174 | 262718 | 367805 | 459757 | 525436 | 656795 |        |        |     |
|                | Minimum                 | ●                     |  |        | 90127  | 110925 | 138657 | 194119 | 242649 | 277314 | 346642 |        |        |     |
| G13111.0       | Start/End               | ○                     |  |        | 245985 | 302751 | 378439 | 529815 | 662269 |        |        |        |        |     |
|                | Minimum                 | ○                     |  |        | 129826 | 159785 | 199732 | 279625 | 349531 |        |        |        |        |     |
|                | Start/End               | ●                     |  |        | 213458 | 262718 | 328398 | 459757 | 574696 | 656795 |        |        |        |     |
|                | Minimum                 | ●                     |  |        | 112659 | 138657 | 173321 | 242649 | 303312 | 346642 |        |        |        |     |
| G13112.0       | Start/End               | ○                     |  | 225187 | 292743 | 360299 | 450374 | 630523 |        |        |        |        |        |     |
|                | Minimum                 | ○                     |  | 118849 | 154503 | 190158 | 237697 | 332776 |        |        |        |        |        |     |
|                | Start/End               | ●                     |  | 200166 | 260216 | 320266 | 400332 | 560465 |        |        |        |        |        |     |
|                | Minimum                 | ●                     |  | 105643 | 137336 | 169029 | 211287 | 295801 |        |        |        |        |        |     |
| G13114.0       | Start/End               | ○                     |  | 306504 | 398456 | 490407 | 613009 |        |        |        |        |        |        |     |
|                | Minimum                 | ○                     |  | 161766 | 210296 | 258826 | 323532 |        |        |        |        |        |        |     |
|                | Start/End               | ●                     |  | 281484 | 365929 | 450374 | 562967 |        |        |        |        |        |        |     |
|                | Minimum                 | ●                     |  | 148561 | 193129 | 237697 | 297122 |        |        |        |        |        |        |     |
| G13116.0       | Start/End               | ○                     | 280233                                     | 400332 | 520432 | 640532 |        |        |        |        |        |        |        |     |
|                | Minimum                 | ○                     | 147901                                     | 211287 | 274672 | 338058 |        |        |        |        |        |        |        |     |
|                | Start/End               | ●                     | 262718                                     | 375312 | 487905 | 600499 |        |        |        |        |        |        |        |     |
|                | Minimum                 | ●                     | 138657                                     | 198081 | 257505 | 316930 |        |        |        |        |        |        |        |     |
| G13118.0       | Start/End               | ○                     | 354669                                     | 506671 | 658672 |        |        |        |        |        |        |        |        |     |
|                | Minimum                 | ○                     | 187187                                     | 267410 | 347632 |        |        |        |        |        |        |        |        |     |
|                | Start/End               | ●                     | 337155                                     | 481650 | 626145 |        |        |        |        |        |        |        |        |     |
|                | Minimum                 | ●                     | 177943                                     | 254204 | 330465 |        |        |        |        |        |        |        |        |     |
| Actuator Model | See Bettis' Definitions | Direction of Rotation | Pressure Torque Output Start/Min./End (Nm) |        |        |        |        |        |        |        |        |        |        |     |
|                |                         |                       | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340 |
|                |                         |                       | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |     |

NOTE: ○ Standard configuration produces counterclockwise rotation when the outboard side of piston is pressurized. Outboard side of piston equals > torque.

● Standard configuration produces clockwise rotation when the inboard side of piston is pressurized. Inboard side of piston equals < torque.



# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |     |      |      |       |      |      |      |      |      |      |      |      |
|----------------|-----------------------------------|--|-----|------|------|-------|------|------|------|------|------|------|------|------|
|                |                                   | 35   | 50  | 65   | 80   | 100   | 140  | 175  | 200  | 250  | 275  | 300  | 340  |      |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |     |      |      |       |      |      |      |      |      |      |      |      |
| G01101.5-SR4   | Start                             | 1312                                       |     |      |      |       |      |      |      |      |      | 995  | 1199 | 1526 |
|                | Min.                              | 645  |     |      |      |       |      |      |      |      |      | 471  | 580  | 753  |
|                | End                               | 1132                                       |     |      |      |       |      |      |      |      |      | 796  | 1000 | 1326 |
| G01101.7-SR4   | Start                             | 1312                                       |     |      |      |       |      |      | 735  | 1019 | 1586 | 1870 | 2154 | 2608 |
|                | Min.                              | 645  |     |      |      |       |      |      | 333  | 484  | 785  | 934  | 1084 | 1324 |
|                | End                               | 1132                                       |     |      |      |       |      |      | 536  | 819  | 1387 | 1670 | 1954 | 2408 |
| G01102.0-SR4   | Start                             | 1312                                       |     |      |      |       |      | 1060 | 1638 | 2051 | 2876 |      |      |      |
|                | Min.                              | 645  |     |      |      |       |      | 506  | 812  | 1030 | 1465 |      |      |      |
|                | End                               | 1132                                       |     |      |      |       |      | 860  | 1438 | 1851 | 2676 |      |      |      |
| G01102.2-SR4   | Start                             | 1312                                       |     |      |      |       | 985  | 1879 | 2661 | 3220 |      |      |      |      |
|                | Min.                              | 645  |     |      |      |       | 466  | 939  | 1352 | 1647 |      |      |      |      |
|                | End                               | 1132                                       |     |      |      |       | 785  | 1679 | 2461 | 3020 |      |      |      |      |
| G01102.5-SR4   | Start                             | 1312                                       |     |      |      | 1060  | 1638 | 2793 |      |      |      |      |      |      |
|                | Min.                              | 645  |     |      |      | 506   | 812  | 1422 |      |      |      |      |      |      |
|                | End                               | 1132                                       |     |      |      | 860   | 1438 | 2594 |      |      |      |      |      |      |
| G01103.0-SR4   | Start                             | 1312                                       |     | 950  | 1610 | 2271  | 3151 |      |      |      |      |      |      |      |
|                | Min.                              | 645  |     | 447  | 797  | 1146  | 1610 |      |      |      |      |      |      |      |
|                | End                               | 1132                                       |     | 750  | 1411 | 12071 | 2951 |      |      |      |      |      |      |      |
| G01103.5-SR4   | Start                             | 1312                                       | 916 | 1844 | 2773 |       |      |      |      |      |      |      |      |      |
|                | Min.                              | 645  | 429 | 921  | 1411 |       |      |      |      |      |      |      |      |      |
|                | End                               | 1132                                       | 716 | 1645 | 2573 |       |      |      |      |      |      |      |      |      |
| G01101.7-SR3   | Start                             | 1536                                       |     |      |      |       |      |      |      | 840  | 1408 | 1692 | 1975 | 2429 |
|                | Min.                              | 746  |     |      |      |       |      |      |      | 369  | 671  | 821  | 972  | 1211 |
|                | End                               | 1293                                       |     |      |      |       |      |      |      | 572  | 1139 | 1423 | 1706 | 2160 |
| G01102.0-SR3   | Start                             | 1536                                       |     |      |      |       |      | 882  | 1459 | 1872 | 2697 |      |      |      |
|                | Min.                              | 746  |     |      |      |       |      | 391  | 698  | 917  | 1353 |      |      |      |
|                | End                               | 1293                                       |     |      |      |       |      | 613  | 1191 | 1603 | 2429 |      |      |      |
| G01102.2-SR3   | Start                             | 1536                                       |     |      |      |       | 806  | 1700 | 2482 | 3041 |      |      |      |      |
|                | Min.                              | 746  |     |      |      |       | 351  | 826  | 1239 | 1534 |      |      |      |      |
|                | End                               | 1293                                       |     |      |      |       | 537  | 1431 | 2214 | 2772 |      |      |      |      |
| G01102.5-SR3   | Start                             | 1536                                       |     |      |      |       | 882  | 1459 | 2615 |      |      |      |      |      |
|                | Min.                              | 746  |     |      |      |       | 391  | 698  | 1309 |      |      |      |      |      |
|                | End                               | 1293                                       |     |      |      |       | 613  | 1191 | 2346 |      |      |      |      |      |
| G01103.0-SR3   | Start                             | 1536                                       |     | 772  | 1432 | 2092  | 2973 |      |      |      |      |      |      |      |
|                | Min.                              | 746  |     | 332  | 683  | 1033  | 1498 |      |      |      |      |      |      |      |
|                | End                               | 1293                                       |     | 503  | 1163 | 1823  | 2704 |      |      |      |      |      |      |      |
| G01103.5-SR3   | Start                             | 1536                                       | 737 | 1666 | 2594 |       |      |      |      |      |      |      |      |      |
|                | Min.                              | 746  | 314 | 808  | 1298 |       |      |      |      |      |      |      |      |      |
|                | End                               | 1293                                       | 468 | 1397 | 2325 |       |      |      |      |      |      |      |      |      |
| G01101.7-SR2   | Start                             | 1754                                       |     |      |      |       |      |      |      |      | 1209 | 1493 | 1776 | 2230 |
|                | Min.                              | 851  |     |      |      |       |      |      |      |      | 553  | 703  | 854  | 1095 |
|                | End                               | 1473                                       |     |      |      |       |      |      |      |      | 898  | 1182 | 1466 | 1919 |
| G01102.0-SR2   | Start                             | 1754                                       |     |      |      |       |      |      | 1261 | 1673 | 2499 |      |      |      |
|                | Min.                              | 851  |     |      |      |       |      |      | 580  | 799  | 1237 |      |      |      |
|                | End                               | 1473                                       |     |      |      |       |      |      | 950  | 1362 | 2188 |      |      |      |
| G01102.2-SR2   | Start                             | 1754                                       |     |      |      |       |      | 1501 | 2284 | 2842 |      |      |      |      |
|                | Min.                              | 851  |     |      |      |       |      | 708  | 1123 | 1418 |      |      |      |      |
|                | End                               | 1473                                       |     |      |      |       |      | 1190 | 1973 | 2532 |      |      |      |      |
| G01102.5-SR2   | Start                             | 1754                                       |     |      |      |       | 1261 | 2416 |      |      |      |      |      |      |
|                | Min.                              | 851  |     |      |      |       | 580  | 1193 |      |      |      |      |      |      |
|                | End                               | 1473                                       |     |      |      |       | 950  | 2105 |      |      |      |      |      |      |
| G01103.0-SR2   | Start                             | 1754                                       |     |      | 1233 | 1893  | 2774 |      |      |      |      |      |      |      |
|                | Min.                              | 851  |     |      | 565  | 916   | 1382 |      |      |      |      |      |      |      |
|                | End                               | 1473                                       |     |      | 922  | 1582  | 2463 |      |      |      |      |      |      |      |
| G01103.5-SR2   | Start                             | 1754                                       |     | 1467 | 2395 |       |      |      |      |      |      |      |      |      |
|                | Min.                              | 851  |     | 690  | 1182 |       |      |      |      |      |      |      |      |      |
|                | End                               | 1473                                       |     | 1156 | 2085 |       |      |      |      |      |      |      |      |      |
| Actuator Model | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |     |      |      |       |      |      |      |      |      |      |      |      |
|                |                                   | 35   | 50  | 65   | 80   | 100   | 140  | 175  | 200  | 250  | 275  | 300  | 340  |      |
|                |                                   | Operating Pressure (Bar)                   |     |      |      |       |      |      |      |      |      |      |      |      |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |
|--------------------------|-----------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|
|                          |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
| G01101.7-SR1             | Start                             | 2087                                       |      |      |      |      |      |      |      | 992  | 1275 | 1559 | 2013 |
|                          | Min.                              | 989  |      |      |      |      |      |      |      | 391  | 545  | 695  | 937  |
|                          | End                               | 1670                                       |      |      |      |      |      |      |      | 530  | 814  | 1098 | 1552 |
| G01102.0-SR1             | Start                             | 2087                                       |      |      |      |      |      | 1043 | 1456 | 2281 |      |      |      |
|                          | Min.                              | 989  |      |      |      |      |      | 419  | 641  | 1079 |      |      |      |
|                          | End                               | 1670                                       |      |      |      |      |      | 582  | 995  | 1820 |      |      |      |
| G01102.2-SR1             | Start                             | 2087                                       |      |      |      |      | 1284 | 2066 | 2625 |      |      |      |      |
|                          | Min.                              | 989  |      |      |      |      | 549  | 965  | 1262 |      |      |      |      |
|                          | End                               | 1670                                       |      |      |      |      | 823  | 1605 | 2164 |      |      |      |      |
| G01102.5-SR1             | Start                             | 2087                                       |      |      |      | 1043 | 2199 |      |      |      |      |      |      |
|                          | Min.                              | 989  |      |      |      | 419  | 1035 |      |      |      |      |      |      |
|                          | End                               | 1670                                       |      |      |      | 582  | 1737 |      |      |      |      |      |      |
| G01103.0-SR1             | Start                             | 2087                                       |      |      | 1676 | 2556 |      |      |      |      |      |      |      |
|                          | Min.                              | 989  |      |      | 757  | 1225 |      |      |      |      |      |      |      |
|                          | End                               | 1670                                       |      |      | 1215 | 2095 |      |      |      |      |      |      |      |
| G01103.5-SR1             | Start                             | 2087                                       | 1250 | 2178 |      |      |      |      |      |      |      |      |      |
|                          | Min.                              | 989  | 531  | 1024 |      |      |      |      |      |      |      |      |      |
|                          | End                               | 1670                                       | 788  | 1717 |      |      |      |      |      |      |      |      |      |
| G2101.7-SR6              | Start                             | 1463                                       |      |      |      |      | 1142 | 1485 | 2172 | 2515 | 2859 | 3408 |      |
|                          | Min.                              | 685  |      |      |      |      | 504  | 687  | 1052 | 1234 | 1415 | 1705 |      |
|                          | End                               | 1142                                       |      |      |      |      | 787  | 1131 | 1818 | 2161 | 2505 | 3054 |      |
| G2102.0-SR6              | Start                             | 1463                                       |      |      |      | 1535 | 2234 | 2734 | 3733 | 4233 | 4732 | 5531 |      |
|                          | Min.                              | 685  |      |      |      | 713  | 1085 | 1349 | 1877 | 2140 | 2404 | 2826 |      |
|                          | End                               | 1142                                       |      |      |      | 1181 | 1880 | 2380 | 3379 | 3878 | 4378 | 5177 |      |
| G2102.2-SR6              | Start                             | 1463                                       |      |      |      | 1444 | 2526 | 3473 | 4149 | 5502 |      |      |      |
|                          | Min.                              | 685  |      |      |      | 665  | 1240 | 1739 | 2096 | 2811 |      |      |      |
|                          | End                               | 1142                                       |      |      |      | 1089 | 2172 | 3119 | 3795 | 5148 |      |      |      |
| G2102.5-SR6              | Start                             | 1463                                       |      |      | 1535 | 2234 | 3633 | 4857 |      |      |      |      |      |
|                          | Min.                              | 685  |      |      | 713  | 1085 | 1824 | 2470 |      |      |      |      |      |
|                          | End                               | 1142                                       |      |      | 1181 | 1880 | 3279 | 4503 |      |      |      |      |      |
| G2103.0-SR6              | Start                             | 1463                                       | 1402 | 2201 | 3000 | 4066 |      |      |      |      |      |      |      |
|                          | Min.                              | 685  | 643  | 1067 | 1490 | 2053 |      |      |      |      |      |      |      |
|                          | End                               | 1142                                       | 1048 | 1847 | 2646 | 3712 |      |      |      |      |      |      |      |
| G2103.5-SR6              | Start                             | 1463                                       | 1360 | 2484 | 3608 | 4732 |      |      |      |      |      |      |      |
|                          | Min.                              | 685  | 621  | 1218 | 1811 | 2404 |      |      |      |      |      |      |      |
|                          | End                               | 1142                                       | 1006 | 2130 | 3254 | 4378 |      |      |      |      |      |      |      |
| G2104.0-SR6              | Start                             | 1463                                       | 2234 | 3733 | 5232 |      |      |      |      |      |      |      |      |
|                          | Min.                              | 685  | 1085 | 1877 | 2668 |      |      |      |      |      |      |      |      |
|                          | End                               | 1142                                       | 1880 | 3379 | 4877 |      |      |      |      |      |      |      |      |
| G2101.7-SR5              | Start                             | 1855                                       |      |      |      |      |      |      |      | 1748 | 2092 | 2435 | 2985 |
|                          | Min.                              | 891  |      |      |      |      |      |      |      | 824  | 1007 | 1189 | 1479 |
|                          | End                               | 1525                                       |      |      |      |      |      |      |      | 1384 | 1728 | 2071 | 2621 |
| G2102.0-SR5              | Start                             | 1855                                       |      |      |      |      | 1111 | 1811 | 2310 | 3309 | 3809 | 4309 | 5108 |
|                          | Min.                              | 891  |      |      |      |      | 485  | 857  | 1123 | 1651 | 1914 | 2178 | 2600 |
|                          | End                               | 1525                                       |      |      |      |      | 747  | 1447 | 1946 | 2945 | 3445 | 3944 | 4744 |
| G2102.2-SR5              | Start                             | 1855                                       |      |      |      |      | 2102 | 3049 | 3726 | 5079 |      |      |      |
|                          | Min.                              | 891  |      |      |      |      | 1012 | 1513 | 1870 | 2584 |      |      |      |
|                          | End                               | 1525                                       |      |      |      |      | 1738 | 2685 | 3362 | 4715 |      |      |      |
| G2102.5-SR5              | Start                             | 1855                                       |      |      | 1111 | 1811 | 3210 | 4433 |      |      |      |      |      |
|                          | Min.                              | 891  |      |      | 485  | 857  | 1598 | 2244 |      |      |      |      |      |
|                          | End                               | 1525                                       |      |      | 747  | 1447 | 2845 | 4069 |      |      |      |      |      |
| G2103.0-SR5              | Start                             | 1855                                       |      | 1778 | 2577 | 3643 |      |      |      |      |      |      |      |
|                          | Min.                              | 891  |      | 839  | 1264 | 1826 |      |      |      |      |      |      |      |
|                          | End                               | 1525                                       |      | 1413 | 2213 | 3278 |      |      |      |      |      |      |      |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |
|                          |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
| Operating Pressure (Bar) |                                   |  |      |      |      |      |      |      |      |      |      |      |      |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |
|----------------|-----------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|
|                |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |
| G2103.5-SR5    | Start                             | 1855                                       |      | 2061 | 3185 | 4309 |      |      |      |      |      |      |      |
|                | Min.                              | 891  |      | 990  | 1585 | 2178 |      |      |      |      |      |      |      |
|                | End                               | 1525                                       |      | 1697 | 2820 | 3944 |      |      |      |      |      |      |      |
| G2104.0-SR5    | Start                             | 1855                                       | 1811 | 3309 | 4808 |      |      |      |      |      |      |      |      |
|                | Min.                              | 891  | 857  | 1651 | 2442 |      |      |      |      |      |      |      |      |
|                | End                               | 1525                                       | 1447 | 2945 | 4444 |      |      |      |      |      |      |      |      |
| G2101.7-SR4    | Start                             | 2336                                       |      |      |      |      |      |      |      | 1322 | 1665 | 2009 | 2558 |
|                | Min.                              | 1119                                       |      |      |      |      |      |      |      | 567  | 749  | 932  | 1224 |
|                | End                               | 1912                                       |      |      |      |      |      |      |      | 852  | 1195 | 1539 | 2088 |
| G2102.0-SR4    | Start                             | 2336                                       |      |      |      |      |      | 1384 | 1884 | 2883 | 3382 | 3882 | 4681 |
|                | Min.                              | 1119                                       |      |      |      |      |      | 600  | 865  | 1396 | 1661 | 1925 | 2347 |
|                | End                               | 1912                                       |      |      |      |      |      | 914  | 1414 | 2413 | 2913 | 3412 | 4211 |
| G2102.2-SR4    | Start                             | 2336                                       |      |      |      |      | 1676 | 2623 | 3299 | 4652 |      |      |      |
|                | Min.                              | 1119                                       |      |      |      |      | 755  | 1258 | 1617 | 2331 |      |      |      |
|                | End                               | 1912                                       |      |      |      |      | 1206 | 2153 | 2829 | 4182 |      |      |      |
| G2102.5-SR4    | Start                             | 2336                                       |      |      |      | 1384 | 2783 | 4007 |      |      |      |      |      |
|                | Min.                              | 1119                                       |      |      |      | 600  | 1343 | 1991 |      |      |      |      |      |
|                | End                               | 1912                                       |      |      |      | 914  | 2313 | 3537 |      |      |      |      |      |
| G2103.0-SR4    | Start                             | 2336                                       |      | 1351 | 2150 | 3216 |      |      |      |      |      |      |      |
|                | Min.                              | 1119                                       |      | 582  | 1007 | 1573 |      |      |      |      |      |      |      |
|                | End                               | 1912                                       |      | 881  | 1680 | 2746 |      |      |      |      |      |      |      |
| G2103.5-SR4    | Start                             | 2336                                       |      | 1634 | 2758 | 3882 |      |      |      |      |      |      |      |
|                | Min.                              | 1119                                       |      | 733  | 1330 | 1925 |      |      |      |      |      |      |      |
|                | End                               | 1912                                       |      | 1164 | 2288 | 3412 |      |      |      |      |      |      |      |
| G2104.0-SR4    | Start                             | 2336                                       | 1384 | 2883 | 4381 |      |      |      |      |      |      |      |      |
|                | Min.                              | 1119                                       | 600  | 1396 | 2188 |      |      |      |      |      |      |      |      |
|                | End                               | 1912                                       | 914  | 2413 | 3912 |      |      |      |      |      |      |      |      |
| G2101.7-SR3    | Start                             | 2728                                       |      |      |      |      |      |      |      |      | 1356 | 1700 | 2249 |
|                | Min.                              | 1295                                       |      |      |      |      |      |      |      |      | 547  | 732  | 1024 |
|                | End                               | 2191                                       |      |      |      |      |      |      |      |      | 763  | 1107 | 1656 |
| G2102.0-SR3    | Start                             | 2728                                       |      |      |      |      |      |      | 1575 | 2574 | 3073 | 3573 | 4372 |
|                | Min.                              | 1295                                       |      |      |      |      |      |      | 665  | 1197 | 1462 | 1728 | 2151 |
|                | End                               | 2191                                       |      |      |      |      |      |      | 982  | 1981 | 2480 | 2980 | 3779 |
| G2102.2-SR3    | Start                             | 2728                                       |      |      |      | 1367 | 2314 | 2990 | 4343 |      |      |      |      |
|                | Min.                              | 1295                                       |      |      |      | 552  | 1058 | 1418 | 2136 |      |      |      |      |
|                | End                               | 2191                                       |      |      |      | 774  | 1721 | 2397 | 3750 |      |      |      |      |
| G2102.5-SR3    | Start                             | 2728                                       |      |      |      | 1075 | 2474 | 3698 |      |      |      |      |      |
|                | Min.                              | 1295                                       |      |      |      | 393  | 1143 | 1794 |      |      |      |      |      |
|                | End                               | 2191                                       |      |      |      | 482  | 1881 | 3105 |      |      |      |      |      |
| G2103.0-SR3    | Start                             | 2728                                       |      |      | 1841 | 2907 |      |      |      |      |      |      |      |
|                | Min.                              | 1295                                       |      |      | 807  | 1374 |      |      |      |      |      |      |      |
|                | End                               | 2191                                       |      |      | 1248 | 2314 |      |      |      |      |      |      |      |
| G2103.5-SR3    | Start                             | 2728                                       |      | 1325 | 2449 | 3573 |      |      |      |      |      |      |      |
|                | Min.                              | 1295                                       |      | 530  | 1130 | 1728 |      |      |      |      |      |      |      |
|                | End                               | 2191                                       |      | 732  | 1856 | 2980 |      |      |      |      |      |      |      |
| G2104.0-SR3    | Start                             | 2728                                       | 1075 | 2574 | 4073 |      |      |      |      |      |      |      |      |
|                | Min.                              | 1295                                       | 393  | 1197 | 1993 |      |      |      |      |      |      |      |      |
|                | End                               | 2191                                       | 482  | 1981 | 3479 |      |      |      |      |      |      |      |      |
| G2101.7-SR2    | Start                             | 3030                                       |      |      |      |      |      |      |      |      |      | 1364 | 1914 |
|                | Min.                              | 1456                                       |      |      |      |      |      |      |      |      |      | 551  | 846  |
|                | End                               | 2494                                       |      |      |      |      |      |      |      |      |      | 772  | 1321 |
| G2102.0-SR2    | Start                             | 3030                                       |      |      |      |      |      |      | 1240 | 2239 | 2738 | 3238 | 4037 |
|                | Min.                              | 1456                                       |      |      |      |      |      |      | 484  | 1019 | 1284 | 1550 | 1974 |
|                | End                               | 2494                                       |      |      |      |      |      |      | 647  | 1646 | 2146 | 2645 | 3445 |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |
| Actuator Model | Spring Torque Start/Min./End (Nm) | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
|                |                                   | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |
|----------------|-----------------------------------|--|------|------|------|------|------|------|------|------|------|------|------|
|                |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |
| G2102.2-SR2    | Start                             | 3030                                       |      |      |      |      |      |      | 1979 | 2655 | 4008 |      |      |
|                | Min.                              | 1456                                       |      |      |      |      |      |      | 880  | 1240 | 1959 |      |      |
|                | End                               | 2494                                       |      |      |      |      |      |      | 1386 | 2062 | 3415 |      |      |
| G2102.5-SR2    | Start                             | 3030                                       |      |      |      |      |      | 2139 | 3363 |      |      |      |      |
|                | Min.                              | 1456                                       |      |      |      |      |      | 965  | 1616 |      |      |      |      |
|                | End                               | 2494                                       |      |      |      |      |      | 1546 | 2770 |      |      |      |      |
| G2103.0-SR2    | Start                             | 3030                                       |      |      |      | 1506 | 2572 |      |      |      |      |      |      |
|                | Min.                              | 1456                                       |      |      |      | 628  | 1196 |      |      |      |      |      |      |
|                | End                               | 2494                                       |      |      |      | 914  | 1979 |      |      |      |      |      |      |
| G2103.5-SR2    | Start                             | 3030                                       |      |      | 2114 | 3238 |      |      |      |      |      |      |      |
|                | Min.                              | 1456                                       |      |      | 952  | 1550 |      |      |      |      |      |      |      |
|                | End                               | 2494                                       |      |      | 1521 | 2645 |      |      |      |      |      |      |      |
| G2104.0-SR2    | Start                             | 3030                                       |      | 2239 | 3737 |      |      |      |      |      |      |      |      |
|                | Min.                              | 1456                                       |      | 1019 | 1815 |      |      |      |      |      |      |      |      |
|                | End                               | 2494                                       |      | 1646 | 3145 |      |      |      |      |      |      |      |      |
| G2102.0-SR1    | Start                             | 3502                                       |      |      |      |      |      |      |      | 1873 | 2372 | 2872 | 3671 |
|                | Min.                              | 1666                                       |      |      |      |      |      |      |      | 778  | 1045 | 1310 | 1735 |
|                | End                               | 2825                                       |      |      |      |      |      |      |      | 1124 | 1624 | 2123 | 2923 |
| G2102.2-SR1    | Start                             | 3502                                       |      |      |      |      |      | 1613 | 2289 | 3642 |      |      |      |
|                | Min.                              | 1666                                       |      |      |      |      |      | 636  | 1000 | 1719 |      |      |      |
|                | End                               | 2825                                       |      |      |      |      |      | 864  | 1541 | 2894 |      |      |      |
| G2102.5-SR1    | Start                             | 3502                                       |      |      |      |      |      | 1773 | 2997 |      |      |      |      |
|                | Min.                              | 1666                                       |      |      |      |      |      | 723  | 1376 |      |      |      |      |
|                | End                               | 2825                                       |      |      |      |      |      | 1024 | 2248 |      |      |      |      |
| G2103.0-SR1    | Start                             | 3502                                       |      |      |      |      | 2206 |      |      |      |      |      |      |
|                | Min.                              | 1666                                       |      |      |      |      | 956  |      |      |      |      |      |      |
|                | End                               | 2825                                       |      |      |      |      | 1457 |      |      |      |      |      |      |
| G2103.5-SR1    | Start                             | 3502                                       |      |      |      | 2872 |      |      |      |      |      |      |      |
|                | Min.                              | 1666                                       |      |      |      | 1310 |      |      |      |      |      |      |      |
|                | End                               | 2825                                       |      |      |      | 2123 |      |      |      |      |      |      |      |
| G2104.0-SR1    | Start                             | 3502                                       |      | 1873 | 3371 |      |      |      |      |      |      |      |      |
|                | Min.                              | 1666                                       |      | 778  | 1576 |      |      |      |      |      |      |      |      |
|                | End                               | 2825                                       |      | 1124 | 2623 |      |      |      |      |      |      |      |      |
| G3102.0-SR4    | Start                             | 4132                                       |      |      |      |      |      |      |      |      |      | 2362 | 3152 |
|                | Min.                              | 1935                                       |      |      |      |      |      |      |      |      |      | 963  | 1387 |
|                | End                               | 3228                                       |      |      |      |      |      |      |      |      |      | 1362 | 2153 |
| G3102.2-SR4    | Start                             | 4132                                       |      |      |      |      |      |      | 2108 | 3527 | 4237 | 4946 | 6082 |
|                | Min.                              | 1935                                       |      |      |      |      |      |      | 825  | 1586 | 1963 | 2340 | 2943 |
|                | End                               | 3228                                       |      |      |      |      |      |      | 1109 | 2528 | 3238 | 3947 | 5082 |
| G3102.5-SR4    | Start                             | 4132                                       |      |      |      |      |      |      | 3084 | 4034 | 5935 | 6885 | 7835 |
|                | Min.                              | 1935                                       |      |      |      |      |      |      | 1350 | 1855 | 2865 | 3370 | 3871 |
|                | End                               | 3228                                       |      |      |      |      |      |      | 2085 | 3035 | 4935 | 5886 | 6836 |
| G3103.0-SR4    | Start                             | 4132                                       |      |      |      |      | 2463 | 4875 | 6986 |      |      |      |      |
|                | Min.                              | 1935                                       |      |      |      |      | 1018 | 2302 | 3423 |      |      |      |      |
|                | End                               | 3228                                       |      |      |      |      | 1464 | 3876 | 5987 |      |      |      |      |
| G3103.5-SR4    | Start                             | 4132                                       |      |      |      | 3365 | 5098 |      |      |      |      |      |      |
|                | Min.                              | 1935                                       |      |      |      | 1500 | 2421 |      |      |      |      |      |      |
|                | End                               | 3228                                       |      |      |      | 2366 | 4099 |      |      |      |      |      |      |
| G3104.0-SR4    | Start                             | 4132                                       |      | 2286 | 4042 | 5798 | 8139 |      |      |      |      |      |      |
|                | Min.                              | 1935                                       |      | 922  | 1859 | 2793 | 4032 |      |      |      |      |      |      |
|                | End                               | 3228                                       |      | 1286 | 3042 | 4798 | 7140 |      |      |      |      |      |      |
| G3104.5-SR4    | Start                             | 4132                                       | 1736 | 4009 | 6282 |      |      |      |      |      |      |      |      |
|                | Min.                              | 1935                                       | 620  | 1842 | 3050 |      |      |      |      |      |      |      |      |
|                | End                               | 3228                                       | 737  | 3009 | 5282 |      |      |      |      |      |      |      |      |
| G3102.2-SR3    | Start                             | 4760                                       |      |      |      |      |      |      |      | 3051 | 3761 | 4470 | 5605 |
|                | Min.                              | 2212                                       |      |      |      |      |      |      |      | 1267 | 1647 | 2024 | 2627 |
|                | End                               | 3659                                       |      |      |      |      |      |      |      | 1834 | 2543 | 3253 | 4388 |
| Actuator Model | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |      |      |      |      |
|                |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250  | 275  | 300  | 340  |
|                |                                   | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |      |      |      |      |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |       |       |       |       |
|----------------|-----------------------------------|--|------|------|------|------|------|------|------|-------|-------|-------|-------|
|                |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250   | 275   | 300   | 340   |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |       |       |       |       |
| G3102.5-SR3    | Start                             | 4760                                       |      |      |      |      |      | 2608 | 3558 | 5459  | 6409  | 7359  |       |
|                | Min.                              | 2212                                       |      |      |      |      |      | 1027 | 1539 | 2549  | 3054  | 3559  |       |
|                | End                               | 3659                                       |      |      |      |      |      | 1390 | 2340 | 4241  | 5191  | 6141  |       |
| G3103.0-SR3    | Start                             | 4760                                       |      |      |      |      | 4399 | 6510 |      |       |       |       |       |
|                | Min.                              | 2212                                       |      |      |      |      | 1986 | 3108 |      |       |       |       |       |
|                | End                               | 3659                                       |      |      |      |      | 3182 | 5292 |      |       |       |       |       |
| G3103.5-SR3    | Start                             | 4760                                       |      |      | 2889 | 4622 |      |      |      |       |       |       |       |
|                | Min.                              | 2212                                       |      |      | 1179 | 2105 |      |      |      |       |       |       |       |
|                | End                               | 3659                                       |      |      | 1671 | 3405 |      |      |      |       |       |       |       |
| G3104.0-SR3    | Start                             | 4760                                       |      | 3566 | 5322 | 7663 |      |      |      |       |       |       |       |
|                | Min.                              | 2212                                       |      | 1543 | 2476 | 3721 |      |      |      |       |       |       |       |
|                | End                               | 3659                                       |      | 2348 | 4104 | 6445 |      |      |      |       |       |       |       |
| G3104.5-SR3    | Start                             | 4760                                       | 3533 | 5806 |      |      |      |      |      |       |       |       |       |
|                | Min.                              | 2212                                       | 1526 | 2734 |      |      |      |      |      |       |       |       |       |
|                | End                               | 3659                                       | 2315 | 4588 |      |      |      |      |      |       |       |       |       |
| G3102.2-SR2    | Start                             | 5539                                       |      |      |      |      |      |      |      | 3187  | 3896  | 5031  |       |
|                | Min.                              | 2550                                       |      |      |      |      |      |      |      | 1250  | 1635  | 2239  |       |
|                | End                               | 4178                                       |      |      |      |      |      |      |      | 1683  | 2392  | 3528  |       |
| G3102.5-SR2    | Start                             | 5539                                       |      |      |      |      |      |      | 2984 | 4884  | 5835  | 6785  |       |
|                | Min.                              | 2550                                       |      |      |      |      |      |      | 1140 | 2161  | 2666  | 3171  |       |
|                | End                               | 4178                                       |      |      |      |      |      |      | 1480 | 3381  | 4331  | 5281  |       |
| G3103.0-SR2    | Start                             | 5539                                       |      |      |      |      | 3825 | 5936 |      |       |       |       |       |
|                | Min.                              | 2550                                       |      |      |      |      | 1596 | 2720 |      |       |       |       |       |
|                | End                               | 4178                                       |      |      |      |      | 2321 | 4432 |      |       |       |       |       |
| G3103.5-SR2    | Start                             | 5539                                       |      |      |      | 4048 |      |      |      |       |       |       |       |
|                | Min.                              | 2550                                       |      |      |      | 1717 |      |      |      |       |       |       |       |
|                | End                               | 4178                                       |      |      |      | 2544 |      |      |      |       |       |       |       |
| G3104.0-SR2    | Start                             | 5539                                       |      | 2992 | 4748 | 7089 |      |      |      |       |       |       |       |
|                | Min.                              | 2550                                       |      | 1144 | 2089 | 3333 |      |      |      |       |       |       |       |
|                | End                               | 4178                                       |      | 1488 | 3244 | 5585 |      |      |      |       |       |       |       |
| G3104.5-SR2    | Start                             | 5539                                       | 2959 | 5232 |      |      |      |      |      |       |       |       |       |
|                | Min.                              | 2550                                       | 1126 | 2346 |      |      |      |      |      |       |       |       |       |
|                | End                               | 4178                                       | 1455 | 3728 |      |      |      |      |      |       |       |       |       |
| G3102.2-SR1    | Start                             | 6107                                       |      |      |      |      |      |      |      | 2531  | 3241  | 4376  |       |
|                | Min.                              | 2860                                       |      |      |      |      |      |      |      | 897   | 1288  | 1899  |       |
|                | End                               | 4771                                       |      |      |      |      |      |      |      | 1055  | 1764  | 2900  |       |
| G3102.5-SR1    | Start                             | 6107                                       |      |      |      |      |      |      | 2328 | 4229  | 5179  | 6129  |       |
|                | Min.                              | 2860                                       |      |      |      |      |      |      | 782  | 1821  | 2326  | 2831  |       |
|                | End                               | 4771                                       |      |      |      |      |      |      | 852  | 2753  | 3703  | 4653  |       |
| G3103.0-SR1    | Start                             | 6107                                       |      |      |      |      | 3170 | 5281 |      |       |       |       |       |
|                | Min.                              | 2860                                       |      |      |      |      | 1249 | 2380 |      |       |       |       |       |
|                | End                               | 4771                                       |      |      |      |      | 1694 | 3804 |      |       |       |       |       |
| G3103.5-SR1    | Start                             | 6107                                       |      |      |      | 3393 |      |      |      |       |       |       |       |
|                | Min.                              | 2860                                       |      |      |      | 1370 |      |      |      |       |       |       |       |
|                | End                               | 4771                                       |      |      |      | 1917 |      |      |      |       |       |       |       |
| G3104.0-SR1    | Start                             | 6107                                       |      |      | 4092 | 6433 |      |      |      |       |       |       |       |
|                | Min.                              | 2860                                       |      |      | 1748 | 2993 |      |      |      |       |       |       |       |
|                | End                               | 4771                                       |      |      | 2616 | 4957 |      |      |      |       |       |       |       |
| G3104.5-SR1    | Start                             | 6107                                       | 2303 | 4576 |      |      |      |      |      |       |       |       |       |
|                | Min.                              | 2860                                       | 767  | 2005 |      |      |      |      |      |       |       |       |       |
|                | End                               | 4771                                       | 827  | 3100 |      |      |      |      |      |       |       |       |       |
| G4102.5-SR4    | Start                             | 7772                                       |      |      |      |      |      |      |      |       | 4644  | 5629  | 7204  |
|                | Min.                              | 3502                                       |      |      |      |      |      |      |      |       | 1754  | 2288  | 3134  |
|                | End                               | 5597                                       |      |      |      |      |      |      |      |       | 2241  | 3226  | 4801  |
| G4103.0-SR4    | Start                             | 7772                                       |      |      |      |      |      | 5444 | 7106 | 10429 | 12091 | 13752 | 16410 |
|                | Min.                              | 3502                                       |      |      |      |      |      | 2188 | 3082 | 4848  | 5731  | 6614  | 8027  |
|                | End                               | 5597                                       |      |      |      |      |      | 3041 | 4703 | 8026  | 9687  | 11349 | 14007 |
| Actuator Model | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |      |      |      |      |      |      |      |       |       |       |       |
|                |                                   | 35   | 50   | 65   | 80   | 100  | 140  | 175  | 200  | 250   | 275   | 300   | 340   |
|                |                                   | Operating Pressure (Bar)                   |      |      |      |      |      |      |      |       |       |       |       |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |      |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-----------------------------------|--|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                          |                                   | 35   | 50   | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
| G4103.5-SR4              | Start                             | 7772                                       |      |       |       | 3660  | 7598  | 11044 | 13506 |       |       |       |       |
|                          | Min.                              | 3502                                       |      |       |       | 1195  | 3344  | 5175  | 6483  |       |       |       |       |
|                          | End                               | 5597                                       |      |       |       | 1256  | 5195  | 8641  | 11102 |       |       |       |       |
| G4104.0-SR4              | Start                             | 7772                                       |      |       | 4644  | 7352  | 12767 | 17506 |       |       |       |       |       |
|                          | Min.                              | 3502                                       |      |       | 1754  | 3213  | 6091  | 8605  |       |       |       |       |       |
|                          | End                               | 5597                                       |      |       | 2241  | 4949  | 10364 | 15102 |       |       |       |       |       |
| G4104.5-SR4              | Start                             | 7772                                       |      | 5334  | 7992  | 11537 |       |       |       |       |       |       |       |
|                          | Min.                              | 3502                                       |      | 2128  | 3553  | 5437  |       |       |       |       |       |       |       |
|                          | End                               | 5597                                       |      | 2930  | 5589  | 9133  |       |       |       |       |       |       |       |
| G4105.0-SR4              | Start                             | 7772                                       | 5014 | 8374  | 11734 | 16214 |       |       |       |       |       |       |       |
|                          | Min.                              | 3502                                       | 1954 | 3756  | 5542  | 7923  |       |       |       |       |       |       |       |
|                          | End                               | 5597                                       | 2610 | 5970  | 9330  | 13810 |       |       |       |       |       |       |       |
| G4106.0-SR4              | Start                             | 7772                                       | 5444 | 10429 | 15414 |       |       |       |       |       |       |       |       |
|                          | Min.                              | 3502                                       | 2188 | 4848  | 7497  |       |       |       |       |       |       |       |       |
|                          | End                               | 5597                                       | 3041 | 8026  | 13010 |       |       |       |       |       |       |       |       |
| G4103.0-SR3              | Start                             | 9384                                       |      |       |       |       |       | 5954  | 9277  | 10939 | 12600 | 15259 |       |
|                          | Min.                              | 4194                                       |      |       |       |       |       | 2263  | 4054  | 4937  | 5820  | 7233  |       |
|                          | End                               | 6639                                       |      |       |       |       |       | 2921  | 6244  | 7905  | 9567  | 12225 |       |
| G4103.5-SR3              | Start                             | 9384                                       |      |       |       |       | 6446  | 9893  | 12354 |       |       |       |       |
|                          | Min.                              | 4194                                       |      |       |       |       | 2531  | 4381  | 5689  |       |       |       |       |
|                          | End                               | 6639                                       |      |       |       |       | 3413  | 6859  | 9321  |       |       |       |       |
| G4104.0-SR3              | Start                             | 9384                                       |      |       |       | 6200  | 11616 | 16354 |       |       |       |       |       |
|                          | Min.                              | 4194                                       |      |       |       | 2397  | 5297  | 7815  |       |       |       |       |       |
|                          | End                               | 6639                                       |      |       |       | 3167  | 8582  | 13321 |       |       |       |       |       |
| G4104.5-SR3              | Start                             | 9384                                       |      |       | 6743  | 10263 |       |       |       |       |       |       |       |
|                          | Min.                              | 4194                                       |      |       | 2744  | 4643  |       |       |       |       |       |       |       |
|                          | End                               | 6639                                       |      |       | 3807  | 7352  |       |       |       |       |       |       |       |
| G4105.0-SR3              | Start                             | 9384                                       | 3862 | 7222  | 10582 | 15062 |       |       |       |       |       |       |       |
|                          | Min.                              | 4194                                       | 829  | 2951  | 4747  | 7128  |       |       |       |       |       |       |       |
|                          | End                               | 6639                                       | 829  | 4189  | 7549  | 12029 |       |       |       |       |       |       |       |
| G4106.0-SR3              | Start                             | 9384                                       | 4293 | 9277  | 14262 |       |       |       |       |       |       |       |       |
|                          | Min.                              | 4194                                       | 1259 | 4054  | 6703  |       |       |       |       |       |       |       |       |
|                          | End                               | 6639                                       | 1259 | 6244  | 11229 |       |       |       |       |       |       |       |       |
| G4103.0-SR2              | Start                             | 11116                                      |      |       |       |       |       | 4623  | 7946  | 9607  | 11269 | 13927 |       |
|                          | Min.                              | 4962                                       |      |       |       |       |       | 1006  | 3158  | 4060  | 4944  | 6357  |       |
|                          | End                               | 7844                                       |      |       |       |       |       | 1006  | 4329  | 5990  | 7652  | 10310 |       |
| G4103.5-SR2              | Start                             | 11116                                      |      |       |       |       | 5115  | 8561  | 11023 |       |       |       |       |
|                          | Min.                              | 4962                                       |      |       |       |       | 1498  | 3492  | 4813  |       |       |       |       |
|                          | End                               | 7844                                       |      |       |       |       | 1498  | 4944  | 7406  |       |       |       |       |
| G4104.0-SR2              | Start                             | 11116                                      |      |       |       | 4869  | 10284 | 15023 |       |       |       |       |       |
|                          | Min.                              | 4962                                       |      |       |       | 1252  | 4421  | 6939  |       |       |       |       |       |
|                          | End                               | 7844                                       |      |       |       | 1252  | 6667  | 11406 |       |       |       |       |       |
| G4104.5-SR2              | Start                             | 11116                                      |      |       | 5509  | 9053  |       |       |       |       |       |       |       |
|                          | Min.                              | 4962                                       |      |       | 1799  | 3759  |       |       |       |       |       |       |       |
|                          | End                               | 7844                                       |      |       | 1892  | 5436  |       |       |       |       |       |       |       |
| G4105.0-SR2              | Start                             | 11116                                      |      | 5890  | 9250  | 13730 |       |       |       |       |       |       |       |
|                          | Min.                              | 4962                                       |      | 2023  | 3866  | 6252  |       |       |       |       |       |       |       |
|                          | End                               | 7844                                       |      | 2273  | 5633  | 10113 |       |       |       |       |       |       |       |
| G4106.0-SR2              | Start                             | 11116                                      | 7946 | 12930 |       |       |       |       |       |       |       |       |       |
|                          | Min.                              | 4962                                       | 3158 | 5827  |       |       |       |       |       |       |       |       |       |
|                          | End                               | 7844                                       | 4329 | 9313  |       |       |       |       |       |       |       |       |       |
| G4103.0-SR1              | Start                             | 12698                                      |      |       |       |       |       |       |       | 6367  | 8029  | 9690  | 12349 |
|                          | Min.                              | 5759                                       |      |       |       |       |       |       |       | 2231  | 3149  | 4051  | 5469  |
|                          | End                               | 9272                                       |      |       |       |       |       |       |       | 2581  | 4242  | 5904  | 8562  |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |      |       |       |       |       |       |       |       |       |       |       |
|                          |                                   | 35   | 50   | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
| Operating Pressure (Bar) |                                   |  |      |       |       |       |       |       |       |       |       |       |       |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |       |       |       |       |       |       |       |       |       |       |       |  |
|--------------------------|-----------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|
|                          |                                   | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |  |
| G4103.5-SR1              | Start                             | 12698                                      |       |       |       |       |       |       | 6983  | 9444  |       |       |       |  |
|                          | Min.                              | 5759                                       |       |       |       |       |       |       | 2577  | 3917  |       |       |       |  |
|                          | End                               | 9272                                       |       |       |       |       |       |       | 3196  | 5658  |       |       |       |  |
| G4104.0-SR1              | Start                             | 12698                                      |       |       |       |       |       | 8706  | 13444 |       |       |       |       |  |
|                          | Min.                              | 5759                                       |       |       |       |       |       | 3516  | 6051  |       |       |       |       |  |
|                          | End                               | 9272                                       |       |       |       |       |       | 4919  | 9658  |       |       |       |       |  |
| G4104.5-SR1              | Start                             | 12698                                      |       |       |       | 7475  |       |       |       |       |       |       |       |  |
|                          | Min.                              | 5759                                       |       |       |       | 2848  |       |       |       |       |       |       |       |  |
|                          | End                               | 9272                                       |       |       |       | 3688  |       |       |       |       |       |       |       |  |
| G4105.0-SR1              | Start                             | 12698                                      |       |       | 7672  | 12152 |       |       |       |       |       |       |       |  |
|                          | Min.                              | 5759                                       |       |       | 2955  | 5364  |       |       |       |       |       |       |       |  |
|                          | End                               | 9272                                       |       |       | 3885  | 8365  |       |       |       |       |       |       |       |  |
| G4106.0-SR1              | Start                             | 12698                                      |       | 11352 |       |       |       |       |       |       |       |       |       |  |
|                          | Min.                              | 5759                                       |       | 4939  |       |       |       |       |       |       |       |       |       |  |
|                          | End                               | 9272                                       |       | 7565  |       |       |       |       |       |       |       |       |       |  |
| G5103.5-SR4              | Start                             | 17372                                      |       |       |       |       |       |       |       | 14120 | 16748 | 19376 | 23581 |  |
|                          | Min.                              | 7392                                       |       |       |       |       |       |       |       | 5416  | 6843  | 8263  | 10498 |  |
|                          | End                               | 11002                                      |       |       |       |       |       |       |       | 7080  | 9708  | 12336 | 16541 |  |
| G5104.0-SR4              | Start                             | 17372                                      |       |       |       |       |       | 14598 | 18421 | 26066 | 29888 | 33711 | 39827 |  |
|                          | Min.                              | 7392                                       |       |       |       |       |       | 5676  | 7751  | 11819 | 13850 | 15882 | 19132 |  |
|                          | End                               | 11002                                      |       |       |       |       |       | 7558  | 11380 | 19025 | 22848 | 26671 | 32787 |  |
| G5104.5-SR4              | Start                             | 17372                                      |       |       |       |       |       | 16828 | 24075 | 29251 | 39604 |       |       |  |
|                          | Min.                              | 7392                                       |       |       |       |       |       | 6886  | 10761 | 13512 | 19014 |       |       |  |
|                          | End                               | 11002                                      |       |       |       |       |       | 9787  | 17034 | 22211 | 32564 |       |       |  |
| G5105.0-SR4              | Start                             | 17372                                      |       |       |       | 14598 | 25301 | 34667 | 41356 |       |       |       |       |  |
|                          | Min.                              | 7392                                       |       |       |       | 5676  | 11412 | 16390 | 19945 |       |       |       |       |  |
|                          | End                               | 11002                                      |       |       |       | 7558  | 18261 | 27626 | 34316 |       |       |       |       |  |
| G5106.0-SR4              | Start                             | 17372                                      |       | 14343 | 20459 | 28614 |       |       |       |       |       |       |       |  |
|                          | Min.                              | 7392                                       |       | 5537  | 8839  | 13173 |       |       |       |       |       |       |       |  |
|                          | End                               | 11002                                      |       | 7319  | 13449 | 21623 |       |       |       |       |       |       |       |  |
| G5107.0-SR4              | Start                             | 17372                                      | 16509 | 25110 | 33711 |       |       |       |       |       |       |       |       |  |
|                          | Min.                              | 7392                                       | 6713  | 11311 | 15882 |       |       |       |       |       |       |       |       |  |
|                          | End                               | 11002                                      | 9469  | 18070 | 26671 |       |       |       |       |       |       |       |       |  |
| G5108.0-SR4              | Start                             | 17372                                      | 14598 | 26066 | 37534 |       |       |       |       |       |       |       |       |  |
|                          | Min.                              | 7392                                       | 5676  | 11819 | 17914 |       |       |       |       |       |       |       |       |  |
|                          | End                               | 11002                                      | 7558  | 19025 | 30493 |       |       |       |       |       |       |       |       |  |
| G5103.5-SR3              | Start                             | 20785                                      |       |       |       |       |       |       |       |       | 14575 | 17203 | 21408 |  |
|                          | Min.                              | 8786                                       |       |       |       |       |       |       |       |       | 5117  | 6580  | 8862  |  |
|                          | End                               | 12968                                      |       |       |       |       |       |       |       |       | 5936  | 8564  | 12769 |  |
| G5104.0-SR3              | Start                             | 20785                                      |       |       |       |       |       | 12425 | 16248 | 23893 | 27715 | 31538 | 37654 |  |
|                          | Min.                              | 8786                                       |       |       |       |       |       | 3786  | 6057  | 10202 | 12233 | 14265 | 17516 |  |
|                          | End                               | 12968                                      |       |       |       |       |       | 3786  | 7609  | 15254 | 19076 | 22899 | 29015 |  |
| G5104.5-SR3              | Start                             | 20785                                      |       |       |       |       |       | 14655 | 21902 | 27078 | 37431 |       |       |  |
|                          | Min.                              | 8786                                       |       |       |       |       |       | 5161  | 9130  | 11895 | 17397 |       |       |  |
|                          | End                               | 12968                                      |       |       |       |       |       | 6016  | 13263 | 18439 | 28792 |       |       |  |
| G5105.0-SR3              | Start                             | 20785                                      |       |       |       | 12425 | 23128 | 32494 | 39183 |       |       |       |       |  |
|                          | Min.                              | 8786                                       |       |       |       | 3786  | 9796  | 14773 | 18328 |       |       |       |       |  |
|                          | End                               | 12968                                      |       |       |       | 3786  | 14489 | 23855 | 30544 |       |       |       |       |  |
| G5106.0-SR3              | Start                             | 20785                                      |       |       | 18286 | 26441 |       |       |       |       |       |       |       |  |
|                          | Min.                              | 8786                                       |       |       | 7167  | 11556 |       |       |       |       |       |       |       |  |
|                          | End                               | 12968                                      |       |       | 9647  | 17802 |       |       |       |       |       |       |       |  |
| G5107.0-SR3              | Start                             | 20785                                      | 14336 | 22937 | 31538 |       |       |       |       |       |       |       |       |  |
|                          | Min.                              | 8786                                       | 4982  | 9692  | 14265 |       |       |       |       |       |       |       |       |  |
|                          | End                               | 12968                                      | 5697  | 14298 | 22899 |       |       |       |       |       |       |       |       |  |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |       |       |       |       |       |       |       |       |       |       |       |  |
|                          |                                   | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |  |
| Operating Pressure (Bar) |                                   |  |       |       |       |       |       |       |       |       |       |       |       |  |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |       |       |       |       |       |       |       |       |       |       |       |
|--------------------------|-----------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                          |                                   | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
| G5108.0-SR3              | Start                             | 20785                                      | 12425 | 23893 | 35361 |       |       |       |       |       |       |       |       |
|                          | Min.                              | 8786                                       | 3786  | 10202 | 16297 |       |       |       |       |       |       |       |       |
|                          | End                               | 12968                                      | 3786  | 15254 | 26722 |       |       |       |       |       |       |       |       |
| G5104.0-SR2              | Start                             | 25788                                      |       |       |       |       |       |       |       | 21251 | 25074 | 28896 | 35013 |
|                          | Min.                              | 10667                                      |       |       |       |       |       |       |       | 7841  | 9929  | 12004 | 15277 |
|                          | End                               | 15358                                      |       |       |       |       |       |       |       | 9724  | 13547 | 17369 | 23485 |
| G5104.5-SR2              | Start                             | 25788                                      |       |       |       |       |       | 19260 | 24437 | 34790 |       |       |       |
|                          | Min.                              | 10667                                      |       |       |       |       |       | 6721  | 9584  | 15159 |       |       |       |
|                          | End                               | 15358                                      |       |       |       |       |       | 7733  | 12909 | 23262 |       |       |       |
| G5105.0-SR2              | Start                             | 25788                                      |       |       |       |       | 20487 | 29852 | 36542 |       |       |       |       |
|                          | Min.                              | 10667                                      |       |       |       |       | 7411  | 12523 | 16090 |       |       |       |       |
|                          | End                               | 15358                                      |       |       |       |       | 8959  | 18325 | 25014 |       |       |       |       |
| G5106.0-SR2              | Start                             | 25788                                      |       |       |       | 23800 |       |       |       |       |       |       |       |
|                          | Min.                              | 10667                                      |       |       |       | 9238  |       |       |       |       |       |       |       |
|                          | End                               | 15358                                      |       |       |       | 12272 |       |       |       |       |       |       |       |
| G5107.0-SR2              | Start                             | 25788                                      |       | 20296 | 28896 |       |       |       |       |       |       |       |       |
|                          | Min.                              | 10667                                      |       | 7304  | 12004 |       |       |       |       |       |       |       |       |
|                          | End                               | 15358                                      |       | 8768  | 17369 |       |       |       |       |       |       |       |       |
| G5108.0-SR2              | Start                             | 25788                                      | 21251 | 32719 |       |       |       |       |       |       |       |       |       |
|                          | Min.                              | 10667                                      | 7841  | 14058 |       |       |       |       |       |       |       |       |       |
|                          | End                               | 15358                                      | 9724  | 21192 |       |       |       |       |       |       |       |       |       |
| G5104.0-SR1              | Start                             | 28735                                      |       |       |       |       |       |       |       | 18190 | 22013 | 25835 | 31952 |
|                          | Min.                              | 12206                                      |       |       |       |       |       |       |       | 6030  | 8200  | 10280 | 13594 |
|                          | End                               | 18128                                      |       |       |       |       |       |       |       | 6467  | 10289 | 14112 | 20228 |
| G5104.5-SR1              | Start                             | 28735                                      |       |       |       |       |       |       | 21376 | 31729 |       |       |       |
|                          | Min.                              | 12206                                      |       |       |       |       |       |       | 7841  | 13475 |       |       |       |
|                          | End                               | 18128                                      |       |       |       |       |       |       | 9652  | 20005 |       |       |       |
| G5105.0-SR1              | Start                             | 28735                                      |       |       |       |       | 17426 | 26791 | 33481 |       |       |       |       |
|                          | Min.                              | 12206                                      |       |       |       |       | 5578  | 10799 | 14406 |       |       |       |       |
|                          | End                               | 18128                                      |       |       |       |       | 5702  | 15068 | 21757 |       |       |       |       |
| G5106.0-SR1              | Start                             | 28735                                      |       |       |       | 20739 |       |       |       |       |       |       |       |
|                          | Min.                              | 12206                                      |       |       |       | 7483  |       |       |       |       |       |       |       |
|                          | End                               | 18128                                      |       |       |       | 9015  |       |       |       |       |       |       |       |
| G5107.0-SR1              | Start                             | 28735                                      |       |       | 25835 |       |       |       |       |       |       |       |       |
|                          | Min.                              | 12206                                      |       |       | 10280 |       |       |       |       |       |       |       |       |
|                          | End                               | 18128                                      |       |       | 14112 |       |       |       |       |       |       |       |       |
| G5108.0-SR1              | Start                             | 28735                                      | 18190 | 29658 |       |       |       |       |       |       |       |       |       |
|                          | Min.                              | 12206                                      | 6030  | 12355 |       |       |       |       |       |       |       |       |       |
|                          | End                               | 18128                                      | 6467  | 17935 |       |       |       |       |       |       |       |       |       |
| G7104.0-SR4              | Start                             | 33079                                      |       |       |       |       |       |       |       |       | 23379 | 27655 | 34497 |
|                          | Min.                              | 14207                                      |       |       |       |       |       |       |       |       | 8547  | 10891 | 14604 |
|                          | End                               | 21404                                      |       |       |       |       |       |       |       |       | 10475 | 14751 | 21592 |
| G7104.5-SR4              | Start                             | 33079                                      |       |       |       |       |       |       | 23843 | 35719 | 41656 | 47594 | 57094 |
|                          | Min.                              | 14207                                      |       |       |       |       |       |       | 8808  | 15254 | 18410 | 21565 | 26615 |
|                          | End                               | 21404                                      |       |       |       |       |       |       | 10939 | 22814 | 28752 | 34689 | 44189 |
| G7105.0-SR4              | Start                             | 33079                                      |       |       |       |       | 19993 | 30905 | 38700 | 54289 | 62083 | 69878 |       |
|                          | Min.                              | 14207                                      |       |       |       |       | 6620  | 12655 | 16839 | 25124 | 29266 | 33409 |       |
|                          | End                               | 21404                                      |       |       |       |       | 7088  | 18000 | 25795 | 41384 | 49179 | 56973 |       |
| G7106.0-SR4              | Start                             | 33079                                      |       |       |       | 24723 | 44075 | 61008 | 73103 |       |       |       |       |
|                          | Min.                              | 14207                                      |       |       |       | 9299  | 19695 | 28695 | 35123 |       |       |       |       |
|                          | End                               | 21404                                      |       |       |       | 11819 | 31171 | 48104 | 60199 |       |       |       |       |
| G7107.0-SR4              | Start                             | 33079                                      |       |       | 31311 | 45053 | 72536 |       |       |       |       |       |       |
|                          | Min.                              | 14207                                      |       |       | 12875 | 20215 | 34822 |       |       |       |       |       |       |
|                          | End                               | 21404                                      |       |       | 18406 | 32148 | 59632 |       |       |       |       |       |       |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |       |       |       |       |       |       |       |       |       |       |       |
|                          |                                   | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
| Operating Pressure (Bar) |                                   |  |       |       |       |       |       |       |       |       |       |       |       |

# Torque Ratings – G-Series (Hydraulic)

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## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |       |       |       |       |       |       |       |       |       |       |       |
|----------------|-----------------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                |                                   | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |       |       |       |       |       |       |       |       |       |       |       |
| G7108.0-SR4    | Start                             | 33079                                      |       | 22426 | 36251 | 50076 | 68509 |       |       |       |       |       |       |
|                | Min.                              | 14207                                      |       | 8011  | 15537 | 22885 | 32682 |       |       |       |       |       |       |
|                | End                               | 21404                                      |       | 9522  | 23347 | 37172 | 55605 |       |       |       |       |       |       |
| G7109.0-SR4    | Start                             | 33079                                      |       | 35719 | 53531 | 71344 |       |       |       |       |       |       |       |
|                | Min.                              | 14207                                      |       | 15254 | 24721 | 34188 |       |       |       |       |       |       |       |
|                | End                               | 21404                                      |       | 22814 | 40627 | 58439 |       |       |       |       |       |       |       |
| G7110.0-SR4    | Start                             | 33079                                      | 28305 | 50575 | 72844 |       |       |       |       |       |       |       |       |
|                | Min.                              | 14207                                      | 11244 | 23150 | 34985 |       |       |       |       |       |       |       |       |
|                | End                               | 21404                                      | 15401 | 37670 | 59940 |       |       |       |       |       |       |       |       |
| G7104.0-SR3    | Start                             | 39345                                      |       |       |       |       |       |       |       |       |       | 23481 | 30322 |
|                | Min.                              | 16818                                      |       |       |       |       |       |       |       |       |       | 7573  | 11460 |
|                | End                               | 25181                                      |       |       |       |       |       |       |       |       |       | 7826  | 14667 |
| G7104.5-SR3    | Start                             | 39345                                      |       |       |       |       |       |       |       | 31544 | 37481 | 43419 | 52919 |
|                | Min.                              | 16818                                      |       |       |       |       |       |       |       | 12124 | 15346 | 18552 | 23601 |
|                | End                               | 25181                                      |       |       |       |       |       |       |       | 15889 | 21827 | 27764 | 37264 |
| G7105.0-SR3    | Start                             | 39345                                      |       |       |       |       |       | 26730 | 34525 | 50114 | 57909 | 65703 |       |
|                | Min.                              | 16818                                      |       |       |       |       |       | 9451  | 13742 | 22110 | 26253 | 30395 |       |
|                | End                               | 25181                                      |       |       |       |       |       | 11075 | 18870 | 34459 | 42254 | 50048 |       |
| G7106.0-SR3    | Start                             | 39345                                      |       |       |       |       |       | 39900 | 56833 | 68928 |       |       |       |
|                | Min.                              | 16818                                      |       |       |       |       |       | 16659 | 25681 | 32110 |       |       |       |
|                | End                               | 25181                                      |       |       |       |       |       | 24246 | 41179 | 53274 |       |       |       |
| G7107.0-SR3    | Start                             | 39345                                      |       |       | 27136 | 40878 | 68362 |       |       |       |       |       |       |
|                | Min.                              | 16818                                      |       |       | 9679  | 17190 | 31808 |       |       |       |       |       |       |
|                | End                               | 25181                                      |       |       | 11481 | 25223 | 52707 |       |       |       |       |       |       |
| G7108.0-SR3    | Start                             | 39345                                      |       | 32077 | 45902 | 64335 |       |       |       |       |       |       |       |
|                | Min.                              | 16818                                      |       | 12413 | 19871 | 29668 |       |       |       |       |       |       |       |
|                | End                               | 25181                                      |       | 16422 | 30247 | 48680 |       |       |       |       |       |       |       |
| G7109.0-SR3    | Start                             | 39345                                      | 31544 | 49357 | 67169 |       |       |       |       |       |       |       |       |
|                | Min.                              | 16818                                      | 12124 | 21708 | 31175 |       |       |       |       |       |       |       |       |
|                | End                               | 25181                                      | 15889 | 33702 | 51514 |       |       |       |       |       |       |       |       |
| G7110.0-SR3    | Start                             | 39345                                      | 24131 | 46400 | 68669 |       |       |       |       |       |       |       |       |
|                | Min.                              | 16818                                      | 7958  | 20136 | 31972 |       |       |       |       |       |       |       |       |
|                | End                               | 25181                                      | 8476  | 30745 | 53015 |       |       |       |       |       |       |       |       |
| G7104.5-SR2    | Start                             | 50028                                      |       |       |       |       |       |       |       |       | 32557 | 38495 | 47995 |
|                | Min.                              | 20644                                      |       |       |       |       |       |       |       |       | 10019 | 13613 | 18855 |
|                | End                               | 29636                                      |       |       |       |       |       |       |       |       | 10019 | 15957 | 25457 |
| G7105.0-SR2    | Start                             | 50028                                      |       |       |       |       |       |       |       | 45190 | 52984 | 60779 |       |
|                | Min.                              | 20644                                      |       |       |       |       |       |       |       | 17333 | 21563 | 25789 |       |
|                | End                               | 29636                                      |       |       |       |       |       |       |       | 22652 | 30446 | 38241 |       |
| G7106.0-SR2    | Start                             | 50028                                      |       |       |       |       |       | 34976 | 51909 | 64004 |       |       |       |
|                | Min.                              | 20644                                      |       |       |       |       |       | 11596 | 20980 | 27503 |       |       |       |
|                | End                               | 29636                                      |       |       |       |       |       | 12438 | 29371 | 41466 |       |       |       |
| G7107.0-SR2    | Start                             | 50028                                      |       |       |       |       |       | 35954 | 63437 |       |       |       |       |
|                | Min.                              | 20644                                      |       |       |       |       |       | 12174 | 27202 |       |       |       |       |
|                | End                               | 29636                                      |       |       |       |       |       | 13415 | 40899 |       |       |       |       |
| G7108.0-SR2    | Start                             | 50028                                      |       |       |       | 40977 | 59411 |       |       |       |       |       |       |
|                | Min.                              | 20644                                      |       |       |       | 15009 | 25051 |       |       |       |       |       |       |
|                | End                               | 29636                                      |       |       |       | 18439 | 36872 |       |       |       |       |       |       |
| G7109.0-SR2    | Start                             | 50028                                      |       |       | 44432 | 62245 |       |       |       |       |       |       |       |
|                | Min.                              | 20644                                      |       |       | 16922 | 26568 |       |       |       |       |       |       |       |
|                | End                               | 29636                                      |       |       | 21894 | 39707 |       |       |       |       |       |       |       |
| G7110.0-SR2    | Start                             | 50028                                      |       | 41476 | 63745 |       |       |       |       |       |       |       |       |
|                | Min.                              | 20644                                      |       | 15289 | 27366 |       |       |       |       |       |       |       |       |
|                | End                               | 29636                                      |       | 18938 | 41207 |       |       |       |       |       |       |       |       |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |       |       |       |       |       |       |       |       |       |       |       |
| Actuator Model | Spring Torque Start/Min./End (Nm) | 35   | 50    | 65    | 80    | 100   | 140   | 175   | 200   | 250   | 275   | 300   | 340   |
|                |                                   | Operating Pressure (Bar)                   |       |       |       |       |       |       |       |       |       |       |       |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |       |       |        |       |       |        |        |        |       |        |       |       |
|--------------------------|-----------------------------------|--|-------|-------|--------|-------|-------|--------|--------|--------|-------|--------|-------|-------|
|                          |                                   | 35   | 50    | 65    | 80     | 100   | 140   | 175    | 200    | 250    | 275   | 300    | 340   |       |
| G7104.5-SR1              | Start                             | 59263                                      |       |       |        |       |       |        |        |        |       |        |       | 42046 |
|                          | Min.                              | 24427                                      |       |       |        |       |       |        |        |        |       |        |       | 14059 |
|                          | End                               | 35019                                      |       |       |        |       |       |        |        |        |       |        |       | 15249 |
| G7105.0-SR1              | Start                             | 59263                                      |       |       |        |       |       |        |        | 39241  | 47035 | 54830  |       |       |
|                          | Min.                              | 24427                                      |       |       |        |       |       |        |        | 12386  | 16897 | 21206  |       |       |
|                          | End                               | 35019                                      |       |       |        |       |       |        |        | 12444  | 20239 | 28033  |       |       |
| G7106.0-SR1              | Start                             | 59263                                      |       |       |        |       |       |        | 45960  | 58055  |       |        |       |       |
|                          | Min.                              | 24427                                      |       |       |        |       |       |        | 16293  | 22956  |       |        |       |       |
|                          | End                               | 35019                                      |       |       |        |       |       |        | 19164  | 31259  |       |        |       |       |
| G7107.0-SR1              | Start                             | 59263                                      |       |       |        |       |       | 57488  |        |        |       |        |       |       |
|                          | Min.                              | 24427                                      |       |       |        |       |       | 22649  |        |        |       |        |       |       |
|                          | End                               | 35019                                      |       |       |        |       |       | 30692  |        |        |       |        |       |       |
| G7108.0-SR1              | Start                             | 59263                                      |       |       |        |       | 53461 |        |        |        |       |        |       |       |
|                          | Min.                              | 24427                                      |       |       |        |       | 20463 |        |        |        |       |        |       |       |
|                          | End                               | 35019                                      |       |       |        |       | 26665 |        |        |        |       |        |       |       |
| G7109.0-SR1              | Start                             | 59263                                      |       |       | 38483  | 56296 |       |        |        |        |       |        |       |       |
|                          | Min.                              | 24427                                      |       |       | 11687  | 22001 |       |        |        |        |       |        |       |       |
|                          | End                               | 35019                                      |       |       | 11687  | 29499 |       |        |        |        |       |        |       |       |
| G7110.0-SR1              | Start                             | 59263                                      |       | 35527 | 57796  |       |       |        |        |        |       |        |       |       |
|                          | Min.                              | 24427                                      |       | 8730  | 22816  |       |       |        |        |        |       |        |       |       |
|                          | End                               | 35019                                      |       | 8730  | 31000  |       |       |        |        |        |       |        |       |       |
| G8105.0-SR3              | Start                             | 57255                                      |       |       |        |       |       |        |        | 35595  | 43675 | 51754  | 64682 |       |
|                          | Min.                              | 25702                                      |       |       |        |       |       |        |        | 13548  | 17933 | 22281  | 29151 |       |
|                          | End                               | 40896                                      |       |       |        |       |       |        |        | 17514  | 25594 | 33674  | 46601 |       |
| G8106.0-SR3              | Start                             | 57255                                      |       |       |        |       |       | 47034  | 60210  | 86563  | 99740 | 112916 |       |       |
|                          | Min.                              | 25702                                      |       |       |        |       |       | 19757  | 26775  | 40781  | 47784 | 54787  |       |       |
|                          | End                               | 40896                                      |       |       |        |       |       | 28953  | 42130  | 68483  | 81659 | 94835  |       |       |
| G8107.0-SR3              | Start                             | 57255                                      |       |       |        |       | 31599 | 62319  | 89199  | 108399 |       |        |       |       |
|                          | Min.                              | 25702                                      |       |       |        |       | 11324 | 27896  | 42182  | 52386  |       |        |       |       |
|                          | End                               | 40896                                      |       |       |        |       | 13518 | 44238  | 71118  | 90318  |       |        |       |       |
| G8108.0-SR3              | Start                             | 57255                                      |       |       |        | 38479 | 59400 | 101240 |        |        |       |        |       |       |
|                          | Min.                              | 25702                                      |       |       |        | 15114 | 26344 | 48581  |        |        |       |        |       |       |
|                          | End                               | 40896                                      |       |       |        | 20399 | 41319 | 83159  |        |        |       |        |       |       |
| G8109.0-SR3              | Start                             | 57255                                      |       |       | 43269  | 63686 | 90907 |        |        |        |       |        |       |       |
|                          | Min.                              | 25702                                      |       |       | 17713  | 28622 | 43090 |        |        |        |       |        |       |       |
|                          | End                               | 40896                                      |       |       | 25189  | 45605 | 72826 |        |        |        |       |        |       |       |
| G8110.0-SR3              | Start                             | 57255                                      |       | 40460 | 66159  | 91857 |       |        |        |        |       |        |       |       |
|                          | Min.                              | 25702                                      |       | 16189 | 29936  | 43594 |       |        |        |        |       |        |       |       |
|                          | End                               | 40896                                      |       | 22379 | 48078  | 73776 |       |        |        |        |       |        |       |       |
| G8112.0-SR3              | Start                             | 57255                                      | 43304 | 81235 | 119166 |       |       |        |        |        |       |        |       |       |
|                          | Min.                              | 25702                                      | 17732 | 37949 | 58108  |       |       |        |        |        |       |        |       |       |
|                          | End                               | 40896                                      | 25223 | 63154 | 101085 |       |       |        |        |        |       |        |       |       |
| G8105.0-SR2              | Start                             | 67425                                      |       |       |        |       |       |        |        |        | 35742 | 43822  | 56749 |       |
|                          | Min.                              | 30242                                      |       |       |        |       |       |        |        |        | 12475 | 16957  | 23974 |       |
|                          | End                               | 48073                                      |       |       |        |       |       |        |        |        | 14354 | 22434  | 35361 |       |
| G8106.0-SR2              | Start                             | 67425                                      |       |       |        |       |       | 39102  | 52278  | 78631  | 91807 | 104984 |       |       |
|                          | Min.                              | 30242                                      |       |       |        |       |       | 14364  | 21547  | 35609  | 42612 | 49615  |       |       |
|                          | End                               | 48073                                      |       |       |        |       |       | 17713  | 30890  | 57243  | 70419 | 83595  |       |       |
| G8107.0-SR2              | Start                             | 67425                                      |       |       |        |       | 54386 | 81266  | 100466 |        |       |        |       |       |
|                          | Min.                              | 30242                                      |       |       |        |       | 22691 | 37010  | 47214  |        |       |        |       |       |
|                          | End                               | 48073                                      |       |       |        |       | 32998 | 59878  | 79078  |        |       |        |       |       |
| G8108.0-SR2              | Start                             | 67425                                      |       |       |        |       | 51467 | 93307  |        |        |       |        |       |       |
|                          | Min.                              | 30242                                      |       |       |        |       | 21107 | 43409  |        |        |       |        |       |       |
|                          | End                               | 48073                                      |       |       |        |       | 30079 | 71919  |        |        |       |        |       |       |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |       |       |        |       |       |        |        |        |       |        |       |       |
|                          |                                   | 35   | 50    | 65    | 80     | 100   | 140   | 175    | 200    | 250    | 275   | 300    | 340   |       |
| Operating Pressure (Bar) |                                   |  |       |       |        |       |       |        |        |        |       |        |       |       |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |       |        |        |        |        |        |        |        |        |        |        |
|----------------|-----------------------------------|--|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                |                                   | 35   | 50    | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |       |        |        |        |        |        |        |        |        |        |        |
| G8109.0-SR2    | Start                             | 67425                                      |       |        |        | 55753  | 82975  |        |        |        |        |        |        |
|                | Min.                              | 30242                                      |       |        |        | 23433  | 37918  |        |        |        |        |        |        |
|                | End                               | 48073                                      |       |        |        | 34365  | 61586  |        |        |        |        |        |        |
| G8110.0-SR2    | Start                             | 67425                                      | 32528 | 58226  | 83925  |        |        |        |        |        |        |        |        |
|                | Min.                              | 30242                                      | 10612 | 24765  | 38423  |        |        |        |        |        |        |        |        |
|                | End                               | 48073                                      | 11139 | 36838  | 62536  |        |        |        |        |        |        |        |        |
| G8112.0-SR2    | Start                             | 67425                                      | 35372 | 73302  | 111233 |        |        |        |        |        |        |        |        |
|                | Min.                              | 30242                                      | 12266 | 32777  | 52936  |        |        |        |        |        |        |        |        |
|                | End                               | 48073                                      | 13983 | 51914  | 89845  |        |        |        |        |        |        |        |        |
| G8106.0-SR1    | Start                             | 83654                                      |       |        |        |        |        |        |        | 69192  | 82368  | 95545  |        |
|                | Min.                              | 36645                                      |       |        |        |        |        |        |        | 28014  | 35140  | 42143  |        |
|                | End                               | 56614                                      |       |        |        |        |        |        |        | 39305  | 52482  | 65658  |        |
| G8107.0-SR1    | Start                             | 83654                                      |       |        |        |        |        | 71827  | 91027  |        |        |        |        |
|                | Min.                              | 36645                                      |       |        |        |        |        | 29445  | 39742  |        |        |        |        |
|                | End                               | 56614                                      |       |        |        |        |        | 41941  | 61141  |        |        |        |        |
| G8108.0-SR1    | Start                             | 83654                                      |       |        |        |        | 83868  |        |        |        |        |        |        |
|                | Min.                              | 36645                                      |       |        |        |        | 35937  |        |        |        |        |        |        |
|                | End                               | 56614                                      |       |        |        |        | 53982  |        |        |        |        |        |        |
| G8109.0-SR1    | Start                             | 83654                                      |       |        |        | 73535  |        |        |        |        |        |        |        |
|                | Min.                              | 36645                                      |       |        |        | 30372  |        |        |        |        |        |        |        |
|                | End                               | 56614                                      |       |        |        | 43649  |        |        |        |        |        |        |        |
| G8110.0-SR1    | Start                             | 83654                                      |       |        | 74485  |        |        |        |        |        |        |        |        |
|                | Min.                              | 36645                                      |       |        | 30888  |        |        |        |        |        |        |        |        |
|                | End                               | 56614                                      |       |        | 44599  |        |        |        |        |        |        |        |        |
| G8112.0-SR1    | Start                             | 83654                                      | 63863 | 101794 |        |        |        |        |        |        |        |        |        |
|                | Min.                              | 36645                                      | 25122 | 45464  |        |        |        |        |        |        |        |        |        |
|                | End                               | 56614                                      | 33977 | 71908  |        |        |        |        |        |        |        |        |        |
| G10106.0-SR4   | Start                             | 113922                                     |       |        |        |        |        |        |        | 80268  | 95737  | 111207 | 135959 |
|                | Min.                              | 46963                                      |       |        |        |        |        |        |        | 26709  | 35484  | 43924  | 57359  |
|                | End                               | 67340                                      |       |        |        |        |        |        |        | 28783  | 44253  | 59722  | 84474  |
| G10107.0-SR4   | Start                             | 113922                                     |       |        |        |        |        | 89200  | 112575 | 159326 | 182702 | 206077 | 243478 |
|                | Min.                              | 46963                                      |       |        |        |        |        | 31807  | 44667  | 69799  | 82223  | 94646  | 114524 |
|                | End                               | 67340                                      |       |        |        |        |        | 37715  | 61090  | 107842 | 131217 | 154593 | 191993 |
| G10108.0-SR4   | Start                             | 113922                                     |       |        |        |        | 107558 | 153055 | 185553 | 250548 |        |        |        |
|                | Min.                              | 46963                                      |       |        |        |        | 41944  | 66466  | 83738  | 118281 |        |        |        |
|                | End                               | 67340                                      |       |        |        |        | 56073  | 101570 | 134068 | 199063 |        |        |        |
| G10109.0-SR4   | Start                             | 113922                                     |       |        |        | 96916  | 165453 | 225424 |        |        |        |        |        |
|                | Min.                              | 46963                                      |       |        |        | 36146  | 73056  | 104928 |        |        |        |        |        |
|                | End                               | 67340                                      |       |        |        | 45431  | 113969 | 173939 |        |        |        |        |        |
| G10110.0-SR4   | Start                             | 113922                                     |       |        | 99622  | 143135 | 230160 |        |        |        |        |        |        |
|                | Min.                              | 46963                                      |       |        | 37636  | 61194  | 107445 |        |        |        |        |        |        |
|                | End                               | 67340                                      |       |        | 48137  | 91650  | 178675 |        |        |        |        |        |        |
| G10112.0-SR4   | Start                             | 113922                                     | 87870 | 136559 | 185249 | 250168 |        |        |        |        |        |        |        |
|                | Min.                              | 46963                                      | 31059 | 57685  | 83576  | 118079 |        |        |        |        |        |        |        |
|                | End                               | 67340                                      | 36385 | 85074  | 133764 | 198683 |        |        |        |        |        |        |        |
| G10114.0-SR4   | Start                             | 113922                                     | 83453 | 151116 | 218780 |        |        |        |        |        |        |        |        |
|                | Min.                              | 46963                                      | 28575 | 65436  | 101397 |        |        |        |        |        |        |        |        |
|                | End                               | 67340                                      | 31968 | 99632  | 167295 |        |        |        |        |        |        |        |        |
| G10107.0-SR3   | Start                             | 141885                                     |       |        |        |        |        | 98621  | 145372 | 168748 | 192123 | 229524 |        |
|                | Min.                              | 57244                                      |       |        |        |        |        | 30184  | 57056  | 69744  | 82331  | 102208 |        |
|                | End                               | 79966                                      |       |        |        |        |        | 30184  | 76935  | 100310 | 123686 | 161087 |        |
| G10108.0-SR3   | Start                             | 141885                                     |       |        |        |        | 93604  | 139101 | 171598 | 236594 |        |        |        |
|                | Min.                              | 57244                                      |       |        |        |        | 25167  | 53652  | 71291  | 105966 |        |        |        |
|                | End                               | 79966                                      |       |        |        |        | 25167  | 70663  | 103161 | 168156 |        |        |        |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |       |        |        |        |        |        |        |        |        |        |        |
|                |                                   | Operating Pressure (Bar)                   |       |        |        |        |        |        |        |        |        |        |        |
| Actuator Model | Spring Torque Start/Min./End (Nm) | 35   | 50    | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model           | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |    |        |        |        |        |        |        |        |        |        |        |
|--------------------------|-----------------------------------|--|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                          |                                   | 35   | 50 | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |
| G10109.0-SR3             | Start                             | 141885                                     |    |        |        |        |        | 151499 | 211470 |        |        |        |        |
|                          | Min.                              | 57244                                      |    |        |        |        |        | 60382  | 92613  |        |        |        |        |
|                          | End                               | 79966                                      |    |        |        |        |        | 83062  | 143033 |        |        |        |        |
| G10110.0-SR3             | Start                             | 141885                                     |    |        |        |        | 129180 | 216206 |        |        |        |        |        |
|                          | Min.                              | 57244                                      |    |        |        |        | 48247  | 95130  |        |        |        |        |        |
|                          | End                               | 79966                                      |    |        |        |        | 60743  | 147768 |        |        |        |        |        |
| G10112.0-SR3             | Start                             | 141885                                     |    |        | 122605 | 171294 | 236214 |        |        |        |        |        |        |
|                          | Min.                              | 57244                                      |    |        | 44549  | 71126  | 105764 |        |        |        |        |        |        |
|                          | End                               | 79966                                      |    |        | 54168  | 102857 | 167776 |        |        |        |        |        |        |
| G10114.0-SR3             | Start                             | 141885                                     |    | 137162 | 204826 |        |        |        |        |        |        |        |        |
|                          | Min.                              | 57244                                      |    | 52600  | 89082  |        |        |        |        |        |        |        |        |
|                          | End                               | 79966                                      |    | 68725  | 136389 |        |        |        |        |        |        |        |        |
| G10107.0-SR2             | Start                             | 155488                                     |    |        |        |        |        |        |        | 128554 | 151930 | 175305 | 212706 |
|                          | Min.                              | 65143                                      |    |        |        |        |        |        |        | 48497  | 61185  | 73872  | 93785  |
|                          | End                               | 95182                                      |    |        |        |        |        |        |        | 61900  | 85275  | 108651 | 146052 |
| G10108.0-SR2             | Start                             | 155488                                     |    |        |        |        |        | 122283 | 154781 | 219776 |        |        |        |
|                          | Min.                              | 65143                                      |    |        |        |        |        | 45003  | 62732  | 97543  |        |        |        |
|                          | End                               | 95182                                      |    |        |        |        |        | 55628  | 88126  | 153121 |        |        |        |
| G10109.0-SR2             | Start                             | 155488                                     |    |        |        |        |        | 134681 | 194652 |        |        |        |        |
|                          | Min.                              | 65143                                      |    |        |        |        |        | 51823  | 84190  |        |        |        |        |
|                          | End                               | 95182                                      |    |        |        |        |        | 68027  | 127997 |        |        |        |        |
| G10110.0-SR2             | Start                             | 155488                                     |    |        |        |        | 112363 | 199388 |        |        |        |        |        |
|                          | Min.                              | 65143                                      |    |        |        |        | 39425  | 86707  |        |        |        |        |        |
|                          | End                               | 95182                                      |    |        |        |        | 45708  | 132733 |        |        |        |        |        |
| G10112.0-SR2             | Start                             | 155488                                     |    |        | 105787 | 154476 | 219396 |        |        |        |        |        |        |
|                          | Min.                              | 65143                                      |    |        | 35684  | 62567  | 97341  |        |        |        |        |        |        |
|                          | End                               | 95182                                      |    |        | 39132  | 87822  | 152741 |        |        |        |        |        |        |
| G10114.0-SR2             | Start                             | 155488                                     |    | 120344 | 188008 |        |        |        |        |        |        |        |        |
|                          | Min.                              | 65143                                      |    | 43913  | 80659  |        |        |        |        |        |        |        |        |
|                          | End                               | 95182                                      |    | 53690  | 121353 |        |        |        |        |        |        |        |        |
| G10107.0-SR1             | Start                             | 192709                                     |    |        |        |        |        |        |        |        | 131993 | 155368 | 192769 |
|                          | Min.                              | 79221                                      |    |        |        |        |        |        |        |        | 42632  | 56051  | 76583  |
|                          | End                               | 113220                                     |    |        |        |        |        |        |        |        | 44137  | 67512  | 104913 |
| G10108.0-SR1             | Start                             | 192709                                     |    |        |        |        |        |        | 134844 | 199839 |        |        |        |
|                          | Min.                              | 79221                                      |    |        |        |        |        |        | 44318  | 80420  |        |        |        |
|                          | End                               | 113220                                     |    |        |        |        |        |        | 46987  | 111983 |        |        |        |
| G10109.0-SR1             | Start                             | 192709                                     |    |        |        |        |        |        | 174715 |        |        |        |        |
|                          | Min.                              | 79221                                      |    |        |        |        |        |        | 66783  |        |        |        |        |
|                          | End                               | 113220                                     |    |        |        |        |        |        | 86859  |        |        |        |        |
| G10110.0-SR1             | Start                             | 192709                                     |    |        |        |        |        | 179451 |        |        |        |        |        |
|                          | Min.                              | 79221                                      |    |        |        |        |        | 69354  |        |        |        |        |        |
|                          | End                               | 113220                                     |    |        |        |        |        | 91595  |        |        |        |        |        |
| G10112.0-SR1             | Start                             | 192709                                     |    |        |        | 134540 | 199459 |        |        |        |        |        |        |
|                          | Min.                              | 79221                                      |    |        |        | 44138  | 80214  |        |        |        |        |        |        |
|                          | End                               | 113220                                     |    |        |        | 46683  | 111603 |        |        |        |        |        |        |
| G10114.0-SR1             | Start                             | 192709                                     |    |        | 168071 |        |        |        |        |        |        |        |        |
|                          | Min.                              | 79221                                      |    |        | 63177  |        |        |        |        |        |        |        |        |
|                          | End                               | 113220                                     |    |        | 80215  |        |        |        |        |        |        |        |        |
| G13108.0-SR4             | Start                             | 249866                                     |    |        |        |        |        |        |        |        | 262526 | 300057 | 360107 |
|                          | Min.                              | 99270                                      |    |        |        |        |        |        |        |        | 102316 | 122686 | 155018 |
|                          | End                               | 136001                                     |    |        |        |        |        |        |        |        | 136675 | 174206 | 234256 |
| G13109.0-SR4             | Start                             | 249866                                     |    |        |        |        |        | 205448 | 256271 | 357918 | 408741 | 459565 |        |
|                          | Min.                              | 99270                                      |    |        |        |        |        | 70667  | 98920  | 153854 | 180866 | 207877 |        |
|                          | End                               | 136001                                     |    |        |        |        |        | 79597  | 130420 | 232067 | 282890 | 333714 |        |
| Actuator Model           | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |    |        |        |        |        |        |        |        |        |        |        |
|                          |                                   | 35   | 50 | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |
| Operating Pressure (Bar) |                                   |  |    |        |        |        |        |        |        |        |        |        |        |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |    |        |        |        |        |        |        |        |        |        |        |        |
|----------------|-----------------------------------|--|----|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                |                                   | 35   | 50 | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |        |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |    |        |        |        |        |        |        |        |        |        |        |        |
| G13110.0-SR4   | Start                             | 249866                                     |    |        |        |        |        | 217489 | 309440 | 375120 | 506479 |        |        |        |
|                | Min.                              | 99270                                      |    |        |        |        |        | 77439  | 127779 | 162997 | 232810 |        |        |        |
|                | End                               | 136001                                     |    |        |        |        |        | 91638  | 183589 | 249269 | 380628 |        |        |        |
| G13111.0-SR4   | Start                             | 249866                                     |    |        |        |        |        | 309440 | 424379 | 506479 |        |        |        |        |
|                | Min.                              | 99270                                      |    |        |        |        |        | 127779 | 189177 | 232810 |        |        |        |        |
|                | End                               | 136001                                     |    |        |        |        |        | 183589 | 298528 | 380628 |        |        |        |        |
| G13112.0-SR4   | Start                             | 249866                                     |    |        |        |        | 250016 | 410149 |        |        |        |        |        |        |
|                | Min.                              | 99270                                      |    |        |        |        | 95525  | 181614 |        |        |        |        |        |        |
|                | End                               | 136001                                     |    |        |        |        | 124165 | 284298 |        |        |        |        |        |        |
| G13114.0-SR4   | Start                             | 249866                                     |    |        | 215612 | 300057 | 412651 |        |        |        |        |        |        |        |
|                | Min.                              | 99270                                      |    |        | 76383  | 122686 | 182943 |        |        |        |        |        |        |        |
|                | End                               | 136001                                     |    |        | 89761  | 174206 | 286800 |        |        |        |        |        |        |        |
| G13116.0-SR4   | Start                             | 249866                                     |    | 224995 | 337589 | 450182 |        |        |        |        |        |        |        |        |
|                | Min.                              | 99270                                      |    | 81660  | 143050 | 202890 |        |        |        |        |        |        |        |        |
|                | End                               | 136001                                     |    | 99144  | 211738 | 324331 |        |        |        |        |        |        |        |        |
| G13118.0-SR4   | Start                             | 249866                                     |    | 331333 | 475828 |        |        |        |        |        |        |        |        |        |
|                | Min.                              | 99270                                      |    | 139662 | 216520 |        |        |        |        |        |        |        |        |        |
|                | End                               | 136001                                     |    | 205482 | 349977 |        |        |        |        |        |        |        |        |        |
| G13108.0-SR3   | Start                             | 308129                                     |    |        |        |        |        |        |        |        |        |        | 267859 | 327909 |
|                | Min.                              | 121594                                     |    |        |        |        |        |        |        |        |        |        | 94286  | 127525 |
|                | End                               | 165132                                     |    |        |        |        |        |        |        |        |        |        | 109811 | 169860 |
| G13109.0-SR3   | Start                             | 308129                                     |    |        |        |        |        |        |        |        | 325720 | 376543 | 427367 |        |
|                | Min.                              | 121594                                     |    |        |        |        |        |        |        |        | 126337 | 153922 | 181460 |        |
|                | End                               | 165132                                     |    |        |        |        |        |        |        |        | 167671 | 218495 | 269318 |        |
| G13110.0-SR3   | Start                             | 308129                                     |    |        |        |        |        |        | 277242 | 342922 | 474281 |        |        |        |
|                | Min.                              | 121594                                     |    |        |        |        |        |        | 99563  | 135673 | 206393 |        |        |        |
|                | End                               | 165132                                     |    |        |        |        |        |        | 119193 | 184873 | 316232 |        |        |        |
| G13111.0-SR3   | Start                             | 308129                                     |    |        |        |        |        |        | 277242 | 392181 | 474281 |        |        |        |
|                | Min.                              | 121594                                     |    |        |        |        |        |        | 99563  | 162410 | 206393 |        |        |        |
|                | End                               | 165132                                     |    |        |        |        |        |        | 119193 | 234133 | 316232 |        |        |        |
| G13112.0-SR3   | Start                             | 308129                                     |    |        |        |        |        |        | 377951 |        |        |        |        |        |
|                | Min.                              | 121594                                     |    |        |        |        |        |        | 154686 |        |        |        |        |        |
|                | End                               | 165132                                     |    |        |        |        |        |        | 219902 |        |        |        |        |        |
| G13114.0-SR3   | Start                             | 308129                                     |    |        |        | 267859 | 380453 |        |        |        |        |        |        |        |
|                | Min.                              | 121594                                     |    |        |        | 94286  | 156044 |        |        |        |        |        |        |        |
|                | End                               | 165132                                     |    |        |        | 109811 | 222404 |        |        |        |        |        |        |        |
| G13116.0-SR3   | Start                             | 308129                                     |    |        | 305391 | 417984 |        |        |        |        |        |        |        |        |
|                | Min.                              | 121594                                     |    |        | 115302 | 176415 |        |        |        |        |        |        |        |        |
|                | End                               | 165132                                     |    |        | 147342 | 259935 |        |        |        |        |        |        |        |        |
| G13118.0-SR3   | Start                             | 308129                                     |    | 299135 | 443630 |        |        |        |        |        |        |        |        |        |
|                | Min.                              | 121594                                     |    | 111874 | 190103 |        |        |        |        |        |        |        |        |        |
|                | End                               | 165132                                     |    | 141087 | 285582 |        |        |        |        |        |        |        |        |        |
| G13108.0-SR2   | Start                             | 369313                                     |    |        |        |        |        |        |        |        |        |        |        | 289412 |
|                | Min.                              | 146390                                     |    |        |        |        |        |        |        |        |        |        |        | 95678  |
|                | End                               | 199963                                     |    |        |        |        |        |        |        |        |        |        |        | 102236 |
| G13109.0-SR2   | Start                             | 369313                                     |    |        |        |        |        |        |        |        | 287223 | 338046 | 388870 |        |
|                | Min.                              | 146390                                     |    |        |        |        |        |        |        |        | 94383  | 123372 | 151314 |        |
|                | End                               | 199963                                     |    |        |        |        |        |        |        |        | 100046 | 150870 | 201693 |        |
| G13110.0-SR2   | Start                             | 369313                                     |    |        |        |        |        |        | 238745 | 304424 | 435783 |        |        |        |
|                | Min.                              | 146390                                     |    |        |        |        |        |        | 51569  | 104464 | 176777 |        |        |        |
|                | End                               | 199963                                     |    |        |        |        |        |        | 51569  | 117248 | 248607 |        |        |        |
| G13111.0-SR2   | Start                             | 369313                                     |    |        |        |        |        |        | 353684 | 435783 |        |        |        |        |
|                | Min.                              | 146390                                     |    |        |        |        |        |        | 132166 | 176777 |        |        |        |        |
|                | End                               | 199963                                     |    |        |        |        |        |        | 166508 | 248607 |        |        |        |        |
|                |                                   | Pressure Torque Output Start/Min./End (Nm) |    |        |        |        |        |        |        |        |        |        |        |        |
| Actuator Model | Spring Torque Start/Min./End (Nm) | 35   | 50 | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340    |        |
|                |                                   | Operating Pressure (Bar)                   |    |        |        |        |        |        |        |        |        |        |        |        |

# Torque Ratings – G-Series (Hydraulic)

All Published Torques are Guaranteed Minimum Values.

## Spring-Return Actuators

### G-Series (cont.)

| Actuator Model | Spring Torque Start/Min./End (Nm) | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |     |
|----------------|-----------------------------------|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
|                |                                   | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340 |
| G13112.0-SR2   | Start                             | 369313                                     |        |        |        |        |        | 339454 |        |        |        |        |     |
|                | Min.                              | 146390                                     |        |        |        |        |        | 124163 |        |        |        |        |     |
|                | End                               | 199963                                     |        |        |        |        |        | 152277 |        |        |        |        |     |
| G13114.0-SR2   | Start                             | 369313                                     |        |        |        |        | 341956 |        |        |        |        |        |     |
|                | Min.                              | 146390                                     |        |        |        |        | 125570 |        |        |        |        |        |     |
|                | End                               | 199963                                     |        |        |        |        | 154779 |        |        |        |        |        |     |
| G13116.0-SR2   | Start                             | 369313                                     |        |        |        | 379487 |        |        |        |        |        |        |     |
|                | Min.                              | 146390                                     |        |        |        | 146221 |        |        |        |        |        |        |     |
|                | End                               | 199963                                     |        |        |        | 192310 |        |        |        |        |        |        |     |
| G13118.0-SR2   | Start                             | 369313                                     | 260638 | 405133 |        |        |        |        |        |        |        |        |     |
|                | Min.                              | 146390                                     | 73462  | 160141 |        |        |        |        |        |        |        |        |     |
|                | End                               | 199963                                     | 73462  | 217957 |        |        |        |        |        |        |        |        |     |
| G13109.0-SR1   | Start                             | 427576                                     |        |        |        |        |        |        |        |        | 305848 | 356672 |     |
|                | Min.                              | 168713                                     |        |        |        |        |        |        |        |        | 86474  | 122367 |     |
|                | End                               | 229094                                     |        |        |        |        |        |        |        |        | 86474  | 137297 |     |
| G13110.0-SR1   | Start                             | 427576                                     |        |        |        |        |        |        | 272227 | 403586 |        |        |     |
|                | Min.                              | 168713                                     |        |        |        |        |        |        | 52852  | 148749 |        |        |     |
|                | End                               | 229094                                     |        |        |        |        |        |        | 52852  | 184211 |        |        |     |
| G13111.0-SR1   | Start                             | 427576                                     |        |        |        |        |        | 321486 | 403586 |        |        |        |     |
|                | Min.                              | 168713                                     |        |        |        |        |        | 101548 | 148749 |        |        |        |     |
|                | End                               | 229094                                     |        |        |        |        |        | 102112 | 184211 |        |        |        |     |
| G13112.0-SR1   | Start                             | 427576                                     |        |        |        |        |        | 307256 |        |        |        |        |     |
|                | Min.                              | 168713                                     |        |        |        |        |        | 87881  |        |        |        |        |     |
|                | End                               | 229094                                     |        |        |        |        |        | 87881  |        |        |        |        |     |
| G13114.0-SR1   | Start                             | 427576                                     |        |        |        |        | 309758 |        |        |        |        |        |     |
|                | Min.                              | 168713                                     |        |        |        |        | 90383  |        |        |        |        |        |     |
|                | End                               | 229094                                     |        |        |        |        | 90383  |        |        |        |        |        |     |
| G13116.0-SR1   | Start                             | 427576                                     |        |        |        | 347289 |        |        |        |        |        |        |     |
|                | Min.                              | 168713                                     |        |        |        | 116923 |        |        |        |        |        |        |     |
|                | End                               | 229094                                     |        |        |        | 127915 |        |        |        |        |        |        |     |
| G13118.0-SR1   | Start                             | 427576                                     |        |        | 372935 |        |        |        |        |        |        |        |     |
|                | Min.                              | 168713                                     |        |        | 131513 |        |        |        |        |        |        |        |     |
|                | End                               | 229094                                     |        |        | 153561 |        |        |        |        |        |        |        |     |
| Actuator Model | Spring Torque Start/Min./End (Nm) | Pressure Torque Output Start/Min./End (Nm) |        |        |        |        |        |        |        |        |        |        |     |
|                |                                   | 35   | 50     | 65     | 80     | 100    | 140    | 175    | 200    | 250    | 275    | 300    | 340 |
|                |                                   | Operating Pressure (Bar)                   |        |        |        |        |        |        |        |        |        |        |     |