

D-FLSR Manual Gate Valve/Frac Valve

D-FLSR gate valves are modeled after the OEM Model FLS-R gate valve. All dimensions are interchangeable with the original Model FLS-R.

- The DOYLES D-FLSR gate valve was designed for use as a manual valve in high-pressure, large bore applications.
- A ball screw mechanism and lower stem are incorporated into the D-FLSR gate valve to minimize the actuating torque.
- Bi-directional design provides flow direction flexibility and increased service life.
- Sealing at the gate-to-seat and seat-to-body is metal-to-metal.
- Two spring-loaded, pressure energized, non-elastomeric lip-seals provide maximum protection against intrusion of particle contaminants into the body cavity and seal areas, improving gate and seat service life, prevent damage to the body-to-seat seal face and improve valve performance at very low pressure.
- Lower stem balances pressure thrust on upper stem to reduce operating torque, prevents body cavity pressure build-up during operation and provides position indication.
- Spring-loaded, pressure energized, non-elastomeric stem seal covers full range of pressures, temperatures, and fluids.
- Pressure-energized metal-to-metal bonnet seal.
- Either stem can be back seated to allow stem seal replacement with valve under pressure.
- Grease injection fittings located on the downstream side of the stem and the balancing stem backseat for safety.
- Guaranteed to be 100% interchangeable with the OEM model.
- DOYLES D-FLSR gate valves meet or exceeds API 6A standards.

D-FLSR Information

Size # of Revolutions to Fully Open or Close # of Revolutions to Crack Open Input Torques Before Cracked Open ft-lb Input Torques Before Cracked Open N-m Input Torques After Cracked Open ft-lb Input Torques After Cracked Open N-m | 3-1/16", 20K | 15-3/4 | 3-1/3 | 110 | 149 | 20 | 27 | | 4-1/16", 15K | 19 | 2-1/2 | 100 | 136 | 15 | 20 | | 4-1/16", 20K | 21 | 4-1/2 | 175

| 237 | 20 | 27 | | 5-1/8", 10K | 23-1/4 | 2-1/2 | 100 | 136 | 10 | 14 | | 5-1/8",
 15K | 24 | 3 | 175 | 237 | 15 | 20 | | 6-3/8", 10K | 28-3/4 | 3 | 150 | 203 | 15 | 20 | |
 6-3/8", 15K | 15-1/4 | 2-1/2 | 400 | 542 | 20 | 27 | | 7-1/16" 10K | 31 | 2-1/2 |
 180 | 244 | 15 | 20 | | 7-1/16", 15K | 16-5/8 | 2-1/2 | 450 | 610 | 20 | 27 | |
 9", 5K | 38-1/4 | 3 | 125 | 169 | 20 | 27 | | 9", 10K | 20 | 2 | 380 | 515 | 20 | 27 |

D-FLSR Critical Dimensions

. Nominal Size (in) |. Rated Pressure (psi) |_. A |_. A |_. B |_. B |_. C |_. C |_.
 D |_. D |_. E |_. E |_. F |_. F |_. Weight |_. Weight | | Size(In.) | Pressure | in. | mm
 | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | lb | kg | | 3-1/16 | 20,000 | 34.0 | 864 |
 45.6 | 1158 | 53.2 | 1351 | 32.0 | 813 | 16.0 | 406 | 30.5 | 775 | 2145 | 973 | | 4-1/16 |
 15,000 | 41.7 | 1059 | 53.3 | 1354 | 66.6 | 1692 | 39.7 | 1008 | 15.9 | 404 | 29.0 | 737
 | 1550 | 703 | | 4-1/16 | 20,000 | 40.3 | 1024 | 54.8 | 1392 | 63.7 | 1618 | 37.8 | 960 |
 18.8 | 478 | 35.5 | 902 | 3525 | 1599 | | 5-1/8 | 10,000 | 42.4 | 1077 | 55.1 | 1400 |
 69.5 | 1765 | 40.4 | 1026 | 15.9 | 404 | 29.0 | 737 | 1565 | 710 | | 5-1/8 | 15,000 |
 42.5 | 1080 | 57.5 | 1461 | 67.1 | 1704 | 40.5 | 1029 | 17.8 | 452 | 35.0 | 889 | 2980 |
 1352 | | 6-3/8 | 10,000 | 47.7 | 1212 | 62.4 | 1585 | 78.1 | 1984 | 45.7 | 1161 | 17.4 |
 442 | 35.0 | 889 | 2505 | 1136 | | 6-3/8 | 15,000 | 60.9 | 1547 | 72.9 | 1852 | 94.7 |
 2405 | 58.9 | 1496 | 24.0 | 610 | 41.0 | 1041 | 5980 | 2712 | | 7-1/16 | 10,000 | 49.7 |
 1262 | 67.7 | 1720 | 79.2 | 2012 | 47.7 | 1212 | 18.9 | 480 | 35.0 | 889 | 3900 | 1769 |
 | 7-1/16 | 15,000 | 62.1 | 1577 | 74.1 | 1882 | 97.2 | 2469 | 60.1 | 1527 | 24.0 | 610 |
 41.0 | 1041 | 6190 | 2808 | | 9 | 5,000 | 55.2 | 1402 | 64.9 | 1648 | 88.6 | 2250 | 53.2 |
 1351 | 23.1 | 587 | 41.0 | 1041 | 4000 | 1814 |

D-FLSR Critical Dimensions

. Nominal Size |. Rated Pressure |_. A |_. A |_. B |_. B |_. C |_. C |_. D |_. D |_.
 E |_. E |_. G |_. G |_. H |_. H |_. Weight |_. Weight | | In. | PSI | in. | mm | in. | mm |
 in. | mm | in. | mm | in. | mm | in. | mm | in. | mm | lb | kg | | 4-1/16 | 20,000 | 40.3 |
 1024 | 54.8 | 1392 | 63.7 | 1618 | 37.8 | 960 | 18.8 | 478 | 19.0 | 483 | 31.8 | 808 |
 2800 | 1270 | | 5-1/8 | 15,000 | 42.5 | 1080 | 57.5 | 1461 | 67.1 | 1704 | 40.5 | 1029 |
 15.9 | 404 | 18.0 | 457 | 29.8 | 757 | 2750 | 1247 | | 6-3/8 | 10,000 | 47.7 | 1212 |
 62.4 | 1585 | 78.1 | 1984 | 45.7 | 1161 | 17.8 | 452 | 19.0 | 483 | 31.0 | 787 | 2900 |
 1315 | | 6-3/8 | 15,000 | 60.9 | 1547 | 72.9 | 1852 | 94.7 | 2405 | 58.9 | 1496 | 17.4 |
 442 | 24.0 | 610 | 37.2 | 945 | 6300 | 2858 | | 7-1/16 | 10,000 | 49.7 | 1262 | 67.7 |
 1720 | 79.2 | 2012 | 47.7 | 1212 | 24.0 | 610 | 22.0 | 559 | 34.0 | 864 | 3600 | 1633 | |
 7-1/16 | 15,000 | 62.1 | 1577 | 74.1 | 1882 | 97.2 | 2469 | 60.1 | 1527 | 18.9 | 480 |
 24.0 | 610 | 37.2 | 945 | 5400 | 2449 | | 9 | 5,000 | 55.2 | 1402 | 64.9 | 1648 | 88.6 |
 2250 | 53.2 | 1351 | 24.0 | 610 | 23.1 | 587 | 36.4 | 925 | 5700 | 2585 | | 9 | 10,000 |
 66.6 | 1692 | 79.1 | 2009 | 103.7 | 2634 | 64.6 | 1641 | 23.1 | 587 | 25.0 | 635 | 40.0 |
 1016 | 7650 | 3470 |