



Sure Seal

Valve and Pumps Specialists



Knife Gate Valve

Design Specifications



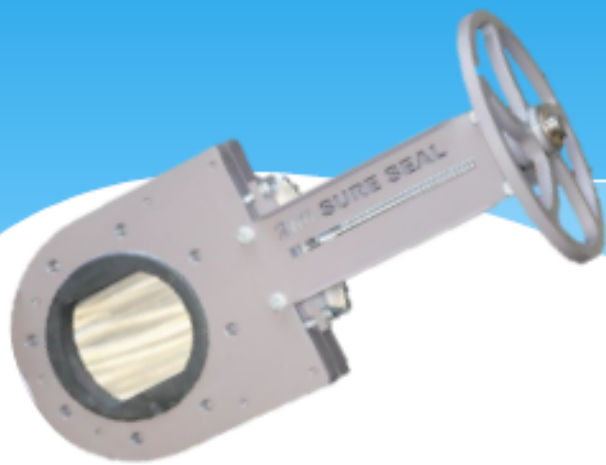
Valve Design:

- Valve design is in accordance with MSS SP-81.
- Valve is bi-directional, complete shut off as per pressure rating
- Valve action can be manual, gearbox or actuated.
- Valve is a bonnet less design.

Valve Material list

| | |
|----------------------|---|
| Body | Carbon Steel / Stainless Steel |
| Blade | Stainless Steel 304/316/Hardened Material |
| Hand wheel | Carbon Steel / Stainless Steel |
| Lining | Natural Rubber/EPDM/Polyurethane/Unlined |
| Gland | Carbon Steel / Stainless Steel |
| Pillar | Carbon Steel / Stainless Steel |
| Spindle | 304 Stainless Steel |
| Rev Nut | GM Bronze |
| Locking Device (opt) | Mild Steel / Stainless Steel |
| Fasteners | 304 Stainless Steel |
| Deflector Cone (opt) | Polyurethane/304 Stainless Steel/ROQ-tuf/ROQ-last |

Dimensions & Pressure Ratings



| Size (mm) | Unlined F/F | Lined F/F | Length (mm) | Pressure Rating Bar | Mass (kg) |
|-----------|-------------|-----------|-------------|---------------------|-----------|
| 50mm | 40 | 46 | 430 | 12 | 12 |
| 80mm | 44 | 50 | 430 | 12 | 12 |
| 100mm | 59 | 62 | 460 | 12 | 14 |
| 125mm | 70 | 78 | 560 | 12 | 29 |
| 150mm | 70 | 78 | 560 | 12 | 29 |
| 200mm | 72 | 80 | 740 | 12 | 38 |
| 250mm | 76 | 84 | 900 | 12 | 56 |
| 300mm | 80 | 88 | 1050 | 12 | 85 |
| 350mm | 96 | 104 | 1170 | 10 | 95 |
| 400mm | 100 | 108 | 1320 | 10 | 130 |
| 450mm | 100 | 112 | 1460 | 10 | 238 |
| 500mm | 110 | 122 | 1630 | 10 | 286 |
| 600mm | 110 | 122 | 1850 | 10 | 356 |
| 700mm | 110 | 122 | 2050 | 10 | 460 |
| 800mm | 120 | 132 | 2270 | 10 | 557 |
| | | | | | |

Sure Seal Linear Actuator



The Sure Seal Actuator is of linear design. This Actuator can be applied to any linear valve design. The Sure Seal linear actuator comes in a double-acting and spring-return option. The Actuator is manufactured in different materials as per spec's. It is robust and durable and is also easy to maintain with standard Seal kits supplied by Sure Seal.

Sure Seal Double Acting Actuator Spec Sheet

| Cylinder Size | Area | Thrust In Kg. Force | Mass/kg |
|---------------|----------------------|---------------------|---------|
| 125mm | 28cm ² | 585 | 19 kg |
| 160mm | 50cm ² | 1 065 | 24 kg |
| 200mm | 314cm ² | 1 660 | 32 kg |
| 250mm | 490cm ² | 2 575 | 41 kg |
| 300mm | 706cm ² | 3 750 | 52 kg |
| 350mm | 962cm ² | 5 150 | 87 kg |
| 400mm | 1 256cm ² | 6 585 | 103 kg |
| 450mm | 1 590cm ² | 8 300 | 119 kg |
| 551mm | 2 374cm ² | 12 570 | 141 kg |
| 750mm | 4 657cm ² | 16 750 | 238 kg |

Actuator Materials

| | |
|------------|---------------------------|
| Endcaps | Mild Steel Galv or 304 SS |
| Piston | Mild Steel Galv or 304 SS |
| Piston Rod | 303/304/316 SS |
| Barrel | Fibre Glass |
| Seals | Nitrile |
| Tie-Rods | Mild Steel Galv or 304 SS |
| Fastners | HT Galv or 304 SS |

Spring return option available on request