

ProDV® (Spheri Valve®)

- “Fit and forget” reliable – up to 1,000,000 cycles between major overhauls with most materials
- One moving part ensures quick and easy maintenance
- Simple, fully proven design – no components in material flow to wear
- Can cut through moving or static columns of material
- Can handle pressures to 500 psig and material temperatures from -4 °F to 1,382 °F (-20 °C to +750 °C)
- Standard unit rated for 150 psig (10 Barg) design
- Forms pressure-tight seal when closed



Application

More than 20,000 ProDV® (Spheri Valves®) have been sold worldwide for applications across a wide range of industries, including food, pharmaceuticals, chemicals, plastics, minerals, power, iron and steel. With a global reputation for reliability, the ProDV® has a simple robust design and only one moving part.

Common materials handled:

- | | |
|-----------------------|-------------|
| ■ Abrasive | ■ Fly Ash |
| ■ Ash | ■ Friable |
| ■ Blast Furnace Grits | ■ Hazardous |
| ■ Cement | ■ Limestone |
| ■ Chemicals | ■ Minerals |
| ■ Cohesive | ■ Ores |
| ■ Copper Concentrate | ■ Powders |
| ■ Detergents | ■ Toxic |

Appropriate uses for a ProDV®:

- Whenever more common valves such as knife gate, pinch, ball and butterfly valves fail when handling abrasive materials
- At pressure and where high temperatures are present

- Hopper discharge valve
- Pressure vessel inlet, outlet and vent
- Blast furnace dustcatchers vessel outlets
- High frequency duties
- Pipework isolation and routing
- Screw feeder inlet/outlet and isolation valves
- Abrasive products and differential pressures
- Reactor, dryer, lock hoppers

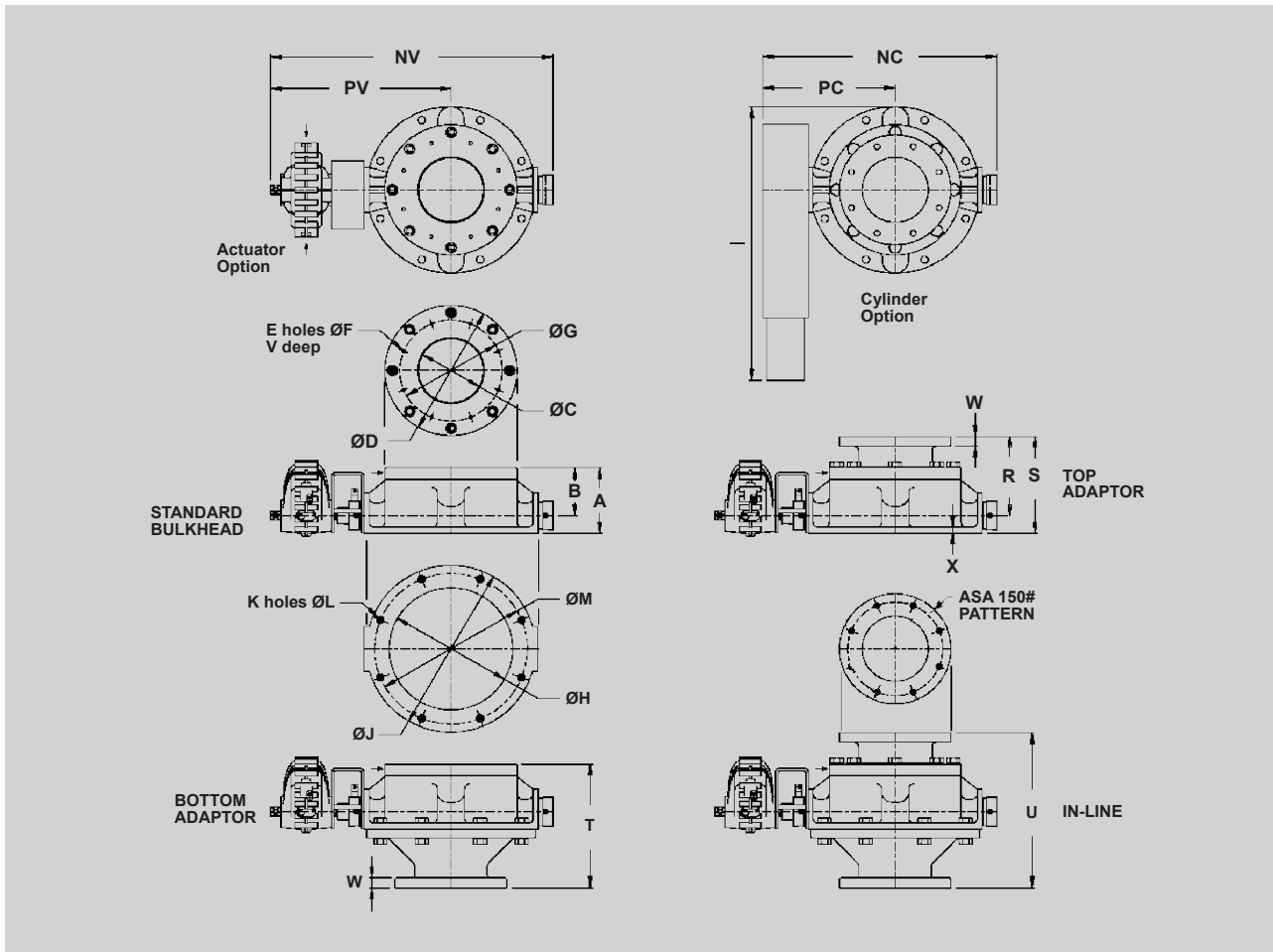
Features of the ProDV®:

- Valve open proximity switch available
- Only a single moving part within main valve body
- Seal protection ring for abrasive products
- Choice of five pneumatic seals, depending on application

Operating principles

Totally unrestricted full bore material flow is assured through the unique design of the ‘dome’ assembly. With one quarter turn, the valve moves from the fully closed to the fully open position. This action positions the dome completely clear of the material flow path.

ProDV® (Spheri Valve®) Dimensions



| | Dimensions (inches) | | | | | | | | | | | | | | | | | | | | | | | |
|------|---------------------|------|----|------|----|----------|------|------|------|------|----|------|------|----|----|----|----|------|------|------|------|-----|-----|-----|
| Size | A | B | C | D | E | F | G | H | I | J | K | L | M | NV | NC | PV | PC | R | S | T | U | V | W | X |
| 2" | 7.4 | 3 | 2 | 6.5 | 4 | 5/8" UNC | 4.75 | 2 | | 6.5 | 4 | 0.69 | 4.75 | 15 | | 10 | | | | | | 0.9 | | 0.7 |
| 3" | 9 | 3.54 | 3 | 7.78 | 8 | 5/8" UNC | 6 | 3 | | 7.87 | 8 | 0.69 | 6 | 18 | | 12 | | | | | | 0.9 | | 0.8 |
| 4" | 5.4 | 3.82 | 4 | 9.84 | 4 | 1/2" UNC | 7.78 | 9.45 | | 13.4 | 6 | 0.69 | 11.8 | 24 | | 16 | | 6.8 | 8.4 | 10.7 | 13.7 | 0.5 | 1 | 0.8 |
| 6" | 6.7 | 4.9 | 6 | 12.6 | 6 | 1/2" UNC | 10.2 | 12.3 | | 17.3 | 8 | 0.88 | 15.4 | 31 | | 20 | | 8.4 | 10.1 | 14.3 | 17.7 | 0.6 | 1.1 | 0.8 |
| 8" | 8 | 5.9 | 8 | 16 | 8 | 1/2" UNC | 12.4 | 15.4 | 36.5 | 20.5 | 8 | 0.88 | 18.5 | 34 | 27 | 22 | 15 | 9.7 | 11.9 | 15.3 | 19.1 | 0.6 | 1.2 | 0.8 |
| 10" | 9.8 | 7.44 | 10 | 15.4 | 6 | 1/2" UNC | 13.8 | 18.9 | 47.7 | 24.4 | 8 | 1.06 | 22 | 44 | 34 | 29 | 19 | 10.5 | 12.9 | 19.2 | 22.3 | 0.7 | 1.3 | 1 |
| 12" | 11.1 | 8.58 | 12 | 18 | 6 | 5/8" UNC | 16.1 | 21.7 | 48.9 | 27.2 | 12 | 1.06 | 24.8 | 48 | 38 | 30 | 20 | 13.4 | 15.9 | 22 | 26.8 | 0.7 | 1.4 | 1.1 |
| 16" | 14.6 | 11.3 | 16 | 23.4 | 16 | 5/8" UNC | 21.5 | 29.1 | 59.4 | 39.4 | 12 | 1.5 | 34.3 | 64 | 54 | 40 | 30 | 17.6 | 20.9 | 28.5 | 34.8 | 1 | 1.8 | 1.4 |
| 20" | 19 | 14.8 | 20 | 29.3 | 24 | 1" UNC | 27 | 34.7 | 66.2 | 43.7 | 12 | 1.5 | 40.6 | | 69 | | 38 | | | 33.8 | | 1.6 | 1.5 | 1.8 |