



APPLICATION

Sterilizer - Condensate Discharge Valve, Back Pressure Receiver - Automatic Blow-Off, Pulp and Paper Mills

SPECIFICATION

| | |
|---------------------|---|
| Design Standard | ASME B16.5, EN1092-1:2001 |
| Pressure Rating | PN16, PN40, ANSI 150, ANSI 300 |
| End Connection | Wafer Type (1"-10"), Flanged End Type (1"-20") |
| Leakage Class | Metal Seat - ANSI Class IV, V Ball & Seat tungsten carbide coated - ANSI Class V Soft Seat - ANSI Class V, VI |
| Flow Characteristic | Equal Percentage |
| Working Temperature | Up to 160°C Standard (Others upon request) |

VALMATIC SEGMENTED CONTROL VALVE

MATERIALS

| PARTS | FIG. 21V2 | FIG. 21V6 | FIG. 21V7 |
|-------------------|---------------------|--------------------|--------------------|
| 1. Body | A216WCB | A351-CF8 | A351-CF8M |
| 2. Segmented Ball | A351-CF8 + Cr | A351-CF8 + Cr | A351-CF8 + Cr |
| 3. Seat | St.Steel 304 + STL | St.Steel 304 + STL | St.Steel 316 + STL |
| 4. O-Ring | Viton + Graphite | Viton + Graphite | Viton + Graphite |
| 5. Spring | St.Steel 316 | St.Steel316 | St.Steel 316 |
| 6. Bearing | St.Steel 304 + PTFE | St.Steel304 + PTFE | St.Steel304 + PTFE |
| 7. Packing | PTFE + Graphite | PTFE + Graphite | PTFE + Graphite |
| 8. Gland | CF8 | CF8 | CF8 |
| 9. Upper Shaft | A351-CF8 | A351-CF8 | A351-CF8 |
| 10. Lower Shaft | A351-CF8 | A351-CF8 | A351-CF8 |
| 11. Gasket | PTFE | PTFE | PTFE |
| 12. O-Ring | Viton | Viton | Viton |

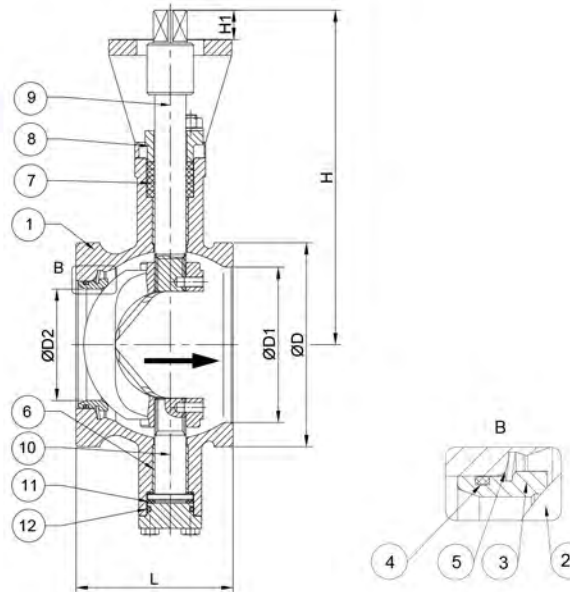


FIG 21V

DIMENSIONS (mm)

| Size | Inch | 1 | 1¼ | 1½ | 2 | 2½ | 3 | 4 | 5 | 6 | 8 | 10 |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | mm | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 |
| L | | 62 | 62 | 62 | 75 | 90 | 100 | 115 | 129 | 160 | 200 | 240 |
| H | | 179 | 184 | 189 | 197 | 217 | 231 | 243 | 292 | 335 | 362 | 421 |
| H1 | | 14 | 14 | 14 | 17 | 17 | 22 | 22 | 22 | 27 | 27 | 36 |
| ØD | | 68 | 78 | 85 | 100 | 120 | 130 | 158 | 184 | 216 | 268 | 322 |
| ØD1 | | 38 | 44 | 50 | 60 | 75 | 99 | 118 | 140 | 167 | 210 | 264 |
| ØD2 | | 20 | 24 | 30 | 40 | 52 | 71 | 85 | 100 | 126 | 158 | 204 |

*The specifications are subject to change without further notice



Metal Seat Designed

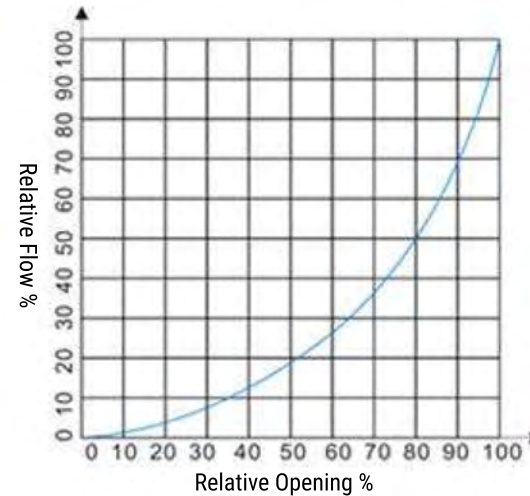


VALMATIC SEGMENTED CONTROL VALVE

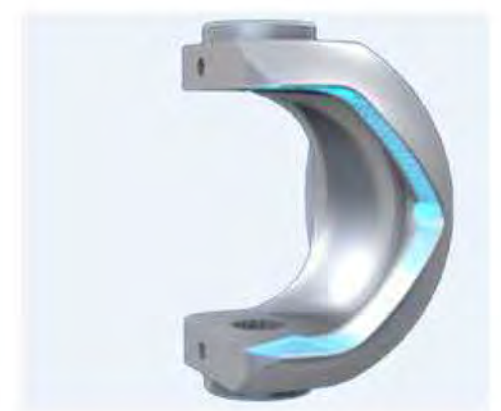
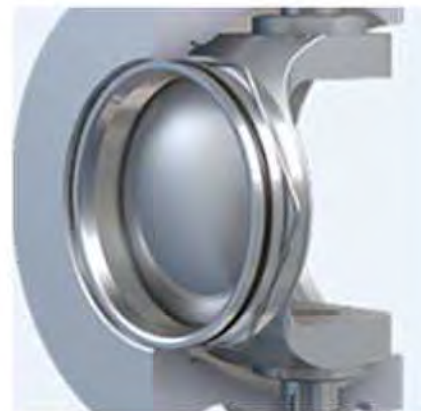
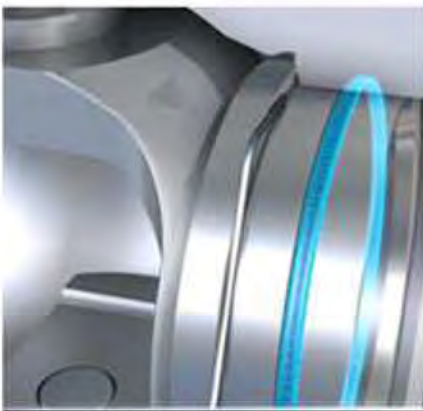
MAXIMUM ALLOWABLE DIFFERENTIAL PRESSURE AND RATED CV PN40 / ANSI 300

| SIZE (mm) | Max. Shut off D.P. (Bar) | Max. Control D.P. (Bar) | Rated CV |
|-----------|--------------------------|-------------------------|----------|
| 25 | 50 | 35 | 27 |
| 32 | 50 | 35 | 47 |
| 40 | 50 | 35 | 70 |
| 50 | 50 | 35 | 135 |
| 65 | 50 | 35 | 210 |
| 80 | 50 | 35 | 390 |
| 100 | 40 | 25 | 560 |
| 125 | 40 | 25 | 790 |
| 150 | 40 | 25 | 1130 |
| 200 | 35 | 25 | 1860 |
| 250 | 35 | 20 | 2900 |

EQUAL PERCENTAGE INHERENT
FLOW CHARACTERISTIC



Normal temperature metal seat design: Hexagonal spring to pre-tightened seat, providing multipoint equal contact forces and good sealing property even in low differential pressure conditions



Features: Low torque, Operating stability, Precise control property.



VALVE SIZE AND ACTUATOR TABLE SELECTION (FOR PN16 RATING)

Piston Type Actuator

| Size | | Double Acting Model | Air Press. (5 Bar) Nm | Single Acting Model | Air Press. (5 Bar) Nm |
|------|-----|---------------------|-----------------------|---------------------|-----------------------|
| Inch | mm | | | | |
| 1 | 25 | ZS36-63 | 48 | ZDS45-100 | 60 |
| 1¼ | 32 | ZS36-63 | 48 | ZDS45-100 | 60 |
| 1½ | 40 | ZS36-80 | 76 | ZDS45-125 | 94 |
| 2 | 50 | ZS45-80 | 96 | ZDS45-125 | 94 |
| 2½ | 65 | ZS45-80 | 96 | ZDS45-125 | 94 |
| 3 | 80 | ZS45-100 | 150 | ZDS55-125 | 115 |
| 4 | 100 | ZS45-100 | 150 | ZDS55-125 | 115 |
| 5 | 125 | ZS55-100 | 180 | ZDS63-160 | 214 |
| 6 | 150 | ZS55-125 | 280 | ZDS63-200 | 335 |
| 8 | 200 | ZS63-160 | 488 | ZDS63-200 | 335 |
| 10 | 250 | ZS63-200 | 838 | ZDS80-250 | 665 |

I-Tork Scotch and Yoke Type Actuator

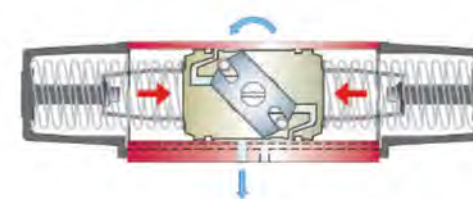
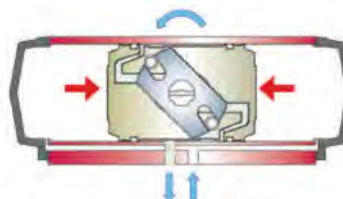
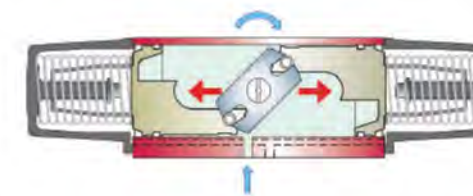
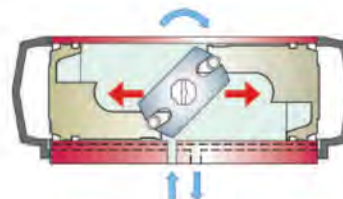
| Size | | Double Acting Model | Air Press. (5 Bar) | | Single Acting Model | Air Press. (5 Bar) | |
|------|-----|---------------------|--------------------|------|---------------------|--------------------|-----|
| Inch | mm | | 0° | 90° | | 0° | 90° |
| 1 | 25 | PD50 | 54 | 38 | PS70 | 57 | 38 |
| 1¼ | 32 | PD70 | 149 | 104 | PS85 | 101 | 67 |
| 1½ | 40 | PD70 | 149 | 104 | PS100 | 163 | 106 |
| 2 | 50 | PD70 | 149 | 104 | PS100 | 163 | 106 |
| 2½ | 65 | PD70 | 149 | 104 | PS125 | 309 | 202 |
| 3 | 80 | PD85 | 277 | 194 | PS125 | 309 | 202 |
| 4 | 100 | PD85 | 277 | 194 | PS125 | 309 | 202 |
| 5 | 125 | PD85 | 277 | 194 | PS160 | 579 | 390 |
| 6 | 150 | PD100 | 449 | 314 | PS160 | 579 | 390 |
| 8 | 200 | PD125 | 860 | 602 | PS200 | 1115 | 729 |
| 10 | 250 | PD160 | 1668 | 1168 | | | |



Single Acting
Piston Actuator



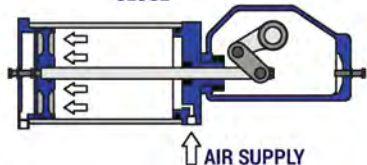
Double Acting
Piston Actuator



MECHANICAL MOVEMENT- PISTON ACTUATOR

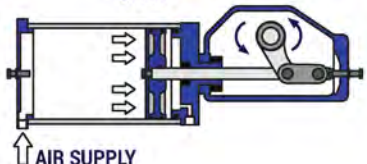
DOUBLE ACTING ACTUATOR

CLOSE



AIR SUPPLY

OPEN



AIR SUPPLY

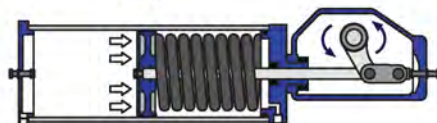
SINGLE ACTING ACTUATOR

CLOSE



NO AIR SUPPLY

OPEN



AIR SUPPLY