

## Series "V8" Characterized Ball Valve

The Series "V8" is designed to provide characterized control of fluids in light to moderate service. The characterized "V" is laser cut in either 60° or 30° configurations directly into the valve ball. "V8" valves may be used in manual or modulating control service.

### The Series "V8" features:

- 60° or 30° configurations
- Integral ISO mounting pad
- Live-Loaded Stem Seals for High Performance Cycling
- In line weldability
- Selection of Ends: NPT, SW, BW, Flanged plus Tube and TriClamp
- Variety of Seats and Seals for a wide range of services
- Size Range: ½", 1" and 2"



### Applications

The "V8" Control Valve is ideal for applications where critical, high performance characterized flow is required.

The "V" Ball is adapted to our well proven, "Process-Quality" ball valves to provide accurate control of gases, liquids and slurries.

With a wide choice of advanced technology seat materials, "V8" control valves may be used in a variety of critical applications including:

- Temperature Control – Steam and Heat Transfer Fluids
- pH control
- Flow Control
- Level control
- Pressure Control
- Filling Applications

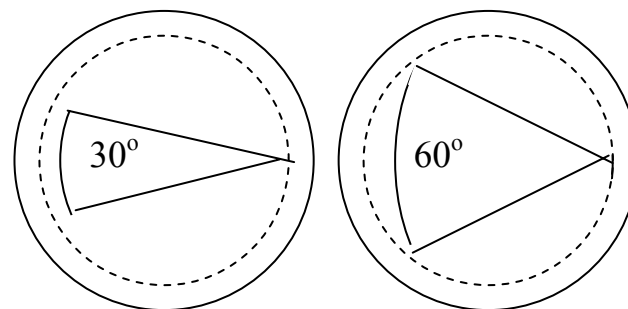


### Design Advantages

- Simplicity-Low maintenance costs compared to globe and segmented valves
- Low Weight-about 30% lighter than globe valve
- Compact Size-Leaves more room for additional field equipment
- Low Flow – to Cv=0.08
- Flexibility-"V" Ball comes in 60° or 30° configurations

**Dynamic Characteristics**

- Shutoff Class VI
- Capacity: 2" Cv = 61
- Rangeability: 200:1
- Live Loaded Stem seal is inherently resistant to wear under high cycling
- Pressure Drop to 500 psi
- Temperature to 450°F
- Inherent Characteristic: Equal %


**Control Valve Selection Information**

| Service Conditions                   | Units | Minimum | Normal | Maximum |
|--------------------------------------|-------|---------|--------|---------|
| <b>Media</b>                         |       |         |        |         |
| <b>Inlet Pressure</b>                |       |         |        |         |
| <b>Outlet Pressure</b>               |       |         |        |         |
| <b>Differential Pressure</b>         |       |         |        |         |
| <b>Flow Rate</b>                     |       |         |        |         |
| <b>Temperature</b>                   |       |         |        |         |
| <b>Specific Gravity</b>              |       |         |        |         |
| <b>Viscosity/Specific Heat Ratio</b> |       |         |        |         |
| <b>Required Cv</b>                   |       |         |        |         |

**Cv Table for SVF Series "V8" Characterized "V-Ball" Control Valves**

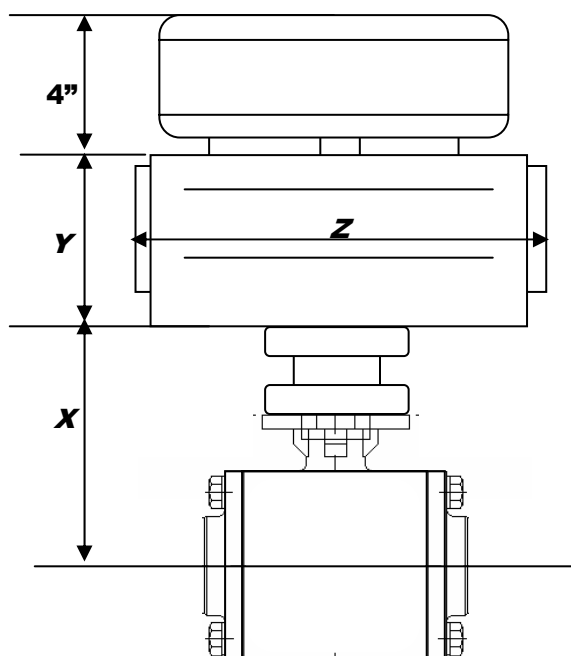
| Valve Size | Line Size | 10%  | 20%  | 30%  | 40%  | 50%  | 60%   | 70%   | 80%   | 90%   | OPEN  |
|------------|-----------|------|------|------|------|------|-------|-------|-------|-------|-------|
| 1/2" V30   | 1/2"      | 0.02 | 0.10 | 0.20 | 0.34 | 0.55 | 0.83  | 1.11  | 1.59  | 2.08  | 2.5   |
|            | 3/4"      | 0.02 | 0.09 | 0.18 | 0.30 | 0.49 | 0.74  | 0.99  | 1.41  | 1.85  | 2.22  |
|            | 1"        | 0.02 | 0.08 | 0.17 | 0.28 | 0.46 | 0.69  | 0.92  | 1.32  | 1.73  | 2.07  |
| 1/2" V60   | 1/2"      | 0.02 | 0.12 | 0.33 | 0.60 | 0.84 | 1.35  | 1.95  | 3.10  | 4.37  | 5.92  |
|            | 3/4"      | 0.02 | 0.10 | 0.29 | 0.44 | 0.75 | 1.20  | 1.74  | 2.76  | 3.90  | 5.27  |
|            | 1"        | 0.02 | 0.10 | 0.27 | 0.41 | 0.70 | 1.12  | 1.62  | 2.57  | 3.63  | 4.91  |
| 1" V30     | 1"        | 0.02 | 0.21 | 0.56 | 0.96 | 1.58 | 2.39  | 3.43  | 4.62  | 6.15  | 7.26  |
|            | 1.5"      | 0.02 | 0.16 | 0.44 | 0.75 | 1.23 | 1.86  | 2.68  | 3.60  | 4.80  | 5.66  |
|            | 2"        | 0.02 | 0.15 | 0.40 | 0.69 | 1.14 | 1.72  | 2.47  | 3.33  | 4.43  | 5.23  |
| 1" V60     | 1"        | 0.02 | 0.30 | 0.78 | 1.24 | 2.27 | 3.59  | 5.28  | 8.29  | 11.60 | 15.50 |
|            | 1.5"      | 0.02 | 0.23 | 0.61 | 0.97 | 1.77 | 2.80  | 4.12  | 6.47  | 9.05  | 12.10 |
|            | 2"        | 0.02 | 0.22 | 0.56 | 0.89 | 1.63 | 2.58  | 3.80  | 5.97  | 8.35  | 11.20 |
| 2" V30     | 1.5"      | 0.02 | 0.55 | 1.72 | 3.41 | 5.65 | 8.26  | 12.10 | 16.60 | 22.20 | 26.50 |
|            | 2"        | 0.02 | 0.45 | 1.41 | 2.80 | 4.63 | 6.77  | 9.92  | 13.60 | 18.20 | 21.70 |
|            | 2.5"      | 0.02 | 0.41 | 1.27 | 2.52 | 4.18 | 6.11  | 8.95  | 12.30 | 16.40 | 19.60 |
| 2" V60     | 1.5"      | 0.02 | 0.70 | 2.64 | 4.90 | 9.32 | 15.50 | 22.20 | 32.10 | 47.20 | 61.60 |
|            | 2"        | 0.02 | 0.57 | 2.16 | 4.02 | 7.64 | 12.70 | 18.20 | 26.30 | 38.70 | 50.50 |
|            | 2.5"      | 0.02 | 0.52 | 1.95 | 3.63 | 6.90 | 11.50 | 16.40 | 23.80 | 34.90 | 45.60 |

**Series "V8" Characterized Ball Valve**
**Actuator Sizing and Package Dimensions (with Positioner)**

| Size | Torque | X (in.) | AD @ 80  | AS @ 80    | AD @ 60  | AS @ 60    |
|------|--------|---------|----------|------------|----------|------------|
| 1/2" | 60     | 1.75    | AD-11    | AS-14/16-4 | AD-11    | AS-14/16-3 |
| 1"   | 90     | 2.32    | AD-11    | AS-14/16-4 | AD-14/16 | AS-19/21-3 |
| 2"   | 375    | 3.32    | AD-19/21 | AS-31-5    | AD-19/21 | AS-36-3    |

Note: AD (Double Acting Models), AS (Spring Return Models), @ = Air Supply Pressure (psi)

| Model          | Y (in.) | Z (in.) |
|----------------|---------|---------|
| <b>A-11</b>    | 4       | 5       |
| <b>A14/16</b>  | 4.5     | 6.5     |
| <b>A-19/21</b> | 4.5     | 7       |
| <b>A-26</b>    | 5.6     | 9.5     |
| <b>A-31</b>    | 6.5     | 9.5     |
| <b>A-36</b>    | 8       | 9.7     |
| <b>A-41</b>    | 8       | 11.5    |
| <b>A-46</b>    | 8.3     | 14      |
| <b>A-56</b>    | 10      | 17      |


**HOW TO ORDER**

| SIZE | STYLE | BODY/ENDS      | BALL/STEM | SEAT       | SEAL          | ENDS           |
|------|-------|----------------|-----------|------------|---------------|----------------|
| 1/2" | V8    | 6-316L         | 6-316 SS  | T-TFE      | T- Virgin TFE | SE-NPT         |
|      |       | 4-Carbon Steel |           | S-SupraLon | B- BUNA       | BW-BUTT WELD   |
| 1"   |       |                |           |            | E- EPDM       | SW-SOCKET WELD |
|      |       |                |           |            | G- Graphoil   | CE-COMPRESSION |
| 2"   |       |                |           |            | V- Viton      | 150-FLANGED    |
|      |       |                |           |            | S-SupraLon    | TR-TRICLAMP    |
|      |       |                |           |            | ETO-TUBE OD   |                |

SupraLon is a high density TFM Material. V8 valves shall not be used for erosive fluids.

| Valve and Actuator Selection Data     |                   |                               |              |
|---------------------------------------|-------------------|-------------------------------|--------------|
| <b>Valve Information</b>              |                   | <b>Pipeline Information</b>   |              |
| Type                                  | <b>Ball Valve</b> | Inlet Pipe size               |              |
| Size                                  |                   | Pipe SCH.                     |              |
| End connection                        |                   | Outlet Pipe Size              |              |
| ANSI Class                            |                   | Pipe SCH.                     |              |
| Body Material                         |                   | Material of Construction      |              |
| Ball/Stem Material                    |                   |                               |              |
| Seat/Seal Material                    |                   |                               |              |
| Stem Seal Material                    |                   |                               |              |
| <b>Pneumatic Actuator Information</b> |                   | <b>Positioner Information</b> |              |
| Double Acting                         |                   | Control Signal                |              |
| Spring Return                         |                   | Enclosure NEMA 4 or 7         |              |
| Air Supply (Min psi)                  |                   | Other Information             |              |
| <b>Fail Position</b>                  |                   |                               |              |
| Open                                  |                   |                               |              |
| Closed                                |                   |                               |              |
| Fail In Place                         |                   |                               |              |
| <b>Electric Actuator Information</b>  |                   | <b>Positioner Information</b> |              |
| Enclosure NEMA 4 or 7                 |                   | Control Signal                |              |
| Voltage AC/DC/Current                 |                   | Other Information             |              |
| Other Information                     |                   |                               |              |
| <b>Accessories</b>                    | <b>Voltage</b>    | <b>NEMA 4 or 7</b>            | <b>Other</b> |
| Limit Switches                        |                   |                               |              |
| Pilot Valve                           |                   |                               |              |
| Tubing (SS or Plastic)                |                   |                               |              |
| Other                                 |                   |                               |              |
|                                       |                   |                               |              |
|                                       |                   |                               |              |

Not responsible for typographical errors. Specifications can change without notice.