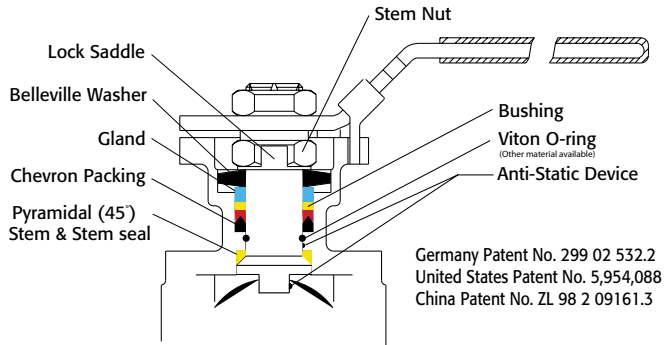




Triac "V" Series Ball Valves are ideal for achieving more precise control with the simplicity and sealing features of a ball valve. We offer them 1/2" – 4" in a 3-piece design and 1/2"– 6" flanged. The standard "V" notch options are 30, 60 & 90. While they are available as manual valves, we specialize in automating them to suit your particular control requirements.



Easy to Automate!

See automated data sheets for pre-sized assemblies



Pneumatic



Electric



**"V" Series
Control Port
Ball Valves**

Sizes 1/2" – 6"

3 Piece and 150# Flanged

316SS or WCB

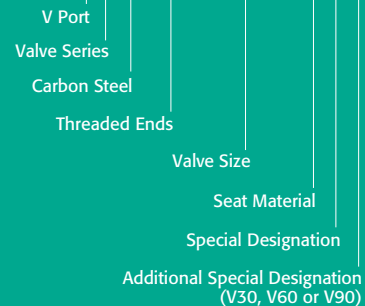
30, 60 & 90 "V" Notch Standard
Others on Request



**HOW TO ORDER
MANUAL VALVES**

SAMPLE PART #

V8C-TH-0200-XXX



See part number matrix for itemized options



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"V" Series

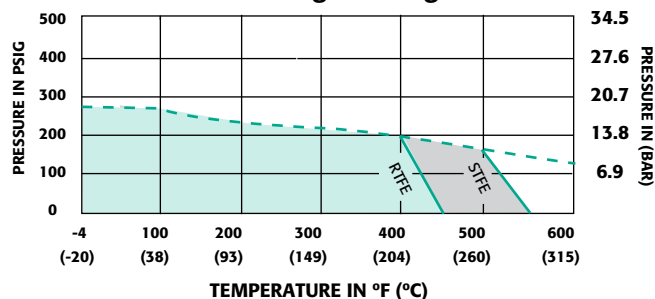
"V" Series Flow Coefficients- Cv Chart

| Valve Size | Ball Angle | 0% | 15% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |
|------------|------------|----------|------------|------------|------------|-----------|-----------|-----------|-----------|------------|------------|------------|
| 1/2" | 30 | 0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.5 | 0.8 | 1.1 | 1.6 | 2.2 | 2.6 |
| | 60 | 0 | 0.1 | 0.1 | 0.3 | 0.5 | 0.9 | 1.4 | 2 | 3.3 | 4.4 | 6 |
| | 90 | 0 | 0.1 | 0.2 | 0.4 | 0.6 | 0.9 | 1.5 | 2.2 | 3.8 | 5.4 | 6.9 |
| 3/4" | 30 | 0 | 0.1 | 0.2 | 0.5 | 0.7 | 1.1 | 1.8 | 2.4 | 3.3 | 4.5 | 5.4 |
| | 60 | 0 | 0.1 | 0.2 | 0.7 | 1 | 1.7 | 2.8 | 4 | 6.5 | 9 | 12 |
| | 90 | 0 | 0.2 | 0.4 | 0.8 | 1.2 | 2 | 3.1 | 4.6 | 8 | 11.3 | 14 |
| 1" | 30 | 0 | 0.1 | 0.3 | 0.8 | 1.3 | 2.3 | 3.5 | 5.1 | 9.8 | 8.5 | 10 |
| | 60 | 0 | 0.2 | 0.4 | 1.1 | 1.8 | 3.4 | 5.3 | 7.9 | 12.3 | 15.3 | 21 |
| | 90 | 0 | 0.2 | 0.6 | 1.8 | 3.4 | 5.1 | 8.1 | 11.4 | 16 | 21 | 29 |
| 1 1/4" | 30 | 0 | 0.2 | 0.4 | 1.1 | 2 | 3.7 | 5.5 | 8 | 10 | 13 | 15 |
| | 60 | 0 | 0.2 | 0.6 | 1.8 | 3 | 5.5 | 9.5 | 12.8 | 19 | 26 | 39 |
| | 90 | 0 | 0.3 | 0.8 | 2 | 5 | 8 | 14 | 19 | 28 | 39 | 55 |
| 1 1/2" | 30 | 0 | 0.3 | 0.6 | 1.6 | 3 | 5 | 7.5 | 11 | 14 | 17 | 20 |
| | 60 | 0 | 0.4 | 0.8 | 2.5 | 4 | 8 | 13 | 19 | 27 | 40 | 52 |
| | 90 | 0 | 0.4 | 0.9 | 3.5 | 7 | 13 | 20 | 31 | 42 | 63 | 78 |
| 2" | 30 | 0 | 0.4 | 1.2 | 3.8 | 6 | 10 | 15 | 23 | 31 | 43 | 60 |
| | 60 | 0 | 0.4 | 1.5 | 4.6 | 9 | 16.5 | 27 | 39 | 55 | 83 | 110 |
| | 90 | 0 | 0.5 | 2 | 6 | 12 | 22 | 35 | 45 | 70 | 105 | 135 |
| 2 1/2" | 30 | 0 | 0.4 | 1 | 4 | 8 | 12 | 18 | 28 | 37 | 62 | 75 |
| | 60 | 0 | 0.4 | 1.5 | 5 | 10 | 21 | 34 | 53 | 75 | 103 | 150 |
| | 90 | 0 | 0.5 | 1.7 | 7 | 14 | 28 | 48 | 70 | 106 | 160 | 218 |
| 3" | 30 | 0 | 0.5 | 1.2 | 4 | 8 | 14 | 23 | 33 | 46 | 65 | 82 |
| | 60 | 0 | 0.5 | 2.5 | 6 | 14 | 25 | 40 | 65 | 91 | 128 | 165 |
| | 90 | 0 | 0.7 | 3.5 | 8 | 18 | 35 | 60 | 90 | 135 | 205 | 310 |
| 4" | 30 | 0 | 0.6 | 2 | 6 | 15 | 29 | 48 | 71 | 100 | 130 | 159 |
| | 60 | 0 | 0.7 | 3 | 11 | 25 | 40 | 59 | 90 | 141 | 212 | 356 |
| | 90 | 0 | 1 | 3.5 | 16 | 40 | 75 | 125 | 190 | 295 | 442 | 670 |
| 6" | 30 | 0 | 0.9 | 3.2 | 14 | 33 | 60 | 103 | 155 | 220 | 280 | 350 |
| | 60 | 0 | 2 | 5 | 22 | 60 | 110 | 190 | 285 | 416 | 586 | 800 |
| | 90 | 0 | 3 | 8 | 35 | 90 | 160 | 280 | 425 | 650 | 970 | 1480 |

| | | | | | | | | | | | |
|----|---|------|------|------|------|------|------|------|------|------|------|
| FL | 0 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.9 | 0.88 | 0.86 | 0.82 | 0.75 |
| Xt | 0 | 0.98 | 0.77 | 0.71 | 0.67 | 0.64 | 0.63 | 0.62 | 0.55 | 0.43 | 0.4 |

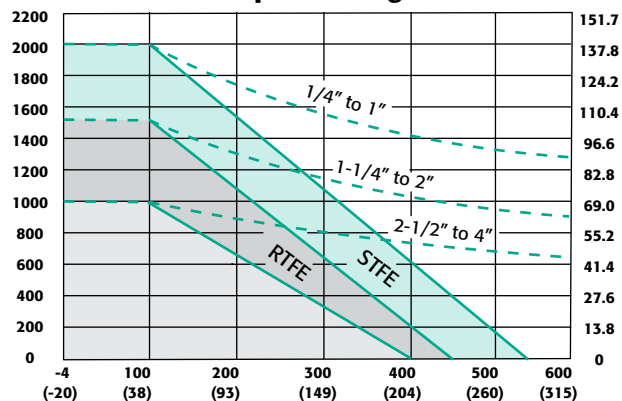
Pressure vs. Temperature Charts 1" – 6"

150# Flanged Design

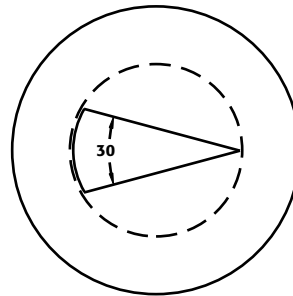


NOTE: Dotted line shows the rating for valve body. Solid line shows the rating for valve seat. Both ratings need to be consulted when determining the limitation of the valve for specific application. Consult factory for other seat material.

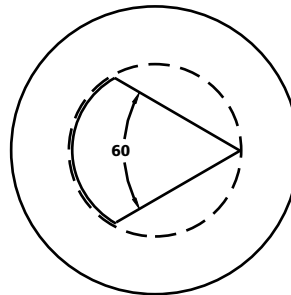
3-piece Design



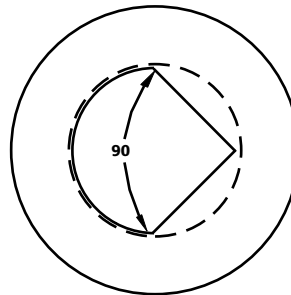
Triac "V" port control valves are available with 30V, 60V & 90V notch. V port valves offer better and more consistent control than traditional round ported ball valves. We offer this valve with the control port cast and machined into the ball, not in the seat. This allows for much better flow characteristics and eliminates the need to replace seats. The 30 option allows for finer tapered control throughout the valve rotation and the 60 & 90 offers a larger Cv in addition to controlled flow.



30 V-Port



60 V-Port



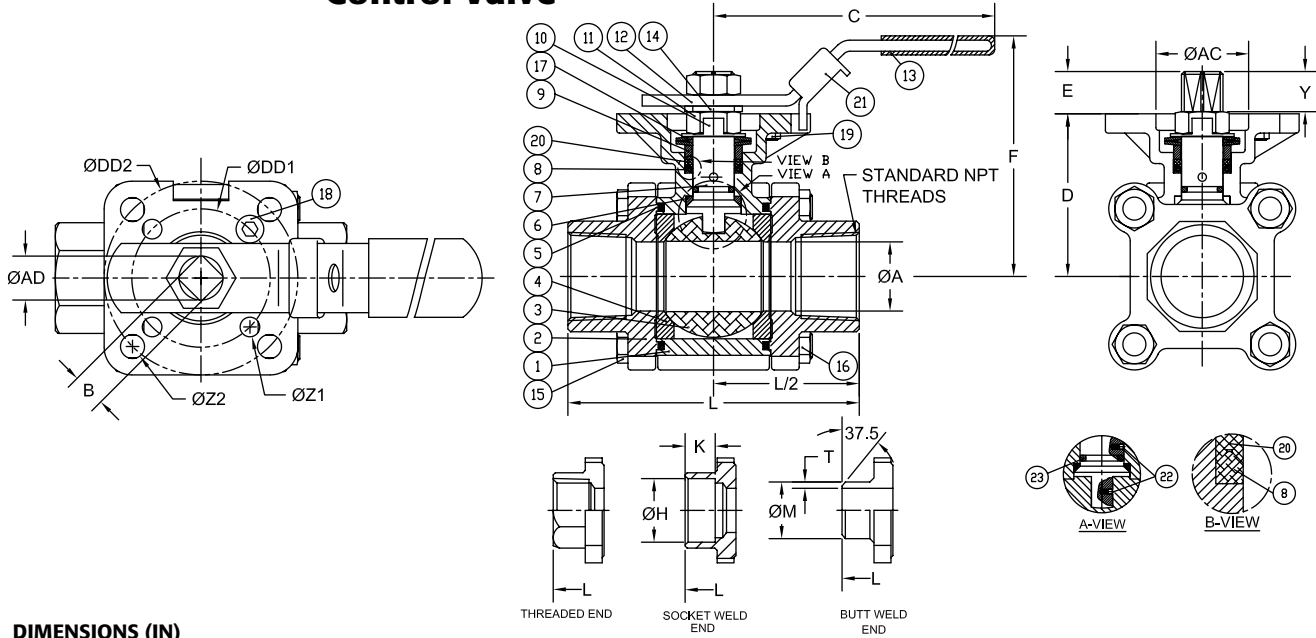
90 V-Port

The 50/50 seat is standard with all V port valves. The 50% SST powder and 50% PTFE offers both strength and superior sealing properties.



"V" Series 3 Piece

88 Series V-Port Control Valve

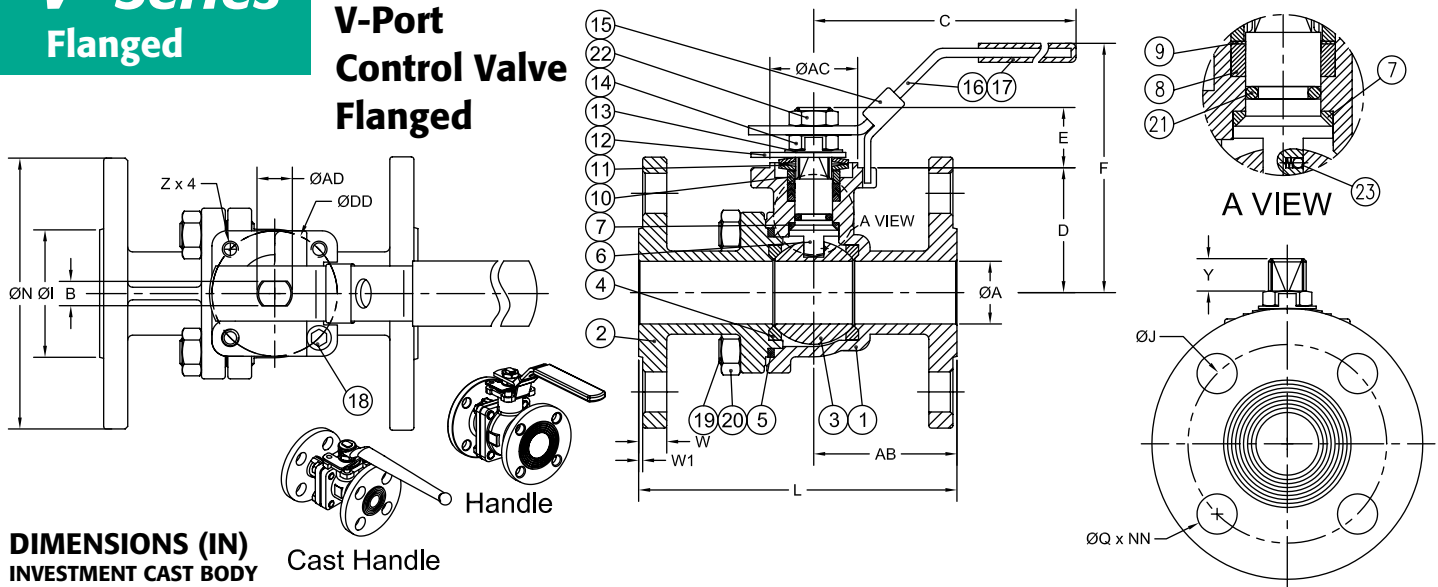


DIMENSIONS (IN)

| SIZE | ØA | B | C | D | E | F | H | K | L | M | T | Y | AC | AD | DD1 | DD2 | ØZ2 | ØZ1 | (LBS) | ISO5211 |
|--------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|-------|-------|------|------|-------|---------|
| 1/2" | 0.59 | 0.354 | 5.47 | 1.66 | 0.25 | 3.00 | 0.85 | 0.39 | 2.85 | 0.85 | 0.06 | 0.25 | 1.07 | 0.44 | 1.654 | 1.969 | 0.28 | 0.28 | 2.0 | F04/F05 |
| 3/4" | 0.79 | 0.354 | 5.47 | 1.83 | 0.33 | 3.20 | 1.07 | 0.51 | 3.36 | 1.07 | 0.06 | 0.33 | 1.07 | 0.44 | 1.969 | 2.756 | 0.34 | 0.28 | 3.0 | F05/F07 |
| 1" | 0.98 | 0.433 | 6.50 | 2.31 | 0.41 | 3.86 | 1.34 | 0.51 | 4.15 | 1.34 | 0.06 | 0.41 | 1.34 | 0.56 | 1.969 | 2.756 | 0.34 | 0.28 | 4.5 | F05/F07 |
| 1-1/4" | 1.26 | 0.433 | 6.50 | 2.46 | 0.41 | 4.00 | 1.69 | 0.51 | 4.37 | 1.68 | 0.06 | 0.41 | 1.34 | 0.56 | 1.969 | 2.756 | 0.34 | 0.28 | 6.0 | F05/F07 |
| 1-1/2" | 1.50 | 0.551 | 8.46 | 3.11 | 0.53 | 5.04 | 1.92 | 0.51 | 5.01 | 1.91 | 0.06 | 0.53 | 1.54 | 0.74 | 1.969 | 2.756 | 0.34 | 0.28 | 10.0 | F05/F07 |
| 2" | 1.97 | 0.551 | 8.46 | 3.42 | 0.53 | 5.35 | 2.40 | 0.63 | 5.62 | 2.38 | 0.06 | 0.53 | 1.54 | 0.74 | 1.969 | 2.756 | 0.35 | 0.30 | 13.0 | F05/F07 |
| 2-1/2" | 2.56 | 0.748 | 10.31 | 4.28 | 0.66 | 6.60 | 2.89 | 0.63 | 7.28 | 3.00 | N/A | 0.66 | 2.09 | 0.94 | 2.756 | 4.016 | 0.47 | 0.39 | 26.0 | F07/F10 |
| 3" | 3.15 | 0.748 | 10.31 | 4.63 | 0.70 | 6.96 | 3.54 | 0.63 | 8.07 | 3.54 | N/A | 0.70 | 2.09 | 0.94 | 2.756 | 4.016 | 0.47 | 0.39 | 34.0 | F07/F10 |
| 4" | 3.94 | 0.748 | 12.28 | 5.26 | 0.66 | 7.59 | 4.54 | 0.79 | 9.45 | 4.57 | N/A | 0.66 | 2.09 | 0.94 | 2.756 | 4.016 | 0.47 | 0.39 | 52.0 | F07/F10 |

"V" Series Flanged

90 Series V-Port Control Valve Flanged



DIMENSIONS (IN) INVESTMENT CAST BODY

Cast Handle

| SIZE | A | B | C | D | E | F | I | J | L | N | Q | W | W1 | Y | Z | AB | AC | AD | DD | NN | (LBS) | ISO 5211 |
|--------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|------|-------|----|-------|----------|
| 1/2" | 0.59 | 0.315 | 6.69 | 1.34 | 0.92 | 3.15 | 1.47 | 2.38 | 4.26 | 3.50 | 0.63 | 0.44 | 0.06 | 0.36 | M5 | 1.82 | 1.17 | 0.43 | 1.654 | 4 | 3.7 | F04 |
| 3/4" | 0.79 | 0.315 | 6.69 | 1.65 | 0.94 | 3.43 | 1.82 | 2.75 | 4.62 | 3.88 | 0.63 | 0.44 | 0.06 | 0.40 | M5 | 2.17 | 1.17 | 0.43 | 1.654 | 4 | 4.6 | F04 |
| 1" | 0.98 | 0.382 | 8.05 | 1.95 | 0.94 | 3.85 | 2.08 | 3.13 | 5.00 | 4.26 | 0.63 | 0.44 | 0.06 | 0.32 | M6 | 2.20 | 1.37 | 0.56 | 1.969 | 4 | 3.1 | F05 |
| 1-1/2" | 1.50 | 0.472 | 10.28 | 3.08 | 1.37 | 6.02 | 2.88 | 3.88 | 6.50 | 5.00 | 0.63 | 0.56 | 0.06 | 0.58 | M8 | 2.81 | 2.17 | 0.75 | 2.756 | 4 | 13.6 | F07 |
| 2" | 1.97 | 0.472 | 10.28 | 3.40 | 1.37 | 6.38 | 3.62 | 4.75 | 7.02 | 6.00 | 0.75 | 0.63 | 0.06 | 0.58 | M8 | 3.38 | 2.17 | 0.75 | 2.756 | 4 | 19.2 | F07 |
| 2-1/2" | 2.56 | 0.472 | 10.28 | 3.83 | 1.37 | 6.81 | 4.12 | 5.50 | 7.49 | 7.00 | 0.75 | 0.69 | 0.06 | 0.58 | M8 | 3.02 | 2.17 | 0.75 | 2.756 | 4 | 30.0 | F07 |
| 3" | 3.15 | 0.591 | 13.94 | 4.23 | 1.81 | 6.95 | 5.00 | 6.00 | 8.01 | 7.50 | 0.75 | 0.75 | 0.06 | 0.93 | M10 | 4.01 | 2.76 | 0.94 | 4.016 | 4 | 41.0 | F10 |
| 4" | 3.94 | 0.591 | 13.94 | 4.82 | 1.79 | 7.52 | 6.19 | 7.50 | 9.04 | 9.00 | 0.75 | 0.94 | 0.06 | 0.93 | M10 | 4.06 | 2.76 | 0.94 | 4.016 | 8 | 65.0 | F10 |

For 6" valve dimensions please see D9 brochure.

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