

# Victaulic® Series 788V Manual Balancing Valve



106.03

## PROJECT INFORMATION

Project  
Contractor  
Job  
Engineer  
Date



## 1.0 PRODUCT DESCRIPTION

**Available Sizes:** 2 ½ - 16"/73.0 mm – DN400

**Application/Function:** Heating (Not Including Steam) and Cooling Systems/Balancing, Pre-Setting, Measuring, and Shut-Off

**Maximum Working Pressure:** 350 psi/2413 kPa/24 Bar

**Maximum Operating Temperature:** +14°F to 248°F/-12°C to +120°C

## 2.0 CERTIFICATIONS/LISTINGS

Product manufactured by Victaulic and/or certified suppliers in accordance with ISO-9001.

## 3.0 MATERIALS AND DESIGN

### Body:

- Gray cast iron conforming to EN 1561 EN-GJL-250 (GG25) for 2 ½ – 12"/73.0 mm – DN300 sizes
- Ductile iron conforming to EN1563 EN-GJS-500-7 (GGG50) for 14 – 16"/DN350 – DN400 sizes

### Bonnet:

- Cast iron EN-GJL-250 (GG25) for 2 ½ – 3"/73.0 mm – DN80 sizes
- Brass CC491K (Rg5) for 4 – 6"/DN100 – DN150 sizes
- Cast iron EN-GJS-400-7 (GGG40) for 8 – 12"/DN200 – DN300 sizes
- Ductile iron EN-GJS-500-7 (GGG50) for 14 – 16"/DN350 – DN400 sizes

**Bonnet Seal O-Ring:** EPDM

**Spindle:** DZR brass CW602

**Spindle Seal O-Ring:** EPDM

### Plug:

- DZR brass CW602 for 2 ½ – 3"/73.0 mm – DN80 sizes
- Brass CC491K (Rg5) for 4 – 16"/DN100 – DN400 sizes

### Seat Seal:

- PTFE for 2 ½ – 3"/73.0 mm – DN80 sizes
- EPDM for 4 – 16"/DN100 – DN400 sizes

**PT Ports:** DZR brass CW602

**Set Screw:** 304 stainless steel

**Handwheel:** Polyamide plastic

## 4.0 AVAILABLE ACCESSORIES

- |                        |                                 |
|------------------------|---------------------------------|
| • Standard PT Ports    | • Measuring Nipple              |
| • PT Port Extensions   | • Locking Wires and Wire Crimps |
| • Hand Wheel           | • Memory Stop Hex Key           |
| • Hand Wheel Extension | • Flow Wheel                    |

THE INFORMATION CONTAINED ON THIS PAGE IS NOT INTENDED TO REPLACE THE FULL PRODUCT DATA LISTED LATER IN THIS DOCUMENT. THOROUGHLY READ AND UNDERSTAND ALL INSTALLATION INSTRUCTIONS AND PRODUCT SAFETY INFORMATION BEFORE INSTALLING THIS PRODUCT.



## 5.0 VALVE SELECTION GUIDE

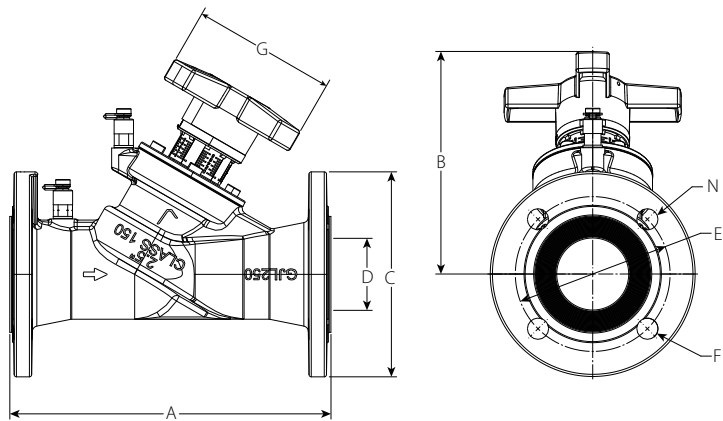
| Nominal Size<br>inches<br>DN | Actual Outside Diameter<br>inches<br>mm | Absolute Minimum Flow Rate<br>GPM<br>LPM | Nominal Minimum Flow Rate<br>GPM<br>LPM | Nominal Maximum Flow Rate<br>GPM<br>LPM | Absolute Maximum Flow Rate<br>GPM<br>LPM |
|------------------------------|-----------------------------------------|------------------------------------------|-----------------------------------------|-----------------------------------------|------------------------------------------|
| 2 ½                          | 2.875<br>73.0                           | 1.58<br>7.18                             | 2.40<br>10.91                           | 113<br>514                              | 333<br>1514                              |
| 3<br>DN80                    | 3.500<br>88.9                           | 1.51<br>6.86                             | 2.30<br>10.46                           | 141<br>641                              | 416<br>1891                              |
| 4<br>DN100                   | 4.500<br>114.3                          | 2.24<br>10.2                             | 3.40<br>15.5                            | 252<br>1146                             | 742<br>3373                              |
| 5                            | 5.563<br>141.3                          | 2.96<br>13.5                             | 4.50<br>20.5                            | 361<br>1641                             | 1061<br>4823                             |
| 6<br>DN150                   | 6.625<br>168.3                          | 2.90<br>13.2                             | 4.40<br>20.0                            | 499<br>2268                             | 1470<br>6683                             |
| 8<br>DN200                   | 8.625<br>219.1                          | 9.87<br>44.9                             | 15.0<br>68.2                            | 1037<br>4714                            | 3051<br>13870                            |
| 10<br>DN250                  | 10.750<br>273.0                         | 11.2<br>50.9                             | 17.0<br>77.3                            | 1399<br>6360                            | 4116<br>18711                            |
| 12<br>DN300                  | 12.750<br>323.9                         | 34.9<br>159                              | 53.0<br>241                             | 1861<br>8460                            | 5475<br>24889                            |
| 14<br>DN350                  | 14.000<br>355.6                         | 220<br>1000                              | 335<br>1523                             | 2601<br>11824                           | 7654<br>34795                            |
| 16<br>DN400                  | 16.000<br>406.4                         | 257<br>1168                              | 391<br>1777                             | 4335<br>19707                           | 12757<br>57993                           |

Sizing may be accomplished by using the nominal range of flows provided. Nominal flow rates are based on 1-psi pressure drop with minimum at half turn and maximum at fully open. Absolute flow rates are established by calculating the flow through the valve at its minimum recommended opening position (half turn) with a pressure drop of 1-ft of water and maximum opening position (fully open) with a pressure drop of 20-ft of water. These ranges were chosen as they are achievable by most systems and common measurement equipment.

Flows outside this the nominal range are achievable. It is the responsibility of the system designer to determine whether system conditions such as available differential pressure, maximum component pressure drop and velocity limits, and measurement accuracy will allow valve sizing outside this nominal range. However, it is not recommended to exceed the maximum flow rates listed above. Excessive pressure drop may cause excessive noise or cavitation within the system.

6.0 DIMENSIONS

Series 788V Flanged End



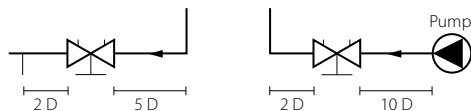
Series 788V  
2 ½ – 16"/73.0 mm – DN400

| Size                    |                                               | Dimensions                         |                                          |                                   |                         |                                     |                                      |                                          |                                         | Weight                        |
|-------------------------|-----------------------------------------------|------------------------------------|------------------------------------------|-----------------------------------|-------------------------|-------------------------------------|--------------------------------------|------------------------------------------|-----------------------------------------|-------------------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | A<br>End to<br>End<br>inches<br>mm | B<br>CL to<br>Hand Wheel<br>inches<br>mm | C<br>Flange<br>OD<br>inches<br>mm | D<br>ID<br>inches<br>mm | E<br>Bolt<br>Circle<br>inches<br>mm | F<br>Bolt Hole<br>ID<br>inches<br>mm | G<br>Hand Wheel<br>Width<br>inches<br>mm | N<br>Number<br>of Bolts<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| 2 ½                     | 2.875<br>73.0                                 | 11.40<br>290                       | 7.90<br>201                              | 7.30<br>185                       | 2.56<br>65              | 5.51<br>140                         | 0.75<br>19                           | 6.30<br>160                              | 4.00<br>102                             | 29.70<br>13.5                 |
| 3<br>DN80               | 3.500<br>88.9                                 | 12.20<br>310                       | 8.60<br>218                              | 7.90<br>201                       | 3.15<br>81              | 6.00<br>153                         | 0.75<br>19                           | 6.30<br>160                              | 4.00<br>102                             | 39.50<br>18.0                 |
| 4<br>DN100              | 4.500<br>114.3                                | 13.80<br>351                       | 9.70<br>246                              | 8.70<br>221                       | 3.94<br>100             | 7.50<br>191                         | 0.75<br>19                           | 6.30<br>160                              | 8.00<br>203                             | 59.90<br>27.0                 |
| 5                       | 5.563<br>141.3                                | 15.80<br>401                       | 11.50<br>292                             | 9.80<br>249                       | 4.92<br>125             | 8.50<br>216                         | 0.88<br>22                           | 6.30<br>160                              | 8.00<br>203                             | 94.10<br>42.5                 |
| 6<br>DN150              | 6.625<br>168.3                                | 18.90<br>480                       | 11.60<br>295                             | 11.20<br>284                      | 5.91<br>151             | 9.50<br>242                         | 0.88<br>22                           | 6.30<br>160                              | 8.00<br>203                             | 126.00<br>57.0                |
| 8<br>DN200              | 8.625<br>219.1                                | 23.60<br>599                       | 18.40<br>467                             | 13.40<br>340                      | 7.87<br>200             | 11.75<br>299                        | 0.88<br>22                           | 11.77<br>299                             | 8.00<br>203                             | 240.00<br>109.0               |
| 10<br>DN250             | 10.750<br>273.0                               | 28.70<br>729                       | 19.00<br>483                             | 15.90<br>404                      | 9.84<br>251             | 14.25<br>362                        | 1.00<br>25                           | 11.77<br>299                             | 12.00<br>305                            | 382.00<br>173.5               |
| 12<br>DN300             | 12.750<br>323.9                               | 33.50<br>851                       | 20.30<br>516                             | 19.10<br>485                      | 11.81<br>300            | 17.00<br>432                        | 1.00<br>25                           | 11.77<br>299                             | 12.00<br>305                            | 579.00<br>262.5               |
| 14<br>DN350             | 14.000<br>355.6                               | 38.60<br>980                       | 21.90<br>556                             | 21.10<br>536                      | 13.78<br>351            | 18.75<br>477                        | 1.12<br>28                           | 11.77<br>299                             | 12.00<br>305                            | 767.00<br>348.0               |
| 16<br>DN400             | 16.000<br>406.4                               | 43.30<br>1100                      | 26.00<br>660                             | 23.40<br>594                      | 15.75<br>400            | 21.25<br>540                        | 1.12<br>28                           | 11.77<br>299                             | 16.00<br>406                            | 1105.00<br>501.0              |

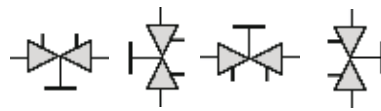
## 7.0 PERFORMANCE

### Measuring Accuracy

The hand wheel zero position is calibrated and shall not be changed. Valves have a flow measurement accuracy of  $\pm 5\%$  when used within their recommended flow range and installed in accordance with the figure below. **NOTE:** For the most accurate results, a differential pressure meter should be used. For optimal flow accuracy, the valve should be installed with the hand wheel toward the downstream end.



For accuracy of measurement, it is recommended that the valve be installed (10) pipe diameters downstream of a pump or (5) pipe diameters downstream of elbows, valves, or other pipe fittings. In all cases, (2) pipe diameters should be located downstream of the valve.



Valve may be installed in any orientation.

## 7.1 PERFORMANCE

### C<sub>v</sub> Values for Various Hand Wheel Settings

#### Series 788V

The values below may be used when calculating and sizing a piping system.

| Number of Turns | Nominal Size<br>inches<br>DN     |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
|-----------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|                 | 2½                               | 3<br>DN80                        | 4<br>DN100                       | 5                                | 6<br>DN150                       | 8<br>DN200                       | 10<br>DN250                      | 12<br>DN300                      | 14<br>DN350                      | 16<br>DN400                      |
|                 | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> |
| 0.5             | 2.40<br>2.08                     | 2.27<br>1.96                     | 3.37<br>2.92                     | 4.27<br>3.69                     | 4.40<br>3.81                     | 15.0<br>13.0                     | 17.0<br>14.7                     | –                                | –                                | –                                |
| 1               | 4.21<br>3.64                     | 5.14<br>4.45                     | 8.76<br>7.58                     | 12.9<br>11.1                     | 15.8<br>13.6                     | 28.0<br>24.2                     | 34.0<br>29.4                     | –                                | –                                | –                                |
| 1.5             | 6.54<br>5.66                     | 8.18<br>7.07                     | 14.6<br>12.6                     | 22.2<br>19.2                     | 27.5<br>23.7                     | 43.0<br>37.2                     | 53.0<br>45.8                     | –                                | –                                | –                                |
| 2               | 11.7<br>10.1                     | 13.8<br>12.0                     | 21.0<br>18.2                     | 31.0<br>26.8                     | 40.3<br>34.9                     | 54.3<br>47.0                     | 70.1<br>60.6                     | 234<br>202                       | –                                | –                                |
| 2.5             | 17.5<br>15.2                     | 21.8<br>18.8                     | 28.0<br>24.3                     | 40.3<br>34.9                     | 57.2<br>49.5                     | 67.2<br>58.1                     | 91.1<br>78.8                     | 292<br>253                       | –                                | –                                |
| 3               | 28.0<br>24.3                     | 30.5<br>26.4                     | 38.6<br>33.3                     | 56.7<br>49.0                     | 104<br>89.9                      | 90.5<br>78.3                     | 117<br>101                       | 350<br>303                       | 339<br>293                       | 391<br>338                       |
| 3.5             | 39.7<br>34.4                     | 40.9<br>35.4                     | 60.7<br>52.5                     | 73.6<br>63.7                     | 152<br>131                       | 126<br>109                       | 158<br>136                       | 456<br>394                       | 397<br>344                       | 469<br>406                       |
| 4               | 50.8<br>44.0                     | 52.3<br>45.2                     | 84.1<br>72.8                     | 93.5<br>80.8                     | 204<br>177                       | 169<br>147                       | 210<br>182                       | 549<br>475                       | 467<br>404                       | 548<br>474                       |
| 4.5             | 60.7<br>52.5                     | 64.5<br>55.8                     | 109<br>94.0                      | 119<br>103                       | 248<br>214                       | 233<br>202                       | 286<br>248                       | 654<br>566                       | 561<br>485                       | 682<br>590                       |
| 5               | 71.3<br>61.6                     | 75.5<br>65.3                     | 131<br>113                       | 150<br>129                       | 297<br>257                       | 309<br>267                       | 386<br>333                       | 759<br>657                       | 654<br>566                       | 803<br>695                       |
| 5.5             | 81.8<br>70.7                     | 88.1<br>76.2                     | 154<br>133                       | 186<br>161                       | 339<br>293                       | 391<br>339                       | 496<br>429                       | 876<br>758                       | 759<br>657                       | 948<br>820                       |
| 6               | 91.1<br>78.8                     | 101.6<br>87.9                    | 178<br>154                       | 216<br>187                       | 376<br>325                       | 467<br>404                       | 607<br>525                       | 993<br>859                       | 911<br>788                       | 1092<br>945                      |
| 6.5             | 99.3<br>85.9                     | 114<br>98.6                      | 201<br>174                       | 255<br>220                       | 414<br>358                       | 550<br>476                       | 713<br>616                       | 1110<br>960                      | 1028<br>889                      | 1246<br>1078                     |
| 7               | 105<br>90.9                      | 125<br>108                       | 218<br>189                       | 290<br>251                       | 449<br>388                       | 621<br>538                       | 824<br>712                       | 1227<br>1061                     | 1145<br>990                      | 1399<br>1210                     |
| 7.5             | 110<br>95.5                      | 134<br>116                       | 237<br>205                       | 329<br>285                       | 473<br>409                       | 686<br>594                       | 929<br>803                       | 1320<br>1142                     | 1250<br>1081                     | 1546<br>1337                     |
| 8 <sup>1</sup>  | 114<br>99.0                      | 143<br>123                       | 255<br>220                       | 364<br>315                       | 505<br>437                       | 749<br>648                       | 1016<br>879                      | 1402<br>1213                     | 1379<br>1192                     | 1691<br>1463                     |
| 8.5             | –                                | –                                | –                                | –                                | –                                | 807<br>698                       | 1092<br>945                      | 1460<br>1263                     | 1460<br>1263                     | 1840<br>1592                     |
| 9               | –                                | –                                | –                                | –                                | –                                | 866<br>749                       | 1186<br>1026                     | 1519<br>1314                     | 1542<br>1334                     | 1994<br>1725                     |
| 9.5             | –                                | –                                | –                                | –                                | –                                | 919<br>795                       | 1197<br>1036                     | 1577<br>1364                     | 1589<br>1374                     | 2115<br>1830                     |
| 10              | –                                | –                                | –                                | –                                | –                                | 942<br>814                       | 1256<br>1086                     | 1694<br>1465                     | 1659<br>1435                     | 2238<br>1936                     |
| 10.5            | –                                | –                                | –                                | –                                | –                                | 982<br>850                       | 1308<br>1132                     | 1752<br>1516                     | 1752<br>1516                     | 2342<br>2026                     |
| 11              | –                                | –                                | –                                | –                                | –                                | 1009<br>873                      | 1355<br>1172                     | 1799<br>1556                     | 1846<br>1597                     | 2446<br>2116                     |
| 11.5            | –                                | –                                | –                                | –                                | –                                | 1030<br>891                      | 1384<br>1197                     | 1822<br>1576                     | 1916<br>1657                     | 2569<br>2222                     |
| 12 <sup>2</sup> | –                                | –                                | –                                | –                                | –                                | 1048<br>906                      | 1414<br>1223                     | 1834<br>1587                     | 1986<br>1718                     | 2691<br>2328                     |

<sup>1</sup> Full open valve for 2½" through 6"

<sup>2</sup> Full open valve for 8" through 12"

## 7.1 PERFORMANCE (CONTINUED)

### C<sub>v</sub> Values for Various Hand Wheel Settings

#### Series 788V

The values below may be used when calculating and sizing a piping system.

| Number of Turns | Nominal Size<br>inches<br>DN     |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |                                  |
|-----------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
|                 | 2½                               | 3<br>DN80                        | 4<br>DN100                       | 5                                | 6<br>DN150                       | 8<br>DN200                       | 10<br>DN250                      | 12<br>DN300                      | 14<br>DN350                      | 16<br>DN400                      |
|                 | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> | C <sub>v</sub><br>K <sub>v</sub> |
| 12.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2079<br>1798                     | 2807<br>2428                     |
| 13              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2138<br>1849                     | 2922<br>2528                     |
| 13.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2185<br>1890                     | 3030<br>2621                     |
| 14              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2231<br>1930                     | 3135<br>2712                     |
| 14.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2313<br>2001                     | 3232<br>2796                     |
| 15              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2360<br>2041                     | 3329<br>2880                     |
| 15.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2442<br>2112                     | 3391<br>2933                     |
| 16              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2465<br>2132                     | 3452<br>2986                     |
| 16.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2488<br>2152                     | 3527<br>3051                     |
| 17              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2512<br>2173                     | 3601<br>3115                     |
| 17.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2635<br>2279                     | 3665<br>3170                     |
| 18 <sup>3</sup> | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 2547<br>2203                     | 3729<br>3226                     |
| 18.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 3784<br>3273                     |
| 19              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 3838<br>3320                     |
| 19.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 3890<br>3365                     |
| 20              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 3942<br>3410                     |
| 20.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 3988<br>3450                     |
| 21              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4034<br>3490                     |
| 21.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4092<br>3540                     |
| 22              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4150<br>3590                     |
| 22.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4202<br>3635                     |
| 23              | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4254<br>3680                     |
| 23.5            | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4295<br>3715                     |
| 24 <sup>4</sup> | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | –                                | 4335<br>3750                     |

<sup>3</sup> Full open valve for 14"

<sup>4</sup> Full open valve for 16"

## 7.2 PERFORMANCE

### Correction Factors

For liquids other than water, the flow values can be adjusted as follows:

Divide the flow rate by the square root of the specific gravity.

$$\text{Actual Flow} = \frac{q_{\text{Calculated}}}{\sqrt{SG}}$$

This applies to liquids having, on the whole, the same viscosity as water, i.e. most water/glycol mixtures and water/brine solutions at room temperature. At low temperatures, the viscosity increases and laminar flow may occur in certain valves. The risk increases with small valves, low settings and low differential pressures.

### Correction Factors

When  $\Delta p$  and the design flow rate are known, use the formula shown to calculate the CV value.

$$C_v = 1.52 \frac{q}{\sqrt{\Delta p}}$$

q in GPM,  $\Delta p$  in Ft. of  $H_2O$

$$C_v = \frac{q}{\sqrt{\Delta p}}$$

q in GPM,  $\Delta p$  in psi

When measuring pressure drop across the Series 786V valves installed in the vertical position, the measured value should be adjusted by the static head created by the distance between the PT ports.

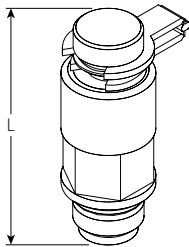
#### NOTE:

- Suitable for water-glycol mixtures to 57%

7.3 PERFORMANCE

Accessories (Sold Separately)

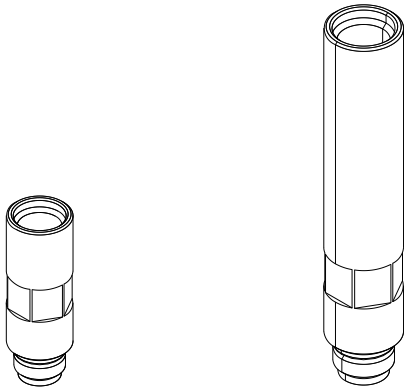
Replacement PT Ports



| L<br>inches<br>mm | Diameter<br>inches<br>mm | Part Code                                                                                                |
|-------------------|--------------------------|----------------------------------------------------------------------------------------------------------|
| 1.79<br>45.5      | 0.69<br>17.5             | P000788RPT (Red) <sup>2</sup><br>P000788BPT (Blue) <sup>2</sup><br>K000788VPT (Kit of one red, one blue) |

<sup>2</sup> When ordering, the part code includes only one PT port.  
Each valve requires two PT ports (one red, one blue).

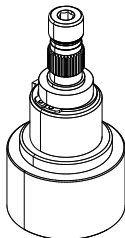
PT Port Extensions



|                                                                          |                                                                          |
|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| PT Port Extension for<br>2"/51 mm of Insulation,<br>Kit of Two Part Code | PT Port Extension for<br>4"/102 mm of Insulation<br>Kit of Two Part Code |
| P0007882PT <sup>3</sup>                                                  | P0007884PT <sup>3</sup>                                                  |

<sup>3</sup> When ordering, the part code includes only one PT port extension.  
Each valve requires two PT port extensions.

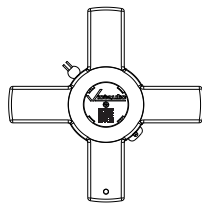
Hand Wheel Extension for 2 ½ – 6"/73.0 mm – DN150  
Valve Sizes



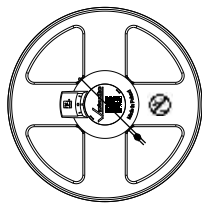
| Part Code  |
|------------|
| P024788VHE |

7.3 PERFORMANCE (CONTINUED)

Hand Wheels



2 ½ – 6"/73 mm – DN150



8 – 16"/DN200 – DN400

| Part Code  |
|------------|
| P024788VHL |

| Part Code                                              |
|--------------------------------------------------------|
| 8 – 12" P080788VHL<br>14" P140788VHL<br>16" P160788VHL |

Measuring Nipple (4"/102 mm Extension, Kit of Two)

| Part Code  |
|------------|
| K000788VMN |

Locking Wires and Wire Crimps

Sold in sets of 10 each

| Part Code  |
|------------|
| K000788RWL |

Memory Stop Hex Key

4-mm size for memory stop setting screw

| Part Code  |
|------------|
| P000788HKY |

## 8.0 NOTIFICATIONS

### ! WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, foot protection, and hearing protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

## 9.0 REFERENCE MATERIALS

[08.30: Victaulic® KOIL-KIT™ Coil Pack](#)

[08.34: Victaulic® Automatic Balancing Valves - Series 76T, 76B, 76K, 76V & 76G](#)

[106.01: Victaulic Series 786V Manual Balancing Valve](#)

[106.02: Victaulic® Series 787V Manual Balancing Valve](#)

[106.04: Victaulic Series 789V Manual Balancing Valve](#)

[106.05: Victaulic® Series 78KV Manual Balancing Valve](#)

[106.20: Victaulic® Series UBA Unibody ABV Balancing Valve](#)

[106.21: Victaulic® Series UBM Unibody Manual Balancing Valve](#)

[106.15: Victaulic® Series UBP Unibody PICV Balancing Valve](#)

[106.30: Victaulic® Series UH1 Braided Flexible Hose](#)

[I-786V/787V: Victaulic® Series 786V and 787V Manual Balancing Valves Installation and Maintenance Instructions](#)

[I-788V/789V: Victaulic® Series 788V and 789V Manual Balancing Valves Installation and Maintenance Instructions](#)

[I-UBA: Victaulic® Series UBA Unibody ABV Balancing Valve Installation and Maintenance Instructions](#)

[I-UBM: Victaulic® Series UBM Unibody Manual Balancing Valve Installation and Maintenance Instructions](#)

[I-UBP: Victaulic® Series UBP Unibody PICV Balancing Valve Installation and Maintenance Instructions](#)

[I-UH1: Victaulic® Series UH1 Braided Flexible Hose Installation and Use Guidelines](#)

#### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, warranty, installation instructions, or this disclaimer.

#### Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at victaulic.com.

#### Warranty

Refer to the Warranty section of the current Price List or contact Victaulic for details.

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