

# COMPACT BALL VALVE 13mm - 80mm(3/8inch - 3inch)



## FEATURES

· Features such as compact, light weight and assembly of a reduced number of parts, the COMPACT BALL VALVES can easily be installed in a small space.

### NSF Product

NSF("NSF/ANSI STANDARD 61" Drinking Water System Components-Health Effects)Product.

:Compact BALL VALVE (Material:PVC+EPDM)

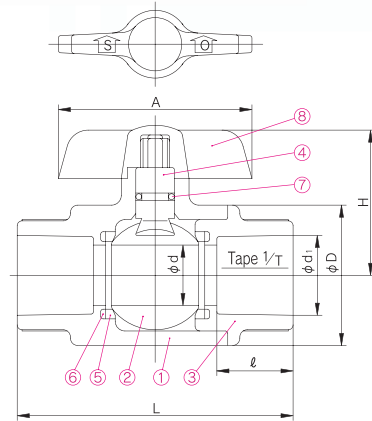
\*Certified products bear an NSF Certification Mark.

## MATERIAL AND WORKING TEMPERATURE

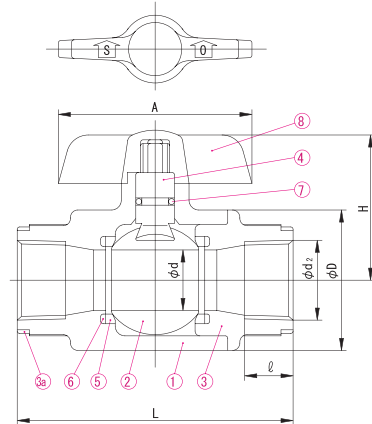
| Body material                         | Working Temperature C (°F) | Max.Working Pressure(at R.T.) MPa[kgf/cm <sup>2</sup> ][PSI] | End Connectors             | Color               |
|---------------------------------------|----------------------------|--|----------------------------|---------------------|
| Unplasticized Polyvinyl Chloride(PVC) | 0-50(30-120)               | 1.0{10.2} [150]  | Socket End<br>Threaded End | Dark gray           |
| Chlorinated Polyvinyl Chloride(C-PVC) | 0-90(30-195)               | 1.0{10.2} [150]  | Socket End<br>Threaded End | Brown or Light gray |

Notes : 1. There is a dead space in a ball valve. Volatile liquids, such as a hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) and sodium hypochlorite (NaClO) may vaporize in the dead space, thus causing an abnormal pressure increase in the valve. (Important: Gas is compressible. Thus if its pressure rises abnormally, the valve can burst ejectng dangerous fragments.)

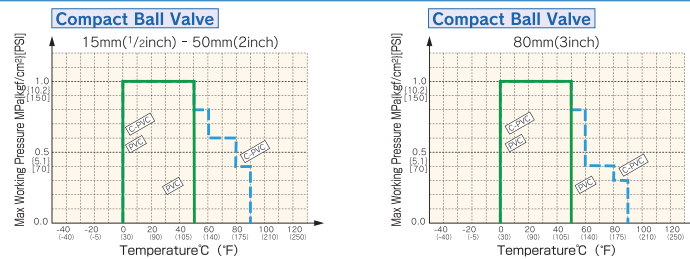
### ▼ SOCKET END



### ▼ THREADED END



## WORKING PRESSURE VS. TEMPERATURE



## DIMENSIONS TABLE

| Nominal Size |       | Socket End |                |      |      |                | Threaded End |    |     | Unit:mm |     |     |
|--------------|-------|------------|----------------|------|------|----------------|--------------|----|-----|---------|-----|-----|
|              |       | d          | d <sub>1</sub> | ℓ    | 1/T  | L              | JIS B 0203   |    | D   | H       | A   |     |
| mm           | inch  |            |                |      |      | d <sub>1</sub> | ℓ            | L  |     |         |     |     |
| 13           | 3/8   | 13         | 18.20          | 17   | 1/30 | 67             | Rc 1/2       | 15 | 67  | 35      | 42  | 60  |
| 15           | 1/2   | 15         | 22.20          | 21   | 1/34 | 79             | —            | —  | —   | 39      | 44  | 70  |
| 20           | 3/4   | 20         | 26.25          | 28   | 1/34 | 102            | Rc 3/4       | 17 | 102 | 48      | 55  | 80  |
| 25           | 1     | 25         | 32.30          | 31.5 | 1/34 | 114            | Rc 1         | 20 | 114 | 58      | 60  | 80  |
| 32           | 1 1/4 | 31         | 38.28          | 33   | 1/34 | 127            | Rc 1 1/4     | 22 | 127 | 66      | 70  | 95  |
| 40           | 1 1/2 | 35         | 48.43          | 42   | 1/37 | 152            | Rc 1 1/2     | 25 | 152 | 72.5    | 76  | 110 |
| 50           | 2     | 45         | 60.50          | 49   | 1/37 | 176            | Rc 2         | 28 | 176 | 88.5    | 85  | 110 |
| 80           | 3     | 68.5       | 89.60          | 64   | 1/49 | 236            | Rc 3         | 35 | 236 | 130     | 124 | 200 |

| Nominal Size |       | Socket End |                |    |                |          | Threaded End |     |      | Unit:mm |     |  |
|--------------|-------|------------|----------------|----|----------------|----------|--------------|-----|------|---------|-----|--|
|              |       | d          | d <sub>1</sub> | ℓ  | L              | DIN 2999 |              | L   | D    | H       | A   |  |
| mm           | inch  |            |                |    | d <sub>1</sub> | ℓ        |              |     |      |         |     |  |
| 13           | 3/8   | 13         | 16             | 14 | 85             | Rp 3/8   | 15           | 85  | 35   | 42      | 60  |  |
| 15           | 1/2   | 15         | 20             | 16 | 97             | Rp 1/2   | 15           | 97  | 39   | 44      | 70  |  |
| 20           | 3/4   | 20         | 25             | 19 | 102            | Rp 3/4   | 17           | 102 | 48   | 55      | 80  |  |
| 25           | 1     | 25         | 32             | 22 | 114            | Rp 1     | 20           | 114 | 58   | 60      | 80  |  |
| 32           | 1 1/4 | 31         | 40             | 26 | 127            | Rp 1 1/4 | 22           | 127 | 66   | 70      | 95  |  |
| 40           | 1 1/2 | 35         | 50             | 31 | 152            | Rp 1 1/2 | 25           | 152 | 72.5 | 76      | 110 |  |
| 50           | 2     | 45         | 63             | 38 | 176            | Rp 2     | 28           | 176 | 88.5 | 85      | 110 |  |
| 80           | 3     | 68.5       | 90             | 51 | 236            | Rp 3     | 35           | 236 | 130  | 124     | 200 |  |

## PARTS & MATERIALS

| No. | DESCRIPTION   | Pcs. | MATERIAL           |
|-----|---------------|------|--------------------|
| ①   | BODY          | 1    | PVC, C-PVC         |
| ②   | BALL          | 1    | PVC, C-PVC         |
| ③   | END CONNECTOR | 1    | PVC, C-PVC         |
| ④   | STEM          | 1    | PVC, C-PVC         |
| ⑤   | SEAT          | 2    | PTFE               |
| ⑥   | CUSHION       | 2    | EPDM, FKM          |
| ⑦   | O-RING        | 1    | EPDM, FKM          |
| ⑧   | HANDLE        | 1    | ABS                |
| ⑨   | RING※         | 2    | STAINLESS STEEL304 |

Note : The ring (⑨) is used for C-PVC valves 13mm ~ 25mm in nominal size.

| Nominal Size |    | Socket End     |                |       |      |                   | Threaded End     |      |      | Unit:inch |      |      |
|--------------|----|----------------|----------------|-------|------|-------------------|------------------|------|------|-----------|------|------|
|              |    | d              | ASTM SCH40     |       | L    | ANSI/ASME B1.20.1 |                  | L    | D    | H         | A    |      |
| inch         | mm | d <sub>1</sub> | d <sub>2</sub> | ℓ     |      | d <sub>1</sub>    | ℓ                |      |      |           |      |      |
| 1/2          | 13 | 0.51           | 0.848          | 0.836 | 0.69 | 3.35              | 1/2-14NPT        | 0.59 | 3.35 | 1.38      | 1.65 | 2.36 |
| 3/4          | 20 | 0.79           | 1.058          | 1.046 | 0.72 | 4.02              | 3/4-14NPT        | 0.67 | 4.02 | 1.89      | 2.17 | 3.15 |
| 1            | 25 | 0.98           | 1.325          | 1.310 | 0.87 | 4.49              | 1-11 1/2 NPT     | 0.79 | 4.49 | 2.28      | 2.36 | 3.15 |
| 1 1/4        | 32 | 1.22           | 1.670          | 1.655 | 0.94 | 5.00              | 1 1/4-11 1/2 NPT | 0.87 | 5.00 | 2.60      | 2.76 | 3.74 |
| 1 1/2        | 40 | 1.38           | 1.912          | 1.894 | 1.09 | 5.98              | 1 1/2-11 1/2 NPT | 0.98 | 5.98 | 2.85      | 2.99 | 4.33 |
| 2            | 50 | 1.77           | 2.387          | 2.369 | 1.16 | 6.93              | 2-11 1/2 NPT     | 1.10 | 6.93 | 3.48      | 3.31 | 4.33 |
| 3            | 80 | 2.70           | 3.516          | 3.492 | 1.87 | 9.29              | 3-8NPT           | 1.17 | 9.29 | 5.12      | 4.88 | 7.87 |