# TRUE UNION SAFETY BLOCK BALL VALVE WITH MOUNTING PADS 



## CH Series

## CH100 SOCKET/ CH200 THERAD/ CH300 FLANGED Size:DN15-DN100

## MATERIALS OF CONSTRUCTION

| No. | Parts | Pcs | Materials | No. | Parts | Pcs | Materials |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | BODY | 1 | UPVC, PP, CPVC, PVDF | 9 | SOLID END O-RING | 1 | EPDM , VITON |
| 2 | BALL | 1 | UPVC, PP, CPVC, PVDF | 10 | SEAT | 2 | TEFLON |
| 3 | STEM | 1 | UPVC, PP, CPVC, PVDF | 11 | SEAT CARRIER O-RING | 1 | EPDM , VITON |
| 4 | SEAT CARRIER | 1 | UPVC, PP, CPVC, PVDF | 12 | BODY O-RING | 1 | EPDM , VITON |
| 5 | END CONNECTOR | 2 | UPVC, PP, CPVC, PVDF | 13 | SEAT O-RING | 2 | EPDM, VITON |
| 6 | UNION NUT | 2 | UPVC, PP, CPVC, PVDF | 14 | FLANGES | 2 | UPVC , PP, CPVC, PVDF |
| 7 | HANDLE | 1 | ABS | 15 | MOUNTING PAD (UP\&DOWN) | $\begin{array}{ll} \hline 15 \mathrm{~A}-50 \mathrm{~A} & 4 \\ 65 \mathrm{~A}-100 \mathrm{~A} & 8 \\ \hline \end{array}$ | BRASS, SUS304 |
| 8 | SEAT O-RING | $\begin{array}{\|ll\|} \hline 15 \mathrm{~A}-50 \mathrm{~A} & 2 \\ 65 \mathrm{~A}-100 \mathrm{~A} & 2 \\ \hline \end{array}$ | EPDM , VITON |  |  |  |  |

## DIMENSIONS TABLE

| JIS Unit :mm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size | D1 | D2 | D3 | d |  | e | n | P | L |  |  | H | A | B | T | K | E | S | S1 |  | Workingpress$\left(\mathrm{kgf} / \mathrm{cm}^{2}\right)$ |
|  |  |  |  | Socket | Thread |  |  |  | Socket | Thread | Flange |  |  |  |  |  |  |  |  |  |  |
| 15(1/2") | 15 | 70 | 95 | 22 | PT 1/2" | 15 | 4 | 22.2 | 115 | 115 | 153 | 51 | 82.7 | 53.2 | 15 | 31 | - | 4 | 4 | 22.5 | 15 |
| 20(3/4") | 19 | 75 | 100 | 26 | PT 3/4" | 15 | 4 | 25.4 | 126 | 126 | 165 | 63 | 101.2 | 63 | 15 | 37 | - | 6 | 4 | 22.5 | 15 |
| 25(1") | 25 | 90 | 125 | 32 | PT 1" | 19 | 4 | 28.6 | 144 | 144 | 189 | 72 | 111.8 | 72.2 | 17 | 40 | - | 6 | 4 | 22.5 | 15 |
| 32(1-1/4") | 38 | 100 | 135 | 38 | PT 1-1/4" | 19 | 4 | 31.8 | 181 | 181 | 226 | 86 | 121.4 | 97 | 17 | 55 | - | 8 | 4 | 22.5 | 15 |
| 40(1-1/2") | 38 | 105 | 140 | 48 | PT 1-1/2" | 19 | 4 | 34.9 | 181 | 181 | 226 | 86 | 121.4 | 97 | 19 | 55 | - | 8 | 4 | 22.5 | 15 |
| 50(2") | 48 | 120 | 155 | 60 | PT 2" | 19 | 4 | 38.1 | 202 | 202 | 252 | 100 | 149.3 | 118.9 | 21 | 68 | - | 8 | 4 | 22.5 | 15 |
| 65(2-1/2") | 65 | 140 | 175 | 76 | PT 2-1/2" | 19 | 4 | 44.5 | 227 | 227 | 281 | 140 | 190 | 150.1 | 21 | 80 | 41 | 8 | 8 | 15 | 10 |
| 80(3") | 78 | 150 | 185 | 89 | PT 3" | 19 | 8 | 47.6 | 275 | 275 | 330 | 165.1 | 230 | 183.9 | 22 | 80 | 41 | 8 | 8 | 15 | 10 |
| 100(4") | 102 | 175 | 210 | 114 | PT 4" | 19 | 8 | 57.2 | 321 | 321 | 387 | 172 | 274 | 226 | 22 | 121 | 50 | 8 | 8 | 15 | 10 |



SOCKET \& SCREW TYPE


15 A ~ 50A FLANGE TYPE


65A ~ 100A FLANGE TYPE

(ON SIZE DN65~DN100)

(ON SIZE DN15~DN50)
END VIEW
Bolts inserted pad pattern

## DIMENSIONS TABLE

| ANSI Unit : inch |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size | D1 | D2 | D3 | d |  | e | n | P | L |  |  | H | A | B | T | K | E | S | S1 | $\begin{gathered} \text { Test } \\ \text { press } \\ \left(\mathrm{kgf}^{2} / \mathrm{cm}^{2}\right) \end{gathered}$ | Working press ( $\mathrm{lb} / \mathrm{in}^{2}$ ) |
|  |  |  |  | Socket | Thread |  |  |  | Socket | Thread | Flange |  |  |  |  |  |  |  |  |  |  |
| 15(1/2") | 0.59 | 2.375 | 3.500 | 0.848 | NPT 1/2" | 0.625 | 4 | 0.875 | 4.528 | 4.528 | 6.024 | 2.00 | 3.25 | 2.10 | 0.59 | 1.22 | - | 0.157 | 4 | 353 | 235 |
| 20(3/4") | 0.748 | 2.750 | 3.875 | 1.058 | NPT 3/4" | 0.625 | 4 | 1.000 | 4.960 | 4.960 | 6.496 | 2.48 | 3.98 | 2.48 | 0.59 | 1.45 | - | 0.236 | 4 | 353 | 235 |
| 25(1") | 0.98 | 3.125 | 4.250 | 1.325 | NPT 1" | 0.625 | 4 | 1.125 | 5.669 | 5.669 | 7.440 | 2.83 | 4.40 | 2.84 | 0.66 | 1.57 | - | 0.236 | 4 | 353 | 235 |
| 32(1-1/4") | 1.496 | 3.500 | 4.625 | 1.670 | NPT 1-1/4" | 0.625 | 4 | 1.125 | 7.126 | 7.126 | 8.898 | 3.38 | 4.78 | 3.82 | 0.66 | 2.16 | - | 0.315 | 4 | 353 | 235 |
| 40(1-1/2") | 1.496 | 3.875 | 5.000 | 1.912 | NPT 1-1/2" | 0.625 | 4 | 1.375 | 7.126 | 7.126 | 8.898 | 3.38 | 4.78 | 3.82 | 0.75 | 2.16 | - | 0.315 | 4 | 353 | 235 |
| 50(2") | 1.89 | 4.750 | 6.000 | 2.387 | NPT 2" | 0.750 | 4 | 1.500 | 7.953 | 7.953 | 9.921 | 3.93 | 5.88 | 4.68 | 0.83 | 2.67 | - | 0.315 | 4 | 353 | 235 |
| 65(2-1/2") | 2.56 | 5.500 | 7.000 | 2.889 | NPT 2-1/2" | 0.750 | 4 | 1.750 | 8.937 | 8.937 | 11.063 | 5.51 | 7.48 | 5.91 | 0.83 | 3.15 | 1.61 | 0.315 | 8 | 225 | 150 |
| 80(3") | 3.07 | 6.000 | 7.500 | 3.515 | NPT 3" | 0.750 | 4 | 1.750 | 10.826 | 10.826 | 12.992 | 6.50 | 9.06 | 7.24 | 0.866 | 3.15 | 1.61 | 0.315 | 8 | 225 | 150 |
| 100(4") | 4.01 | 7.500 | 9.000 | 4.518 | NPT 4" | 0.750 | 8 | 2.250 | 12.638 | 12.638 | 15.236 | 6.77 | 10.97 | 8.90 | 0.866 | 4.76 | 1.97 | 0.315 | 8 | 225 | 150 |


| DIN Unit :mm |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nominal Pipe Size | D1 | D2 | D3 | d |  | e | n | P | L |  |  | H | A | B | T | K | E | S | S1 | Testpress(bar) | Working press (bar) |
|  |  |  |  | Socket | Thread |  |  |  | Socket | Thread | Flange |  |  |  |  |  |  |  |  |  |  |
| 15(1/2") | 15 | 65 | 95 | 20 | R1/2" | 14 | 4 | 16.0 | 115 | 115 | 153 | 51 | 82.7 | 53.2 | 15 | 31 | - | 4 | 4 | 24 | 16 |
| 20(3/4") | 19 | 75 | 105 | 25 | R1/4" | 14 | 4 | 18.5 | 126 | 126 | 165 | 63 | 101.2 | 63 | 15 | 37 | - | 6 | 4 | 24 | 16 |
| 25(1") | 25 | 85 | 115 | 32 | R1" | 14 | 4 | 22.0 | 144 | 144 | 189 | 72 | 111.8 | 72.2 | 17 | 40 | - | 6 | 4 | 24 | 16 |
| 32(1-1/4") | 38 | 100 | 140 | 40 | R1-1/4" | 18 | 4 | 26.0 | 181 | 181 | 226 | 86 | 121.4 | 97 | 17 | 55 | - | 8 | 4 | 24 | 16 |
| 40(1-1/2") | 38 | 110 | 150 | 50 | R1-1/2" | 18 | 4 | 31.0 | 181 | 181 | 226 | 86 | 121.4 | 97 | 19 | 55 | - | 8 | 4 | 24 | 16 |
| 50(2") | 48 | 125 | 165 | 63 | R2" | 18 | 4 | 37.5 | 202 | 202 | 253 | 100 | 149.3 | 118.9 | 21 | 68 | - | 8 | 4 | 24 | 16 |
| 65(2-1/2") | 65 | 145 | 185 | 75 | R2-1/2" | 18 | 4 | 43.5 | 227 | 227 | 281 | 140 | 190 | 150.1 | 21 | 80 | 41 | 8 | 8 | 15 | 10 |
| 80(3") | 78 | 160 | 200 | 90 | R3" | 18 | 8 | 51.0 | 275 | 275 | 330 | 165.1 | 230.1 | 183.9 | 22 | 80 | 41 | 8 | 8 | 15 | 10 |
| 100(4") | 102 | 180 | 220 | 110 | R4" | 18 | 8 | 61.0 | 321 | 321 | 387 | 172 | 274 | 226 | 22 | 121 | 50 | 8 | 8 | 15 | 10 |

