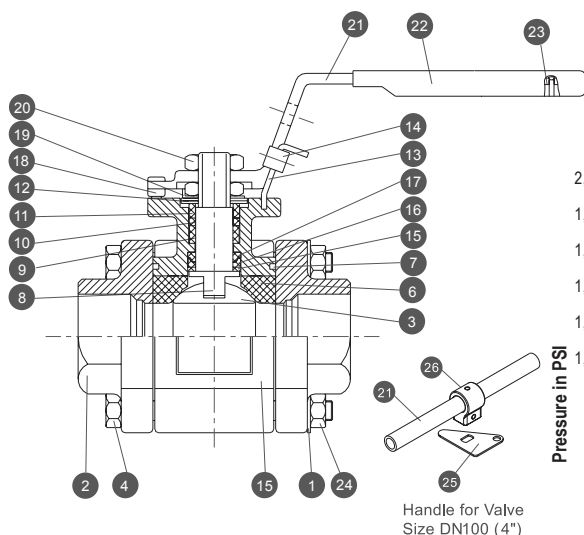


# SERIES 780S/780F

## 3 PC HEAVY DUTY HIGH PERFORMANCE BALL VALVE

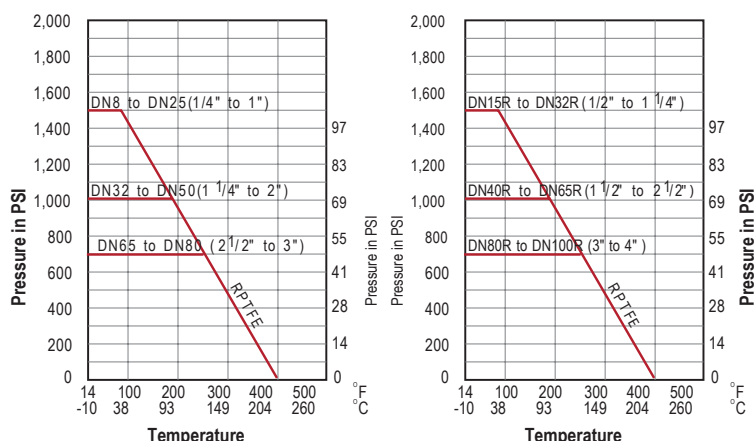
### FEATURES

- Special stem arrangement
- Double stem sealing complies with TA-LUFT requirements
- Heavy duty, three piece ball valve
- ISO 5211 top mounting plate
- Fully enclosed bolting for sizes up to DN40 full bore
- End connections, screwed, butt weld and socket weld
- Seat material options
- Size range DN8 (1/4") to DN100 (4") - Full and reduced bore
- Blow-out proof stem and anti-static design (Firesafe Design)
- Tightness to EN12266-1



Sizes DN8 to DN80(1/4" to 3")

Pressure/Temperature chart

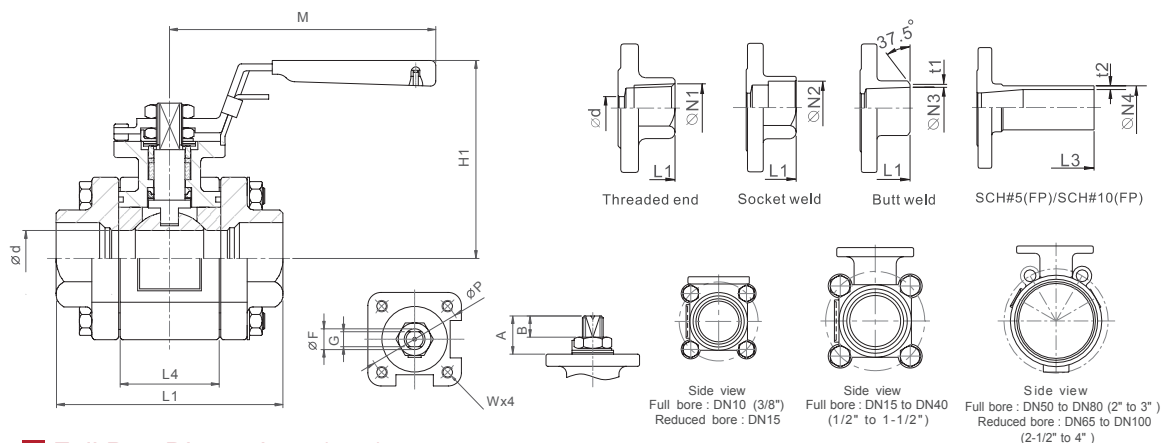


### MATERIALS OF CONSTRUCTION

| No. | Part Name           | Material                    | Q,TY  | No. | Part Name        | Material                  | Q,TY |
|-----|---------------------|-----------------------------|-------|-----|------------------|---------------------------|------|
| 1   | Body                | CF8M / WCB, 1.4408 / 1.0619 | 1     | 14  | Fix Plate        | 304SS                     | 1    |
| 2   | Cap                 | CF8M / WCB, 1.4408 / 1.0619 | 2*    | 15  | Lower Stem Seal  | 50% S.S Powder / 50% PTFE | 1    |
| 3   | Ball                | ASTM A351 Gr. CF8M          | 1     | 16  | Compress Ring    | 316SS                     | 1    |
| 4   | Bolt                | A2-70                       | 4-6   | 17  | Upper Stem Seal  | TFM1600                   | 1    |
| 5   | Bolt Washer         | 304SS                       | 4-12  | 18  | Stop Bolt        | A2-70                     | 1    |
| 6   | Ball Seat           | RPTFE                       | 2     | 19  | Lock Saddle      | 304SS                     | 1    |
| 7   | Body Gasket         | PTFE                        | 2     | 20  | Stem Nut         | 304SS                     | 2    |
| 8   | Anti-Static Stem    | A276 Type 316               | 1     | 21  | Handle           | CF8 / SGP Zn Plating      | 1    |
| 9   | V-Ring Stem Packing | PTFE                        | 1 Set | 22  | Handle Sleeve    | Vinyl                     | 1    |
| 10  | Thrust Washer       | 50% S.S Powder / 50% PTFE   | 1     | 23  | Rivet            | 304SS                     | 2    |
| 11  | Gland               | 304SS                       | 1     | 24  | Bolt Nut         | A2-70                     | 4-12 |
| 12  | Belleville Washer   | 301SS                       | 2     | 25  | Triangle Stopper | 304SS                     | 1    |
| 13  | Locking Trigger     | 304SS                       | 1     | 26  | Handle Adapter   | ASTM A351 Gr. CF8         | 1    |

\* Stainless steel welded connectors are CF3M/1.4409

## Series 780S/ 780F



### Full Port Dimensions (mm)

| Size   | DN | ød   | A    | B    | G    | øP  | øF   | W   | M   | t1  | 5S   | 1210S | L1    | L3    | L4    | øN1  | øN2  | øN3  | øN4  | H1  | Wt(kg) |
|--------|----|------|------|------|------|-----|------|-----|-----|-----|------|-------|-------|-------|-------|------|------|------|------|-----|--------|
| 1/4"   | 8  | 11.2 | 12.7 | 5.6  | 5.0  | 36  | 8.0  | M5  | 115 | 0.5 | N/A  | N/A   | 66.6  | N/A   | 21.2  | NPT  | 14.1 | 9.2  | N/A  | 66  | 0.62   |
| 3/8"   | 10 | 12.7 | 12.7 | 5.6  | 5.0  | 36  | 8.0  | M5  | 115 | 0.5 | N/A  | N/A   | 66.6  | N/A   | 21.2  | or   | 17.5 | 12.5 | N/A  | 66  | 0.60   |
| 1/2"   | 15 | 15.0 | 15.0 | 9.3  | 6.3  | 42  | 9.7  | M5  | 135 | 0.5 | 1.65 | 2.1   | 71.6  | 129.8 | 25.2  | PT   | 22.4 | 15.8 | 21.7 | 84  | 0.82   |
| 3/4"   | 20 | 20.0 | 20.0 | 12.5 | 6.3  | 42  | 9.7  | M5  | 135 | 0.5 | 1.65 | 2.1   | 96.6  | 140.9 | 32.3  | or   | 27.4 | 21.0 | 27.2 | 88  | 1.42   |
| 1"     | 25 | 25.0 | 21.4 | 13.4 | 8.0  | 50  | 11.2 | M6  | 165 | 0.5 | 1.65 | 2.8   | 109.0 | 223.3 | 42.3  | PF   | 34.2 | 26.6 | 34.0 | 98  | 2.02   |
| 1-1/4" | 32 | 31.8 | 21.7 | 13.8 | 8.0  | 50  | 11.2 | M6  | 165 | 0.5 | 1.65 | 2.8   | 117.0 | 230.4 | 49.4  | or   | 43.0 | 35.1 | 42.7 | 101 | 2.76   |
| 1-1/2" | 40 | 38.1 | 25.6 | 15.6 | 9.5  | 70  | 16.0 | M8  | 200 | 0.5 | 1.65 | 2.8   | 129.0 | 240.2 | 57.2  | DIN  | 49.0 | 40.9 | 48.6 | 117 | 4.12   |
| 2"     | 50 | 50.8 | 25.2 | 16.3 | 9.5  | 70  | 16.0 | M8  | 200 | 1.0 | 1.65 | 2.8   | 142.0 | 259.4 | 71.4  | 2999 | 61.1 | 52.5 | 60.5 | 125 | 6.00   |
| 2-1/2" | 65 | 65.0 | 42.7 | 25.2 | 17.0 | 102 | 22.3 | M10 | 250 | 1.0 | N/A  | N/A   | 174.0 | N/A   | 89.0  |      | 77.1 | 68.9 | N/A  | 165 | 9.48   |
| 3"     | 80 | 80.0 | 39.4 | 24.8 | 17.0 | 102 | 22.3 | M10 | 250 | 1.6 | N/A  | N/A   | 193.0 | N/A   | 108.5 |      | 90.2 | 77.9 | N/A  | 174 | 15.64  |

### Reduced Port Dimensions (mm)

| Size   | DN  | Ød   | A    | B    | G    | ØP  | ØF   | W   | M   | t1  | L1    | L4    | ØN1  | ØN2   | ØN3   | H1  | Wt(kg) |
|--------|-----|------|------|------|------|-----|------|-----|-----|-----|-------|-------|------|-------|-------|-----|--------|
| 1/2"   | 15  | 12.7 | 12.7 | 5.6  | 5.0  | 36  | 8.0  | M5  | 115 | 0.5 | 66.6  | 21.2  | NPT  | 22.4  | 15.8  | 66  | 0.63   |
| 3/4"   | 20  | 15.0 | 15.0 | 9.3  | 6.3  | 42  | 9.7  | M5  | 135 | 0.5 | 71.6  | 25.2  | or   | 27.4  | 21.0  | 84  | 0.85   |
| 1"     | 25  | 20.0 | 20.0 | 12.5 | 6.3  | 42  | 9.7  | M5  | 135 | 0.5 | 96.6  | 32.3  | PT   | 34.2  | 26.6  | 85  | 1.48   |
| 1-1/4" | 32  | 25.0 | 21.4 | 13.4 | 8.0  | 50  | 11.2 | M6  | 165 | 0.5 | 109.0 | 42.3  | or   | 43.0  | 35.1  | 98  | 2.08   |
| 1-1/2" | 40  | 31.8 | 21.7 | 13.8 | 8.0  | 50  | 11.2 | M6  | 165 | 0.5 | 117.0 | 49.4  | PF   | 49.0  | 40.9  | 101 | 2.82   |
| 2"     | 50  | 38.1 | 25.6 | 15.6 | 9.5  | 70  | 16.0 | M8  | 200 | 1.0 | 129.0 | 57.2  | or   | 61.1  | 52.5  | 117 | 4.32   |
| 2-1/2" | 65  | 50.8 | 25.2 | 16.3 | 9.5  | 70  | 16.0 | M8  | 200 | 1.0 | 142.0 | 71.4  | DIN  | 77.1  | 68.9  | 125 | 5.89   |
| 3"     | 80  | 65.0 | 42.7 | 25.2 | 17.0 | 102 | 22.3 | M10 | 250 | 1.6 | 174.0 | 89.0  | 2999 | 90.2  | 77.9  | 165 | 9.63   |
| 4"     | 100 | 80.0 | 39.4 | 24.8 | 17.0 | 102 | 22.3 | M10 | 250 | 1.6 | 193.0 | 108.5 |      | 115.1 | 102.3 | 174 | 15.44  |

N/A = Not Available

### ORDERING INFORMATION

| 780S          | BUTT WELD                | REDUCED PORT   | SS316                 | RPTFE                 | 1-1/2"   | 1440cwp         | T-HANDLE          |
|---------------|--------------------------|----------------|-----------------------|-----------------------|----------|-----------------|-------------------|
| 780S          | B                        | 3              | 1                     | R                     | G        | M               | 2                 |
| 780S STANDARD | END CAP TYPE             | PORT TYPE      | BODY/END CAP MATERIAL | SEAT MATERIAL         | SIZE     | PRESSURE        | HANDLE TYPE       |
| A             | EXTEND BUTT WELD SCH-5   | 1 FULL PORT    | 1 316 CF8M            | T PTFE                | A 1/4"   | C PN50/720cwp   | 1 STANDARD HANDLE |
| B             | BUTT WELD                | 3 REDUCED PORT | 4 WCB GS-C25          | R RPTFE               | B 3/8"   | D PN63/1000cwp  | 2 T - HANDLE      |
| C             | EXTEND BUTT WELD SCH-10  |                | 5 316L CF3M           | N 50% S/S Filled PTFE | C 1/2"   | M PN100/1440cwp | 3 BARE SHAFT      |
| S             | SOCKET WELD              |                |                       | 4 25% CARBON 75% PTFE | D 3/4"   |                 | 4 OTHER           |
| N             | THREADED END(NPT)        |                |                       | M MG1241              | E 1"     |                 |                   |
| P             | THREADED END(PF)         |                |                       | O OTHER               | F 1-1/4" |                 |                   |
| H             | THREADED END(PT)         |                |                       |                       | G 1-1/2" |                 |                   |
| V             | EXTENDED BUTT WELD - NW  |                |                       |                       | H 2"     |                 |                   |
| W             | EXTENDED BUTT WELD - RJT |                |                       |                       | J 2-1/2" |                 |                   |
|               |                          |                |                       |                       | K 3"     |                 |                   |
|               |                          |                |                       |                       | L 4"     |                 |                   |

**SINGAPORE**

**Univals Pte Ltd**

1 Kaki Bukit Road 1,  
#02-12, ENTERPRISE ONE,  
Singapore 415934  
Tel (65) 6580 8388 Fax: (65) 6580 8399

**CHINA**

**Univals (Shanghai) Co. Ltd**

1239 Shuhai Road, SongJiang District,  
Shanghai, China 201612  
Tel: (021) 33505868 Fax: (021) 33505738

Email: [sales@univals.com](mailto:sales@univals.com)  
<https://www.univals.com>

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