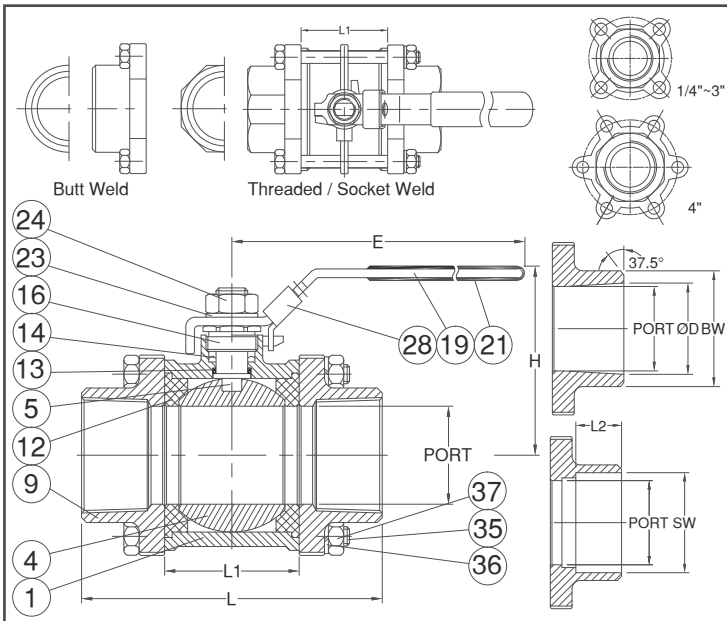
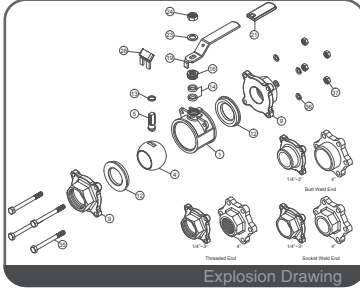
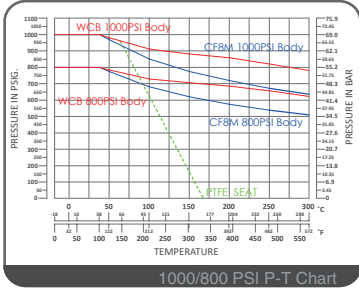


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### FEATURES

- Investment Cast Body Construction
- 3 Pieces Body Design
- In-Line Maintenance
- Integral Seat & Body Seal Design
- Blow-Out-Proof Stem Design
- Locking Device **OPTION**
- NACE MR0175 is available upon request
- Super Alloy materials for highly corrosive medium are available upon request

### SPECIFICATIONS

- Size Range: 1/4" ~ 4" ( DN8 ~ DN100 )
- End Connection: Threaded / Socket / Butt Weld Ends
- Working Pressure: 1000PSI ( CWP ) for 1/4" ~ 2"  
800PSI ( CWP ) for 2-1/2" ~ 4"
- Steam Pressure: 150 PSIG. Saturated Steam for PTFE.
- Temperature Range: -4 to 320 °F ( -20 to 160 °C ) for PTFE.

### STANDARDS

- Design: EN-12516-1/2/3
- Threaded End: NPT/ BS 21 ( BSP ) / BSPT / ISO 228-1 / DIN 2999 / ISO 7-1Rp
- Socket Weld End: ASME/ANSI B16.11
- Butt Weld End: ASME/ANSI B16.25
- Face to Face: MFG / DIN 3202 M3/S13 **OPTION**
- Material: ASTM
- Pressure Testing: API 598

### CERTIFICATE

- Quality Assurance: ISO 9001
- Material Certificate: EN 10204-3.1 MTR
- CE Approval: PED 2014/68/EU Module H
- Canadian Certificate: CRN

### MATERIAL LIST

| NO. | PART NAME      | MATERIAL<br>( more options available ) |
|-----|----------------|--|
| 1   | BODY           | ASTM A351 Gr.CF8M<br>ASTM A216 Gr.WCB  |
| 4   | BALL           | ASTM A351 Gr.CF8M                      |
| 5   | STEM           | ASTM A276 Gr.316                       |
| 9   | END CAP        | ASTM A351 Gr.CF8M<br>ASTM A216 Gr.WCB  |
| 12  | SEAT           | PTFE.                                  |
| 13  | THRUST WASHER  | PTFE.                                  |
| 14  | STEM PACKING   | PTFE.                                  |
| 16  | GLAND NUT      | SS304                                  |
| 19  | HANDLE         | SS304                                  |
| 21  | HANDLE COVER   | PLASTIC                                |
| 23  | HANDLE WASHER  | SS304                                  |
| 24  | HANDLE NUT     | SS304                                  |
| 28  | LOCKING DEVICE | SS304 (OPTION)                         |
| 35  | BODY BOLT      | SS304                                  |
| 36  | BOLT WASHER    | SS304                                  |
| 37  | BOLT NUT       | SS304                                  |

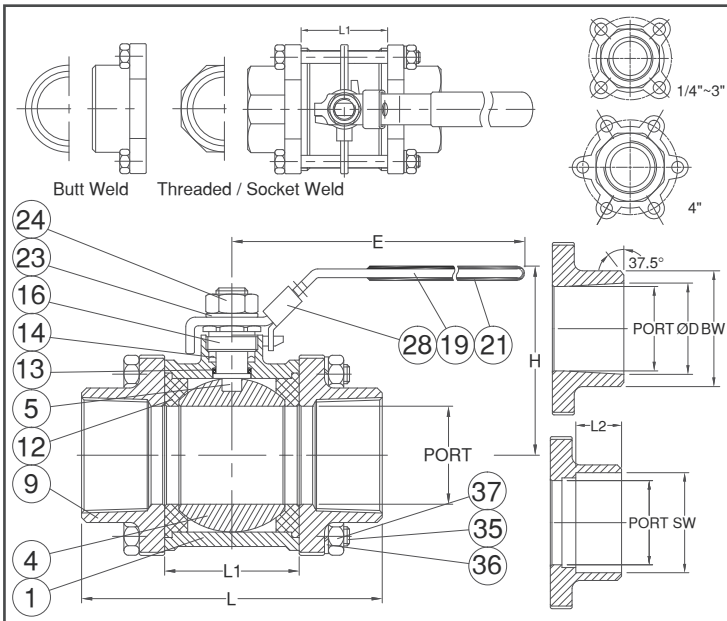
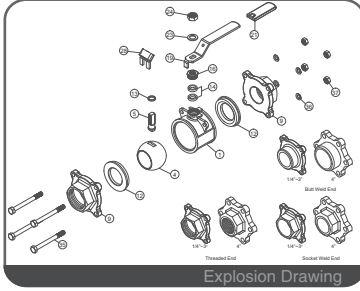
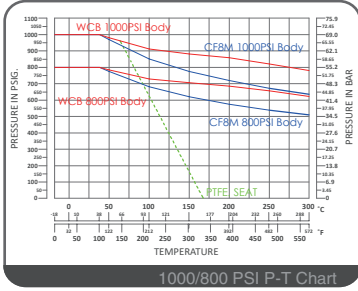
### DIMENSION

| SIZE | PORT   | unit : mm |      |       |      |       |      |    |      |      |      |
|------|--------|-----------|------|-------|------|-------|------|----|------|------|------|
|      |        | TH/SW     | BW   | L     | L1   | E     | H    | L2 | SW   | ØD   | BW   |
| DN8  | 1/4"   | 11.5      | 11.0 | 54.0  | 19.0 | 97.4  | 49.0 | 10 | 14.2 | 11.0 | 13.7 |
| DN10 | 3/8"   | 12.5      | 12.5 | 54.0  | 19.0 | 97.4  | 49.0 | 10 | 17.5 | 12.5 | 17.1 |
| DN15 | 1/2"   | 15.0      | 15.0 | 63.5  | 22.5 | 122.9 | 58.0 | 10 | 21.8 | 15.8 | 21.3 |
| DN20 | 3/4"   | 20.0      | 20.0 | 72.5  | 27.5 | 122.9 | 61.0 | 13 | 27.4 | 20.9 | 26.7 |
| DN25 | 1"     | 25.0      | 25.0 | 81.0  | 34.0 | 144.9 | 68.0 | 13 | 34.1 | 26.6 | 33.4 |
| DN32 | 1-1/4" | 32.0      | 32.0 | 94.5  | 42.5 | 144.9 | 73.5 | 13 | 42.7 | 35.1 | 42.2 |
| DN40 | 1-1/2" | 38.0      | 38.1 | 108.0 | 52.0 | 188.9 | 84.5 | 13 | 49.0 | 40.9 | 48.3 |
| DN50 | 2"     | 50.0      | 50.0 | 121.5 | 63.5 | 188.9 | 93.2 | 16 | 61.0 | 52.5 | 60.3 |

### DIMENSION

| SIZE | PORT   | unit : inch |      |      |      |      |      |      |      |      |      |
|------|--------|-------------|------|------|------|------|------|------|------|------|------|
|      |        | TH/SW       | BW   | L    | L1   | E    | H    | L2   | SW   | ØD   | BW   |
| DN8  | 1/4"   | 0.45        | 0.43 | 2.13 | 0.75 | 3.83 | 1.93 | 0.39 | 0.56 | 0.43 | 0.54 |
| DN10 | 3/8"   | 0.49        | 0.49 | 2.13 | 0.75 | 3.83 | 1.93 | 0.39 | 0.69 | 0.49 | 0.67 |
| DN15 | 1/2"   | 0.59        | 0.59 | 2.50 | 0.89 | 4.84 | 2.28 | 0.39 | 0.86 | 0.62 | 0.84 |
| DN20 | 3/4"   | 0.79        | 0.79 | 2.85 | 1.08 | 4.84 | 2.40 | 0.51 | 1.08 | 0.82 | 1.05 |
| DN25 | 1"     | 0.98        | 0.98 | 3.19 | 1.34 | 5.70 | 2.68 | 0.51 | 1.34 | 1.05 | 1.31 |
| DN32 | 1-1/4" | 1.26        | 1.26 | 3.72 | 1.67 | 5.70 | 2.89 | 0.51 | 1.68 | 1.38 | 1.66 |
| DN40 | 1-1/2" | 1.50        | 1.50 | 4.25 | 2.05 | 7.44 | 3.33 | 0.51 | 1.93 | 1.61 | 1.90 |
| DN50 | 2"     | 1.97        | 1.97 | 4.78 | 2.50 | 7.44 | 3.67 | 0.63 | 2.40 | 2.07 | 2.37 |

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### STANDARDS

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- Threaded End NPT/ BS 21 ( BSP ) / BSPT / ISO 228-1 / DIN 2999 / ISO 7-1Rp
- Socket Weld End ASME/ANSI B16.11
- Butt Weld End ASME/ANSI B16.25
- Face to Face MFG / DIN 3202 M3/S13 **OPTION**
- Material ASTM
- Pressure Testing API 598

### CERTIFICATE

- Quality Assurance ISO 9001
- Material Certificate EN 10204-3.1 MTR
- CE Approval PED 2014/68/EU Module H
- Canadian Certificate CRN

### MATERIAL LIST

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| 9   | END CAP        | ASTM A351 Gr.CF8M<br>ASTM A216 Gr.WCB  |
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| 13  | THRUST WASHER  | PTFE.                                  |
| 14  | STEM PACKING   | PTFE.                                  |
| 16  | GLAND NUT      | SS304                                  |
| 19  | HANDLE         | SS304                                  |
| 21  | HANDLE COVER   | PLASTIC                                |
| 23  | HANDLE WASHER  | SS304                                  |
| 24  | HANDLE NUT     | SS304                                  |
| 28  | LOCKING DEVICE | SS304 (OPTION)                         |
| 35  | BODY BOLT      | SS304                                  |
| 36  | BOLT WASHER    | SS304                                  |
| 37  | BOLT NUT       | SS304                                  |

### DIMENSION

| SIZE  | PORT   |       | L     | L1    | E     | H     | L2    | SW | ØD    | BW    |       |
|-------|--------|-------|-------|-------|-------|-------|-------|----|-------|-------|-------|
|       | TH/SW  | BW    |       |       |       |       |       |    |       |       |       |
| DN65  | 2-1/2" | 65.0  | 62.7  | 157.5 | 85.5  | 255.3 | 131.8 | 16 | 77.0  | 65.0  | 73.0  |
| DN80  | 3"     | 80.0  | 77.9  | 190.0 | 102.0 | 260.8 | 140.0 | 16 | 90.2  | 77.9  | 88.9  |
| DN100 | 4"     | 100.0 | 100.0 | 225.0 | 128.5 | 322.2 | 173.6 | 22 | 115.3 | 102.3 | 114.3 |

### DIMENSION

| SIZE  | PORT   |      | L    | L1   | E    | H     | L2   | SW   | ØD   | BW   |      |
|-------|--------|------|------|------|------|-------|------|------|------|------|------|
|       | TH/SW  | BW   |      |      |      |       |      |      |      |      |      |
| DN65  | 2-1/2" | 2.56 | 2.47 | 6.20 | 3.37 | 10.05 | 5.19 | 0.63 | 3.03 | 2.56 | 2.87 |
| DN80  | 3"     | 3.15 | 3.07 | 7.48 | 4.02 | 10.27 | 5.51 | 0.63 | 3.55 | 3.07 | 3.50 |
| DN100 | 4"     | 3.94 | 3.94 | 8.86 | 5.06 | 12.69 | 6.83 | 0.87 | 4.54 | 4.03 | 4.50 |