



## FEATURES

- Investment Cast Body Construction
- 3 Pieces Body Design
- Integral Seat & Body Seal Design **OPTION**
- ISO 5211 Direct Mounting Flange
- Blow-Out-Proof Stem Design & Anti-Static Device
- Available for Pneumatic or Electric Actuator
- NACE MR0175 is available upon request
- Super Alloy materials for highly corrosive medium are available upon request

**AUTOMATION AVAILABLE**

## SPECIFICATIONS

- Size Range DN8 ~ DN100 ( 1/4" ~ 4" )
- End Connection Threaded / Socket / Butt Weld Ends
- Working Pressure
  - PN63 for DN8 ~ DN50 / 1000 PSI ( CWP ) for 1/4" ~ 2"
  - PN40 for DN65 ~ DN100 / 800 PSI ( CWP ) for 2-1/2" ~ 4"
- Steam Pressure 150 PSIG. Saturated Steam for RTFE.
- Temperature Range -4 to 356 °F ( -20 to 180 °C ) for RTFE.

## STANDARDS

- Design EN 12516-1/2/3
- Mounting Flange ISO 5211
- 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 ( Option for DIN 3202 M3/S13 )
- Material EN1503-1
- Pressure Testing EN 12266

## CERTIFICATE

- Fugitive Emission TA-LUFT
- Quality Assurance ISO 9001
- Material Certificate EN 10204-3.1 MTR
- CE Approval PED 2014/68/EU Module H

## MATERIAL LIST

| NO. | PART NAME         | MATERIAL<br>(more options available) |
|-----|-------------------|--------------------------------------|
| 1   | BODY              | EN1503-1 1.4408 EN1503-1 1.0619      |
| 4   | BALL              | ASTM A351 Gr.CF8M                    |
| 5   | STEM              | ASTM A276 Gr.316                     |
| 9   | END CAP           | EN1503-1 1.4408 EN1503-1 1.0619      |
| 12  | SEAT              | RTFE.(15%G.F.)                       |
| 13  | THRUST WASHER     | RTFE.(15%G.F.)                       |
| 14  | STEM PACKING      | RTFE.(15%G.F.)                       |
| 15  | GLAND BUSH        | SS304                                |
| 19  | HANDLE            | SS304                                |
| 21  | HANDLE COVER      | VINYL GRIP.                          |
| 22  | STEM NUT          | SS304                                |
| 24  | HANDLE NUT        | SS304                                |
| 28  | LOCKING DEVICE    | SS304                                |
| 29  | BELLEVILLE WASHER | SS304-CSP                            |
| 30  | TAB WASHER        | SS304                                |
| 31  | O-RING            | VITON®                               |
| 32  | PACKING FOLLOWER  | PTFE.+25%G.F.                        |
| 33  | STOP PIN          | SS304                                |
| 35  | BODY BOLT         | SS304                                |
| 36  | BOLT WASHER       | SS304                                |
| 37  | BOLT NUT          | SS304                                |

## DIMENSION

| SIZE  | PORT TH/SW | unit : mm |       |       |      |       |       |      |       |      |     |     |    |     |         |     |       |       |       |       |
|-------|------------|-----------|-------|-------|------|-------|-------|------|-------|------|-----|-----|----|-----|---------|-----|-------|-------|-------|-------|
|       |            | L         | L1    | L2    | E    | H     | H1    | H4   | C     | ØK   | ØK1 | Z   | Z1 | SW  | PORT BW | ØD  | BW    |       |       |       |
| DN8   | 1/4"       | 11.5      | 63.5  | 22.5  | 10.0 | 112.0 | 73.0  | 8.5  | 37.0  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 14.2  | 11.0  | 11.0  | 13.7  |
| DN10  | 3/8"       | 12.5      | 63.5  | 22.5  | 10.0 | 112.0 | 73.0  | 8.5  | 37.0  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 17.5  | 12.5  | 12.5  | 17.1  |
| DN15  | 1/2"       | 15.0      | 63.5  | 22.5  | 10.0 | 112.0 | 73.0  | 8.5  | 37.0  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 21.8  | 15.0  | 15.8  | 21.3  |
| DN20  | 3/4"       | 20.0      | 72.5  | 27.5  | 13.0 | 112.0 | 80.8  | 8.5  | 45.0  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 27.4  | 20.0  | 20.9  | 26.7  |
| DN25  | 1"         | 25.0      | 81.0  | 34.0  | 13.0 | 136.0 | 90.5  | 9.5  | 53.5  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 34.1  | 25.0  | 26.6  | 33.4  |
| DN32  | 1-1/4"     | 32.0      | 94.5  | 42.5  | 13.0 | 185.0 | 98.7  | 9.5  | 59.0  | 9.0  | 50  | F05 | 36 | F03 | 7.0     | 6.0 | 42.7  | 32.0  | 35.1  | 42.2  |
| DN40  | 1-1/2"     | 38.0      | 108.0 | 52.0  | 13.0 | 197.9 | 115.3 | 14.0 | 74.8  | 14.0 | 70  | F07 | 50 | F05 | 9.0     | 7.0 | 49.0  | 38.1  | 40.9  | 48.3  |
| DN50  | 2"         | 50.0      | 121.5 | 63.5  | 16.0 | 197.9 | 124.0 | 13.7 | 83.5  | 14.0 | 70  | F07 | 50 | F05 | 9.0     | 7.0 | 61.0  | 50.0  | 52.5  | 60.3  |
| DN65  | 2-1/2"     | 65.0      | 157.5 | 85.5  | 16.0 | 267.0 | 155.0 | 18.0 | 108.8 | 17.0 | 102 | F10 | 70 | F07 | 11.0    | 9.0 | 77.0  | 62.7  | 62.7  | 73.0  |
| DN80  | 3"         | 80.0      | 190.0 | 102.0 | 16.0 | 267.0 | 164.5 | 18.0 | 118.3 | 17.0 | 102 | F10 | 70 | F07 | 11.0    | 9.0 | 90.2  | 77.9  | 77.9  | 88.9  |
| DN100 | 4"         | 100.0     | 225.0 | 128.5 | 22.0 | 322.0 | 216.7 | 18.0 | 153.8 | 22.0 | 102 | F10 | 70 | F07 | 11.0    | 9.0 | 115.3 | 100.0 | 102.3 | 114.3 |

## DIMENSION

| SIZE  | PORT TH/SW | unit : inch |      |      |      |       |      |      |      |      |      |     |      |     |         |      |      |      |      |      |
|-------|------------|-------------|------|------|------|-------|------|------|------|------|------|-----|------|-----|---------|------|------|------|------|------|
|       |            | L           | L1   | L2   | E    | H     | H1   | H4   | C    | ØK   | ØK1  | Z   | Z1   | SW  | PORT BW | ØD   | BW   |      |      |      |
| DN8   | 1/4"       | 0.45        | 2.50 | 0.89 | 3.39 | 4.41  | 2.87 | 0.33 | 1.46 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 0.56 | 0.43 | 0.43 | 0.54 |
| DN10  | 3/8"       | 0.49        | 2.50 | 0.89 | 3.39 | 4.41  | 2.87 | 0.33 | 1.46 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 0.69 | 0.49 | 0.49 | 0.67 |
| DN15  | 1/2"       | 0.59        | 2.50 | 0.89 | 3.39 | 4.41  | 2.87 | 0.33 | 1.46 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 0.86 | 0.59 | 0.62 | 0.84 |
| DN20  | 3/4"       | 0.79        | 2.85 | 1.08 | 0.51 | 4.41  | 3.18 | 0.33 | 1.77 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 1.08 | 0.79 | 0.82 | 1.05 |
| DN25  | 1"         | 0.98        | 3.19 | 1.34 | 0.51 | 5.35  | 3.56 | 0.37 | 2.11 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 1.34 | 0.98 | 1.05 | 1.31 |
| DN32  | 1-1/4"     | 1.26        | 3.72 | 1.67 | 0.51 | 7.28  | 3.89 | 0.37 | 2.32 | 0.35 | 1.97 | F05 | 1.42 | F03 | 0.28    | 0.24 | 1.68 | 1.26 | 1.38 | 1.66 |
| DN40  | 1-1/2"     | 1.50        | 4.25 | 2.05 | 0.51 | 7.79  | 4.54 | 0.55 | 2.94 | 0.55 | 2.76 | F07 | 1.97 | F05 | 0.35    | 0.28 | 1.93 | 1.50 | 1.61 | 1.90 |
| DN50  | 2"         | 1.97        | 4.78 | 2.50 | 0.63 | 7.79  | 4.88 | 0.54 | 3.29 | 0.55 | 2.76 | F07 | 1.97 | F05 | 0.35    | 0.28 | 2.40 | 1.97 | 2.07 | 2.37 |
| DN65  | 2-1/2"     | 2.56        | 6.20 | 3.37 | 0.63 | 10.51 | 6.10 | 0.71 | 4.28 | 0.67 | 4.02 | F10 | 2.76 | F07 | 0.43    | 0.35 | 3.03 | 2.47 | 2.47 | 2.87 |
| DN80  | 3"         | 3.15        | 7.48 | 4.02 | 0.63 | 10.51 | 6.48 | 0.71 | 4.66 | 0.67 | 4.02 | F10 | 2.76 | F07 | 0.43    | 0.35 | 3.55 | 3.07 | 3.07 | 3.50 |
| DN100 | 4"         | 3.94        | 8.86 | 5.06 | 0.87 | 12.68 | 8.53 | 0.71 | 6.06 | 0.87 | 4.02 | F10 | 2.76 | F07 | 0.43    | 0.35 | 4.54 | 3.94 | 4.03 | 4.50 |