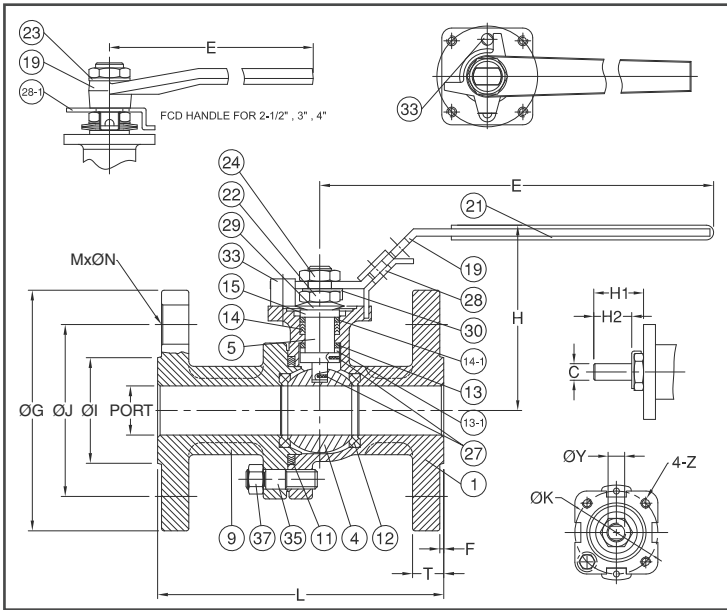
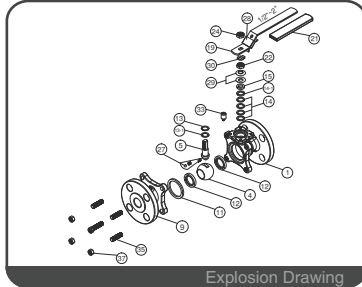
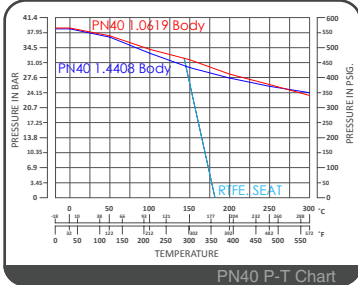




DN15 ~ DN100 (1/2" ~ 4")



FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 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 DN15 ~ DN300 (1/2" ~ 12")
- End Connection Flanged End, RF
- Working Pressure 1.4408 - PN40 38.8 at RT.
1.0619 - PN40 39.0 at RT.
- Steam Pressure 150 PSIG. Saturated Steam for RTFE.
- Temperature Range -4 to 356 °F (-20 to 180 °C) for RTFE.

STANDARDS

- Design ISO12516-1/2 / ISO 17292 / API 608
- Mounting Flange ISO 5211
- Face to Face DIN 3202 F4 for DN15 ~ DN100
DIN 3202 F5 for DN125 ~ DN300
- Flange Dimension EN 1092-1 PN40
- Material EN1503-1
- Pressure Testing EN 12266

CERTIFICATE

- Fire Safe API 607 6th Edition / ISO 10497
- Fugitive Emission ISO 15848-1 / 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 (more options available) | |
|------|--------------------|--|-----------------|
| 1 | BODY | EN1503-1 1.4408 | EN1503-1 1.0619 |
| 4 | BALL | ASTM A351 Gr.CF8M | |
| 5 | STEM | ASTM A276 Gr.SS316 | |
| 9 | END CAP | EN1503-1 1.4408 | EN1503-1 1.0619 |
| 11 | BODY SEAL | GRAPHITE+SS316 SPIRAL WOUND WIRE | |
| 12 | SEAT | RTFE.(15%G.F.) | |
| 13 | THRUST WASHER | RTFE.(15%G.F.) | |
| 13-1 | THRUST WASHER | RTFE.+50%SS316 | |
| 14 | STEM PACKING | RTFE.(15%G.F.) | |
| 14-1 | STEM PACKING | PTFE.+50%SS316 | |
| 15 | GLAND BUSH | SS304 | |
| 19 | HANDLE | SS304 / FCD45 | |
| 21 | HANDLE COVER | PLASTIC | |
| 22 | STEM NUT | SS304 | |
| 23 | HANDLE WASHER | SS304 | |
| 24 | HANDLE NUT | SS304 | |
| 27 | ANTI-STATIC DEVICE | SS316 | |
| 28 | LOCKING DEVICE | SS304 | |
| 28-1 | STOP PLATE | SS304 | |
| 29 | BELLEVEILLE WASHER | SS301 | |
| 30 | TAB WASHER | SS304 | |
| 33 | STOP PIN | SS304 | |
| 35 | STUD | ASTM A193 Gr.B8 | ASTM A193 Gr.B7 |
| 37 | BOLT NUT | ASTM A194 Gr.8 | ASTM A194 Gr.2H |

DIMENSION

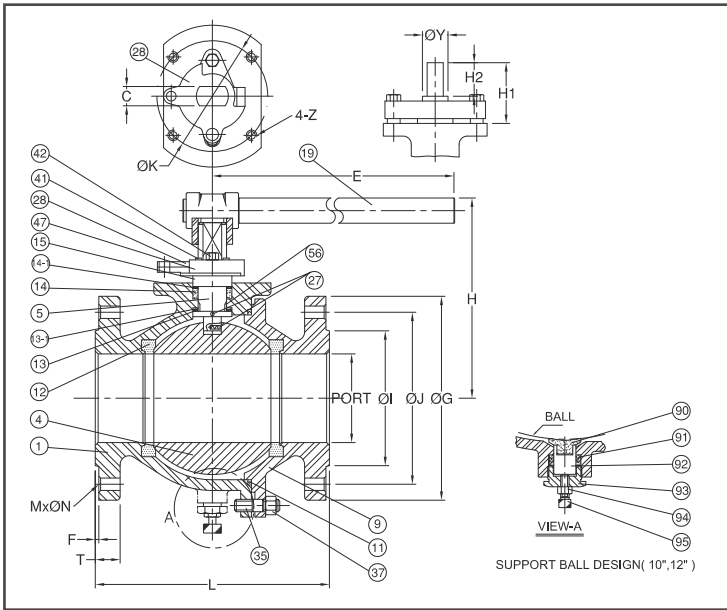
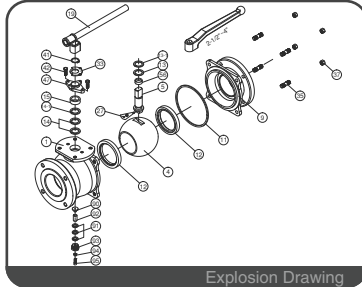
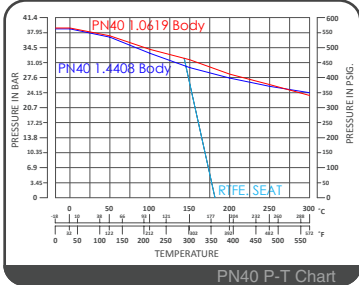
| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | | |
|-------|--------|-------|-----|-----|-------|----|----|------|------|-----|-----|-----|----|---|----|----|-----|-----|---------|
| DN15 | 1/2" | 15.0 | 115 | 165 | 66.0 | 14 | 8 | 6.35 | 9.3 | 95 | 65 | 45 | 16 | 2 | 4 | 14 | 42 | F04 | M5x0.8 |
| DN20 | 3/4" | 20.0 | 120 | 165 | 74.0 | 14 | 8 | 6.35 | 9.3 | 105 | 75 | 58 | 18 | 2 | 4 | 14 | 42 | F03 | M5x0.8 |
| DN25 | 1" | 25.0 | 125 | 200 | 87.0 | 19 | 11 | 8.0 | 10.9 | 115 | 85 | 68 | 18 | 2 | 4 | 14 | 50 | F05 | M6x1.0 |
| DN32 | 1-1/4" | 32.0 | 130 | 200 | 92.0 | 19 | 11 | 8.0 | 10.9 | 140 | 100 | 78 | 18 | 2 | 4 | 18 | 50 | F05 | M6x1.0 |
| DN40 | 1-1/2" | 38.0 | 140 | 250 | 105.0 | 23 | 14 | 9.5 | 15.7 | 150 | 110 | 88 | 18 | 3 | 4 | 18 | 70 | F05 | M8x1.25 |
| DN50 | 2" | 50.0 | 150 | 265 | 115.0 | 23 | 14 | 9.5 | 15.7 | 165 | 125 | 102 | 20 | 3 | 4 | 18 | 70 | F07 | M8x1.25 |
| DN65 | 2-1/2" | 64.0 | 170 | 390 | 152.5 | 71 | 50 | 17.0 | 28.0 | 185 | 145 | 122 | 22 | 3 | 8 | 18 | 102 | F10 | M10x1.5 |
| DN80 | 3" | 76.0 | 180 | 390 | 161.5 | 71 | 50 | 17.0 | 28.0 | 200 | 160 | 138 | 24 | 3 | 8 | 18 | 102 | F10 | M10x1.5 |
| DN100 | 4" | 100.0 | 190 | 390 | 179.0 | 71 | 50 | 17.0 | 28.0 | 235 | 190 | 162 | 24 | 3 | 8 | 22 | 102 | F10 | M10x1.5 |

DIMENSION

| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | | |
|-------|--------|------|------|-------|------|------|------|------|------|------|------|------|------|------|----|------|------|-----|---------|
| DN15 | 1/2" | 0.59 | 4.53 | 6.50 | 2.60 | 0.55 | 0.31 | 0.25 | 0.37 | 3.74 | 2.56 | 1.77 | 0.63 | 0.08 | 4 | 0.55 | 1.65 | F04 | M5x0.8 |
| DN20 | 3/4" | 0.79 | 4.72 | 6.50 | 2.91 | 0.55 | 0.31 | 0.25 | 0.37 | 4.13 | 2.95 | 2.28 | 0.71 | 0.08 | 4 | 0.55 | 1.65 | F03 | M5x0.8 |
| DN25 | 1" | 0.98 | 4.92 | 7.87 | 3.43 | 0.75 | 0.43 | 0.31 | 0.43 | 4.53 | 3.35 | 2.68 | 0.71 | 0.08 | 4 | 0.55 | 1.97 | F05 | M6x1.0 |
| DN32 | 1-1/4" | 1.26 | 5.12 | 7.87 | 3.62 | 0.75 | 0.43 | 0.31 | 0.43 | 5.51 | 3.94 | 3.07 | 0.71 | 0.08 | 4 | 0.71 | 1.97 | F05 | M6x1.0 |
| DN40 | 1-1/2" | 1.50 | 5.51 | 9.84 | 4.13 | 0.91 | 0.55 | 0.37 | 0.62 | 5.91 | 4.33 | 3.46 | 0.71 | 0.12 | 4 | 0.71 | 2.76 | F07 | M8x1.25 |
| DN50 | 2" | 1.97 | 5.91 | 10.43 | 4.53 | 0.91 | 0.55 | 0.37 | 0.62 | 6.50 | 4.92 | 4.02 | 0.79 | 0.12 | 4 | 0.71 | 2.76 | F07 | M8x1.25 |
| DN65 | 2-1/2" | 2.52 | 6.69 | 15.35 | 6.00 | 2.80 | 1.97 | 0.67 | 1.10 | 7.28 | 5.71 | 4.80 | 0.87 | 0.12 | 8 | 0.71 | 4.02 | F10 | M10x1.5 |
| DN80 | 3" | 2.99 | 7.09 | 15.35 | 6.36 | 2.80 | 1.97 | 0.67 | 1.10 | 7.87 | 6.30 | 5.43 | 0.94 | 0.12 | 8 | 0.71 | 4.02 | F10 | M10x1.5 |
| DN100 | 4" | 3.94 | 7.48 | 15.35 | 7.05 | 2.80 | 1.97 | 0.67 | 1.10 | 9.25 | 7.48 | 6.38 | 0.94 | 0.12 | 8 | 0.87 | 4.02 | F10 | M10x1.5 |



DN150 ~ DN.300 (6" ~ 12")



FEATURES

- Investment Cast Body Construction
- 2 Pieces Body Design
- ISO 5211 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 DN15 ~ DN300 (1/2" ~ 12")
- End Connection Flanged End, RF
- Working Pressure 1.4408 - PN40 38.8 at RT.
1.0619 - PN40 39.0 at RT.
- Steam Pressure 150 PSIG. Saturated Steam for RTFE.
- Temperature Range -4 to 356 °F (-20 to 180 °C) for RTFE.

STANDARDS

- Design ISO12516-1/2 / ISO 17292 / API 608
- Mounting Flange ISO 5211
- Face to Face DIN 3202 F4 for DN15 ~ DN100
DIN 3202 F5 for DN125 ~ DN300
- Flange Dimension EN 1092-1 PN40
- Material EN1503-1
- Pressure Testing EN 12266

CERTIFICATE

- Fire Safe API 607 6th Edition / ISO 10497
- Fugitive Emission ISO 15848-1 / 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 (more options available) | |
|------|--------------------|--------------------------------------|--------------------|
| 1 | BODY | EN1503-1 1.4408 | EN1503-1 1.0619 |
| 4 | BALL | ASTM A351 Gr.CF8M | ASTM A351 Gr.CF8 |
| 5 | STEM | ASTM A276 Gr.SS316 | ASTM A276 Gr.SS304 |
| 9 | END CAP | EN1503-1 1.4408 | EN1503-1 1.0619 |
| 11 | BODY SEAL | GRAPHITE+SS316 SPIRAL WOUND WIRE | |
| 12 | SEAT | RTFE.(15%G.F.) | |
| 13 | THRUST WASHER | RTFE.(15%G.F.) | |
| 13-1 | THRUST WASHER | PTFE.+50%SS316 | |
| 14 | STEM PACKING | RTFE.(15%G.F.) | |
| 14-1 | STEM PACKING | PTFE.+50%SS316 | |
| 15 | GLAND BUSH | SS304 | CARBON STEEL |
| 19 | HANDLE | FCD ADAPTER / S15C PIPE HANDLE | |
| 27 | ANTI-STATIC DEVICE | SS316 | |
| 28 | STOP PLATE | SS304 | |
| 35 | STUD (BODY BOLT) | ASTM A193 Gr.B8 | ASTM A193 Gr.B7 |
| 37 | BOLT NUT | ASTM A194 Gr.8 | ASTM A194 Gr.2H |
| 41 | SNAP RING | SS304 | |
| 42 | GLAND BOLT | SS304 | CARBON STEEL |
| 47 | GLAND FLANGE | ASTM A351 Gr.CF8 | ASTM A216 Gr.WCB |
| 56 | STEM BEARING | RTFE.(15%G.F.) | |
| 90 | PIN SEAT | PTFE.(15%G.F.) | |
| 91 | PIN PACKING | RTFE.(15%G.F.) | |
| 92 | SUPPORT PIN | SS316 | |
| 93 | SUPPORT NUT | SS304 | |
| 94 | SET NUT | SS304 | |
| 95 | TUNING SCREW | SS304 | |

DIMENSION

| | | unit : mm | | | | | | | | | | | | | | | | | |
|-------|------|-----------|-----|------|-----|----|----|----|------|-----|-----|-----|----|---|----|----|-----|-----|----------|
| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | | |
| DN150 | 6" | 150 | 350 | 650 | 274 | 84 | 54 | 26 | 43.5 | 300 | 250 | 218 | 28 | 3 | 8 | 26 | 125 | F12 | M12x1.75 |
| DN200 | 8" | 200 | 400 | 950 | 302 | 84 | 54 | 26 | 43.5 | 375 | 320 | 285 | 34 | 3 | 12 | 30 | 125 | F12 | M12x1.75 |
| DN250 | 10" | 250 | 450 | 1100 | 372 | 98 | 54 | 35 | 50 | 450 | 385 | 345 | 38 | 3 | 12 | 33 | 140 | F16 | M16x2.0 |
| DN300 | 12" | 300 | 500 | 1100 | 413 | 98 | 54 | 35 | 50 | 515 | 450 | 410 | 42 | 4 | 16 | 33 | 140 | F16 | M16x2.0 |

DIMENSION

| | | unit : inch | | | | | | | | | | | | | | | | | |
|-------|------|-------------|-------|-------|-------|------|------|------|------|-------|-------|-------|------|------|----|------|------|-----|----------|
| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | | |
| DN150 | 6" | 5.91 | 13.78 | 25.59 | 10.79 | 3.31 | 2.13 | 1.02 | 1.71 | 11.81 | 9.84 | 8.58 | 1.10 | 0.12 | 8 | 1.02 | 4.92 | F12 | M12x1.75 |
| DN200 | 8" | 7.87 | 15.75 | 37.40 | 11.89 | 3.31 | 2.13 | 1.02 | 1.71 | 14.76 | 12.60 | 11.22 | 1.34 | 0.12 | 12 | 1.18 | 4.92 | F12 | M12x1.75 |
| DN250 | 10" | 9.84 | 17.72 | 43.31 | 14.65 | 3.86 | 2.13 | 1.38 | 1.97 | 17.72 | 15.16 | 13.58 | 1.50 | 0.12 | 12 | 1.30 | 5.51 | F16 | M16x2.0 |
| DN300 | 12" | 11.81 | 19.69 | 43.31 | 16.26 | 3.86 | 2.13 | 1.38 | 1.97 | 20.28 | 17.72 | 16.14 | 1.65 | 0.16 | 12 | 1.30 | 5.51 | F16 | M16x2.0 |