

Fig No. MD-82 Full Bore
1/2" ~ 12" (DN 15 ~ DN 300)



Features :

- Investment Casting Component for 1/2" ~ 4"
- Sand Casting for 6" & above
- Blow Out Proof Stem Design, Non Anti-Static Device
- ISO 5211 Mounting Flange
- Standard Stock Without Fire Safe Design
- * Option : Fire Safe Design

Standard Compliance :

- Basic Design : ANSI B16.34 Class 150
- Body Material : ASTM
- Face to Face Length : ANSI B16.10 Class 150
- Flange Dimension : ANSI B16.5 Class 150
- Pressure Testing : API 598

Specification :

- Temperature : -20 to 180 °C (-4 to 356 °F) for RTFE.
- Suggested Application : Sea Water, Organic Acids, Caustic Soda, Phosphoric Acid

MATERIAL LIST

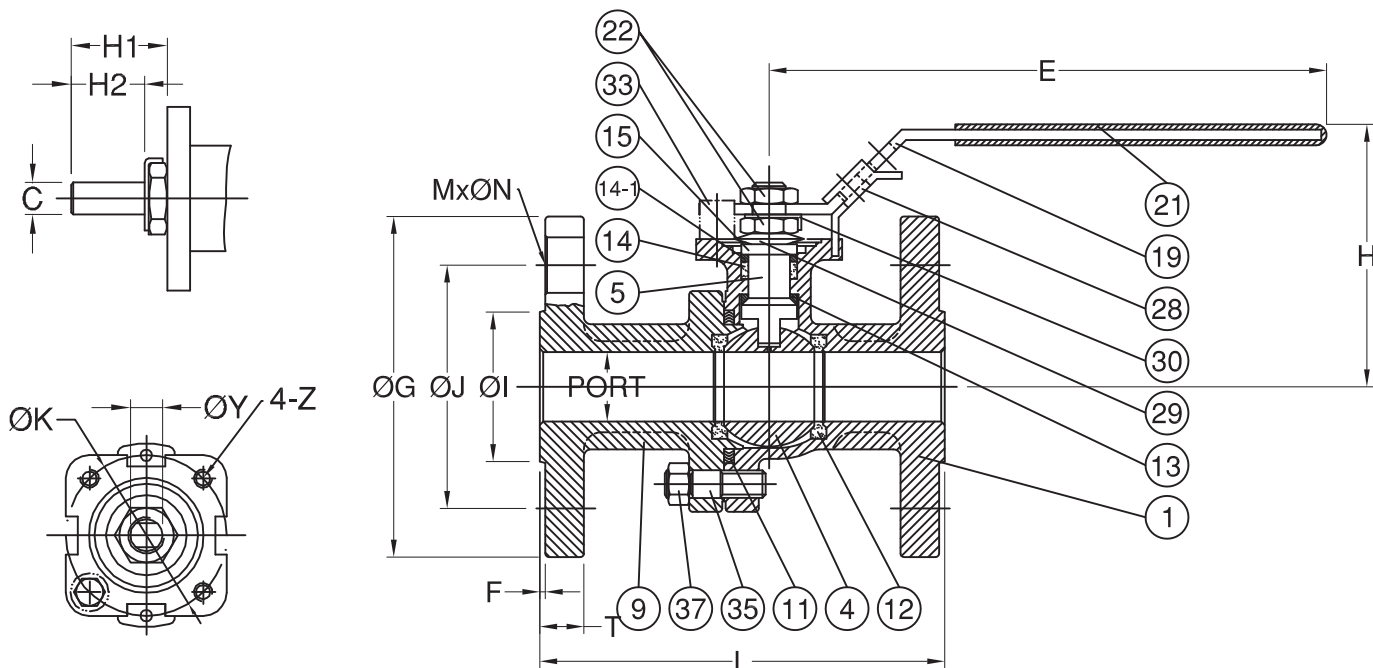
| NO. | PART NAME | MATERIAL |
|------|-------------------|---------------------------|
| 1 | BODY | ASTM A890/995 Gr.4A CD3MN |
| 4 | BALL | ASTM A890/995 Gr.4A CD3MN |
| 5 | STEM | S31803 |
| 9 | END CAP | ASTM A890/995 Gr.4A CD3MN |
| 11 | BODY SEAL | PTFE. |
| 12 | SEAT | RTFE.(15%G.F.) |
| 13 | THRUST WASHER | PTFE. |
| 14 | STEM PACKING | PTFE. |
| 14-1 | STEM PACKING | PTFE. |
| 15 | GLAND BUSH | SS304 |
| 19 | HANDLE | SS304 |
| 21 | HANDLE COVER | PLASTIC |
| 22 | STEM NUT | SS304 |
| 28 | LOCKING DEVICE | SS304 |
| 29 | BELLEVILLE WASHER | SS301 |
| 30 | TAB WASHER | SS304 |
| 33 | STOP PIN | SS304 |
| 35 | STUD | ASTMA193 Gr.B8 |
| 37 | BOLT NUT | ASTMA194 Gr.8 |

DIMENSIONS

| | | | | | | | | | | | | | | | | | unit:mm | |
|------|--------|------|-------|-------|-------|------|------|------|------|-------|-------|------|------|-----|----|------|---------|---------|
| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | |
| DN15 | 1/2" | 15.0 | 108.0 | 165.0 | 66.0 | 14.0 | 8.0 | 6.35 | 9.3 | 89.0 | 60.5 | 35.0 | 11.2 | 1.6 | 4 | 16.0 | 42.0 | M5x0.8 |
| DN20 | 3/4" | 20.0 | 117.0 | 165.0 | 74.0 | 14.0 | 8.0 | 6.35 | 9.3 | 98.0 | 70.0 | 43.0 | 12.7 | 1.6 | 4 | 16.0 | 42.0 | M5x0.8 |
| DN25 | 1" | 25.0 | 127.0 | 200.0 | 87.0 | 19.0 | 11.0 | 8.0 | 10.9 | 108.0 | 79.5 | 51.0 | 14.3 | 1.6 | 4 | 16.0 | 50.0 | M6x1.0 |
| DN32 | 1-1/4" | 32.0 | 140.0 | 200.0 | 92.0 | 19.0 | 11.0 | 8.0 | 10.9 | 117.5 | 88.9 | 64.0 | 15.9 | 1.6 | 4 | 16.0 | 50.0 | M6x1.0 |
| DN40 | 1-1/2" | 38.0 | 165.0 | 250.0 | 105.0 | 23.0 | 14.0 | 9.5 | 15.7 | 127.0 | 98.5 | 73.0 | 17.5 | 1.6 | 4 | 16.0 | 70.0 | M8x1.25 |
| DN50 | 2" | 50.0 | 178.0 | 265.0 | 115.0 | 23.0 | 14.0 | 9.5 | 15.7 | 152.0 | 120.5 | 92.0 | 19.1 | 1.6 | 4 | 19.0 | 70.0 | M8x1.25 |

| | | | | | | | | | | | | | | | | | unit:inch | |
|------|--------|------|------|-------|------|------|------|------|------|------|------|------|------|------|----|------|-----------|---------|
| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | |
| DN15 | 1/2" | 0.59 | 4.25 | 6.50 | 2.60 | 0.55 | 0.31 | 0.25 | 0.37 | 3.50 | 2.38 | 1.38 | 0.44 | 0.06 | 4 | 0.63 | 1.65 | M5x0.8 |
| DN20 | 3/4" | 0.79 | 4.61 | 6.50 | 2.91 | 0.55 | 0.31 | 0.25 | 0.37 | 3.86 | 2.76 | 1.69 | 0.50 | 0.06 | 4 | 0.63 | 1.65 | M5x0.8 |
| DN25 | 1" | 0.98 | 5.00 | 7.87 | 3.43 | 0.75 | 0.43 | 0.31 | 0.43 | 4.25 | 3.13 | 2.01 | 0.56 | 0.06 | 4 | 0.63 | 1.97 | M6x1.0 |
| DN32 | 1-1/4" | 1.26 | 5.51 | 7.87 | 3.62 | 0.75 | 0.43 | 0.31 | 0.43 | 4.63 | 3.50 | 2.52 | 0.63 | 0.06 | 4 | 0.63 | 1.97 | M6x1.0 |
| DN40 | 1-1/2" | 1.50 | 6.50 | 9.84 | 4.13 | 0.91 | 0.55 | 0.37 | 0.62 | 5.00 | 3.88 | 2.87 | 0.69 | 0.06 | 4 | 0.63 | 2.76 | M8x1.25 |
| DN50 | 2" | 1.97 | 7.01 | 10.43 | 4.53 | 0.91 | 0.55 | 0.37 | 0.62 | 5.98 | 4.74 | 3.62 | 0.75 | 0.06 | 4 | 0.75 | 2.76 | M8x1.25 |

FLANGED DIMENSION: ANSI B16.5
 FACE TO FACE: ANSI B16.10





Two Piece Body Design Flanged Ball Valves, Full Bore

DUPLEX 4A / ANSI CLASS 150

Fig No. MD-82 Full Bore
1/2" ~ 12" (DN 15 ~ DN 300)



Features :

- Investment Casting Component for 1/2" ~ 4"
- Sand Casting for 6" & above
- Blow Out Proof Stem Design, Non Anti-Static Device
- ISO 5211 Mounting Flange
- Standard Stock Without Fire Safe Design
- * Option : Fire Safe Design

Standard Compliance :

- Basic Design : ANSI B16.34 Class 150
- Body Material : ASTM
- Face to Face Length : ANSI B16.10 Class 150
- Flange Dimension : ANSI B16.5 Class 150
- Pressure Testing : API 598

Specification :

- Temperature : -20 to 180 °C (-4 to 356 °F) for RTFE.
- Suggested Application : Sea Water, Organic Acids, Caustic Soda, Phosphoric Acid

MATERIAL LIST

| NO. | PART NAME | MATERIAL |
|------|---------------|-------------------------------------|
| 1 | BODY | ASTM A890/995 Gr.4A CD3MN |
| 4 | BALL | ASTM A890/995 Gr.4A CD3MN |
| 5 | STEM | S31803 |
| 9 | END CAP | ASTM A890/995 Gr.4A CD3MN |
| 11 | BODY SEAL | PTFE. |
| 12 | SEAT | RTFE.(15%G.F.) |
| 13 | THRUST WASHER | PTFE. |
| 13-1 | THRUST WASHER | PTFE. |
| 14 | STEM PACKING | PTFE. |
| 14-1 | STEM PACKING | PTFE. |
| 15 | GLAND BUSH | SS304 |
| 19 | HANDLE | JUCTION HEAD(FCD) / PIPE GRIP(S15C) |
| 33 | STOPPER | SS304 |
| 35 | STUD | ASTM A193 Gr.B8 |
| 37 | BODY NUT | ASTM A194 Gr.8 |
| 41 | SNAP RING | NICKEL PLATED CARBON STEEL |
| 42 | GLAND BOLT | SS304 |
| 47 | GLAND FLANGE | ASTM A351 Gr.CF8 |
| 56 | STEM BEARING | PTFE. |
| 90 | PIN SEAT | RTFE. |
| 91 | PIN PACKING | RTFE. |
| 92 | SUPPORT PIN | S31803 |
| 93 | SUPPORT NUT | SS304 |
| 94 | SET NUT | SS304 |
| 95 | TUNING SCREW | SS304 |

FLANGED DIMENSION: ANSI B16.5
 FACE TO FACE: ANSI B16.10

DIMENSIONS

| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | |
|-------|--------|-------|-------|--------|-------|------|------|------|------|-------|-------|-------|------|-----|----|------|-------|----------|
| DN65 | 2-1/2" | 65.0 | 190.0 | 390.0 | 165.0 | 78.0 | 44.5 | 17.0 | 28.0 | 178.0 | 139.5 | 105.0 | 22.3 | 1.6 | 4 | 19.0 | 102.0 | M10x1.5 |
| DN80 | 3" | 76.0 | 203.0 | 390.0 | 166.0 | 78.0 | 44.5 | 17.0 | 28.0 | 190.0 | 152.5 | 127.0 | 23.9 | 1.6 | 4 | 19.0 | 102.0 | M10x1.5 |
| DN100 | 4" | 101.5 | 229.0 | 390.0 | 183.0 | 78.0 | 44.5 | 17.0 | 28.0 | 229.0 | 190.5 | 157.0 | 23.9 | 1.6 | 8 | 19.0 | 102.0 | M10x1.5 |
| DN150 | 6" | 152.0 | 394.0 | 650.0 | 285.0 | 91.0 | 42.0 | 26.0 | 43.5 | 279.0 | 241.5 | 216.0 | 25.4 | 1.6 | 8 | 22.0 | 125.0 | M12x1.75 |
| DN200 | 8" | 200.0 | 457.0 | 950.0 | 294.0 | 91.0 | 42.0 | 26.0 | 43.5 | 343.0 | 298.5 | 270.0 | 28.6 | 1.6 | 8 | 22.0 | 125.0 | M12x1.75 |
| DN250 | 10" | 250.0 | 533.0 | 1100.0 | 372.0 | 98.0 | 54.0 | 35.0 | 50.0 | 406.0 | 362.0 | 324.0 | 30.2 | 1.6 | 12 | 25.0 | 140.0 | M16x2.0 |
| DN300 | 12" | 300.0 | 610.0 | 1100.0 | 413.0 | 98.0 | 54.0 | 35.0 | 50.0 | 483.0 | 432.0 | 381.0 | 31.8 | 1.6 | 12 | 25.0 | 140.0 | M16x2.0 |

| SIZE | PORT | L | E | H | H1 | H2 | C | ØY | ØG | ØJ | ØI | T | F | M | ØN | ØK | Z | |
|-------|--------|-------|-------|-------|-------|------|------|------|------|-------|-------|-------|------|------|----|------|------|----------|
| DN65 | 2-1/2" | 2.56 | 7.48 | 15.35 | 6.50 | 3.07 | 1.75 | 0.67 | 1.10 | 7.01 | 5.49 | 4.13 | 0.88 | 0.06 | 4 | 0.75 | 4.02 | M10x1.5 |
| DN80 | 3" | 2.99 | 7.99 | 15.35 | 6.54 | 3.07 | 1.75 | 0.67 | 1.10 | 7.48 | 6.00 | 5.00 | 0.94 | 0.06 | 4 | 0.75 | 4.02 | M10x1.5 |
| DN100 | 4" | 4.00 | 9.02 | 15.35 | 7.20 | 3.07 | 1.75 | 0.67 | 1.10 | 9.02 | 7.50 | 6.18 | 0.94 | 0.06 | 8 | 0.75 | 4.02 | M10x1.5 |
| DN150 | 6" | 5.98 | 15.51 | 25.59 | 11.22 | 3.58 | 1.65 | 1.02 | 1.71 | 10.98 | 9.51 | 8.50 | 1.00 | 0.06 | 8 | 0.87 | 4.92 | M12x1.75 |
| DN200 | 8" | 7.87 | 17.99 | 37.40 | 11.57 | 3.58 | 1.65 | 1.02 | 1.71 | 13.50 | 11.75 | 10.63 | 1.13 | 0.06 | 8 | 0.87 | 4.92 | M12x1.75 |
| DN250 | 10" | 9.84 | 20.98 | 43.31 | 14.65 | 3.86 | 2.13 | 1.38 | 1.97 | 15.98 | 14.25 | 12.76 | 1.19 | 0.06 | 12 | 0.98 | 5.51 | M16x2.0 |
| DN300 | 12" | 11.81 | 24.02 | 43.31 | 16.26 | 3.86 | 2.13 | 1.38 | 1.97 | 19.02 | 17.01 | 15.00 | 1.25 | 0.06 | 12 | 0.98 | 5.51 | M16x2.0 |

