

DIN PN16 CARBON STEEL OR STAINLESS STEEL PISTON VALVE BOLTED BONNET DESIGN

MODEL NO: SHDXRF-000



PISTON VALVE PRODUCT'S SIZE:

| PRESSURE GRADE | FROM | TO |
|----------------|--------|-----|
| PN 16 | 1/2" | 12" |
| PN 25 | 1-1/2" | 12" |
| PN 40 | 1/2" | 8" |

DESIGN DESCRIPTION:

- * BOLTED BONNET AND WELDING BONNET;
- * WELDING SEAT;
- * INTEGRAL SEATS;
- * HANDWHEEL OPERATOR;
- * AVAILABLE WITH GEAR OPERATOR;
- * FLANGED ENDS OR BUTT-WELDING ENDS;
- * RISING FLANGE OR RING TYPE JOINT.

WORKING PRESSURE AND TEMPERATURE

| WORKING TEMPERATURE | | |
|---------------------|---------------------------------------|---------------------------------------|
| MATERIAL | CELSIUR SCALE | FAHRENHEIT |
| CARBON STEEL | -29 ⁰ C~425 ⁰ C | 6 ⁰ F~822 ⁰ F |
| STAINLESS STEEL | -40 ⁰ C~550 ⁰ C | 15 ⁰ F~1047 ⁰ F |

GENERAL DESIGN SPECIFICATIONS:

| ITEM | DIN PN 16 | DIN PN 25 | DIN PN 40 |
|---------------------|-------------|-----------|-----------|
| MANUFACTURE | DIN 3356 | | |
| FACE TO FACE | DIN 3202 F1 | | |
| END FLANGE | DIN 2543 | DIN 2544 | DIN 2545 |
| INSPECTION AND TEST | DIN 3230 | | |

TEST PRESSURE TO DIN 3230:

| DIN | SHELL (WATER) | SEAT (WATER) | SEAT (AIR) | BACK SEAT(WATER) |
|-------|---------------|--------------|------------|------------------|
| PN 16 | 2.4MPa | 1.76MPa | 0.6MPa | 1.76MPa |
| PN 25 | 3.75MPa | 2.75MPa | 0.6MPa | 2.75MPa |
| PN 40 | 6.0MPa | 4.4MPa | 0.6MPa | 4.4MPa |

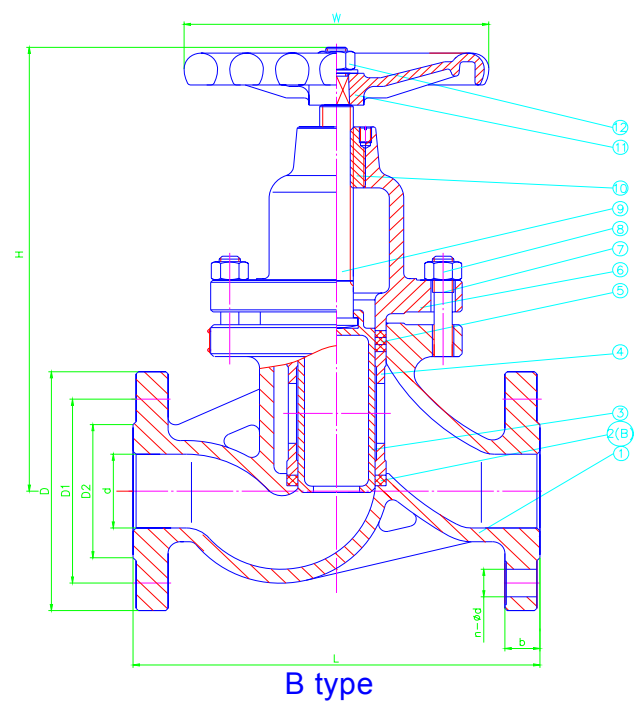
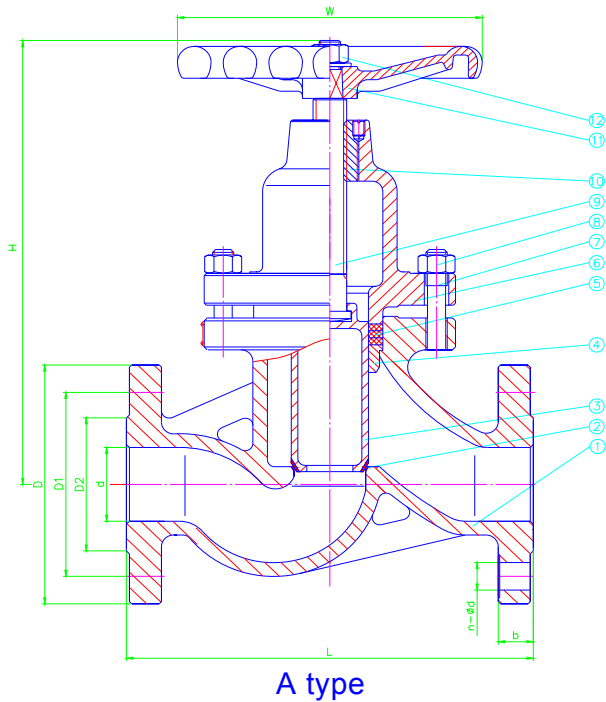
TRIMS SPECIFIED DUE TO TABLE 3:

| DISC SEAT SURFACE PART NO.3 | BODY SEAT SURFACE PART NO.2 | STEM PART NO.9 | SEAL RING PART NO.2(B) |
|---|-----------------------------|----------------|------------------------|
| F6 | F6 | F6 | PTFE OR GRAPHITE |
| STELLITE | STELILITE | F6 | |
| F6 | STELILITE | F6 | |
| F304 | F304 | F304 | |
| F316 | F316 | F316 | |
| MONEL | MONEL | MONEL | |
| ALLOY 20 | ALLOY 20 | ALLOY 20 | |
| HASTELLOY B | HASTELLOY B | HASTELLOY B | |
| BRONZE | BRONZE | BRONZE | |
| CF8 | R-PTFE(INSERT) | S.S. | |
| OTHER MATERIALS ARE AVAILABLE UPON REQUEST. | | | |

PARTS AND MATERIAL (ASTM)

| NO | PARTS NAME | MATERIAL | | | | | | | | |
|----|-----------------|---|---------|---------|---------|---------|---------|----------|---------|----------|
| 1 | BODY | A216WCB | A352LCB | A217WC1 | A217WC5 | A217WC6 | A351CF8 | A351CF8M | A351CF3 | A351CF3M |
| 4 | SEAT RIONG | DUCTILE IRON | | | | | A351CF8 | A351CF8M | A351CF3 | A351CF3M |
| 5 | GASKET | REINFORCED FLAT GRAPHITE,OR SS SPIREAL WOUND W/GRAPHITE | | | | | | | | |
| 6 | BONNET | A216WCB | A352LCB | A217WC1 | A217WC5 | A217WC6 | A351CF8 | A351CF8M | A351CF3 | A351CF3M |
| 7 | BONNET BOLT | A193B7 | A320L7 | A193B7 | A193B16 | A193B16 | A193B8 | A193B8 | A193B8 | A193B8 |
| 8 | BONNET BOLT NUT | A1942H | A1944 | A1942H | A1944 | A1944 | A1948 | A1948 | A1948 | A1948 |
| 16 | STEM NUT | A439-D2 OR A276-410 | | | | | | | | |
| 17 | HANDWHEEL | DUCTILE IRON | | | | | | | | |
| 18 | H.W.LOCK NUT | STEEL | | | | | | | | |

OTHER MATERIALS ARE AVAILABLE UPON REQUEST.

**DIMENSIONS LIST(UNIT:MM):**

| PN 16 | | | | | | | | | | |
|-------|--------|-----|-----|-----|-----|----|-------|--------|---------|-----|
| DN | SIZE | d | D | D1 | D2 | b | n-φd | L (F1) | H(OPEN) | W |
| 15 | 1/2" | 15 | 95 | 65 | 45 | 16 | 4-14 | 130 | 203 | 120 |
| 20 | 3/4" | 20 | 105 | 75 | 58 | 18 | 4-14 | 150 | 223 | 140 |
| 25 | 1" | 25 | 115 | 85 | 68 | 18 | 4-14 | 160 | 230 | 160 |
| 40 | 1-1/2" | 40 | 150 | 110 | 88 | 18 | 4-18 | 200 | 268 | 200 |
| 50 | 2" | 50 | 165 | 125 | 102 | 20 | 4-18 | 230 | 279 | 240 |
| 65 | 2-1/2" | 65 | 185 | 145 | 122 | 20 | 4-18 | 290 | 336 | 240 |
| 80 | 3" | 80 | 200 | 160 | 138 | 20 | 8-18 | 310 | 357 | 280 |
| 100 | 4" | 100 | 220 | 180 | 158 | 20 | 8-18 | 350 | 419 | 320 |
| 150 | 6" | 150 | 285 | 240 | 212 | 22 | 8-22 | 480 | 473 | 360 |
| 200 | 8" | 200 | 340 | 295 | 268 | 24 | 12-22 | 600 | 530 | 400 |
| 250 | 10" | 250 | 405 | 355 | 320 | 26 | 12-26 | 730 | 564 | 450 |
| 300 | 12" | 300 | 460 | 410 | 378 | 28 | 12-26 | 850 | 670 | 500 |

| PN 25 | | | | | | | | | | |
|-------|--------|-----|-----|-----|-----|----|-------|-------|---------|-----|
| DN | SIZE | d | D | D1 | D2 | b | n-φd | L(F1) | H(OPEN) | W |
| 40 | 1-1/2" | 40 | 150 | 110 | 88 | 18 | 4-18 | 200 | 200 | 200 |
| 50 | 2" | 50 | 165 | 125 | 102 | 20 | 4-18 | 230 | 215 | 240 |
| 65 | 2-1/2" | 65 | 185 | 145 | 122 | 22 | 8-18 | 290 | 255 | 240 |
| 80 | 3" | 80 | 200 | 160 | 138 | 24 | 8-18 | 310 | 295 | 280 |
| 100 | 4" | 100 | 235 | 190 | 162 | 24 | 8-22 | 350 | 330 | 320 |
| 150 | 6" | 150 | 300 | 250 | 212 | 28 | 8-26 | 480 | 420 | 360 |
| 200 | 8" | 200 | 365 | 310 | 278 | 30 | 12-26 | 600 | 530 | 400 |
| 250 | 10" | 250 | 425 | 370 | 335 | 32 | 12-30 | 730 | 560 | 450 |
| 300 | 12" | 300 | 485 | 430 | 395 | 34 | 16-30 | 850 | 670 | 500 |

PN 40

| DN | SIZE | d | D | D1 | D2 | b | n-φd | L(F1) | H(OPEN) | W |
|-----|--------|-----|-----|-----|-----|----|-------|-------|---------|-----|
| 15 | 1/2" | 15 | 95 | 65 | 45 | 16 | 4-14 | 130 | 125 | 120 |
| 20 | 3/4" | 20 | 105 | 75 | 58 | 18 | 4-14 | 150 | 145 | 140 |
| 25 | 1" | 25 | 115 | 85 | 68 | 18 | 4-14 | 160 | 165 | 160 |
| 40 | 1-1/2" | 40 | 150 | 110 | 88 | 18 | 4-18 | 200 | 200 | 200 |
| 50 | 2" | 50 | 165 | 125 | 102 | 20 | 4-18 | 230 | 215 | 240 |
| 65 | 2-1/2" | 65 | 185 | 145 | 122 | 22 | 8-18 | 290 | 255 | 280 |
| 80 | 3" | 80 | 200 | 160 | 138 | 24 | 8-18 | 310 | 295 | 320 |
| 100 | 4" | 100 | 235 | 190 | 162 | 24 | 8-22 | 350 | 330 | 360 |
| 150 | 6" | 150 | 300 | 250 | 212 | 28 | 8-26 | 480 | 420 | 400 |
| 200 | 8" | 200 | 375 | 320 | 285 | 34 | 12-30 | 600 | 530 | 400 |

*** We hereby reserve the rights of any alternative dimension that would help to improve our valve's quality and working efficiency**