

BRONZE SAFETY RELIEF VALVES

Technical Data

Low Lift Safety Valves

Material: Body- Cast Bronze; Valve Seat- Brass, PTFE Soft Seat available

Orifice Size: ½"(15mm), ¾"(20mm), 1"(25mm), 1½"(40mm), 2"(50mm)

Working Pressure:

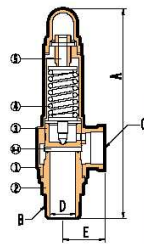
2~10 kgf/cm² (28~150 psig) (Brass Seat & PTFE Soft Seat are available);

Working Temperature: -45°C~+185°C

Working Fluid: Please refer to the table of "General Material List"



Dimensions



**N5B Type
Sealing ½"~2"**

| SEALING SERIES | | SIZE | | | | |
|----------------------|------|------|------|------|------|------|
| ITEM | SIZE | ½" | ¾" | 1" | 1½" | 2" |
| A | | 145 | 167 | 202 | 256 | 283 |
| Inlet B | ½" | ¾" | 1" | 1½" | 2" | |
| Outlet C | ½" | ¾" | 1" | 1½" | 2" | |
| Valve Seat Orifice D | | 15 | 20 | 25 | 40 | 50 |
| E | | 29 | 36 | 40 | 54 | 66 |
| F | | 49 | 55 | 67 | 86 | 96 |
| Lift | | 0.52 | 0.76 | 1.00 | 1.52 | 2.00 |
| Wt. kg | | 0.5 | 0.8 | 1.3 | 2.9 | 4.7 |

General Material List

| NO. | Parts Name | Type |
|------------------|------------|--|
| 1. | Valve Body | Cast Bronze |
| 2. | Valve Seat | Forging Brass |
| 3. | Disc | Forging Brass |
| 3-1. | Soft Seal | Teflon (PTFE) |
| 4. | Spring | Steel |
| 5. | Stem | Brass |
| Working Pressure | | 2~10 kgf/cm ² |
| Working Temp. | | -45°C ~ 185°C |
| Working Fluid | | Noncorrosive gas, Noncorrosive liquid, Corrosive gas, Corrosive liquid, Air, Steam, Water, Oil |

Blowout Capacity Table

- Air

| orifice set press. | Air Blowout Capacity (kg/h) | | | | | |
|--------------------------|-----------------------------|---------|---------|----------|----------|---------|
| | ½" (15) | ¾" (20) | 1" (25) | 1¼" (32) | 1½" (40) | 2" (50) |
| 2 kgf/cm ² | 45 | 97 | 168 | 275 | 388 | 671 |
| 3 kgf/cm ² | 61 | 130 | 226 | 370 | 521 | 902 |
| 4 kgf/cm ² | 77 | 164 | 283 | 464 | 654 | 1133 |
| 5 kgf/cm ² | 92 | 197 | 341 | 559 | 788 | 1364 |
| 6 kgf/cm ² | 108 | 230 | 399 | 653 | 921 | 1595 |
| 7 kgf/cm ² | 123 | 264 | 456 | 748 | 1054 | 1825 |
| 8 kgf/cm ² | 139 | 297 | 514 | 842 | 1188 | 2056 |
| 9 kgf/cm ² | 155 | 330 | 572 | 937 | 1321 | 2287 |
| 10 kgf/cm ² | 170 | 364 | 629 | 1031 | 1454 | 2518 |

- Water

| orifice set press. | Water Blowout Capacity (L/Min) | | | | | |
|--------------------------|--------------------------------|---------|---------|----------|----------|---------|
| | ½" (15) | ¾" (20) | 1" (25) | 1¼" (32) | 1½" (40) | 2" (50) |
| 2 kgf/cm ² | 11.6 | 24.8 | 43.0 | 70.4 | 99.3 | 171.9 |
| 3 kgf/cm ² | 14.2 | 30.4 | 52.6 | 86.3 | 121.6 | 210.6 |
| 4 kgf/cm ² | 16.4 | 35.1 | 60.8 | 99.6 | 140.5 | 243.2 |
| 5 kgf/cm ² | 18.4 | 39.3 | 68.0 | 111.4 | 157.0 | 271.9 |
| 6 kgf/cm ² | 20.1 | 43.0 | 74.5 | 122.0 | 172.0 | 297.8 |
| 7 kgf/cm ² | 21.7 | 46.5 | 80.4 | 131.8 | 185.8 | 321.7 |
| 8 kgf/cm ² | 23.2 | 49.7 | 86.0 | 140.9 | 198.6 | 343.9 |
| 9 kgf/cm ² | 24.7 | 52.7 | 91.2 | 149.4 | 210.7 | 364.7 |
| 10 kgf/cm ² | 26.0 | 55.5 | 96.1 | 157.5 | 222.1 | 384.5 |

- Steam

| orifice set press. | Steam Blowout Capacity (kg/h) | | | | | |
|--------------------------|-------------------------------|---------|---------|----------|----------|---------|
| | ½" (15) | ¾" (20) | 1" (25) | 1¼" (32) | 1½" (40) | 2" (50) |
| 2 kgf/cm ² | 27.7 | 59.1 | 102.4 | 167.7 | 236.6 | 409.5 |
| 3 kgf/cm ² | 37.0 | 79.0 | 136.9 | 224.2 | 316.2 | 547.4 |
| 4 kgf/cm ² | 46.3 | 98.9 | 171.3 | 280.7 | 395.8 | 685.2 |
| 5 kgf/cm ² | 55.7 | 118.8 | 205.8 | 337.1 | 475.4 | 823.1 |
| 6 kgf/cm ² | 65.0 | 138.7 | 240.2 | 393.6 | 555.0 | 960.9 |
| 7 kgf/cm ² | 74.3 | 158.7 | 274.7 | 450.1 | 634.7 | 1099 |
| 8 kgf/cm ² | 83.6 | 178.6 | 309.2 | 506.5 | 714.3 | 1237 |
| 9 kgf/cm ² | 92.9 | 198.5 | 343.6 | 563.0 | 793.9 | 1374 |
| 10 kgf/cm ² | 102.3 | 218.4 | 378.1 | 619.5 | 893.5 | 1512 |