

BRONZE SAFETY RELIEF VALVES

N3/N3L

Technical Data

Low lift safety valves

Material: Body—cast bronze, Valve seat—brass/PTFE available

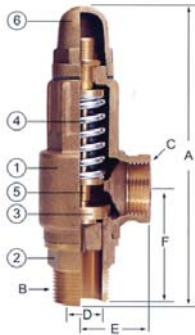
Orifice size: ½"(15mm), ¾"(20mm), 1"(25mm), 1¼"(32mm), 1½"(40mm), 2"(50mm)

Working pressure: 0.3~10 kgf/cm²

Working temp.: -45°C~185°C

Working fluid: Noncorrosive gas, noncorrosive liquid, air, steam

Dimensions



N3 TYPE
Sealing ½"~2"



N3P TYPE
Sealing ½"~2"



N3L TYPE
Lever ½"~2"

(unit:mm)

| SEALING SERIES | | | | | | | |
|----------------------|------|------|------|------|------|------|------|
| ITEM | SIZE | ½" | ¾" | 1" | 1¼" | 1½" | 2" |
| A | | 138 | 150 | 180 | 206 | 231 | 265 |
| Inlet B | | ½" | ¾" | 1" | 1¼" | 1½" | 2" |
| Outlet C | | ½" | ¾" | 1" | 1¼" | 1½" | 2" |
| Valve Seat Orifice D | | 15 | 20 | 25 | 32 | 40 | 50 |
| E | | 29 | 36 | 40 | 50 | 54 | 67 |
| F | | 50 | 58 | 70 | 82 | 93 | 102 |
| Lift | | 0.52 | 0.76 | 1.00 | 1.28 | 1.52 | 2.00 |
| Wt. kg | | 0.52 | 0.66 | 1.09 | 1.90 | 2.35 | 3.85 |

| LEVER SERIES | | | | | | | |
|--------------|------|------|------|------|------|------|------|
| ITEM | SIZE | ½" | ¾" | 1" | 1¼" | 1½" | 2" |
| A1 | | 161 | 172 | 202 | 222 | 246 | 282 |
| Wt. kg | | 0.59 | 0.74 | 1.19 | 1.94 | 2.39 | 4.11 |

Blowout Capacity Table

(unit:mm)

| orifice set pressure | Steam Blowout Cap. (kg/h) | | | | | |
|------------------------|---------------------------|--------|--------|---------|---------|--------|
| | ½"(15) | ¾"(20) | 1"(25) | 1¼"(32) | 1½"(40) | 2"(50) |
| 1 kgf/cm ² | 18.4 | 39.2 | 67.90 | 111.3 | 156.9 | 271.7 |
| 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 |
| 11 kgf/cm ² | 111.6 | 238.3 | 412.5 | 675.9 | 953.2 | 1650 |
| 12 kgf/cm ² | 120.9 | 258.2 | 447.0 | 732.4 | 1033 | 1788 |
| 13 kgf/cm ² | 130.2 | 278.1 | 481.5 | 788.8 | 1112 | 1926 |
| 14 kgf/cm ² | 139.5 | 298.0 | 515.9 | 845.3 | 1192 | 2064 |
| 15 kgf/cm ² | 148.9 | 317.9 | 550.4 | 901.8 | 1272 | 2202 |
| 16 kgf/cm ² | 158.2 | 337.8 | 584.9 | 958.3 | 1351 | 2239 |
| 17 kgf/cm ² | 167.5 | 357.7 | 619.3 | 1014.7 | 1431 | 2477 |
| 18 kgf/cm ² | 176.8 | 377.6 | 653.8 | 1071.2 | 1511 | 2615 |
| 19 kgf/cm ² | 186.1 | 397.5 | 688.2 | 1127.6 | 1590 | 2753 |
| 20 kgf/cm ² | 195.4 | 417.4 | 722.7 | 1184.1 | 1670 | 2891 |

General Material List

| NO. | Type | N3 SEALING | N3L LEVER |
|------------------|------------|---|------------------------------|
| | Parts Name | | |
| 1. | Valve Body | Cast Bronze | Cast Bronze |
| 2. | Valve Seat | Forging Brass or PTFE | Forging Brass or PTFE |
| 3. | Disc | Forging Brass | Forging Brass |
| 4. | Spring | Steel | Steel |
| 5. | Stem | Brass | Brass |
| 6. | Cap | Forging Brass | Cast Bronze |
| Working Pressure | | 0.3~10 kgf/cm ² | |
| Working Temp. | | -45°C~185°C | |
| Working Fluid | | Noncorrosive gas, noncorrosive liquid, air, steam | Noncorrosive gas, air, steam |

* The disc can be replaced with PTFE and those type N3P, N3LP.

* The valve seat can be also made of cast bronze on request.

Ordering Information

| N3 / N3L | Code | Valve Seat | | |
|----------|------|------------|---|---|
| ↓ | ↓ | ↓ | ↓ | 0 Forging Brass P PEFE (pressure only 3.0~10 kg/cm ²) |
| | | | | Code Pressure Rating |
| | | | | 1 0.3~10 kg/cm ² |
| | | | | Code Size |
| | | | | (A)½" NPT (B)¾" NPT (C)1" NPT (D)1¼" NPT (E)1½" NPT (F)2" NPT |
| ↓ | | | | Complete Ordering Code |