

# AL-5

|                     |             |                                    |                    |
|---------------------|-------------|------------------------------------|--------------------|
| Full bore type      | Lift type   | Safety valve                       | Relief valve       |
| Safety relief valve | Lever type  | Closed type                        | Dash-pot structure |
| Handle type         | Stainless   | High pressure gas testing products |                    |
| Diaphragm           | Non-leakage |                                    |                    |

## ■Features

1. Due to lift lever mechanism a discharge inspection can be manually performed at more than 75% of the opening pressure.

## ■Specifications

| Model               | Standard               | SUS                                      |
|---------------------|------------------------|--|
| Structure           | Open type with a lever |  |
| Application         | Steam                  |  |
| Working pressure    | 0.05-1.0 MPa           | 0.05-1.5 MPa                             |
| Maximum temperature | 220°C                  |  |
| Material            | Valve case             | Ductile cast iron                        |
|                     | Spring case            | Ductile cast iron                        |
|                     | Valve, valve seat      | Bronze                                   |
| Connection          | JIS 10K FF flanged     | JIS 10K FF flanged<br>JIS 16K FF flanged |

\* JIS 16K FF flanged when working pressure is more than 1.0 MPa.

· Please refer to the chart in P. 82 for set pressure range.

## ■Dimensions

| Nominal size | Dimension (mm) |                |     |    | Flow area<br>$\pi D_2^2 / 4$ (mm <sup>2</sup> ) |
|--------------|----------------|----------------|-----|----|---|
|              | L              | H <sub>1</sub> | H   | D  |   |
| 20A          | 90             | 75             | 276 | 21 | 34.6  |
| 25A          | 95             | 90             | 295 | 25 | 49.1  |
| 32A          | 100            | 95             | 331 | 35 | 96.2  |
| 40A          | 110            | 105            | 347 | 40 | 125.6   |
| 50A          | 115            | 110            | 388 | 50 | 196.4   |

## ■AL-5 Certified Capacity Table

· For steam (saturation temperature) <Pressure vessel structure standard>

(kg/h)

| Nominal size \ Pressure MPa | 0.05 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0  | 1.1  | 1.2  | 1.3  | 1.4  | 1.5  |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|                             | 20A  | 27  | 35  | 51  | 69  | 87  | 104 | 121 | 138 | 155 | 172  | 189  | 206  | 222  | 239  | 256  |
| 25A                         | 38   | 50  | 73  | 98  | 123 | 148 | 172 | 196 | 220 | 244 | 268  | 292  | 316  | 340  | 364  | 387  |
| 32A                         | 76   | 98  | 143 | 192 | 241 | 290 | 337 | 384 | 431 | 478 | 525  | 572  | 619  | 666  | 713  | 759  |
| 40A                         | 99   | 128 | 186 | 250 | 315 | 278 | 440 | 502 | 563 | 625 | 686  | 748  | 809  | 870  | 931  | 991  |
| 50A                         | 155  | 201 | 292 | 392 | 494 | 592 | 689 | 785 | 881 | 977 | 1073 | 1169 | 1265 | 1360 | 1456 | 1551 |

<Boiler structure standard>

(kg/h)

| Nominal size \ Pressure MPa | 0.05 | 0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.6 | 0.7 | 0.8 | 0.9 | 1.0  | 1.1  | 1.2  | 1.3  | 1.4  | 1.5  |
|-----------------------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
|                             | 20A  | 26  | 34  | 50  | 66  | 83  | 98  | 114 | 130 | 146 | 162  | 178  | 194  | 209  | 225  | 241  |
| 25A                         | 37   | 49  | 71  | 94  | 117 | 140 | 163 | 185 | 208 | 230 | 253  | 275  | 297  | 320  | 342  | 365  |
| 32A                         | 74   | 96  | 140 | 185 | 230 | 274 | 319 | 363 | 407 | 451 | 495  | 539  | 583  | 627  | 671  | 715  |
| 40A                         | 96   | 125 | 183 | 242 | 301 | 358 | 416 | 474 | 532 | 589 | 647  | 704  | 762  | 819  | 876  | 934  |
| 50A                         | 151  | 196 | 287 | 378 | 471 | 560 | 652 | 742 | 832 | 921 | 1012 | 1102 | 1191 | 1280 | 1371 | 1461 |

· Please refer to P. 12 for the calculation procedure for nominal size selection.

## ■At the Time of Ordering

When ordering, please specify with or without lever and the material of the valve body and valve seat in addition to the set pressure.

Also please specify the usage either pressure vessel standard or boiler structure.

