



## KUNKLE MODELS 1 AND 2 SAFETY VALVES

### SAFETY AND RELIEF PRODUCTS

Brass safety valves to ASME Section VIII, 'UV', that are National Board certified for air, gas or steam services

#### MODEL 1



#### FEATURES

- Top or side outlet models available.
- Compact assembly requires minimum space.
- Precision lapped, metal-to-metal beveled seat provides premium shut-off.
- Warn ring for precise opening with minimum pre-open or simmer.
- Tested and inspected for pressure setting and leakage.
- Optional vibration dampener on lift lever.
- Optional nickel plating for use on institutional equipment.

#### GENERAL APPLICATION

Brass safety valves for use on air and non-hazardous gas services including portable or stationary air/gas compressors; pressure vessels including tanks, receivers, intercoolers, aftercoolers and on steam turbines, kettles and other steam-processing equipment.

#### TECHNICAL DATA

Connections: Threaded NPT  
Temperature range: -60° to 406°F  
(-51° to 208°C)  
Pressure range: 5 to 250 psig  
(0.34 to 17.2 barg)  
Code: ASME VIII



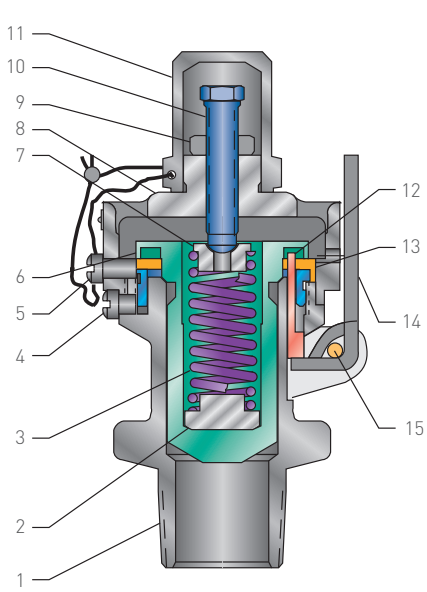
# KUNKLE MODELS 1 AND 2 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

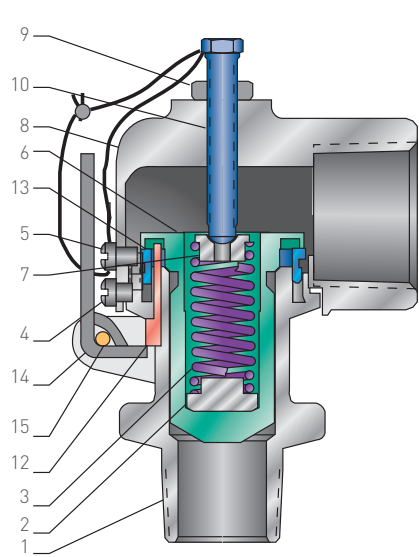
### PARTS AND MATERIALS (MODELS 1 AND 2)

| No. | Part name                 | Material                              |
|-----|---------------------------|---------------------------------------|
| 1   | Body                      | Brass SB283-485                       |
| 2   | Bottom spring step        | Brass B16                             |
| 3   | Spring                    | SS A313-T631, 17-7                    |
| 4   | Body lock screw           | SS Commercial                         |
| 5   | Regulator ring lock screw | SS Commercial                         |
| 6   | Disc                      | Brass SB283-485                       |
| 7   | Top spring step           | Brass B16                             |
| 8   | Bonnet                    | Brass SB283-485 or bronze SB584-84400 |
| 9   | Jam nut                   | SS 18-8                               |
| 10  | Compression screw         | Brass B16                             |
| 11  | Cap                       | Brass B16                             |
| 12  | Lift pin                  | Brass B16                             |
| 13  | Regulator ring            | Brass B16                             |
| 14  | Lever                     | Steel 1070                            |
| 15  | Rivet                     | Nickel plated commercial brass        |

MODEL 1 (TOP OUTLET)



MODEL 2 (SIDE OUTLET)



# KUNKLE MODELS 1 AND 2 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### CAPACITIES FOR NON-CODE<sup>1</sup> AND ASME SECTION VIII AIR, (SCFM) AT 60°F

| Set pressure (psig) | ½" and ¾" | 1"  |
|---------------------|-----------|-----|
| 5                   | 27        | 46  |
| 10                  | 37        | 64  |
| 15                  | 47        | 80  |
| 20                  | 54        | 92  |
| 25                  | 60        | 103 |
| 30                  | 67        | 114 |
| 35                  | 74        | 126 |
| 40                  | 80        | 137 |
| 45                  | 87        | 148 |
| 50                  | 93        | 159 |
| 55                  | 99        | 170 |
| 60                  | 105       | 180 |
| 65                  | 111       | 191 |
| 70                  | 116       | 200 |
| 75                  | 122       | 210 |
| 80                  | 127       | 219 |
| 85                  | 132       | 228 |
| 90                  | 137       | 237 |
| 95                  | 142       | 246 |
| 100                 | 146       | 254 |
| 105                 | 151       | 262 |
| 110                 | 155       | 269 |
| 115                 | 159       | 277 |
| 120                 | 163       | 284 |
| 125                 | 167       | 291 |
| 130                 | 171       | 297 |
| 135                 | 174       | 303 |
| 140                 | 178       | 309 |
| 145                 | 181       | 315 |
| 150                 | 184       | 320 |
| 155                 | 187       | 326 |
| 160                 | 189       | 330 |
| 165                 | 192       | 335 |
| 170                 | 194       | 339 |
| 175                 | 197       | 343 |
| 180                 | 199       | 347 |
| 185                 | 201       | 350 |
| 190                 | 202       | 354 |
| 195                 | 204       | 357 |
| 200                 | 206       | 359 |
| 205                 | 207       | 361 |
| 210                 | 208       | 363 |
| 215                 | 207       | 361 |
| 220                 | 208       | 363 |
| 225                 | 210       | 365 |
| 230                 | 210       | 367 |
| 235                 | 211       | 368 |
| 240                 | 212       | 369 |
| 245                 | 213       | 370 |
| 250                 | 214       | 370 |

### CAPACITIES FOR NON-CODE<sup>1</sup> AND ASME SECTION VIII STEAM, (LB/H) AT SATURATED STEAM TEMPERATURE

| Set pressure (psig) | ½" and ¾" | 1"   |
|---------------------|-----------|------|
| 5                   | 84        | 142  |
| 10                  | 115       | 195  |
| 15                  | 133       | 226  |
| 20                  | 152       | 258  |
| 25                  | 170       | 289  |
| 30                  | 187       | 320  |
| 35                  | 207       | 353  |
| 40                  | 225       | 385  |
| 45                  | 243       | 417  |
| 50                  | 261       | 448  |
| 55                  | 278       | 478  |
| 60                  | 295       | 507  |
| 65                  | 311       | 535  |
| 70                  | 327       | 563  |
| 75                  | 342       | 590  |
| 80                  | 357       | 616  |
| 85                  | 371       | 641  |
| 90                  | 385       | 666  |
| 95                  | 399       | 690  |
| 100                 | 411       | 713  |
| 105                 | 424       | 735  |
| 110                 | 436       | 757  |
| 115                 | 448       | 777  |
| 120                 | 459       | 797  |
| 125                 | 469       | 816  |
| 130                 | 480       | 835  |
| 135                 | 489       | 852  |
| 140                 | 499       | 869  |
| 145                 | 508       | 885  |
| 150                 | 516       | 900  |
| 155                 | 524       | 915  |
| 160                 | 532       | 928  |
| 165                 | 539       | 941  |
| 170                 | 546       | 953  |
| 175                 | 552       | 964  |
| 180                 | 558       | 975  |
| 185                 | 564       | 985  |
| 190                 | 569       | 993  |
| 195                 | 574       | 1002 |
| 200                 | 578       | 1009 |
| 205                 | 582       | 1015 |
| 210                 | 585       | 1021 |
| 215                 | 589       | 1026 |
| 220                 | 591       | 1030 |
| 225                 | 594       | 1034 |
| 230                 | 596       | 1036 |
| 235                 | 597       | 1038 |
| 240                 | 599       | 1039 |
| 245                 | 599       | 1039 |
| 250                 | 600       | 1039 |

#### NOTE

1. No code stamp of 'NB' on nameplate below 15 psig set.

# KUNKLE MODELS 1 AND 2 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### DIMENSIONS

| Model | Inlet size, in<br>MNPT | Outlet size, in<br>FNPT | Dimensions, in |      |      | Min/max<br>pressure (psig) | Min/max<br>temperature (°F) | Approximate<br>weight (lb) |
|-------|------------------------|-------------------------|----------------|------|------|----------------------------|-----------------------------|----------------------------|
| 1     | 1/2, 3/4               | N/A                     | 1.59           | 0.94 | 3.37 | 5/250                      | -60/406                     | 3/4                        |
| 1     | 1                      | N/A                     | 2.22           | 1.25 | 4.47 | 5/250                      | -60/406                     | 1 1/4                      |
| 2     | 1/2, 3/4               | 3/4                     | 2.31           | 1.19 | 3.75 | 5/250                      | -60/406                     | 1                          |
| 2     | 1                      | 1                       | 3.09           | 1.82 | 5.00 | 5/250                      | -60/406                     | 2 1/4                      |

Dimensions are for reference only

### SELECTION GUIDE

**Example:** 0001 - C 01 - K C 0125

#### Model

0001

0002

#### Inlet size

C 1/2"

D 3/4"

E 1"

#### Variation

01 Catalog standard (C and D inlet size only)

02 Vibration dampener (Model 1 only)

03 Nickel plate (D inlet size only)

#### Design revision

Indicates non-interchangeable revision

Dash (-) if original design

#### Valve service

K Air/gas ASME section VIII

L Steam ASME section VIII

N Non-code air/gas (<15 psig)

P Non-code steam (<15 psig)

#### Spring material

C Steel or stainless steel

#### Set pressure

5 psig (0005) through 250 psig (0250)

