



## KUNKLE MODELS 6252/6254 SAFETY VALVES

SAFETY AND RELIEF PRODUCTS

Cast iron ASME section I steam and section VIII, air, steam and gas 'UV' National Board certified safety valves including model 6254 to ASME section IV 'HV', PED certified for non-hazardous gas



### FEATURES

- Heavy duty high quality cast iron construction with stainless steel semi-nozzle, trim and disc.
- Bolted bonnet design for easy maintenance.
- Seats lapped to optical flatness.
- Dual control rings offer easy adjustability for precision opening with minimum pre-open or simmer and exact blowdown control.
- Heavy duty lift lever assembly.
- All adjustments factory sealed to prevent tampering or disassembly.
- Each valve tested and inspected for pressure setting and leakage.
- Valves available National Board certified to ASME sections I, VIII and IV, and PED certified for non-hazardous gas.

### GENERAL APPLICATION

Suitable for use on steam boilers and generators, pressure reducing stations, reciprocating or rotary air/gas compressors and for pressure vessels including tanks, receivers, intercoolers, oil/gas separators and lines.

### TECHNICAL DATA

Connections: FNPT or flanged  
Temperature range: -20° to 406°F (-29° to 208°C)  
Pressure range: 10 to 250 psig (0.7 to 17.2 barg)  
Code: ASME I, IV, VIII and PED



### NOTE

1. ASME code valves made from cast iron A126 may not be used in lethal or flammable service.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### MODELS OVERVIEW

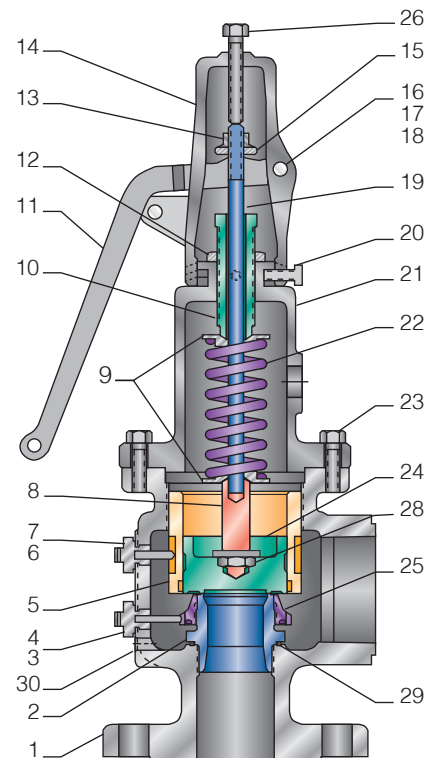
Model 6252: Cast iron, enclosed spring, SS trim.  
Codes: ASME I, VIII and PED

Model 6254: As model 6252 except certified for ASME code section IV - low pressure steam heating boilers. Set pressure 15 psig (1.0 barg) only. J through P orifice only.  
Codes: ASME IV and PED

### Parts and materials

#### MODELS 6252 AND 6254

| No. | Part name                  | Material                                  |
|-----|----------------------------|---|
| 1   | Body                       | Cast iron, A126 CL A or B                 |
| 2   | Semi nozzle                | SS, SA351 CF8M                            |
| 3   | Warn ring locking screw    | Brass, B16 H02                            |
| 4   | Warn ring locking pin      | SS, A582 TY 416                           |
| 5   | Guide                      | Bronze, B584 C84400                       |
| 6   | Guide locking screw        | Brass, B16 H02                            |
| 7   | Guide locking pin          | SS, A582 TY 416                           |
| 8   | Stem end                   | SS, A582 TY 416                           |
| 9   | Spring step                | Brass, B16 H02                            |
| 10  | Compression screw          | Brass, B16 H02                            |
| 11  | Lever <sup>6</sup>         | Iron, A536 65 45 12                       |
| 12  | Compression screw lock nut | SS, SA479 316 SS                          |
| 13  | Lifting disc nut           | Steel, A108 1018                          |
| 14  | Cap                        | Iron, A536 65 45 12                       |
| 15  | Lifting disc               | SS, SA479 316 SS                          |
| 16  | Lever pin                  | Steel, A108 1018                          |
| 17  | Lever pin washer           | Steel, A108 1018                          |
| 18  | Lever cotter pin           | Steel, A108 1018                          |
| 19  | Stem                       | SS, A582 TY 416                           |
| 20  | Cap set screw              | Steel, A108 1018                          |
| 21  | Bonnet                     | Cast iron, A126 CL A or B                 |
| 22  | Spring                     | Steel, A229, aluminum coated <sup>2</sup> |
| 23  | Bonnet bolt                | Steel, A193-B7/194-7                      |
| 24  | Disc                       | SS, SA479 316 SS <sup>5</sup>             |
| 25  | Warn ring                  | Bronze, B584-C84400 <sup>3</sup>          |
| 26  | Gag screw <sup>4</sup>     | Steel, A108 1018                          |
| 27  | Wire seal                  | Lead seal, aluminum wire <sup>1</sup>     |
| 28  | Retainer nut               | Brass, B16-H02                            |
| 29  | O-ring                     | EPDM                                      |
| 30  | Drainhole                  | 3/8" NPT                                  |



### NOTES

1. Not shown on assembly.
2. SS A313-631 for 'J' orifice.
3. Brass B16-H02 for 'J' orifice.
4. Applies only to gag option. Gag screw ships with valve, not installed.
5. SS-SA351-C8FM for 'Q' and 'R' orifice.
6. J and K orifices use 1 piece lever as shown in diagram. All other orifices use 2 piece design, lever and yoke.  
Yoke material: iron, A536 65 45 12.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

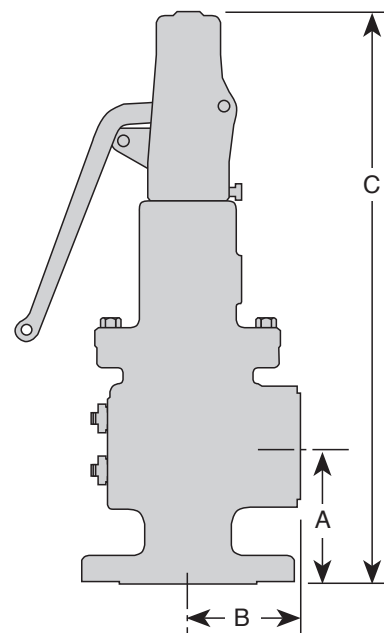
### DIMENSIONS MODELS 6252 AND 6254

| Model <sup>1</sup> | Orifice | Connections ANSI standard, in inch (mm) |             |                     |              | Valve dimensions in inch (mm) |         |                                 |         |                                  |         | Approximate weight |         |
|--------------------|---------|---|-------------|---------------------|--------------|-------------------------------|---------|---------------------------------|---------|----------------------------------|---------|--------------------|---------|
|                    |         | Inlet <sup>2</sup>                      |             | Outlet <sup>3</sup> |              | A                             |         | B                               |         | C                                |         | lb                 | (kg)    |
| 625*AJG            | J       | 1½                                      | (38.1) FNPT | 2½                  | (63.5) FNPT  | 4¼                            | (108.0) | 3½                              | (88.9)  | 18                               | (457.2) | 40                 | (18.2)  |
| 625*FJG            | J       | 1½                                      | (38.1) FL   | 2½                  | (63.5) FNPT  | 4¼                            | (108.0) | 3½                              | (88.9)  | 18                               | (457.2) | 40                 | (18.2)  |
| 625*FJH            | J       | 2                                       | (50.8) FL   | 2½                  | (63.5) FNPT  | 4¼                            | (108.0) | 3½                              | (88.9)  | 18                               | (457.2) | 42                 | (19.1)  |
| 625*FJJ            | J       | 2½                                      | (63.5) FL   | 2½                  | (63.5) FNPT  | 4¼                            | (108.0) | 3½                              | (88.9)  | 18                               | (457.2) | 45                 | (20.5)  |
| 625*AKH            | K       | 2                                       | (50.8) FNPT | 3                   | (76.2) FNPT  | 4⅝                            | (117.6) | 4                               | (101.6) | 18¼                              | (463.6) | 43                 | (19.5)  |
| 625*FKH            | K       | 2                                       | (50.8) FL   | 3                   | (76.2) FNPT  | 4⅝                            | (117.6) | 4                               | (101.6) | 18¼                              | (463.6) | 52                 | (23.6)  |
| 625*FKJ            | K       | 2½                                      | (63.5) FL   | 3                   | (76.2) FNPT  | 4⅝                            | (117.6) | 4                               | (101.6) | 18¼                              | (463.6) | 52                 | (23.6)  |
| 625*FKK            | K       | 3                                       | (76.2) FL   | 3                   | (76.2) FNPT  | 4⅝                            | (117.6) | 4                               | (101.6) | 18¼                              | (463.6) | 55                 | (25.0)  |
| 625*ALJ            | L       | 2½                                      | (63.5) FNPT | 4                   | (101.6) FNPT | 5½                            | (139.7) | 4 <sup>13</sup> / <sub>16</sub> | (122.2) | 21½                              | (546.1) | 74                 | (33.6)  |
| 625*FLJ            | L       | 2½                                      | (63.5) FL   | 4                   | (101.6) FNPT | 5½                            | (139.7) | 4 <sup>13</sup> / <sub>16</sub> | (122.2) | 21½                              | (546.1) | 82                 | (37.3)  |
| 625*FLK            | L       | 3                                       | (76.2) FL   | 4                   | (101.6) FNPT | 5½                            | (139.7) | 4 <sup>13</sup> / <sub>16</sub> | (122.2) | 21½                              | (546.1) | 86                 | (39.1)  |
| 625*FLM            | L       | 4                                       | (101.6) FL  | 4                   | (101.6) FNPT | 5½                            | (139.7) | 4 <sup>13</sup> / <sub>16</sub> | (122.2) | 21½                              | (546.1) | 97                 | (44.1)  |
| 625*AMK            | M       | 3                                       | (76.2) FNPT | 4                   | (101.6) FNPT | 5⅝                            | (142.7) | 5⅝                              | (130.0) | 21 <sup>11</sup> / <sub>16</sub> | (550.9) | 90                 | (40.9)  |
| 625*FMK            | M       | 3                                       | (76.2) FL   | 4                   | (101.6) FNPT | 5⅝                            | (142.7) | 5⅝                              | (130.0) | 21 <sup>11</sup> / <sub>16</sub> | (550.9) | 100                | (45.5)  |
| 625*FMM            | M       | 4                                       | (101.6) FL  | 4                   | (101.6) FNPT | 5⅝                            | (142.7) | 5⅝                              | (130.0) | 21 <sup>11</sup> / <sub>16</sub> | (550.9) | 107                | (48.6)  |
| 625*KNM            | N       | 4                                       | (101.6) FL  | 6                   | (152.4) FL   | 6¾                            | (171.5) | 7¼                              | (184.2) | 22½                              | (571.5) | 197                | (89.5)  |
| 625*KPM            | P       | 4                                       | (101.6) FL  | 6                   | (152.4) FL   | 6¾                            | (171.5) | 7¼                              | (184.2) | 25 <sup>13</sup> / <sub>16</sub> | (655.6) | 197                | (89.5)  |
| 625*KQP            | Q       | 6                                       | (152.4) FL  | 8                   | (203.2) FL   | 9¼                            | (234.9) | 10                              | (254.0) | 39⅞                              | (993.8) | 493                | (224.0) |
| 625*KRP            | R       | 6                                       | (152.4) FL  | 8                   | (203.2) FL   | 9¼                            | (234.9) | 10                              | (254.0) | 39⅞                              | (993.8) | 507                | (230.0) |

Dimensions are for reference only.

#### NOTES

1. Replace asterisk with desired model number.
2. Inlet flanges are ANSI B16. 1-250#.
3. Outlet flanges are ANSI B16. 1-125#.



# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252

#### NON-CODE<sup>1</sup> AND ASME SECTION VIII AIR (SCFM), FLOW COEFFICIENT = 0.878

| Set pressure<br>(psig) | Orifice, area in <sup>2</sup> |              |              |              |              |              |               |               |
|------------------------|-------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
|                        | J<br>(1.414)                  | K<br>(2.022) | L<br>(3.138) | M<br>(3.960) | N<br>(4.774) | P<br>(7.018) | Q<br>(12.155) | R<br>(17.600) |
| 10                     | 582                           | 833          | 1292         | 1631         | 1966         | 2890         | 5005          | 7247          |
| 15                     | 744                           | 1064         | 1652         | 2084         | 2513         | 3694         | 6397          | 9263          |
| 20                     | 858                           | 1227         | 1904         | 2403         | 2897         | 4258         | 7375          | 10679         |
| 25                     | 972                           | 1390         | 2157         | 2722         | 3281         | 4823         | 8354          | 12096         |
| 30                     | 1086                          | 1552         | 2409         | 3040         | 3665         | 5388         | 9332          | 13512         |
| 35                     | 1211                          | 1731         | 2687         | 3391         | 4088         | 6009         | 10408         | 15070         |
| 40                     | 1336                          | 1910         | 2965         | 3741         | 4510         | 6630         | 11484         | 16628         |
| 45                     | 1461                          | 2089         | 3242         | 4092         | 4933         | 7252         | 12560         | 18186         |
| 50                     | 1586                          | 2268         | 3520         | 4442         | 5356         | 7873         | 13636         | 19744         |
| 55                     | 1711                          | 2447         | 3798         | 4793         | 5778         | 8494         | 14712         | 21302         |
| 60                     | 1837                          | 2626         | 4076         | 5143         | 6201         | 9115         | 15788         | 22860         |
| 65                     | 1962                          | 2805         | 4354         | 5494         | 6623         | 9737         | 16864         | 24418         |
| 70                     | 2087                          | 2984         | 4631         | 5845         | 7046         | 10358        | 17939         | 25976         |
| 75                     | 2212                          | 3163         | 4909         | 6195         | 7469         | 10979        | 19015         | 27534         |
| 80                     | 2337                          | 3342         | 5187         | 6546         | 7891         | 11600        | 20091         | 29092         |
| 90                     | 2588                          | 3700         | 5742         | 7247         | 8736         | 12843        | 22243         | 32208         |
| 100                    | 2838                          | 4058         | 6298         | 7948         | 9582         | 14085        | 24395         | 35324         |
| 110                    | 3088                          | 4416         | 6854         | 8649         | 10427        | 15328        | 26547         | 38440         |
| 120                    | 3339                          | 4774         | 7409         | 9350         | 11272        | 16570        | 28699         | 41555         |
| 130                    | 3589                          | 5132         | 7965         | 10051        | 12117        | 17813        | 30851         | 44671         |
| 140                    | 3839                          | 5490         | 8520         | 10752        | 12962        | 19055        | 33003         | 47787         |
| 150                    | 4090                          | 5848         | 9076         | 11453        | 13808        | 20298        | 35155         | 50903         |
| 160                    | 4340                          | 6206         | 9631         | 12154        | 14653        | 21540        | 37307         | 54019         |
| 170                    | 4590                          | 6564         | 10187        | 12855        | 15498        | 22783        | 39459         | 57135         |
| 180                    | 4841                          | 6922         | 10743        | 13557        | 16343        | 24025        | 41611         | 60251         |
| 190                    | 5091                          | 7280         | 11298        | 14258        | 17188        | 25268        | 43763         | 63367         |
| 200                    | 5341                          | 7638         | 11854        | 14959        | 18034        | 26510        | 45915         | 66483         |
| 210                    | 5592                          | 7996         | 12409        | 15660        | 18879        | 27753        | 48067         | 69599         |
| 220                    | 5842                          | 8354         | 12965        | 16361        | 19724        | 28995        | 50219         | 72715         |
| 230                    | 6092                          | 8712         | 13520        | 17062        | 20569        | 30238        | 52371         | 75831         |
| 240                    | 6343                          | 9070         | 14076        | 17763        | 21414        | 31480        | 54523         | 78947         |
| 250                    | 6593                          | 9428         | 14631        | 18464        | 22260        | 32723        | 56675         | 82063         |

#### NOTE

1. No code stamp or "NB" on nameplate below 15 psig set.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252 - metric units

#### NON-CODE<sup>1</sup> AND ASME SECTION VIII AIR (Nm<sup>3</sup>/h), FLOW COEFFICIENT = 0.878

| Set pressure<br>(barg) | Orifice, area cm <sup>2</sup> |               |               |               |               |               |               |                |
|------------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                        | J<br>(9.123)                  | K<br>(13.045) | L<br>(20.245) | M<br>(25.548) | N<br>(30.800) | P<br>(45.277) | Q<br>(78.419) | R<br>(113.548) |
| 1.0                    | 1106                          | 1582          | 2455          | 3098          | 3735          | 5490          | 9509          | 13769          |
| 1.5                    | 1433                          | 2049          | 3179          | 4012          | 4837          | 7110          | 12315         | 17832          |
| 2.0                    | 1696                          | 2425          | 3764          | 4750          | 5726          | 8418          | 14579         | 21110          |
| 2.5                    | 1982                          | 2835          | 4399          | 5551          | 6692          | 9838          | 17039         | 24672          |
| 3.0                    | 2272                          | 3249          | 5042          | 6363          | 7671          | 11276         | 19530         | 28278          |
| 3.5                    | 2562                          | 3663          | 5685          | 7174          | 8649          | 12714         | 22020         | 31885          |
| 4.0                    | 2851                          | 4077          | 6328          | 7985          | 9627          | 14152         | 24511         | 35491          |
| 4.5                    | 3141                          | 4492          | 6971          | 8797          | 10605         | 15590         | 27001         | 39097          |
| 5.0                    | 3431                          | 4906          | 7614          | 9608          | 11583         | 17028         | 29492         | 42703          |
| 5.5                    | 3721                          | 5320          | 8257          | 10420         | 12561         | 18466         | 31982         | 46309          |
| 6.0                    | 4010                          | 5735          | 8900          | 11231         | 13539         | 19904         | 34473         | 49915          |
| 6.5                    | 4300                          | 6149          | 9543          | 12042         | 14518         | 21342         | 36963         | 53521          |
| 7.0                    | 4590                          | 6563          | 10186         | 12854         | 15496         | 22780         | 39454         | 57127          |
| 7.5                    | 4879                          | 6977          | 10828         | 13665         | 16474         | 24217         | 41944         | 60733          |
| 8.0                    | 5169                          | 7392          | 11471         | 14476         | 17452         | 25655         | 44434         | 64340          |
| 8.5                    | 5459                          | 7806          | 12114         | 15288         | 18430         | 27093         | 46925         | 67946          |
| 9.0                    | 5749                          | 8220          | 12757         | 16099         | 19408         | 28531         | 49415         | 71552          |
| 9.5                    | 6038                          | 8635          | 13400         | 16911         | 20387         | 29969         | 51906         | 75158          |
| 10.0                   | 6328                          | 9049          | 14043         | 17722         | 21365         | 31407         | 54396         | 78764          |
| 10.5                   | 6618                          | 9463          | 14686         | 18533         | 22343         | 32845         | 56887         | 82370          |
| 11.0                   | 6907                          | 9877          | 15329         | 19345         | 23321         | 34283         | 59377         | 85976          |
| 11.5                   | 7197                          | 10292         | 15972         | 20156         | 24299         | 35721         | 61868         | 89582          |
| 12.0                   | 7487                          | 10706         | 16615         | 20967         | 25277         | 37159         | 64358         | 93188          |
| 12.5                   | 7777                          | 11120         | 17258         | 21779         | 26256         | 38597         | 66849         | 96795          |
| 13.0                   | 8066                          | 11535         | 17901         | 22590         | 27234         | 40035         | 69339         | 100401         |
| 13.5                   | 8356                          | 11949         | 18544         | 23402         | 28212         | 41473         | 71830         | 104007         |
| 14.0                   | 8646                          | 12363         | 19187         | 24213         | 29190         | 42911         | 74320         | 107613         |
| 14.5                   | 8935                          | 12778         | 19830         | 25024         | 30168         | 44349         | 76811         | 111219         |
| 15.0                   | 9225                          | 13192         | 20473         | 25836         | 31146         | 45786         | 79301         | 114825         |
| 15.5                   | 9515                          | 13606         | 21116         | 26647         | 32124         | 47224         | 81792         | 118431         |
| 16.0                   | 9805                          | 14020         | 21759         | 27458         | 33103         | 48662         | 84282         | 122037         |
| 17.2                   | 10500                         | 15015         | 23302         | 29406         | 35450         | 52113         | 90259         | 130692         |

#### NOTE

1. No code stamp or "NB" on nameplate below 1.1 barg set.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252

#### NON-CODE<sup>1</sup> AND ASME SECTION VIII STEAM (lb/hr), STEAM COEFFICIENT = 0.878

| Set pressure<br>(psig) | Orifice, area in <sup>2</sup> |              |              |              |              |              |               |               |
|------------------------|-------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
|                        | J<br>(1.414)                  | K<br>(2.022) | L<br>(3.138) | M<br>(3.960) | N<br>(4.774) | P<br>(7.018) | Q<br>(12.155) | R<br>(17.600) |
| 10                     | 1775                          | 2538         | 3938         | 4970         | 5991         | 8807         | 15254         | 22087         |
| 15                     | 2091                          | 2990         | 4640         | 5855         | 7059         | 10377        | 17972         | 26023         |
| 20                     | 2410                          | 3447         | 5349         | 6751         | 8138         | 11963        | 20720         | 30002         |
| 25                     | 2730                          | 3904         | 6059         | 7646         | 9217         | 13550        | 23468         | 33981         |
| 30                     | 3050                          | 4361         | 6768         | 8541         | 10297        | 15137        | 26217         | 37961         |
| 35                     | 3401                          | 4864         | 7549         | 9526         | 11484        | 16882        | 29239         | 42338         |
| 40                     | 3753                          | 5367         | 8329         | 10511        | 12671        | 18627        | 32262         | 46715         |
| 45                     | 4105                          | 5870         | 9109         | 11496        | 13859        | 20373        | 35285         | 51092         |
| 50                     | 4456                          | 6373         | 9890         | 12480        | 15046        | 22118        | 38308         | 55469         |
| 55                     | 4808                          | 6875         | 10670        | 13465        | 16233        | 23863        | 41331         | 59846         |
| 60                     | 5160                          | 7378         | 11451        | 14450        | 17420        | 25609        | 44354         | 64223         |
| 65                     | 5511                          | 7881         | 12231        | 15435        | 18608        | 27354        | 47377         | 68600         |
| 70                     | 5863                          | 8384         | 13011        | 16420        | 19795        | 29099        | 50399         | 72977         |
| 75                     | 6215                          | 8887         | 13792        | 17405        | 20982        | 30845        | 53422         | 77354         |
| 80                     | 6566                          | 9390         | 14572        | 18389        | 22169        | 32590        | 56445         | 81731         |
| 90                     | 7270                          | 10395        | 16133        | 20359        | 24544        | 36081        | 62491         | 90485         |
| 100                    | 7973                          | 11401        | 17694        | 22329        | 26918        | 39571        | 68537         | 99239         |
| 110                    | 8676                          | 12407        | 19255        | 24298        | 29293        | 43062        | 74582         | 107993        |
| 120                    | 9380                          | 13413        | 20815        | 26268        | 31668        | 46553        | 80628         | 116747        |
| 130                    | 10083                         | 14418        | 22376        | 28238        | 34042        | 50043        | 86674         | 125501        |
| 140                    | 10786                         | 15424        | 23937        | 30207        | 36417        | 53534        | 92720         | 134255        |
| 150                    | 11489                         | 16430        | 25498        | 32177        | 38791        | 57025        | 98765         | 143009        |
| 160                    | 12193                         | 17435        | 27059        | 34147        | 41166        | 60515        | 104811        | 151763        |
| 170                    | 12896                         | 18441        | 28619        | 36116        | 43540        | 64006        | 110857        | 160517        |
| 180                    | 13599                         | 19447        | 30180        | 38086        | 45915        | 67497        | 116903        | 169271        |
| 190                    | 14303                         | 20453        | 31741        | 40056        | 48289        | 70987        | 122948        | 178025        |
| 200                    | 15006                         | 21458        | 33302        | 42025        | 50664        | 74478        | 128994        | 186779        |
| 210                    | 15709                         | 22464        | 34863        | 43995        | 53038        | 77969        | 135040        | 195533        |
| 220                    | 16413                         | 23470        | 36423        | 45965        | 55413        | 81459        | 141086        | 204287        |
| 230                    | 17116                         | 24475        | 37984        | 47934        | 57787        | 84950        | 147131        | 213041        |
| 240                    | 17819                         | 25481        | 39545        | 49904        | 60162        | 88441        | 153177        | 221795        |
| 250                    | 18523                         | 26487        | 41106        | 51873        | 62536        | 91931        | 159223        | 230549        |

#### NOTE

1. No code stamp or "NB" on nameplate below 15 psig set.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252 - metric units

#### NON-CODE<sup>1</sup> AND ASME SECTION VIII STEAM (kg/h), STEAM COEFFICIENT = 0.878

| Set pressure<br>(barg) | Orifice, area cm <sup>2</sup> |               |               |               |               |               |               |                |
|------------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                        | J<br>(9.123)                  | K<br>(13.045) | L<br>(20.245) | M<br>(25.548) | N<br>(30.800) | P<br>(45.277) | Q<br>(78.419) | R<br>(113.548) |
| 1.0                    | 944                           | 1350          | 2095          | 2644          | 3187          | 4685          | 8115          | 11750          |
| 1.5                    | 1144                          | 1635          | 2538          | 3203          | 3861          | 5676          | 9831          | 14235          |
| 2.0                    | 1354                          | 1936          | 3005          | 3792          | 4571          | 6720          | 11638         | 16852          |
| 2.5                    | 1582                          | 2263          | 3512          | 4431          | 5342          | 7854          | 13602         | 19696          |
| 3.0                    | 1814                          | 2593          | 4025          | 5079          | 6123          | 9001          | 15590         | 22574          |
| 3.5                    | 2045                          | 2924          | 4538          | 5727          | 6904          | 10149         | 17578         | 25453          |
| 4.0                    | 2276                          | 3255          | 5051          | 6375          | 7685          | 11297         | 19567         | 28332          |
| 4.5                    | 2508                          | 3586          | 5565          | 7022          | 8466          | 12445         | 21555         | 31210          |
| 5.0                    | 2739                          | 3916          | 6078          | 7670          | 9247          | 13593         | 23543         | 34089          |
| 5.5                    | 2970                          | 4247          | 6591          | 8318          | 10028         | 14741         | 25531         | 36961          |
| 6.0                    | 3201                          | 4578          | 7104          | 8965          | 10808         | 15889         | 27519         | 39846          |
| 6.5                    | 3433                          | 4909          | 7618          | 9613          | 11589         | 17037         | 29507         | 42725          |
| 7.0                    | 3664                          | 5239          | 8131          | 10261         | 12370         | 18185         | 31495         | 45604          |
| 7.5                    | 3895                          | 5570          | 8644          | 10909         | 13151         | 19332         | 33483         | 48483          |
| 8.0                    | 4127                          | 5901          | 9157          | 11556         | 13932         | 20480         | 35471         | 51361          |
| 8.5                    | 4358                          | 6231          | 9671          | 12204         | 14713         | 21628         | 37459         | 54240          |
| 9.0                    | 4589                          | 6562          | 10184         | 12852         | 15493         | 22776         | 39448         | 57119          |
| 9.5                    | 4820                          | 6893          | 10697         | 13499         | 16274         | 23924         | 41436         | 59997          |
| 10.0                   | 5052                          | 7224          | 11211         | 14147         | 17055         | 25072         | 43424         | 62876          |
| 10.5                   | 5283                          | 7554          | 11724         | 14795         | 17836         | 26220         | 45412         | 65755          |
| 11.0                   | 5514                          | 7885          | 12237         | 15443         | 18617         | 27368         | 47400         | 68633          |
| 11.5                   | 5746                          | 8216          | 12750         | 16090         | 19398         | 28515         | 49388         | 71512          |
| 12.0                   | 5977                          | 8546          | 13264         | 16738         | 20179         | 29663         | 51376         | 74391          |
| 12.5                   | 6208                          | 8877          | 13777         | 17386         | 20959         | 30811         | 53364         | 77270          |
| 13.0                   | 6439                          | 9208          | 14290         | 18033         | 21740         | 31959         | 55352         | 80148          |
| 13.5                   | 6671                          | 9539          | 14803         | 18681         | 22521         | 33107         | 57341         | 83027          |
| 14.0                   | 6902                          | 9869          | 15317         | 19329         | 23302         | 34255         | 59329         | 85906          |
| 14.5                   | 7133                          | 10200         | 15830         | 19976         | 24083         | 35403         | 61317         | 88784          |
| 15.0                   | 7365                          | 10531         | 16343         | 20624         | 24864         | 36551         | 63305         | 91663          |
| 15.5                   | 7596                          | 10862         | 16856         | 21272         | 25644         | 37699         | 65293         | 94542          |
| 16.0                   | 7827                          | 11192         | 17370         | 21920         | 26425         | 38846         | 67281         | 97420          |
| 17.2                   | 8382                          | 11986         | 18601         | 23474         | 28299         | 41601         | 72052         | 104329         |

#### NOTE

1. No code stamp or "NB" on nameplate below 1.1 barg set.

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252

#### NON-CODE AND ASME SECTION I STEAM (lb/hr), STEAM COEFFICIENT = 0.878

| Set pressure<br>(psig) | Orifice, area in <sup>2</sup> |              |              |              |              |              |               |               |
|------------------------|-------------------------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|
|                        | J<br>(1.414)                  | K<br>(2.022) | L<br>(3.138) | M<br>(3.960) | N<br>(4.774) | P<br>(7.018) | Q<br>(12.155) | R<br>(17.600) |
| 15                     | 2027                          | 2898         | 4498         | 5676         | 6843         | 10059        | 17423         | 25227         |
| 20                     | 2346                          | 3355         | 5207         | 6571         | 7922         | 11646        | 20171         | 29207         |
| 25                     | 2666                          | 3813         | 5917         | 7467         | 9002         | 13233        | 22919         | 33186         |
| 30                     | 2986                          | 4270         | 6626         | 8362         | 10081        | 14819        | 25667         | 37165         |
| 35                     | 3306                          | 4727         | 7336         | 9257         | 11160        | 16406        | 28415         | 41144         |
| 40                     | 3625                          | 5184         | 8045         | 10153        | 12240        | 17993        | 31163         | 45123         |
| 45                     | 3945                          | 5641         | 8755         | 11048        | 13319        | 19579        | 33911         | 49102         |
| 50                     | 4265                          | 6098         | 9464         | 11943        | 14398        | 21166        | 36659         | 53081         |
| 55                     | 4584                          | 6555         | 10174        | 12839        | 15478        | 22753        | 39407         | 57060         |
| 60                     | 4904                          | 7013         | 10883        | 13734        | 16557        | 24339        | 42155         | 61039         |
| 65                     | 5224                          | 7470         | 11592        | 14629        | 17636        | 25926        | 44903         | 65018         |
| 70                     | 5550                          | 7936         | 12316        | 15542        | 18737        | 27544        | 47706         | 69077         |
| 75                     | 5879                          | 8407         | 13047        | 16465        | 19849        | 29179        | 50537         | 73176         |
| 80                     | 6208                          | 8878         | 13778        | 17387        | 20961        | 30813        | 53367         | 77274         |
| 90                     | 6867                          | 9819         | 15239        | 19231        | 23184        | 34082        | 59028         | 85471         |
| 100                    | 7525                          | 10761        | 16701        | 21075        | 25407        | 37350        | 64689         | 93668         |
| 110                    | 8184                          | 11703        | 18162        | 22920        | 27631        | 40619        | 70350         | 101865        |
| 120                    | 8842                          | 12645        | 19624        | 24764        | 29854        | 43887        | 76011         | 110062        |
| 130                    | 9501                          | 13586        | 21085        | 26608        | 32078        | 47156        | 81672         | 118259        |
| 140                    | 10160                         | 14528        | 22546        | 28453        | 34301        | 50424        | 87333         | 126456        |
| 150                    | 10818                         | 15470        | 24008        | 30297        | 36525        | 53693        | 92994         | 134653        |
| 160                    | 11477                         | 16411        | 25469        | 32141        | 38748        | 56961        | 98655         | 142850        |
| 170                    | 12135                         | 17353        | 26931        | 33985        | 40971        | 60230        | 104316        | 151046        |
| 180                    | 12794                         | 18295        | 28392        | 35830        | 43195        | 63498        | 109977        | 159243        |
| 190                    | 13452                         | 19237        | 29854        | 37674        | 45418        | 66767        | 115638        | 167440        |
| 200                    | 14111                         | 20178        | 31315        | 39518        | 47642        | 70035        | 121300        | 175637        |
| 210                    | 14769                         | 21120        | 32777        | 41363        | 49865        | 73304        | 126961        | 183834        |
| 220                    | 15428                         | 22062        | 34238        | 43207        | 52088        | 76572        | 132622        | 192031        |
| 230                    | 16087                         | 23003        | 35700        | 45051        | 54312        | 79841        | 138283        | 200228        |
| 240                    | 16745                         | 23945        | 37161        | 46896        | 56535        | 83109        | 143944        | 208425        |
| 250                    | 17404                         | 24887        | 38623        | 48740        | 58759        | 86378        | 149605        | 216622        |



# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### Capacities for model 6252 - metric units

#### NON-CODE AND ASME SECTION I STEAM (kg/h), STEAM COEFFICIENT = 0.878

| Set pressure<br>(barg) | Orifice, area cm <sup>2</sup> |               |               |               |               |               |               |                |
|------------------------|-------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|
|                        | J<br>(9.123)                  | K<br>(13.045) | L<br>(20.245) | M<br>(25.548) | N<br>(30.800) | P<br>(45.277) | Q<br>(78.419) | R<br>(113.548) |
| 1.0                    | 904                           | 1293          | 2007          | 2533          | 3054          | 4489          | 7775          | 11257          |
| 1.5                    | 1115                          | 1594          | 2474          | 3122          | 3763          | 5532          | 9582          | 13874          |
| 2.0                    | 1325                          | 1895          | 2940          | 3711          | 4473          | 6576          | 11389         | 16491          |
| 2.5                    | 1535                          | 2195          | 3407          | 4299          | 5183          | 7619          | 13197         | 19108          |
| 3.0                    | 1745                          | 2496          | 3874          | 4888          | 5893          | 8663          | 15004         | 21725          |
| 3.5                    | 1956                          | 2797          | 4340          | 5477          | 6603          | 9706          | 16811         | 24342          |
| 4.0                    | 2166                          | 3097          | 4807          | 6066          | 7313          | 10750         | 18619         | 26959          |
| 4.5                    | 2376                          | 3398          | 5273          | 6655          | 8023          | 11794         | 20426         | 29576          |
| 5.0                    | 2592                          | 3706          | 5751          | 7258          | 8750          | 12863         | 22278         | 32257          |
| 5.5                    | 2808                          | 4016          | 6232          | 7864          | 9481          | 13937         | 24139         | 34953          |
| 6.0                    | 3025                          | 4325          | 6712          | 8471          | 10212         | 15012         | 26001         | 37648          |
| 6.5                    | 3241                          | 4635          | 7193          | 9077          | 10943         | 16087         | 27862         | 40344          |
| 7.0                    | 3458                          | 4945          | 7674          | 9684          | 11674         | 17162         | 29724         | 43039          |
| 7.5                    | 3674                          | 5254          | 8154          | 10290         | 12406         | 18237         | 31586         | 45735          |
| 8.0                    | 3891                          | 5564          | 8635          | 10897         | 13137         | 19312         | 33447         | 48430          |
| 8.5                    | 4107                          | 5874          | 9115          | 11503         | 13868         | 20386         | 35309         | 51126          |
| 9.0                    | 4324                          | 6183          | 9596          | 12110         | 14599         | 21461         | 37170         | 53821          |
| 9.5                    | 4541                          | 6493          | 10077         | 12716         | 15330         | 22536         | 39032         | 56517          |
| 10.0                   | 4757                          | 6803          | 10557         | 13323         | 16061         | 23611         | 40893         | 59212          |
| 10.5                   | 4974                          | 7112          | 11038         | 13929         | 16792         | 24686         | 42755         | 61908          |
| 11.0                   | 5190                          | 7422          | 11518         | 14536         | 17524         | 25761         | 44617         | 64603          |
| 11.5                   | 5407                          | 7732          | 11999         | 15142         | 18255         | 26835         | 46478         | 67299          |
| 12.0                   | 5623                          | 8041          | 12480         | 15749         | 18986         | 27910         | 48340         | 69994          |
| 12.5                   | 5840                          | 8351          | 12960         | 16355         | 19717         | 28985         | 50201         | 72690          |
| 13.0                   | 6057                          | 8661          | 13441         | 16962         | 20448         | 30060         | 52063         | 75385          |
| 13.5                   | 6273                          | 8970          | 13921         | 17568         | 21179         | 31135         | 53925         | 78081          |
| 14.0                   | 6490                          | 9280          | 14402         | 18175         | 21911         | 32210         | 55786         | 80776          |
| 14.5                   | 6706                          | 9590          | 14883         | 18781         | 22642         | 33284         | 57648         | 83472          |
| 15.0                   | 6923                          | 9899          | 15363         | 19388         | 23373         | 34359         | 59509         | 86167          |
| 15.5                   | 7139                          | 10209         | 15844         | 19994         | 24104         | 35434         | 61371         | 88863          |
| 16.0                   | 7356                          | 10519         | 16324         | 20601         | 24835         | 36509         | 63233         | 91558          |
| 16.5                   | 7572                          | 10828         | 16805         | 21207         | 25566         | 37584         | 65094         | 94254          |
| 17.0                   | 7789                          | 11138         | 17286         | 21814         | 26298         | 38659         | 66956         | 96949          |
| 17.2                   | 7876                          | 11262         | 17478         | 22056         | 26590         | 39089         | 67700         | 98028          |

### Capacities for model 6254

#### ASME SECTION IV STEAM, lb/hr (kg/h)

| Set pressure<br>psig<br>(barg) | Orifice, area in <sup>2</sup> (cm <sup>2</sup> ) |                        |                        |                        |                        |                        |
|--------------------------------|--|------------------------|------------------------|------------------------|------------------------|------------------------|
|                                | J<br>1.414<br>(9.123)                            | K<br>2.022<br>(13.045) | L<br>3.138<br>(20.245) | M<br>3.960<br>(25.548) | N<br>4.774<br>(30.800) | P<br>7.018<br>(45.277) |
| 15                             | 2217   | 3171                   | 4921                   | 6210                   | 7486                   | 11005                  |
| (1.0)                          | (1004)   | (1436)                 | (2229)                 | (2813)                 | (3391)                 | (4985)                 |

# KUNKLE MODELS 6252/6254 SAFETY VALVES

## SAFETY AND RELIEF PRODUCTS

### SELECTION GUIDE

| Example:   | 6252 | F | L | K | 01 | - | A | S | 0020 |
|--|------|---|---|---|----|---|---|---|------|
| <b>Model</b>   |      |   |   |   |    |   |   |   |      |
| <b>6252</b>  |      |   |   |   |    |   |   |   |      |
| <b>6254</b>  |      |   |   |   |    |   |   |   |      |
| <b>Connection type</b>   |      |   |   |   |    |   |   |   |      |
| <b>A</b>   |      |   |   |   |    |   |   |   |      |
| FNPT x FNPT  |      |   |   |   |    |   |   |   |      |
| <b>F</b>   |      |   |   |   |    |   |   |   |      |
| 250# flange x FNPT   |      |   |   |   |    |   |   |   |      |
| <b>K</b>   |      |   |   |   |    |   |   |   |      |
| 250# flange x 125# flange  |      |   |   |   |    |   |   |   |      |
| <b>Orifice</b>   |      |   |   |   |    |   |   |   |      |
| <b>J</b>   |      |   |   |   |    |   |   |   |      |
| <b>N</b>   |      |   |   |   |    |   |   |   |      |
| <b>K</b>   |      |   |   |   |    |   |   |   |      |
| <b>P</b>   |      |   |   |   |    |   |   |   |      |
| <b>L</b>   |      |   |   |   |    |   |   |   |      |
| <b>Q</b>   |      |   |   |   |    |   |   |   |      |
| <b>M</b>   |      |   |   |   |    |   |   |   |      |
| <b>R</b>   |      |   |   |   |    |   |   |   |      |
| <b>Inlet size</b>  |      |   |   |   |    |   |   |   |      |
| <b>G</b>   |      |   |   |   |    |   |   |   |      |
| 1½" [38.1]   |      |   |   |   |    |   |   |   |      |
| <b>H</b>   |      |   |   |   |    |   |   |   |      |
| 2" [50.8]  |      |   |   |   |    |   |   |   |      |
| <b>J</b>   |      |   |   |   |    |   |   |   |      |
| 2½" [63.5]   |      |   |   |   |    |   |   |   |      |
| <b>K</b>   |      |   |   |   |    |   |   |   |      |
| 3" [76.2]  |      |   |   |   |    |   |   |   |      |
| <b>M</b>   |      |   |   |   |    |   |   |   |      |
| 4" [101.6]   |      |   |   |   |    |   |   |   |      |
| <b>P</b>   |      |   |   |   |    |   |   |   |      |
| 6" [152.4]   |      |   |   |   |    |   |   |   |      |
| <b>Variation (01 to 99)</b>  |      |   |   |   |    |   |   |   |      |
| <b>01</b>  |      |   |   |   |    |   |   |   |      |
| Plain lever  |      |   |   |   |    |   |   |   |      |
| <b>02</b>  |      |   |   |   |    |   |   |   |      |
| Plain lever with gag   |      |   |   |   |    |   |   |   |      |
| <b>Design revision</b>   |      |   |   |   |    |   |   |   |      |
| Indicates non-interchangeable revision                                     |      |   |   |   |    |   |   |   |      |
| Dash (-) if original design  |      |   |   |   |    |   |   |   |      |
| <b>Valve service</b>   |      |   |   |   |    |   |   |   |      |
| <b>A</b>   |      |   |   |   |    |   |   |   |      |
| Steam ASME section I (model 6252 only)                                     |      |   |   |   |    |   |   |   |      |
| <b>G</b>   |      |   |   |   |    |   |   |   |      |
| Steam ASME section IV model 6254 only (model 6254 only - 15 psig/1.0 barg) |      |   |   |   |    |   |   |   |      |
| <b>K</b>   |      |   |   |   |    |   |   |   |      |
| Air ASME Section VIII (model 6252 only)                                    |      |   |   |   |    |   |   |   |      |
| <b>L</b>   |      |   |   |   |    |   |   |   |      |
| Steam ASME section VIII (model 6252 only)                                  |      |   |   |   |    |   |   |   |      |
| <b>N</b>   |      |   |   |   |    |   |   |   |      |
| Non-code air/gas   |      |   |   |   |    |   |   |   |      |
| <b>P</b>   |      |   |   |   |    |   |   |   |      |
| Non-code steam   |      |   |   |   |    |   |   |   |      |
| <b>Spring material</b>   |      |   |   |   |    |   |   |   |      |
| <b>S</b>   |      |   |   |   |    |   |   |   |      |
| Steel (plated)   |      |   |   |   |    |   |   |   |      |
| <b>Set pressure</b>  |      |   |   |   |    |   |   |   |      |
| <b>Model 6252</b>  |      |   |   |   |    |   |   |   |      |
| 10 psig [0.34 barg] (0010) to 250 psig [17.2 barg] (0250)                  |      |   |   |   |    |   |   |   |      |
| <b>Model 6254</b>  |      |   |   |   |    |   |   |   |      |
| 15 psig [1.0 barg] (0015)  |      |   |   |   |    |   |   |   |      |



