

**CURTISS -
WRIGHT**

Valve Group



Series 6400/6600

Safety Valves for ASME Section I and VIII
Boiler Applications



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Introduction

Designed with the user in mind, Series 6400 and 6600 safety valves represent the most advanced technology in valves designed for use in intermediate power boiler and organic fluid vaporizer service. Built in conformance to Section I and Section VIII of the ASME Boiler and Pressure Vessel Code, all capacities are certified by The National Board of Boiler and Pressure Vessel Inspectors at 3% overpressure.

Features Include:

- Full nozzle design for minimized maintenance
- Hardened conical disc for extended seat life
- Monel® or copper nickel alloy guides with long guiding ratio for reduced galling used on high temperature models
- Set pressure to 1500 psig, temperatures to 1000 °F
- Available in closed bonnet or exposed spring versions
- Dual blow down ring for more precise performance

Warranty

All products manufactured by Farris Engineering are warranted free of defects in material and workmanship when used within the range recommended for a period of one year after installation or eighteen months from delivery. When authorized, any defective product may be returned to the factory and if found defective will be repaired or replaced free of charge, solely at the discretion of Farris Engineering, ex-works our factory. No charge for labor or other expense incurred will be allowed, as the liability of Farris Engineering is measured by the refund price of the defective product only. All warranties are based on the product being used within the range recommended and does not cover damages or defects due to normal wear and tear, misuse, alteration or neglect. The purchaser shall determine the suitability of the product for use and assumes all risks and liabilities in connection therewith.

This warranty does not cover the performance of valves tested at site on test equipment that is not to the same technical standard as that used by the manufacturer.

Type Numbering System

The type numbering system of the Farris 6400 and 6600 series valve is illustrated below. The type number which describes the metallurgy and construction can be found on the nameplate of every 6400 and 6600 series valve.

| 64/66 D A 1 2 D -1 7 0 | | | | | | | | | | | | | | | | |
|------------------------|----------------|---------------------|-----------------------------|------------------------|------------|-------------|-----------------------|---------------|----------------------|---|--|---------------|----------------------------|------------|--------------------------------|--------------|
| Series Number | Orifice | Seat Construction | | Temperature & Material | | | | Inlet Flange | Special Construction | Inlet Facing | Cap Construction | Option | | | | |
| 64 Open Bonnet | Orifice Letter | Actual Area Sq. In. | Actual Area mm ² | A | Metal Seat | Designation | Inlet Temperature | Material | | 0 150 | D Organic Fluid Vaporizer ⁴ | 1 Raised Face | 2 Screwed Cap ⁵ | 0 No Gag | | |
| | | | | | | | | Body & Bonnet | Spring | | | | | | | |
| 66 Closed Bonnet | D | 0.150 | 97 | A | Metal Seat | 1 | up to 800 °F (427 °C) | Carbon Steel | Chrome Alloy | 2 300 | | 9 Ring Joint | 4 Packed Lever | 1 With Gag | | |
| | E | 0.225 | 145 | | | | | | | 3 600 | | | | | | |
| | F | 0.371 | 239 | | | | | | | 4 900 | | | | | | |
| | G | 0.559 | 361 | | | | | | | 5 1500 | | | | | | |
| | H | 0.873 | 563 | | | | | | | | | | | | | |
| | J | 1.430 | 923 | | | | | | | 3 ² 801 to 1000 °F (427 to 538 °C) | | | | | Chrome Moly Steel ³ | Chrome Alloy |
| | K | 2.042 | 1317 | | | | | | | | | | | | | |
| | L | 3.170 | 2045 | | | | | | | | | | | | | |
| | M | 4.000 | 2581 | | | | | | | | | | | | | |
| | N | 4.822 | 3111 | | | | | | | | | | | | | |
| | P | 7.087 | 4572 | | | | | | | | | | | | | |

Ordering Information

In order to assist you in the proper processing of your order, please specify the following information so that we may process your order as quickly and accurately as possible.

- Quantity
- Inlet and outlet sizes*
- Farris type number*
- Inlet and outlet flange class*
- Set pressure*
- Operating temperature*
- Relieving temperature*
- Allowable overpressure*
- Fluid and state*
- Required capacity*
- Materials of construction if other than standard
- Accessories, such as test gag
- Code requirements
- Any special testing or documentation requirements

*As a customer service, we verify your sizing and selection. To do this, we must have this information.

Notes:

- Obsolete designation. The temperature range for designation 2 is now covered under designation 1.
- Option only available on 6400 Series.
- The open bonnet 6400 series uses a carbon steel bonnet for all temperature ranges.
- D option available on 6600 Series only.
- Option only available on 6600 Series valve for organic fluid vaporizer service.

Parts Replacement

Valves – If an exact replacement valve is required, then the valve type, size and serial number must be specified to ensure proper dimensions and material being supplied. If a specific valve is obsolete, a recommendation of the current equivalent will be made if possible.

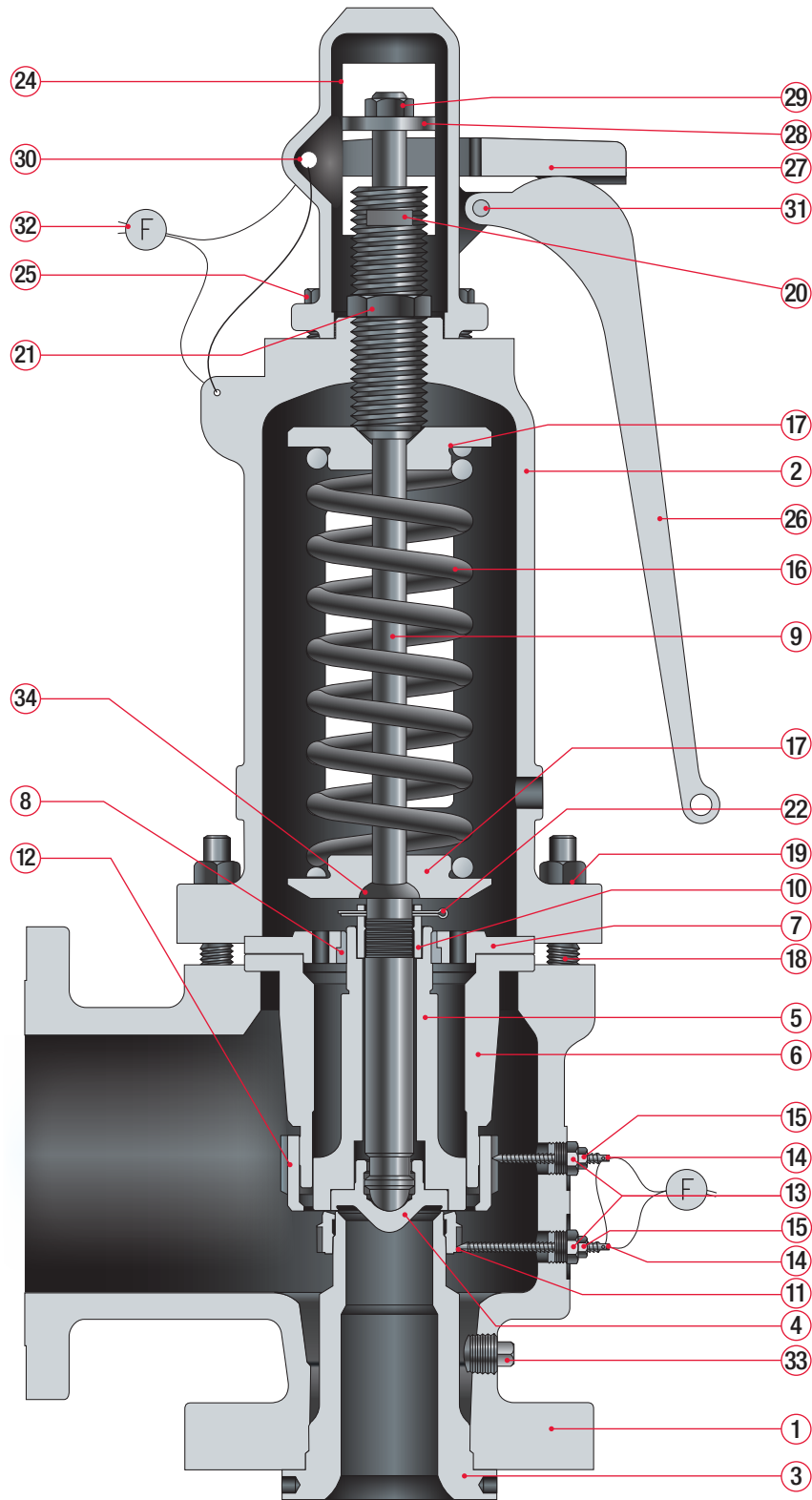
Spare Parts – When ordering parts, use part names as listed in the bills of materials. Specify valve type, size and serial number. If the serial number is not available, the original Farris factory order number will help us supply the proper part and material.

Springs – Order as an assembly to include spring with upper and lower spring buttons. Specify valve type, size, serial number, set pressure and backpressure, if any.

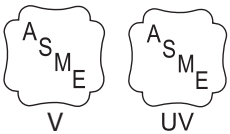
Note: If valve modification or set pressure changes are required, consideration must be given to correct the nameplate and other data.



Series 6400/6600



6400 Series, L & M Orifices



| Bill of Materials | | |
|-------------------|---|--|
| Item No. | Part Name | Material |
| 1 | Body (up to 800 °F) ³ Body (801 to 1000 °F) | SA-216 GR. WCB Carbon Steel SA-217 GR. WC6 Alloy Steel (1 1/4 CR-1/2 Moly) |
| 2 | Open Bonnet (6400 Series) Closed Bonnet (6600 Series) ³ | SA-216 GR. WCB Carbon Steel SA-216 GR. WCB Carbon Steel |
| 3 | Nozzle | 316 Stainless Steel |
| 4 | Disc | Precipitation Hardened St. St. |
| 5 | Disc Holder | Precipitation Hardened St. St. |
| 6 | Sleeve Guide (Up to 800 °F) ³ Sleeve Guide (801 to 1000 °F) | 300 Series Stainless Steel Monel |
| 7 | Guide Plate ¹ | 300 Series Stainless Steel |
| 8 | Guide Bushing ¹ | Monel |
| 9 | Stem | 316 Stainless Steel |
| 10 | Stem Collar | 316 Stainless Steel |
| 11 | Blow Down Ring-Lower | 316 Stainless Steel |
| 12 | Blow Down Ring-Upper | 316 Stainless Steel |
| 13 | Lock Screw (Blow Down Ring) | 316 Stainless Steel |
| 14 | Lock Screw Stud (BDR) | 316 Stainless Steel |
| 15 | Jam Nut, Lock Screw | Stainless Steel |
| 16 | Spring | Chrome Alloy, Rust Proofed |
| 17 | Spring Buttons | 316 Stainless Steel |
| 18 | Body Stud | ASTM A193 Gr. B7 Alloy Steel |
| 19 | Hex Nut, Body | ASTM A194 GR. 2H Alloy Steel |
| 20 | Spring Adjusting Screw | Precipitation Hardened St. St. |
| 21 | Spring Adj. Scr. Jam Nut | 316 Stainless Steel |
| 22 | Cotter Pin | Steel, Pltd. |
| 23 | Spring Pin (not shown) | Carbon Steel, Pltd. |
| 24 | Cap (6400 Series) Cap (6600 Series) | Iron Steel |
| 25 | Cap Screw | Carbon Steel, Pltd. |
| 26 | Test Lever | Iron |
| 27 | Test Lever Fork | Iron |
| 28 | Stem Test Nut | 316 Stainless Steel |
| 29 | Jam Nut, Stem | Stainless Steel |
| 30 | Round Head Rivet (Fork) | Steel |
| 31 | Round Head Rivet (Lever) | Steel |
| 32 | Wire Seal | St. St. Wire / Lead Seal |
| 33 | Pipe Plug, Body | Steel |
| 34 | Stem Shoulder | Precipitation Hardened St. St. |
| 35 | Pipe Plug, Bonnet (Not Shown) | Steel |
| 36 | Nameplate (Not Shown) | Stainless Steel |

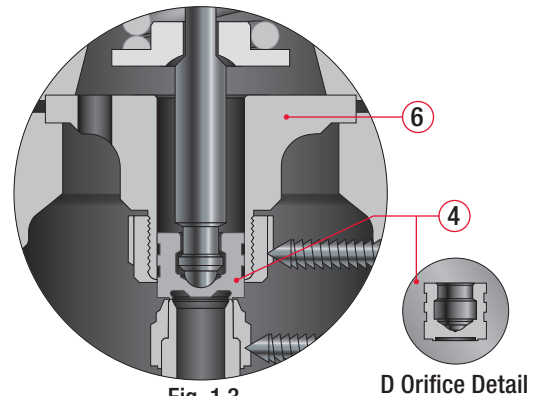


Fig. 1.3
Internals for Orifices D, E, & F

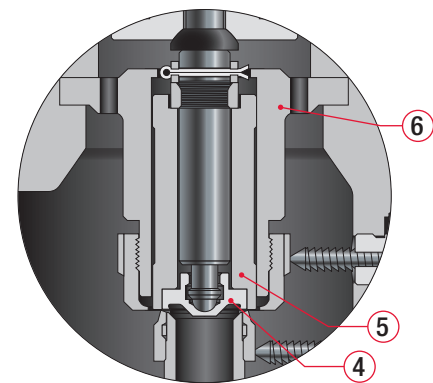


Fig. 1.4
Internals for Orifice G

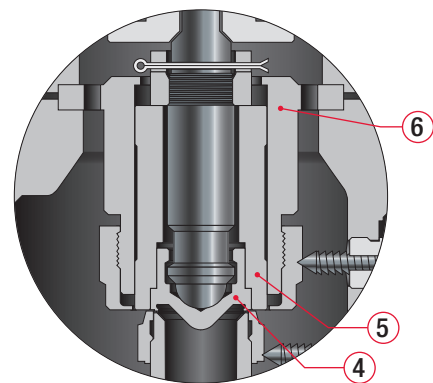


Fig. 1.5
Internals for Orifices H & J



General Notes:

1. Guide plate and guide bushing form a one piece assembly. Used on 2-1/2" to 4" inlet sizes only. No bushing is used on valves up to 800 °F.
2. Gaskets (not shown above) are used on Series 6600 closed bonnet units only. Material is stainless steel.
3. 6600 Series only available to 800 °F (427 °C)



Selection Table – Series 6400

| US Customary System Units | | | | | | | | | | | | | | | | |
|---------------------------|-----------------|------------------------------|----------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|--------|---------|-------------------------------|-------------------------------------|-------------------------|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, psig | | | | | | | | Material | | |
| Letter | Area sq. in. | | Inlet RF | Outlet RF | | 300 °F | 400 °F | 500 °F | 600 °F | 700 °F | 800 °F | 900 °F | 1000 °F | Body & Bonnet ⁷ | Spring | |
| D | 0.150 | 1 x 2 | 300# | 150# | 64DA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64DA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | |
| | | | 900# | | 64DA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | |
| | | | 1500# | | 64DA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | | |
| | | 1 x 2 | 300# | 150# | 64DA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64DA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | | 900# | | 64DA34-170 | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | | 1500# | | 64DA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| E | 0.225 | 1 x 2 | 300# | 150# | 64EA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64EA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | |
| | | | 900# | | 64EA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | |
| | | | 1500# | | 64EA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | | |
| | | 1 x 2 | 300# | 150# | 64EA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64EA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | | 900# | | 64EA34-170 | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | | 1500# | | 64EA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| F | 0.371 | 1 1/2 x 2 | 300# | 150# | 64FA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64FA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | |
| | | | 900# | | 64FA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | |
| | | | 1500# | | 64FA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | | |
| | | 1 1/2 x 2 | 300# | 150# | 64FA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64FA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | | 900# | | 64FA34-170 | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | | 1500# | | 64FA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| G | 0.559 | 1 1/2 x 3 | 300# | 150# | 64GA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64GA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | |
| | | | 900# | | 64GA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | |
| | | | 1500# | | 64GA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | | |
| | | 1 1/2 x 3 | 300# | 150# | 64GA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64GA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | | 900# | | 64GA34-170 | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | | 1500# | | 64GA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| H | 0.873 | 1 1/2 x 3 | 300# | 150# | 64HA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64HA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | |
| | | | 900# | | 64HA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | |
| | | | 1500# | | 64HA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | | |
| | | 1 1/2 x 3 | 300# | 150# | 64HA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64HA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | | 900# | | 64HA34-170 | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | | 1500# | | 64HA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| J | 1.430 | 2 x 3 | 300# | 150# | 64JA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64JA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | – | | | – |
| | | 2 1/2 x 4 | 900# | 150# | 64JA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | Chrome Moly Steel |
| | | | 1500# | | 64JA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | |
| | | 2 x 3 | 300# | 150# | 64JA32-170 | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | | 600# | | 64JA33-170 | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | 2 1/2 x 4 | 900# | 150# | 64JA34-170 | – | – | – | – | – | 900 | 900 | 650 | Chrome Moly Steel | | |
| | | | 1500# | | 64JA35-170 | – | – | – | – | – | 1500 | 1500 | 1080 | | | |

General Notes:

1. The 6400 Series comes standard with an open bonnet and plain lifting lever.
2. For optional test gag, change the last digit of the three digit type number suffix to "1". Example: 64GA13-171 and 66LA12-141.
3. On certain sizes 150#RF inlet flanges are available. Consult the factory.
4. Available in open lever design only. No plain cap or packed lever construction.
5. For optional ring joint inlet, change the first digit of suffix to "9". Example: 64LA15-970.
6. Consult the factory for set pressures beyond those listed above.
7. Bonnet is carbon steel through 1000 °F.

Selection Table – Series 6400 continued

| US Customary System Units | | | | | | | | | | | | | | | |
|---------------------------|-----------------|------------------------------|----------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|-----------------|-------------------------|-------------------|-------------------------------------|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, psig | | | | | | | | Material | |
| Letter | Area sq. in. | | Inlet RF | Outlet RF | | 300 °F | 400 °F | 500 °F | 600 °F | 700 °F | 800 °F | 900 °F | 1000 °F | Body & Bonnet? | Spring |
| K | 2.042 | 2 1/2 x 4 | 300# | 150# | 64KA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 64KA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | |
| | | | 900# | | 64KA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | |
| | | | 1500# | | 64KA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | |
| | 2 1/2 x 4 | 300# | 64KA32-170 | – | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | 600# | 64KA33-170 | – | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | 900# | 64KA34-170 | – | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | 1500# | 64KA35-170 | – | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| L | 3.170 | 3 x 6 | 300# | 150# | 64LA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | |
| | | | 600# | | 64LA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | |
| | | | 900# | | 64LA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | |
| | | | 1500# | | 64LA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | |
| | 3 x 6 | 300# | 64LA32-170 | – | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | 600# | 64LA33-170 | – | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | 900# | 64LA34-170 | – | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | 1500# | 64LA35-170 | – | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| M | 4.000 | 3 x 6 | 300# | 150# | 64MA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | |
| | | | 600# | | 64MA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | |
| | | | 900# | | 64MA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | |
| | | | 1500# | | 64MA15-170 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | – | – | | |
| | 3 x 6 | 300# | 64MA32-170 | – | – | – | – | – | – | 300 | 300 | 215 | Chrome Moly Steel | | |
| | | 600# | 64MA33-170 | – | – | – | – | – | – | 600 | 600 | 430 | | | |
| | | 900# | 64MA34-170 | – | – | – | – | – | – | 900 | 900 | 650 | | | |
| | | 1500# | 64MA35-170 | – | – | – | – | – | – | 1500 | 1500 | 1080 | | | |
| N | 4.822 | 4 x 6 | 300# | 150# | 64NA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | |
| | | | 600# | | 64NA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | |
| | | | 900# | | 64NA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | |
| | | | 300# | | 64NA32-170 | – | – | – | – | – | – | 300 | 300 | | 215 |
| | 600# | 64NA33-170 | – | – | – | – | – | – | 600 | 600 | 430 | | | | |
| | 900# | 64NA34-170 | – | – | – | – | – | – | 900 | 900 | 650 | | | | |
| | 300# | 64PA12-170 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | – | – | Carbon Steel | | | |
| | 600# | 64PA13-170 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | – | – | | | | |
| 900# | 64PA14-170 | 900 | 900 | 900 | 900 | 900 | 900 | 900 | – | – | | | | | |
| 300# | 64PA32-170 | – | – | – | – | – | – | – | 300 | 300 | 215 | | Chrome Moly Steel | | |
| 600# | 64PA33-170 | – | – | – | – | – | – | – | 600 | 600 | 430 | | | | |
| 900# | 64PA34-170 | – | – | – | – | – | – | – | 900 | 900 | 650 | | | | |



Selection Table – Series 6400

| Metric System Units | | | | | | | | | | | | | | | | |
|---------------------|-------------------------|------------------------------|----------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|--------|--------|-------------------------------|-------------------------------------|---|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, barg | | | | | | | | Material | | |
| Letter | Area mm ² | | Inlet RF | Outlet RF | | 149 °C | 204 °C | 260 °C | 316 °C | 371 °C | 427 °C | 482 °C | 538 °C | Body & Bonnet ⁷ | Spring | |
| D | 97 | 1 x 2 | 300# | 150# | 64DA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64DA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | | |
| | | | 900# | | 64DA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | | |
| | | | 1500# | | 64DA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | | |
| | 97 | 1 x 2 | 300# | 150# | 64DA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64DA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | | 900# | | 64DA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64DA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| E | 145 | 1 x 2 | 300# | 150# | 64EA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64EA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | | |
| | | | 900# | | 64EA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | | |
| | | | 1500# | | 64EA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | | |
| | 145 | 1 x 2 | 300# | 150# | 64EA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64EA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | | 900# | | 64EA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64EA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| F | 239 | 1 1/2 x 2 | 300# | 150# | 64FA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64FA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | | |
| | | | 900# | | 64FA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | | |
| | | | 1500# | | 64FA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | | |
| | 239 | 1 1/2 x 2 | 300# | 150# | 64FA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64FA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | | 900# | | 64FA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64FA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| G | 361 | 1 1/2 x 3 | 300# | 150# | 64GA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64GA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | | |
| | | | 900# | | 64GA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | | |
| | | | 1500# | | 64GA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | | |
| | 361 | 1 1/2 x 3 | 300# | 150# | 64GA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64GA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | | 900# | | 64GA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64GA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| H | 563 | 1 1/2 x 3 | 300# | 150# | 64HA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64HA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | | |
| | | | 900# | | 64HA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | | |
| | | | 1500# | | 64HA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | | |
| | 563 | 1 1/2 x 3 | 300# | 150# | 64HA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64HA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | | 900# | | 64HA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64HA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| J | 923 | 2 x 3 | 300# | 150# | 64JA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64JA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | | | – |
| | | 2 1/2 x 4 | 900# | 150# | 64JA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | | | – |
| | | | 1500# | | 64JA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | 103 | – | | | – |
| | 923 | 2 x 3 | 300# | 150# | 64JA32-170 | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 64JA33-170 | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | 2 1/2 x 4 | 900# | 150# | 64JA34-170 | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | | 1500# | | 64JA35-170 | – | – | – | – | – | 103 | 103 | 74.5 | | | |

General Notes:

1. The 6400 Series comes standard with an open yoke and plain lifting lever.
2. For optional test gag, change the last digit of the three digit type number suffix to "1". Example: 64GA13-171 and 66LA12-141.
3. On certain sizes 150#RF inlet flanges are available. Consult the Factory.
4. Available in open lever design only. No plain cap or packed lever construction.
5. For optional ring joint inlet, change the first digit of suffix to "9". Example: 64LA15-970.
6. Consult the factory for set pressures beyond those listed above.
7. Bonnet is carbon steel through 538 °C.

Selection Table – Series 6400 continued

| Metric System Units | | | | | | | | | | | | | | | |
|---------------------|-------------------------|------------------------------|----------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|--------|-------------------------|-------------------------------|-------------------------------------|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, barg | | | | | | | | Material | |
| Letter | Area mm ² | | Inlet RF | Outlet RF | | 149 °C | 204 °C | 260 °C | 316 °C | 371 °C | 427 °C | 482 °C | 538 °C | Body & Bonnet ⁷ | Spring |
| K | 1317 | 2 1/2 x 4 | 300# | 150# | 64KA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 64KA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | |
| | | | 900# | | 64KA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | |
| | | | 1500# | | 64KA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | |
| | 2 1/2 x 4 | 300# | 64KA32-170 | – | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | | |
| | | 600# | 64KA33-170 | – | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | 900# | 64KA34-170 | – | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | 1500# | 64KA35-170 | – | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| L | 2045 | 3 x 6 | 300# | 150# | 64LA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 64LA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | |
| | | | 900# | | 64LA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | |
| | | | 1500# | | 64LA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | |
| | 3 x 6 | 300# | 64LA32-170 | – | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | | |
| | | 600# | 64LA33-170 | – | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | 900# | 64LA34-170 | – | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | 1500# | 64LA35-170 | – | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| M | 2581 | 3 x 6 | 300# | 150# | 64MA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 64MA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | |
| | | | 900# | | 64MA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | |
| | | | 1500# | | 64MA15-170 | 103 | 103 | 103 | 103 | 103 | 103 | – | – | | |
| | 3 x 6 | 300# | 64MA32-170 | – | – | – | – | – | – | 20.7 | 20.7 | 14.9 | Chrome Moly Steel | | |
| | | 600# | 64MA33-170 | – | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | |
| | | 900# | 64MA34-170 | – | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | |
| | | 1500# | 64MA35-170 | – | – | – | – | – | – | 103 | 103 | 74.5 | | | |
| N | 3111 | 4 x 6 | 300# | 150# | 64NA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 64NA13-170 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | |
| | | | 900# | | 64NA14-170 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | |
| | | | 300# | | 64NA32-170 | – | – | – | – | – | – | 20.7 | 20.7 | | |
| | 600# | 64NA33-170 | – | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | | |
| | 900# | 64NA34-170 | – | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | | |
| | 1500# | 64NA35-170 | – | – | – | – | – | – | 103 | 103 | 74.5 | | | | |
| | P | 4572 | 4 x 6 | 300# | 150# | 64PA12-170 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | – | – | Carbon Steel |
| 600# | | | | 64PA13-170 | | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | – | – | | |
| 900# | | | | 64PA14-170 | | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | – | – | | |
| 300# | | | | 64PA32-170 | | – | – | – | – | – | – | 20.7 | 20.7 | 14.9 | |
| 600# | | 64PA33-170 | – | – | – | – | – | – | 41.3 | 41.3 | 29.8 | | | | |
| 900# | | 64PA34-170 | – | – | – | – | – | – | 62.0 | 62.0 | 44.7 | | | | |
| 1500# | | 64PA35-170 | – | – | – | – | – | – | 103 | 103 | 74.5 | | | | |



Selection Table – Series 6600

| US Customary System Units | | | | | | | | | | | | | | |
|---------------------------|-----------------|------------------------------|-------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|---------------------------------------|-------------------------------------|-------------------------------------|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, psig | | | | | | Max. Back Press. psig at 100 °F | Material | |
| Letter | Area sq. in. | | Inlet RF | Outlet RF | | 300 °F | 400 °F | 500 °F | 600 °F | 700 °F | 800 °F | | Body & Bonnet | Spring |
| D | 0.150 | 1 x 2 | 300# | 150# | 66DA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66DA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66DA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66DA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| E | 0.225 | 1 x 2 | 300# | 150# | 66EA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66EA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66EA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66EA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| F | 0.371 | 1 1/2 x 2 | 300# | 150# | 66FA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66FA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66FA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66FA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| G | 0.559 | 1 1/2 x 3 | 300# | 150# | 66GA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66GA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66GA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66GA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| H | 0.873 | 1 1/2 x 3 | 300# | 150# | 66HA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66HA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66HA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66HA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| J | 1.430 | 2 x 3 | 300# | 150# | 66JA12-140 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | | 600# | | 66JA13-140 | 600 | 600 | 600 | 600 | 600 | | | | 600 |
| | | 2 1/2 x 4 | 900# | 150# | 66JA14-140 | 900 | 900 | 900 | 900 | 900 | | | | 900 |
| | | | 1500# | | 66JA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | | | | 1500 |
| K | 2.042 | 2 1/2 x 4 | 300# | 150# | 66KA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66KA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66KA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66KA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| L | 3.170 | 3 x 6 | 300# | 150# | 66LA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66LA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66LA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66LA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| M | 4.000 | 3 x 6 | 300# | 150# | 66MA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66MA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66MA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | 1500# | | 66MA15-140 | 1500 | 1500 | 1500 | 1500 | 1500 | 1500 | | | |
| | | | | | | | | | | | | | | |
| N | 4.822 | 4 x 6 | 300# | 150# | 66NA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66NA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66NA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| P | 7.087 | 4 x 6 | 300# | 150# | 66PA12-140 | 300 | 300 | 300 | 300 | 300 | 300 | 285 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66PA13-140 | 600 | 600 | 600 | 600 | 600 | 600 | | | |
| | | | 900# | | 66PA14-140 | 900 | 900 | 900 | 900 | 900 | 900 | | | |
| | | | | | | | | | | | | | | |

General Notes:

1. The 6600 Series comes standard with enclosed spring and packed lifting lever.
2. For organic fluid vaporizer service, add "D" to the type number and specify a plain screwed cap. Example: 66NA12D-120.
3. On certain sizes, 150#RF inlet flanges are available. Consult the Factory.
4. For optional ring joint inlet, change the first digit of suffix to "9". Example: 66EA15-920.
5. Consult the factory for set pressures beyond those listed above.

Selection Table – Series 6600

| Metric System Units | | | | | | | | | | | | | | |
|---------------------|-------------------------|------------------------------|-------------------|--------------|-------------|----------------------------|--------|--------|--------|--------|--------|-----------------------------------|-------------------------------------|-------------------------------------|
| Orifice | | Valve Size Inlet x Outlet | ANSI Flange Class | | Type Number | Maximum Set Pressure, barg | | | | | | Max. Back Press. barg at 38 °C | Material | |
| Letter | Area mm ² | | Inlet RF | Outlet RF | | 149 °C | 204 °C | 260 °C | 316 °C | 371 °C | 427 °C | | Body & Bonnet | Spring |
| D | 97 | 1 x 2 | 300# | 150# | 66DA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66DA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66DA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66DA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| E | 145 | 1 x 2 | 300# | 150# | 66EA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66EA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66EA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66EA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| F | 239 | 1 1/2 x 2 | 300# | 150# | 66FA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66FA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66FA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66FA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| G | 361 | 1 1/2 x 3 | 300# | 150# | 66GA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66GA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66GA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66GA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| H | 563 | 1 1/2 x 3 | 300# | 150# | 66HA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66HA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66HA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66HA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| J | 923 | 2 x 3 | 150# | 66JA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed | |
| | | 600# | | 66JA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | | |
| | | 2 1/2 x 4 | 150# | 66JA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | | |
| | | 1500# | | 66JA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | | |
| K | 1317 | 2 1/2 x 4 | 300# | 150# | 66KA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66KA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66KA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66KA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| L | 2045 | 3 x 6 | 300# | 150# | 66LA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66LA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66LA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66LA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| M | 2581 | 3 x 6 | 300# | 150# | 66MA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66MA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66MA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| | | | 1500# | | 66MA15-140 | 103 | 103 | 103 | 103 | 103 | 103 | | | |
| N | 3111 | 4 x 6 | 300# | 150# | 66NA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66NA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66NA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |
| P | 4572 | 4 x 6 | 300# | 150# | 66PA12-140 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 20.7 | 19.6 | Carbon Steel | Chrome Alloy, Rust Proofed |
| | | | 600# | | 66PA13-140 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | 41.3 | | | |
| | | | 900# | | 66PA14-140 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | 62.0 | | | |

General Notes:

1. The 6600 Series comes standard with enclosed spring and packed lifting lever.
2. For organic fluid vaporizer service, add "D" to the type number and specify a plain screwed cap. Example: 66NA12D-120.
3. On certain sizes, 150#RF inlet flanges are available. Consult the factory.
4. For optional ring joint inlet, change the first digit of suffix to "9". Example: 66EA15-920.
5. Consult the factory for set pressures beyond those listed above.



Steam Capacities – 6400 & 6600 Series: 3% Overpressure

US Customary System Units

| ASME Pressure Vessel Code Section I, (V) Stamp: Capacities in Pounds per Hour at Saturation Temperature | | | | | | | | | | | |
|---|--|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| Set Pressure (psig) | Orifice Letter Designations & Areas, Square Inches | | | | | | | | | | |
| | D | E | F | G | H | J | K | L | M | N | P |
| | 0.150 | 0.225 | 0.371 | 0.559 | 0.873 | 1.430 | 2.042 | 3.170 | 4.000 | 4.822 | 7.087 |
| 15 | 210 | 315 | 519 | 783 | 1222 | 2003 | 2860 | 4440 | 5602 | 6754 | 9926 |
| 20 | 243 | 364 | 601 | 906 | 1415 | 2318 | 3311 | 5140 | 6486 | 7819 | 11492 |
| 40 | 375 | 563 | 929 | 1400 | 2187 | 3582 | 5116 | 7942 | 10021 | 12081 | 17755 |
| 60 | 508 | 762 | 1257 | 1894 | 2958 | 4846 | 6920 | 10743 | 13556 | 16342 | 24018 |
| 80 | 643 | 965 | 1591 | 2398 | 3745 | 6135 | 8761 | 13601 | 17162 | 20689 | 30407 |
| 100 | 780 | 1170 | 1929 | 2907 | 4540 | 7437 | 10620 | 16486 | 20803 | 25078 | 36858 |
| 120 | 916 | 1374 | 2267 | 3416 | 5334 | 8738 | 12478 | 19372 | 24444 | 29467 | 43309 |
| 140 | 1053 | 1579 | 2604 | 3924 | 6129 | 10040 | 14337 | 22257 | 28085 | 33856 | 49760 |
| 160 | 1189 | 1784 | 2942 | 4433 | 6924 | 11342 | 16196 | 25143 | 31726 | 38246 | 56211 |
| 180 | 1326 | 1989 | 3280 | 4942 | 7718 | 12643 | 18054 | 28028 | 35367 | 42635 | 62661 |
| 200 | 1462 | 2194 | 3618 | 5451 | 8513 | 13945 | 19913 | 30914 | 39008 | 47024 | 69112 |
| 220 | 1599 | 2399 | 3955 | 5960 | 9308 | 15247 | 21772 | 33799 | 42649 | 51413 | 75563 |
| 240 | 1735 | 2603 | 4293 | 6469 | 10102 | 16548 | 23631 | 36685 | 46290 | 55802 | 82014 |
| 260 | 1872 | 2808 | 4631 | 6977 | 10897 | 17850 | 25489 | 39570 | 49931 | 60192 | 88465 |
| 280 | 2008 | 3013 | 4968 | 7486 | 11692 | 19152 | 27348 | 42456 | 53572 | 64581 | 94916 |
| 300 | 2145 | 3218 | 5306 | 7995 | 12486 | 20453 | 29207 | 45341 | 57213 | 68970 | 101367 |
| 320 | 2282 | 3423 | 5644 | 8504 | 13281 | 21755 | 31066 | 48227 | 60854 | 73359 | 107818 |
| 340 | 2418 | 3627 | 5981 | 9013 | 14076 | 23057 | 32924 | 51112 | 64495 | 77749 | 114269 |
| 360 | 2555 | 3832 | 6319 | 9522 | 14870 | 24358 | 34783 | 53998 | 68136 | 82138 | 120720 |
| 380 | 2691 | 4037 | 6657 | 10030 | 15665 | 25660 | 36642 | 56883 | 71777 | 86527 | 127171 |
| 400 | 2828 | 4242 | 6995 | 10539 | 16460 | 26962 | 38501 | 59769 | 75418 | 90916 | 133622 |
| 420 | 2964 | 4447 | 7332 | 11048 | 17254 | 28263 | 40359 | 62654 | 79059 | 95306 | 140073 |
| 440 | 3101 | 4651 | 7670 | 11557 | 18049 | 29565 | 42218 | 65540 | 82700 | 99695 | 146524 |
| 460 | 3237 | 4856 | 8008 | 12066 | 18844 | 30867 | 44077 | 68425 | 86341 | 104084 | 152975 |
| 480 | 3374 | 5061 | 8345 | 12575 | 19638 | 32168 | 45936 | 71311 | 89982 | 108473 | 159426 |
| 500 | 3510 | 5266 | 8683 | 13083 | 20433 | 33470 | 47794 | 74196 | 93623 | 112863 | 165877 |
| 520 | 3647 | 5471 | 9021 | 13592 | 21227 | 34772 | 49653 | 77082 | 97264 | 117252 | 172328 |
| 540 | 3783 | 5675 | 9358 | 14101 | 22022 | 36073 | 51512 | 79967 | 100905 | 121641 | 178779 |
| 560 | 3920 | 5880 | 9696 | 14610 | 22817 | 37375 | 53370 | 82853 | 104546 | 126030 | 185230 |
| 580 | 4057 | 6085 | 10034 | 15119 | 23611 | 38677 | 55229 | 85738 | 108187 | 130419 | 191681 |
| 600 | 4193 | 6290 | 10372 | 15628 | 24406 | 39978 | 57088 | 88624 | 111828 | 134809 | 198132 |
| 620 | 4330 | 6495 | 10709 | 16136 | 25201 | 41280 | 58947 | 91509 | 115469 | 139198 | 204583 |
| 640 | 4466 | 6699 | 11047 | 16645 | 25995 | 42581 | 60805 | 94395 | 119110 | 143587 | 211033 |
| 660 | 4603 | 6904 | 11385 | 17154 | 26790 | 43883 | 62664 | 97280 | 122751 | 147976 | 217484 |
| 680 | 4739 | 7109 | 11722 | 17663 | 27585 | 45185 | 64523 | 100166 | 126392 | 152366 | 223935 |
| 700 | 4876 | 7314 | 12060 | 18172 | 28379 | 46486 | 66382 | 103051 | 130033 | 156755 | 230386 |
| 720 | 5012 | 7519 | 12398 | 18681 | 29174 | 47788 | 68240 | 105937 | 133674 | 161144 | 236837 |
| 740 | 5149 | 7723 | 12736 | 19189 | 29969 | 49090 | 70099 | 108822 | 137315 | 165533 | 243288 |
| 760 | 5285 | 7928 | 13073 | 19698 | 30763 | 50391 | 71958 | 111708 | 140956 | 169923 | 249739 |
| 780 | 5422 | 8133 | 13411 | 20207 | 31558 | 51693 | 73817 | 114593 | 144597 | 174312 | 256190 |
| 800 | 5558 | 8338 | 13749 | 20716 | 32353 | 52995 | 75675 | 117479 | 148238 | 178701 | 262641 |
| 820 | 5695 | 8543 | 14086 | 21225 | 33147 | 54296 | 77534 | 120364 | 151879 | 183090 | 269092 |
| 840 | 5832 | 8748 | 14424 | 21733 | 33942 | 55598 | 79393 | 123250 | 155520 | 187480 | 275543 |
| 860 | 5968 | 8952 | 14762 | 22242 | 34737 | 56900 | 81251 | 126135 | 159161 | 191869 | 281994 |
| 880 | 6105 | 9157 | 15099 | 22751 | 35531 | 58201 | 83110 | 129021 | 162802 | 196258 | 288445 |
| 900 | 6241 | 9362 | 15437 | 23260 | 36326 | 59503 | 84969 | 131906 | 166443 | 200647 | 294896 |
| 920 | 6378 | 9567 | 15775 | 23769 | 37120 | 60805 | 86828 | 134792 | 170084 | - | - |
| 940 | 6514 | 9772 | 16113 | 24278 | 37915 | 62106 | 88686 | 137677 | 173725 | - | - |
| 960 | 6651 | 9976 | 16450 | 24786 | 38710 | 63408 | 90545 | 140563 | 177366 | - | - |
| 980 | 6787 | 10181 | 16788 | 25295 | 39504 | 64710 | 92404 | 143448 | 181007 | - | - |
| 1000 | 6924 | 10386 | 17126 | 25804 | 40299 | 66011 | 94263 | 146334 | 184648 | - | - |
| 1100 | 7607 | 11410 | 18814 | 28348 | 44272 | 72520 | 103556 | 160761 | 202853 | - | - |
| 1200 | 8289 | 12434 | 20503 | 30892 | 48246 | 79028 | 112850 | 175189 | 221058 | - | - |
| 1300 | 8972 | 13458 | 22191 | 33437 | 52219 | 85536 | 122144 | 189616 | 239263 | - | - |
| 1400 | 9655 | 14482 | 23880 | 35981 | 56192 | 92045 | 131437 | 204044 | 257468 | - | - |
| 1500 | 10337 | 15506 | 25568 | 38525 | 60165 | 98553 | 140731 | 218471 | 275673 | - | - |

Steam Capacities – 6400 & 6600 Series: 10% Overpressure

US Customary System Units

| ASME Pressure Vessel Code Section VIII, (UV) Stamp: Capacities in pounds per Hour at Saturation Temperature | | | | | | | | | | | |
|---|--|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| Set Pressure (psig) | Orifice Letter Designations & Areas, Square Inches | | | | | | | | | | |
| | D | E | F | G | H | J | K | L | M | N | P |
| | 0.150 | 0.225 | 0.371 | 0.559 | 0.873 | 1.430 | 2.042 | 3.170 | 4.000 | 4.822 | 7.087 |
| 15 | 216 | 325 | 536 | 807 | 1261 | 2066 | 2950 | 4580 | 5779 | 6967 | 10240 |
| 20 | 249 | 374 | 618 | 931 | 1454 | 2382 | 3401 | 5280 | 6663 | 8032 | 11805 |
| 40 | 389 | 583 | 962 | 1449 | 2264 | 3709 | 5296 | 8222 | 10375 | 12507 | 18382 |
| 60 | 534 | 802 | 1322 | 1993 | 3113 | 5099 | 7281 | 11303 | 14263 | 17194 | 25271 |
| 80 | 680 | 1021 | 1683 | 2536 | 3961 | 6489 | 9266 | 14385 | 18152 | 21882 | 32160 |
| 100 | 826 | 1239 | 2044 | 3080 | 4810 | 7879 | 11251 | 17467 | 22040 | 26569 | 39050 |
| 120 | 972 | 1458 | 2404 | 3623 | 5658 | 9269 | 13236 | 20548 | 25928 | 31257 | 45939 |
| 140 | 1118 | 1677 | 2765 | 4166 | 6507 | 10659 | 15221 | 23630 | 29817 | 35944 | 52828 |
| 160 | 1263 | 1895 | 3126 | 4710 | 7356 | 12049 | 17206 | 26711 | 33705 | 40632 | 59718 |
| 180 | 1409 | 2114 | 3486 | 5253 | 8204 | 13439 | 19191 | 29793 | 37594 | 45319 | 66607 |
| 200 | 1555 | 2333 | 3847 | 5797 | 9053 | 14830 | 21176 | 32875 | 41482 | 50007 | 73497 |
| 220 | 1701 | 2552 | 4208 | 6340 | 9902 | 16220 | 23162 | 35956 | 45371 | 54694 | 80386 |
| 240 | 1847 | 2770 | 4568 | 6884 | 10750 | 17610 | 25147 | 39038 | 49259 | 59382 | 87275 |
| 260 | 1993 | 2989 | 4929 | 7427 | 11599 | 19000 | 27132 | 42119 | 53148 | 64070 | 94165 |
| 280 | 2138 | 3208 | 5290 | 7970 | 12448 | 20390 | 29117 | 45201 | 57036 | 68757 | 101054 |
| 300 | 2284 | 3427 | 5650 | 8514 | 13296 | 21780 | 31102 | 48283 | 60925 | 73445 | 107943 |
| 320 | 2430 | 3645 | 6011 | 9057 | 14145 | 23170 | 33087 | 51364 | 64813 | 78132 | 114833 |
| 340 | 2576 | 3864 | 6372 | 9601 | 14994 | 24560 | 35072 | 54446 | 68701 | 82820 | 121722 |
| 360 | 2722 | 4083 | 6732 | 10144 | 15842 | 25951 | 37057 | 57527 | 72590 | 87507 | 128612 |
| 380 | 2867 | 4301 | 7093 | 10687 | 16691 | 27341 | 39042 | 60609 | 76478 | 92195 | 135501 |
| 400 | 3013 | 4520 | 7454 | 11231 | 17540 | 28731 | 41027 | 63691 | 80367 | 96882 | 142390 |
| 420 | 3159 | 4739 | 7814 | 11774 | 18388 | 30121 | 43012 | 66772 | 84255 | 101570 | 149280 |
| 440 | 3305 | 4958 | 8175 | 12318 | 19237 | 31511 | 44997 | 69854 | 88144 | 106257 | 156169 |
| 460 | 3451 | 5176 | 8536 | 12861 | 20086 | 32901 | 46982 | 72935 | 92032 | 110945 | 163058 |
| 480 | 3597 | 5395 | 8896 | 13404 | 20934 | 34291 | 48967 | 76017 | 95921 | 115632 | 169948 |
| 500 | 3742 | 5614 | 9257 | 13948 | 21783 | 35681 | 50952 | 79099 | 99809 | 120320 | 176837 |
| 520 | 3888 | 5833 | 9617 | 14491 | 22632 | 37072 | 52937 | 82180 | 103698 | 125008 | 183727 |
| 540 | 4034 | 6051 | 9978 | 15035 | 23480 | 38462 | 54922 | 85262 | 107586 | 129695 | 190616 |
| 560 | 4180 | 6270 | 10339 | 15578 | 24329 | 39852 | 56907 | 88343 | 111474 | 134383 | 197505 |
| 580 | 4326 | 6489 | 10699 | 16122 | 25178 | 41242 | 58893 | 91425 | 115363 | 139070 | 204395 |
| 600 | 4471 | 6707 | 11060 | 16665 | 26026 | 42632 | 60878 | 94507 | 119251 | 143758 | 211284 |
| 620 | 4617 | 6926 | 11421 | 17208 | 26875 | 44022 | 62863 | 97588 | 123140 | 148445 | 218173 |
| 640 | 4763 | 7145 | 11781 | 17752 | 27724 | 45412 | 64848 | 100670 | 127028 | 153133 | 225063 |
| 660 | 4909 | 7364 | 12142 | 18295 | 28572 | 46802 | 66833 | 103751 | 130917 | 157820 | 231952 |
| 680 | 5055 | 7582 | 12503 | 18839 | 29421 | 48193 | 68818 | 106833 | 134805 | 162508 | 238841 |
| 700 | 5201 | 7801 | 12863 | 19382 | 30269 | 49583 | 70803 | 109915 | 138694 | 167195 | 245731 |
| 720 | 5346 | 8020 | 13224 | 19925 | 31118 | 50973 | 72788 | 112996 | 142582 | 171883 | 252620 |
| 740 | 5492 | 8238 | 13585 | 20469 | 31967 | 52363 | 74773 | 116078 | 146471 | 176570 | 259510 |
| 760 | 5638 | 8457 | 13945 | 21012 | 32815 | 53753 | 76758 | 119159 | 150359 | 181258 | 266399 |
| 780 | 5784 | 8676 | 14306 | 21556 | 33664 | 55143 | 78743 | 122241 | 154247 | 185945 | 273288 |
| 800 | 5930 | 8895 | 14667 | 22099 | 34513 | 56533 | 80728 | 125323 | 158136 | 190633 | 280178 |
| 820 | 6075 | 9113 | 15027 | 22642 | 35361 | 57923 | 82713 | 128404 | 162024 | 195321 | 287067 |
| 840 | 6221 | 9332 | 15388 | 23186 | 36210 | 59314 | 84698 | 131486 | 165913 | 200008 | 293956 |
| 860 | 6367 | 9551 | 15749 | 23729 | 37059 | 60704 | 86683 | 134567 | 169801 | 204696 | 300846 |
| 880 | 6513 | 9770 | 16109 | 24273 | 37907 | 62094 | 88668 | 137649 | 173690 | 209383 | 307735 |
| 900 | 6659 | 9988 | 16470 | 24816 | 38756 | 63484 | 90653 | 140731 | 177578 | 214071 | 314625 |
| 920 | 6805 | 10207 | 16831 | 25360 | 39605 | 64874 | 92638 | 143812 | 181467 | – | – |
| 940 | 6950 | 10426 | 17191 | 25903 | 40453 | 66264 | 94624 | 146894 | 185355 | – | – |
| 960 | 7096 | 10644 | 17552 | 26446 | 41302 | 67654 | 96609 | 149975 | 189244 | – | – |
| 980 | 7242 | 10863 | 17913 | 26990 | 42151 | 69044 | 98594 | 153057 | 193132 | – | – |
| 1000 | 7388 | 11082 | 18273 | 27533 | 42999 | 70435 | 100579 | 156139 | 197020 | – | – |
| 1100 | 8117 | 12176 | 20076 | 30250 | 47243 | 77385 | 110504 | 171547 | 216463 | – | – |
| 1200 | 8846 | 13269 | 21880 | 32967 | 51486 | 84336 | 120429 | 186955 | 235905 | – | – |
| 1300 | 9575 | 14363 | 23683 | 35684 | 55729 | 91286 | 130355 | 202363 | 255347 | – | – |
| 1400 | 10304 | 15456 | 25486 | 38401 | 59972 | 98237 | 140280 | 217771 | 274790 | – | – |
| 1500 | 11033 | 16550 | 27290 | 41118 | 64216 | 105188 | 150205 | 233179 | 294232 | – | – |

General Notes:

1. The 6400 Series is also Section VIII certified for air & gas service, for Air capacities at 10% overpressure contact factory.



Steam Capacities – 6400 & 6600 Series: 3% Overpressure

Metric System Units

| ASME Pressure Vessel Code Section I, (V) Stamp: Capacities in Kilograms per Hour at Saturation Temperature | | | | | | | | | | | |
|--|---|------|-------|-------|-------|-------|-------|-------|--------|-------|--------|
| Set Pressure (barg) | Orifice Letter Designations & Areas, sq. mm | | | | | | | | | | |
| | D | E | F | G | H | J | K | L | M | N | P |
| | 97 | 145 | 239 | 361 | 563 | 923 | 1317 | 2045 | 2581 | 3111 | 4572 |
| 1 | 93 | 141 | 232 | 349 | 546 | 894 | 1277 | 1982 | 2502 | 3016 | 4432 |
| 2 | 137 | 206 | 340 | 512 | 800 | 1310 | 1871 | 2904 | 3664 | 4417 | 6492 |
| 3 | 181 | 271 | 448 | 675 | 1053 | 1725 | 2464 | 3826 | 4827 | 5819 | 8553 |
| 4 | 225 | 337 | 555 | 837 | 1307 | 2141 | 3058 | 4747 | 5990 | 7221 | 10613 |
| 5 | 269 | 403 | 665 | 1002 | 1564 | 2562 | 3659 | 5680 | 7167 | 8640 | 12698 |
| 6 | 313 | 470 | 776 | 1169 | 1825 | 2990 | 4270 | 6629 | 8364 | 10084 | 14820 |
| 7 | 358 | 538 | 887 | 1336 | 2087 | 3418 | 4882 | 7578 | 9562 | 11527 | 16942 |
| 8 | 403 | 605 | 998 | 1504 | 2348 | 3847 | 5493 | 8527 | 10760 | 12971 | 19064 |
| 9 | 448 | 672 | 1109 | 1671 | 2610 | 4275 | 6104 | 9477 | 11958 | 14415 | 21186 |
| 10 | 493 | 740 | 1220 | 1838 | 2871 | 4703 | 6716 | 10426 | 13155 | 15859 | 23308 |
| 11 | 538 | 807 | 1331 | 2006 | 3133 | 5131 | 7327 | 11375 | 14353 | 17303 | 25430 |
| 12 | 583 | 875 | 1442 | 2173 | 3394 | 5559 | 7938 | 12324 | 15551 | 18747 | 27553 |
| 13 | 628 | 942 | 1553 | 2341 | 3655 | 5988 | 8550 | 13273 | 16749 | 20191 | 29675 |
| 14 | 673 | 1009 | 1664 | 2508 | 3916 | 6416 | 9161 | 14222 | 17946 | 21634 | 31796 |
| 15 | 718 | 1077 | 1775 | 2675 | 4178 | 6844 | 9773 | 15172 | 19144 | 23078 | 33918 |
| 16 | 763 | 1144 | 1887 | 2843 | 4439 | 7272 | 10384 | 16121 | 20342 | 24522 | 36041 |
| 17 | 807 | 1212 | 1998 | 3010 | 4701 | 7700 | 10996 | 17070 | 21540 | 25966 | 38163 |
| 18 | 852 | 1279 | 2109 | 3177 | 4962 | 8129 | 11607 | 18019 | 22737 | 27410 | 40285 |
| 19 | 897 | 1346 | 2220 | 3345 | 5224 | 8557 | 12219 | 18968 | 23935 | 28853 | 42407 |
| 20 | 942 | 1413 | 2331 | 3512 | 5485 | 8985 | 12830 | 19918 | 25133 | 30297 | 44529 |
| 21 | 987 | 1481 | 2442 | 3680 | 5746 | 9413 | 13442 | 20867 | 26330 | 31741 | 46651 |
| 22 | 1032 | 1548 | 2553 | 3847 | 6008 | 9841 | 14053 | 21816 | 27528 | 33185 | 48773 |
| 23 | 1077 | 1616 | 2664 | 4014 | 6269 | 10270 | 14664 | 22765 | 28726 | 34629 | 50895 |
| 24 | 1122 | 1683 | 2775 | 4182 | 6530 | 10697 | 15276 | 23714 | 29924 | 36073 | 53017 |
| 25 | 1167 | 1750 | 2886 | 4349 | 6792 | 11125 | 15887 | 24664 | 31121 | 37516 | 55139 |
| 26 | 1212 | 1818 | 2997 | 4516 | 7053 | 11554 | 16499 | 25613 | 32319 | 38961 | 57261 |
| 27 | 1256 | 1885 | 3109 | 4684 | 7315 | 11982 | 17110 | 26562 | 33517 | 40404 | 59383 |
| 28 | 1301 | 1952 | 3220 | 4851 | 7576 | 12410 | 17722 | 27511 | 34714 | 41848 | 61505 |
| 29 | 1346 | 2020 | 3331 | 5019 | 7838 | 12838 | 18333 | 28460 | 35912 | 43292 | 63627 |
| 30 | 1391 | 2087 | 3442 | 5186 | 8099 | 13266 | 18945 | 29409 | 37109 | 44736 | 65749 |
| 31 | 1436 | 2155 | 3553 | 5353 | 8360 | 13695 | 19556 | 30359 | 38307 | 46180 | 67871 |
| 32 | 1481 | 2222 | 3664 | 5521 | 8622 | 14123 | 20167 | 31308 | 39505 | 47623 | 69993 |
| 33 | 1526 | 2289 | 3775 | 5688 | 8883 | 14551 | 20779 | 32257 | 40703 | 49067 | 72116 |
| 34 | 1571 | 2357 | 3886 | 5856 | 9145 | 14979 | 21390 | 33206 | 41900 | 50511 | 74238 |
| 35 | 1616 | 2424 | 3997 | 6023 | 9406 | 15407 | 22001 | 34155 | 43098 | 51955 | 76359 |
| 36 | 1661 | 2492 | 4108 | 6190 | 9668 | 15836 | 22613 | 35105 | 44296 | 53399 | 78481 |
| 37 | 1706 | 2559 | 4219 | 6358 | 9929 | 16264 | 23224 | 36053 | 45494 | 54843 | 80604 |
| 38 | 1751 | 2626 | 4331 | 6525 | 10190 | 16692 | 23836 | 37003 | 46691 | 56286 | 82726 |
| 39 | 1796 | 2693 | 4442 | 6692 | 10451 | 17120 | 24447 | 37952 | 47889 | 57731 | 84848 |
| 40 | 1841 | 2761 | 4553 | 6860 | 10713 | 17548 | 25059 | 38901 | 49087 | 59174 | 86970 |
| 41 | 1886 | 2828 | 4663 | 7027 | 10974 | 17977 | 25670 | 39851 | 50285 | 60618 | 89092 |
| 42 | 1931 | 2896 | 4775 | 7195 | 11236 | 18405 | 26282 | 40800 | 51482 | 62062 | 91214 |
| 43 | 1975 | 2963 | 4886 | 7362 | 11497 | 18833 | 26893 | 41749 | 52680 | 63506 | 93336 |
| 44 | 2020 | 3031 | 4997 | 7529 | 11759 | 19261 | 27504 | 42698 | 53878 | 64950 | 95458 |
| 45 | 2065 | 3098 | 5108 | 7697 | 12020 | 19689 | 28116 | 43647 | 55075 | 66393 | 97580 |
| 46 | 2110 | 3165 | 5219 | 7864 | 12281 | 20118 | 28727 | 44597 | 56273 | 67837 | 99702 |
| 47 | 2155 | 3232 | 5330 | 8031 | 12543 | 20546 | 29339 | 45546 | 57471 | 69281 | 101824 |
| 48 | 2200 | 3300 | 5441 | 8199 | 12804 | 20974 | 29950 | 46495 | 58669 | 70725 | 103946 |
| 49 | 2245 | 3367 | 5553 | 8366 | 13065 | 21402 | 30562 | 47444 | 59866 | 72169 | 106068 |
| 50 | 2290 | 3435 | 5664 | 8534 | 13327 | 21830 | 31173 | 48393 | 61064 | 73612 | 108190 |
| 52 | 2380 | 3569 | 5885 | 8868 | 13850 | 22686 | 32396 | 50292 | 63460 | 76500 | 112434 |
| 54 | 2469 | 3704 | 6108 | 9203 | 14373 | 23543 | 33619 | 52190 | 65855 | 79388 | 116679 |
| 56 | 2559 | 3839 | 6330 | 9538 | 14895 | 24399 | 34841 | 54088 | 68250 | 82276 | 120923 |
| 58 | 2649 | 3974 | 6552 | 9873 | 15418 | 25256 | 36064 | 55986 | 70645 | 85163 | 125166 |
| 60 | 2739 | 4108 | 6775 | 10207 | 15941 | 26112 | 37287 | 57885 | 73041 | 88051 | 129411 |
| 62 | 2829 | 4243 | 6996 | 10542 | 16464 | 26968 | 38510 | 59784 | 75436 | 90939 | 133655 |
| 64 | 2918 | 4378 | 7219 | 10877 | 16986 | 27825 | 39733 | 61682 | 77832 | - | - |
| 66 | 3008 | 4512 | 7441 | 11212 | 17509 | 28681 | 40956 | 63580 | 80227 | - | - |
| 68 | 3098 | 4647 | 7663 | 11546 | 18032 | 29538 | 42179 | 65479 | 82623 | - | - |
| 70 | 3188 | 4782 | 7885 | 11881 | 18555 | 30394 | 43402 | 67377 | 85018 | - | - |
| 72 | 3278 | 4917 | 8107 | 12216 | 19078 | 31250 | 44625 | 69275 | 87414 | - | - |
| 74 | 3368 | 5052 | 8329 | 12551 | 19601 | 32107 | 45848 | 71173 | 89809 | - | - |
| 76 | 3457 | 5186 | 8552 | 12885 | 20124 | 32963 | 47070 | 73072 | 92205 | - | - |
| 78 | 3547 | 5321 | 8774 | 13220 | 20646 | 33820 | 48293 | 74971 | 94600 | - | - |
| 80 | 3637 | 5456 | 8996 | 13555 | 21169 | 34675 | 49516 | 76869 | 96995 | - | - |
| 85 | 3861 | 5792 | 9551 | 14392 | 22476 | 36816 | 52573 | 81615 | 102984 | - | - |
| 90 | 4086 | 6129 | 10107 | 15229 | 23783 | 38957 | 55630 | 86360 | 108972 | - | - |
| 95 | 4311 | 6467 | 10662 | 16066 | 25090 | 41098 | 58688 | 91106 | 114961 | - | - |
| 100 | 4536 | 6803 | 11218 | 16902 | 26397 | 43239 | 61744 | 95852 | 120950 | - | - |
| 103 | 4670 | 7005 | 11551 | 17405 | 27181 | 44524 | 63579 | 98700 | 124543 | - | - |

Steam Capacities – 6400 & 6600 Series: 10% Overpressure

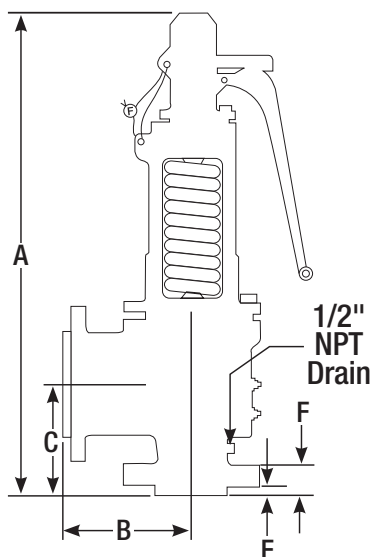
Metric System Units

| ASME Pressure Vessel Code Section VIII, (UV) Stamp: Capacities in Kilograms per Hour at Saturation Temperature | | | | | | | | | | | |
|--|---|------|-------|-------|-------|-------|-------|--------|--------|-------|--------|
| Set Pressure (barg) | Orifice Letter Designations & Areas, sq. mm | | | | | | | | | | |
| | D | E | F | G | H | J | K | L | M | N | P |
| | 97 | 145 | 239 | 361 | 563 | 923 | 1317 | 2045 | 2581 | 3111 | 4572 |
| 1 | 97 | 145 | 239 | 361 | 563 | 923 | 1318 | 2046 | 2581 | 3112 | 4574 |
| 2 | 140 | 210 | 347 | 523 | 817 | 1339 | 1911 | 2967 | 3744 | 4514 | 6634 |
| 3 | 188 | 282 | 465 | 701 | 1095 | 1793 | 2561 | 3975 | 5015 | 6046 | 8886 |
| 4 | 236 | 354 | 584 | 880 | 1374 | 2250 | 3213 | 4989 | 6295 | 7588 | 11153 |
| 5 | 284 | 426 | 702 | 1058 | 1653 | 2708 | 3866 | 6002 | 7574 | 9131 | 13419 |
| 6 | 332 | 498 | 821 | 1237 | 1932 | 3165 | 4519 | 7016 | 8853 | 10672 | 15685 |
| 7 | 380 | 570 | 939 | 1416 | 2211 | 3622 | 5172 | 8030 | 10132 | 12214 | 17952 |
| 8 | 428 | 642 | 1058 | 1594 | 2490 | 4079 | 5825 | 9043 | 11411 | 13756 | 20218 |
| 9 | 476 | 714 | 1177 | 1773 | 2770 | 4536 | 6478 | 10057 | 12690 | 15298 | 22484 |
| 10 | 523 | 786 | 1295 | 1952 | 3049 | 4994 | 7131 | 11071 | 13970 | 16840 | 24751 |
| 11 | 572 | 857 | 1414 | 2131 | 3328 | 5451 | 7784 | 12084 | 15249 | 18382 | 27017 |
| 12 | 620 | 929 | 1533 | 2310 | 3607 | 5909 | 8437 | 13098 | 16528 | 19924 | 29283 |
| 13 | 668 | 1002 | 1652 | 2488 | 3886 | 6366 | 9090 | 14112 | 17807 | 21466 | 31549 |
| 14 | 715 | 1073 | 1770 | 2667 | 4165 | 6823 | 9743 | 15125 | 19086 | 23008 | 33815 |
| 15 | 763 | 1145 | 1889 | 2846 | 4444 | 7280 | 10396 | 16139 | 20365 | 24550 | 36082 |
| 16 | 811 | 1217 | 2007 | 3025 | 4724 | 7738 | 11049 | 17153 | 21644 | 26092 | 38348 |
| 17 | 860 | 1289 | 2126 | 3203 | 5003 | 8195 | 11702 | 18167 | 22923 | 27634 | 40614 |
| 18 | 907 | 1361 | 2244 | 3382 | 5282 | 8652 | 12355 | 19180 | 24202 | 29176 | 42881 |
| 19 | 955 | 1433 | 2363 | 3561 | 5561 | 9110 | 13008 | 20194 | 25481 | 30718 | 45147 |
| 20 | 1003 | 1505 | 2482 | 3739 | 5840 | 9567 | 13661 | 21208 | 26761 | 32260 | 47413 |
| 21 | 1051 | 1577 | 2600 | 3918 | 6120 | 10024 | 14314 | 22221 | 28040 | 33802 | 49679 |
| 22 | 1099 | 1649 | 2719 | 4097 | 6398 | 10481 | 14967 | 23235 | 29319 | 35344 | 51946 |
| 23 | 1147 | 1721 | 2838 | 4276 | 6678 | 10939 | 15620 | 24249 | 30598 | 36886 | 54212 |
| 24 | 1195 | 1793 | 2957 | 4455 | 6957 | 11396 | 16273 | 25262 | 31877 | 38428 | 56478 |
| 25 | 1243 | 1865 | 3075 | 4634 | 7236 | 11853 | 16926 | 26276 | 33156 | 39970 | 58744 |
| 26 | 1291 | 1937 | 3194 | 4812 | 7515 | 12310 | 17579 | 27290 | 34435 | 41512 | 61011 |
| 27 | 1339 | 2009 | 3312 | 4991 | 7795 | 12768 | 18232 | 28304 | 35714 | 43053 | 63277 |
| 28 | 1387 | 2081 | 3431 | 5170 | 8074 | 13225 | 18885 | 29317 | 36993 | 44596 | 65543 |
| 29 | 1435 | 2153 | 3549 | 5348 | 8353 | 13682 | 19538 | 30331 | 38273 | 46137 | 67810 |
| 30 | 1483 | 2224 | 3668 | 5527 | 8632 | 14140 | 20191 | 31345 | 39552 | 47680 | 70076 |
| 31 | 1531 | 2297 | 3787 | 5706 | 8911 | 14597 | 20844 | 32358 | 40831 | 49221 | 72342 |
| 32 | 1579 | 2368 | 3905 | 5885 | 9190 | 15054 | 21497 | 33372 | 42110 | 50763 | 74608 |
| 33 | 1627 | 2440 | 4024 | 6063 | 9469 | 15511 | 22150 | 34386 | 43389 | 52306 | 76875 |
| 34 | 1675 | 2512 | 4143 | 6242 | 9749 | 15969 | 22803 | 35399 | 44668 | 53847 | 79141 |
| 35 | 1723 | 2584 | 4262 | 6421 | 10028 | 16426 | 23456 | 36413 | 45947 | 55390 | 81407 |
| 36 | 1771 | 2656 | 4380 | 6600 | 10307 | 16883 | 24109 | 37427 | 47226 | 56931 | 83673 |
| 37 | 1819 | 2728 | 4499 | 6779 | 10586 | 17341 | 24762 | 38440 | 48505 | 58473 | 85940 |
| 38 | 1867 | 2800 | 4617 | 6957 | 10865 | 17798 | 25415 | 39454 | 49784 | 60015 | 88206 |
| 39 | 1915 | 2872 | 4736 | 7136 | 11144 | 18255 | 26068 | 40468 | 51064 | 61557 | 90472 |
| 40 | 1963 | 2944 | 4854 | 7315 | 11423 | 18712 | 26721 | 41482 | 52343 | 63099 | 92739 |
| 41 | 2011 | 3016 | 4973 | 7493 | 11703 | 19170 | 27374 | 42495 | 53622 | 64641 | 95005 |
| 42 | 2058 | 3088 | 5092 | 7672 | 11982 | 19627 | 28027 | 43509 | 54901 | 66183 | 97271 |
| 43 | 2107 | 3160 | 5211 | 7851 | 12261 | 20084 | 28680 | 44523 | 56180 | 67725 | 99537 |
| 44 | 2155 | 3232 | 5329 | 8030 | 12540 | 20542 | 29333 | 45536 | 57459 | 69267 | 101803 |
| 45 | 2203 | 3304 | 5448 | 8208 | 12820 | 20999 | 29986 | 46550 | 58738 | 70809 | 104070 |
| 46 | 2250 | 3376 | 5567 | 8387 | 13099 | 21456 | 30639 | 47564 | 60017 | 72351 | 106336 |
| 47 | 2298 | 3448 | 5685 | 8566 | 13378 | 21913 | 31292 | 48577 | 61296 | 73893 | 108602 |
| 48 | 2346 | 3519 | 5804 | 8745 | 13657 | 22371 | 31945 | 49591 | 62575 | 75435 | 110868 |
| 49 | 2395 | 3592 | 5922 | 8924 | 13936 | 22828 | 32598 | 50605 | 63855 | 76977 | 113135 |
| 50 | 2442 | 3664 | 6041 | 9102 | 14215 | 23285 | 33251 | 51618 | 65134 | 78519 | 115401 |
| 52 | 2538 | 3808 | 6278 | 9460 | 14774 | 24200 | 34557 | 53646 | 67692 | 81603 | 119934 |
| 54 | 2634 | 3951 | 6516 | 9817 | 15332 | 25114 | 35863 | 55674 | 70250 | 84687 | 124466 |
| 56 | 2730 | 4095 | 6753 | 10175 | 15890 | 26029 | 37168 | 57701 | 72809 | 87771 | 128999 |
| 58 | 2826 | 4239 | 6990 | 10532 | 16448 | 26943 | 38475 | 59728 | 75367 | 90855 | 133531 |
| 60 | 2922 | 4383 | 7227 | 10890 | 17007 | 27858 | 39781 | 61755 | 77925 | 93939 | 138064 |
| 62 | 3018 | 4527 | 7464 | 11247 | 17565 | 28773 | 41087 | 63783 | 80483 | 97022 | 142596 |
| 64 | 3114 | 4671 | 7702 | 11605 | 18124 | 29687 | 42393 | 65810 | 83041 | - | - |
| 66 | 3210 | 4815 | 7939 | 11962 | 18682 | 30602 | 43698 | 67838 | 85600 | - | - |
| 68 | 3306 | 4959 | 8177 | 12320 | 19240 | 31516 | 45004 | 69865 | 88158 | - | - |
| 70 | 3402 | 5103 | 8414 | 12677 | 19799 | 32431 | 46310 | 71892 | 90716 | - | - |
| 72 | 3498 | 5246 | 8651 | 13035 | 20357 | 33345 | 47616 | 73920 | 93274 | - | - |
| 74 | 3593 | 5391 | 8888 | 13393 | 20915 | 34260 | 48923 | 75947 | 95833 | - | - |
| 76 | 3690 | 5534 | 9126 | 13750 | 21473 | 35174 | 50228 | 77975 | 98391 | - | - |
| 78 | 3785 | 5678 | 9363 | 14107 | 22032 | 36089 | 51534 | 80002 | 100949 | - | - |
| 80 | 3881 | 5822 | 9600 | 14465 | 22590 | 37004 | 52840 | 82029 | 103507 | - | - |
| 85 | 4121 | 6182 | 10193 | 15359 | 23986 | 39290 | 56105 | 87098 | 109903 | - | - |
| 90 | 4361 | 6541 | 10787 | 16252 | 25382 | 41577 | 59370 | 92167 | 116298 | - | - |
| 95 | 4601 | 6902 | 11379 | 17146 | 26778 | 43863 | 62635 | 97235 | 122694 | - | - |
| 100 | 4841 | 7261 | 11973 | 18040 | 28174 | 46149 | 65900 | 102303 | 129090 | - | - |
| 103 | 4985 | 7477 | 12329 | 18576 | 29011 | 47521 | 67859 | 105345 | 132927 | - | - |

General Notes:

1. The 6400 Series is also Section VIII certified for air & gas service, for Air capacities at 10% overpressure contact factory.

Dimensions & Weights



| Valve Size Inlet x Outlet | Type Number | ANSI Flange Class | | US Standard Dimensions (inches) | | | | | Approx. Weight Lbs. | Metric Dimensions (millimeters) | | | | | Approx. Weight kg. |
|---------------------------------|-------------|----------------------|--------------|---------------------------------|-------|---------|-------|---------|---------------------------|---------------------------------|-----|-----|----|----|--------------------------|
| | | Inlet RF | Outlet RF | A | B | C | E | F | | A | B | C | E | F | |
| 1 x 2 | 64DA12-170 | 300# | 150# | 18 7/8 | 4 1/2 | 4 1/8 | 1/2 | 1 1/4 | 42 | 480 | 115 | 105 | 13 | 32 | 20 |
| | 64DA13-170 | 600# | | | 4 1/2 | 4 1/8 | 1/2 | 1 1/4 | 42 | | 115 | 105 | 13 | 32 | 20 |
| | 64DA14-170 | 900# | | | 4 1/2 | 4 1/8 | 1/2 | 1 11/16 | 48 | | 115 | 105 | 13 | 43 | 22 |
| | 64DA15-170 | 1500# | | | 4 1/2 | 4 1/8 | 1/2 | 1 11/16 | 48 | | 115 | 105 | 13 | 43 | 22 |
| 1 x 2 | 64EA12-170 | 300# | 150# | 18 7/8 | 4 1/2 | 4 1/8 | 1/2 | 1 1/4 | 42 | 480 | 115 | 105 | 13 | 32 | 20 |
| | 64EA13-170 | 600# | | | 4 1/2 | 4 1/8 | 1/2 | 1 1/4 | 42 | | 115 | 105 | 13 | 32 | 20 |
| | 64EA14-170 | 900# | | | 4 1/2 | 4 1/8 | 1/2 | 1 11/16 | 48 | | 115 | 105 | 13 | 43 | 22 |
| | 64EA15-170 | 1500# | | | 4 1/2 | 4 1/8 | 1/2 | 1 11/16 | 48 | | 115 | 105 | 13 | 43 | 22 |
| 1 1/2 x 2 | 64FA12-170 | 300# | 150# | 22 3/4 | 6 | 4 7/8 | 11/16 | 1 5/8 | 50 | 578 | 153 | 124 | 18 | 42 | 23 |
| | 64FA13-170 | 600# | | | 6 | 4 7/8 | 11/16 | 1 5/8 | 50 | | 153 | 124 | 18 | 42 | 23 |
| | 64FA14-170 | 900# | | | 6 | 4 7/8 | 11/16 | 2 | 60 | | 153 | 124 | 18 | 51 | 28 |
| | 64FA15-170 | 1500# | | | 6 | 4 7/8 | 11/16 | 2 | 60 | | 153 | 124 | 18 | 51 | 28 |
| 1 1/2 x 3 | 64GA12-170 | 300# | 150# | 22 7/8 | 5 1/8 | 5 1/8 | 11/16 | 1 11/16 | 60 | 582 | 131 | 131 | 18 | 43 | 28 |
| | 64GA13-170 | 600# | | | 5 1/8 | 5 1/8 | 11/16 | 1 11/16 | 60 | | 131 | 131 | 18 | 43 | 28 |
| | 64GA14-170 | 900# | | | 5 1/8 | 5 1/8 | 11/16 | 2 | 60 | | 131 | 131 | 18 | 51 | 28 |
| | 64GA15-170 | 1500# | | | 5 1/8 | 5 1/8 | 11/16 | 2 | 85 | | 131 | 131 | 18 | 51 | 39 |
| 1 1/2 x 3 | 64HA12-170 | 300# | 150# | 22 7/8 | 5 1/8 | 5 1/8 | 11/16 | 1 11/16 | 70 | 582 | 131 | 131 | 18 | 43 | 32 |
| | 64HA13-170 | 600# | | | 5 1/8 | 5 1/8 | 11/16 | 1 11/16 | 70 | | 131 | 131 | 18 | 43 | 32 |
| | 64HA14-170 | 900# | | | 5 1/8 | 5 1/8 | 11/16 | 2 | 70 | | 131 | 131 | 18 | 51 | 32 |
| | 64HA15-170 | 1500# | | | 5 1/8 | 5 1/8 | 11/16 | 2 | 85 | | 131 | 131 | 18 | 51 | 39 |
| 2 x 3 | 64JA12-170 | 300# | 150# | 23 7/8 | 6 3/8 | 6 1/16 | 11/16 | 1 11/16 | 70 | 607 | 162 | 154 | 18 | 43 | 32 |
| | 64JA13-170 | 600# | | | 6 3/8 | 6 1/16 | 11/16 | 1 11/16 | 70 | | 162 | 154 | 18 | 43 | 32 |
| 2 1/2 x 4 | 64JA14-170 | 900# | 150# | 33 3/8 | 6 3/4 | 6 1/8 | 11/16 | 2 3/8 | 70 | 848 | 172 | 156 | 18 | 61 | 32 |
| | 64JA15-170 | 1500# | | | 6 3/4 | 6 1/8 | 11/16 | 2 3/8 | 85 | | 172 | 156 | 18 | 61 | 39 |
| 2 1/2 x 4 | 64KA12-170 | 300# | 150# | 33 1/2 | 6 3/4 | 6 1/8 | 11/16 | 1 15/16 | 150 | 851 | 172 | 156 | 18 | 50 | 69 |
| | 64KA13-170 | 600# | | | 6 3/4 | 6 1/8 | 11/16 | 1 15/16 | 150 | | 172 | 156 | 18 | 50 | 69 |
| | 64KA14-170 | 900# | | | 6 3/4 | 6 1/8 | 11/16 | 2 3/8 | 150 | | 172 | 156 | 18 | 61 | 69 |
| | 64KA15-170 | 1500# | | | 6 3/4 | 6 1/8 | 11/16 | 2 3/8 | 175 | | 172 | 156 | 18 | 61 | 80 |
| 3 x 6 | 64LA12-170 | 300# | 150# | 36 5/8 | 8 1/2 | 7 13/16 | 11/16 | 2 | 230 | 931 | 216 | 199 | 18 | 51 | 105 |
| | 64LA13-170 | 600# | | | 8 1/2 | 7 13/16 | 11/16 | 2 | 230 | | 216 | 199 | 18 | 51 | 105 |
| | 64LA14-170 | 900# | | | 8 1/2 | 7 13/16 | 11/16 | 2 1/4 | 230 | | 216 | 199 | 18 | 58 | 105 |
| | 64LA15-170 | 1500# | | | 8 1/2 | 7 13/16 | 11/16 | 2 11/16 | 250 | | 216 | 199 | 18 | 69 | 114 |
| 3 x 6 | 64MA12-170 | 300# | 150# | 36 5/8 | 8 1/2 | 7 13/16 | 11/16 | 2 | 230 | 931 | 216 | 199 | 18 | 51 | 105 |
| | 64MA13-170 | 600# | | | 8 1/2 | 7 13/16 | 11/16 | 2 | 230 | | 216 | 199 | 18 | 51 | 105 |
| | 64MA14-170 | 900# | | | 8 1/2 | 7 13/16 | 11/16 | 2 1/4 | 230 | | 216 | 199 | 18 | 58 | 105 |
| | 64MA15-170 | 1500# | | | 8 1/2 | 7 13/16 | 11/16 | 2 11/16 | 250 | | 216 | 199 | 18 | 69 | 114 |
| 4 x 6 | 64NA12-170 | 300# | 150# | 42 3/8 | 10 | 8 7/8 | 11/16 | 2 | 230 | 1077 | 254 | 226 | 18 | 51 | 105 |
| | 64NA13-170 | 600# | | | 10 | 8 7/8 | 11/16 | 2 1/4 | 250 | | 254 | 226 | 18 | 58 | 114 |
| | 64NA14-170 | 900# | | | 10 | 8 7/8 | 11/16 | 2 1/2 | 250 | | 254 | 226 | 18 | 64 | 114 |
| 4 x 6 | 64PA12-170 | 300# | 150# | 42 3/8 | 10 | 8 7/8 | 11/16 | 2 | 230 | 1077 | 254 | 226 | 18 | 51 | 105 |
| | 64PA13-170 | 600# | | | 10 | 8 7/8 | 11/16 | 2 1/4 | 250 | | 254 | 226 | 18 | 58 | 114 |
| | 64PA14-170 | 900# | | | 10 | 8 7/8 | 11/16 | 2 1/2 | 250 | | 254 | 226 | 18 | 64 | 114 |

General Notes

1. Tolerances for the B and C center-to-face dimensions are $\pm 1/16$ inch for valve inlet sizes up to and including 4 inch and $\pm 1/8$ inch for valve inlet sizes larger than 4 inch.
2. Above dimensions also apply to the 6600 series with closed bonnet.

Conversion Factors

To find desired value, multiply "Given" value by factor below

| Pressure Conversion | | | | |
|---------------------|--------|--------|--------|--------------------|
| Given | psi | kPa | Bar | kg/cm ² |
| psi | 1 | 6.8948 | 0.0689 | 0.0703 |
| kPa | 0.145 | 1 | 0.01 | 0.0102 |
| Bar | 14.504 | 100 | 1 | 1.0197 |
| kg/cm ² | 14.223 | 97.905 | 0.9 | 1 |

| Liquid Flow Rate Conversion | | | | |
|-----------------------------|---------|---------|--------|--------------------|
| Given | gpm | bbl/day | l/min | m ³ /hr |
| gpm | 1 | 34.29 | 3.785 | 0.2271 |
| bbl/day | 0.02917 | 1 | 0.1104 | 0.006624 |
| l/min | 0.2642 | 9.057 | 1 | 0.06 |
| m ³ /hr | 4.403 | 151 | 16.667 | 1 |

| Mass Conversion | | | | |
|-----------------|--------|--------|--------|---------|
| Given | lb | tons | kg | tonnes |
| lb | 1 | 0.0005 | 0.4536 | 0.00045 |
| tons | 2000 | 1 | 907.18 | 0.90718 |
| kg | 2.2046 | 0.0011 | 1 | 0.001 |
| tonnes | 2204.6 | 1.102 | 1000 | 1 |

| Viscosity – Absolute or Dynamic | | |
|---------------------------------|---------------------------|--------------|
| To Convert From | To | Multiply By |
| Centipoise | lbf-sec/ft. ² | 0.0000208854 |
| Centipoise | kg-sec/meter ² | 0.000102 |
| Lbf-sec/sq. ft. | Pascal-sec | 47.8803 |
| Pascal sec. | Centipoise | 1000 |
| Poise (gm/cm-sec) | Centipoise | 100 |

| Viscosity – Kinematic | | |
|-----------------------|-------------------|-------------|
| To Convert From | To | Multiply By |
| Centistokes | Stokes | 0.01 |
| Centistokes | sq. meters/sec | 0.000001 |
| Square Feet/Sec. | Centistokes | 92903.04 |
| Square Feet/Sec. | Square meters/sec | 0.092903 |

| Viscosity – Absolute to Kinematic | | |
|-----------------------------------|-------------|--------------------------------|
| To Convert From | To | Multiply By |
| Centipoise | Centistokes | 1/density (g/cm ³) |

| Volume Conversion | | | | |
|-------------------|-----------------|----------------|--------|-------|
| Given | ft ³ | m ³ | gal | liter |
| ft ³ | 1 | 0.02832 | 7.481 | 28.32 |
| m ³ | 35.31 | 1 | 264.2 | 1000 |
| gal | 0.1337 | 0.00379 | 1 | 3.785 |
| liter | 0.03532 | 0.001 | 0.2642 | 1 |

| Density Conversion | | | | |
|--------------------|--------------------|-------------------|-------------------|--------|
| Given | lb/ft ³ | kg/m ³ | g/cm ³ | lb/gal |
| lb/ft ³ | 1 | 16.018 | 0.016 | 0.1337 |
| kg/m ³ | 0.0624 | 1 | 0.001 | 0.0083 |
| g/cm ³ | 62.428 | 1000 | 1 | 8.345 |
| lb/gal | 7.481 | 119.83 | 0.1198 | 1 |

| Area Conversion | | | | |
|-----------------|-----------------|-----------------|-----------------|-----------------|
| Given | in ² | ft ² | mm ² | cm ² |
| in ² | 1 | 0.00694 | 645.16 | 6.4516 |
| ft ² | 144 | 1 | 92903 | 929.03 |
| mm ² | 0.00155 | 1.08E-05 | 1 | 0.01 |
| cm ² | 0.155 | 0.0011 | 100 | 1 |

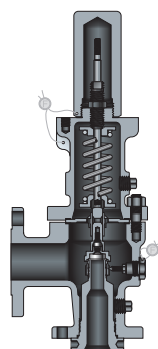
| Temperature Conversion | |
|------------------------|------------------|
| Fahrenheit (F) = | (1.8 x C) + 32 |
| Celsius (C) = | 0.555 x (F - 32) |
| Rankin (R) = | F + 459.67 |
| Kelvin (K) = | C + 273.15 |

| Length Conversion | | | | |
|-------------------|--------|--------|-------|--------|
| Given | ft | in | mm | m |
| ft | 1 | 12 | 304.8 | 0.3048 |
| in | 0.0833 | 1 | 25.4 | 0.0254 |
| mm | 0.0033 | 0.0394 | 1 | 0.001 |
| m | 3.281 | 39.37 | 1000 | 1 |

| Miscellaneous Conversions | | |
|---------------------------|----------------------|-------------|
| From | To | Multiply By |
| Specific Gravity-Gas | Molecular Wt-Gas | 28.97 |
| Density-Liq | Specific Gravity-Liq | 1/(p Water) |

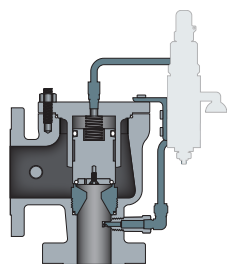
Farris Engineering Products

Process Pressure Relief Valves



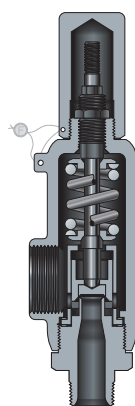
SERIES 2600/2600L

- ASME NB Certified: Air, Steam & Water
- Sizes: 1" x 2" to 20" x 24"
- Pressure Range: 15 psig to 6000 psig
- Temperature Range: -450°F to +1500°F
- Materials: Carbon Steel, Stainless Steel, Monel & Hastelloy C
- Options: Balanced Bellows, O-Ring Seat, Open Bonnet
- CE Approved



SERIES 3800 Pilot Operated

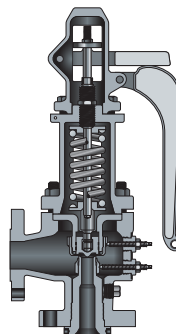
- ASME NB Certified: Air, Steam & Water
- Sizes: 1" x 2" to 12" x 16"
- Pressure Range: 15 psig to 6170 psig
- Temperature Range: -450°F to +500°F
- Materials: Carbon Steel, Stainless Steel, Monel & Hastelloy C
- Actuation: Snap and Modulating Controls
- Options: Field Test Connections, Reverse Flow Preventer, Remote Depressurizing & Auxiliary Filters
- CE Approved



SERIES 2700

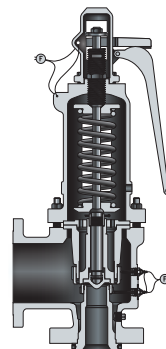
- ASME NB Certified: Air, Steam & Water
- Sizes: ½" x 1" to 1½" x 2½"
- Pressure Range: 15 psig to 6500 psig
- Temperature Range: -450°F to +750°F
- Materials: Carbon Steel, Stainless Steel, Monel & Hastelloy C
- Options: Balanced Design, O-Ring Seats, Flanged, Socket Weld, Welding Nipple, & Sanitary Connections
- CE Approved

Steam Safety Valves



SERIES 4200

- ASME NB Section I & VIII Certified: Steam & Air
- Sizes 1¼" x 1½" to 6" x 8"
- Pressure Range: 15 psig to 1000 psig
- Temperature Range: -20°F to +1000°F
- Materials: Carbon Steel, Stainless Steel, Chrome-Moly
- Options: Test Gag
- CE Approved



SERIES 6400/6600

- ASME NB Section I & VIII Certified: Steam & Air
- Sizes: 1" x 2" to 4" x 6"
- Pressure Range: 15 psig to 1500 psig
- Temperature Range: -20°F to +1000°F
- Materials: Carbon Steel, Stainless Steel, Chrome-Moly
- Options: Closed Bonnet (6600) & Test Gag

*Other materials available upon request. Please consult the factory.

Farris Engineering Products and Services

Process Pressure Relief Valves – ASME Code Section VIII

| | |
|---------------------|--|
| Series 2600 | ASME NB Certified for Air and Steam |
| Series 2600S | ASME NB Certified for Air and Steam |
| Series 2600L | ASME NB Certified for Air, Steam and Water |
| Series 3800 | ASME NB Certified for Air, Steam and Water |
| Series 2700 | ASME NB Certified for Air, Steam and Water |
| Series 1890 / 1896M | ASME NB Certified for Air, Steam and Water |

Steam Safety Valves – ASME Code Section I & VIII

| | |
|------------------|-----------------------------|
| Series 4200 | ASME NB Certified for Steam |
| Series 6400/6600 | ASME NB Certified for Steam |

Nuclear Pressure Relief Valves

| | |
|-------------------|---|
| Series 4700/4700L | ASME NB Section III, Division 1 Class I, II & III |
| Series 2700/3700 | ASME NB Section III, Division 1 Class I, II & III |
| Series 2600/2600L | ASME NB Section III, Division 1 Class I, II & III |
| Series 3800 | ASME NB Section III, Division 1 Class I, II & III |

Changeover Valves

Series 320B & 370B

Certifications and Approvals:

- ASME V, UV, NV and NPT
- National Board Approval, NB
- ISO 9001-2008
- PED 2014/68/EU (European Pressure Equipment Directive)
- ATEX 94/9/EC (European Potentially Explosive Atmospheres)
- CSA B51 (Canadian Registration)
- CSQ (China Safety Quality License)
- Customs Union TR CU 010-2011 and Customs Union TR CU 032-2013
- US Coast Guard
- Nuclear - 10 CFR 50 Appendix B, NCA-4000, NQA-1, N285.0
- First Point Assessment Limited



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- Application, Sizing & Selection Support

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- Pressure Relief System Audit Services
- iPRSM Pressure Relief System Management Software

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Offices Worldwide: For a listing of our global sales network, visit our website at www.cw-valvegroup.com/farrisdistributors.

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