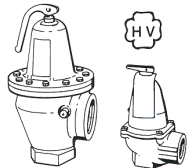


|                    |                        |              |
|--------------------|------------------------|--------------|
| <b>JOB:</b>        | <b>REPRESENTATIVE:</b> |              |
| <b>UNIT TAG:</b>   | <b>SUBMITTED BY:</b>   | <b>DATE:</b> |
| <b>ENGINEER:</b>   | <b>APPROVED BY:</b>    | <b>DATE:</b> |
| <b>CONTRACTOR:</b> |                        |              |

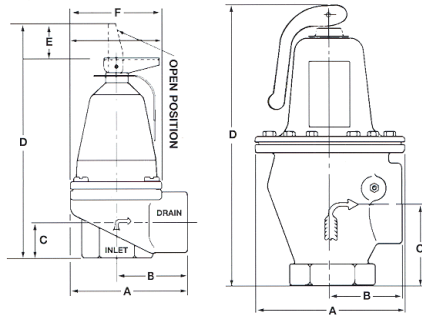


## Safety Relief Valves ASME Valves and Fittings

Patent No. 3,294,114

### DESCRIPTION

B&G diaphragm operated cast iron and diaphragm-assist operated bronze ASME Safety Relief Valves are designed to protect fired and unfired hot water pressure vessels against over-pressure conditions. These valves feature a unique failsafe disc with sufficient area to permit the valves to maintain their safety relief function in the event of a diaphragm rupture. These valves are designed, manufactured, tested and labeled in accordance with the requirements of Section IV of the ASME Boiler and Pressure Vessel code. They are offered in a wide range of capacities to permit a close match with the boiler output rating.



### OPERATING DATA

| MODEL | MAXIMUM WORKING PRESSURE | MAXIMUM OPERATING TEMPERATURE |
|-------|--------------------------|-------------------------------|
| 790   | 125 PSIG (8.6 bar)       | 250°F (121°C)                 |
| 1170  |                          |                               |
| 3301  | 50 PSIG (3.4 bar)        | 250°F (121°C)                 |
| 4100  |                          |                               |

### CONSTRUCTION

790 & 1170

Body: Brass  
Diaphragm & Seat: EPDM  
Internal Wetted Parts: Brass

3301 & 4100

Body: Cast Iron  
Diaphragm & Seat: EPDM  
Internal Wetted Parts: Brass

### DIMENSIONS & WEIGHTS

| MODEL NUMBER* | BODY   | DIMENSIONS-INCHES (mm) |        |                  |                 |                 |                    |                  |                  | APPROXIMATE SHIPPING WEIGHT LBS. (kg) |
|---------------|--------|------------------------|--------|------------------|-----------------|-----------------|--------------------|------------------|------------------|---------------------------------------|
|               |        | NPT CONNECTIONS        |        | A                | B               | C               | D                  | E                | F                |                                       |
|               |        | INLET                  | OUTLET |                  |                 |                 |                    |                  |                  |                                       |
| 790           | BRONZE | 3/4                    | 3/4    | 2-9/16<br>(65.1) | 1-1/2<br>(38.1) | 3/4<br>(19.1)   | 4-9/16<br>(115.9)  | 1-1/32<br>(26.2) | 2-3/16<br>(55.6) | 1.2<br>(0.5)                          |
| 1170          | BRONZE | 1                      | 1      | 2-7/8<br>(73.0)  | 1-3/4<br>(44.5) | 7/8<br>(22.2)   | 4-15/16<br>(125.4) | 1-1/32<br>(26.2) | 2-7/16<br>(61.9) | 1.5<br>(0.7)                          |
| 3301          | IRON   | 1-1/2                  | 2      | 6<br>(152.4)     | 2-7/8<br>(73.0) | 3-1/4<br>(82.6) | 11<br>(279.4)      | N/A              | N/A              | 17<br>(7.7)                           |
| 4100          | IRON   | 2                      | 2      | 6<br>(152.4)     | 2-7/8<br>(73.0) | 3-1/4<br>(82.6) | 11<br>(279.4)      | N/A              | N/A              | 17<br>(7.7)                           |

\*Actual unit model numbers include individual valve pressure settings as a suffix to the basic valve model number noted.

Do Not Use For Construction. Dimensions are approximate and subject to change. Contact factory for certified dimensions.

### TYPICAL SPECIFICATIONS

Furnish and install as shown on plans a diaphragm operated Safety Relief Valve, ASME labeled for relieving pressure of psig \_\_\_\_\_ with a rating of \_\_\_\_\_ BTU/Hr. The fluid should not discharge into the spring chamber. The valve should have a low blow-down differential.

The valve seat and all moving parts exposed to the fluid are to be of non-ferrous material.

Manufacturer ITT Bell & Gossett Model No. \_\_\_\_\_ ASME Safety Relief Valve set at \_\_\_\_\_ psig, rated at \_\_\_\_\_ BTU/Hr.

# SAFETY RELIEF VALVES - ASME (Valves and Fittings)

A-434D

## SCHEDULE

| MODEL NUMBER | PART NUMBER | SIZE TAPPINGS | RELIEF SETTING PSIG | CAPACITY BTU/HR | TAGGING INFORMATION | QUANTITY |
|--------------|-------------|---------------|---------------------|-----------------|---------------------|----------|
| 790-15       | 110120      | 3/4" NPT      | 15                  | 515,000         |                     |          |
| 790-20       | 110750      | 3/4" NPT      | 20                  | 610,000         |                     |          |
| 790-25       | 110751      | 3/4" NPT      | 25                  | 700,000         |                     |          |
| 790-30       | 110121      | 3/4" NPT      | 30                  | 790,000         |                     |          |
| 790-36       | 110122      | 3/4" NPT      | 36                  | 900,000         |                     |          |
| 790-40       | 110752      | 3/4" NPT      | 40                  | 975,000         |                     |          |
| 790-45       | 110123      | 3/4" NPT      | 45                  | 1,065,000       |                     |          |
| 790-50       | 110124      | 3/4" NPT      | 50                  | 1,160,000       |                     |          |
| 790-55       | 110753      | 3/4" NPT      | 55                  | 1,250,000       |                     |          |
| 790-60       | 110754      | 3/4" NPT      | 60                  | 1,340,000       |                     |          |
| 790-65       | 110755      | 3/4" NPT      | 65                  | 1,435,000       |                     |          |
| 790-70       | 110756      | 3/4" NPT      | 70                  | 1,525,000       |                     |          |
| 790-75       | 110125      | 3/4" NPT      | 75                  | 1,615,000       |                     |          |
| 790-80       | 110757      | 3/4" NPT      | 80                  | 1,710,000       |                     |          |
| 790-85       | 110758      | 3/4" NPT      | 85                  | 1,800,000       |                     |          |
| 790-90       | 110759      | 3/4" NPT      | 90                  | 1,890,000       |                     |          |
| 790-95       | 110760      | 3/4" NPT      | 95                  | 1,985,000       |                     |          |
| 790-100      | 110126      | 3/4" NPT      | 100                 | 2,075,000       |                     |          |
| 790-105      | 110761      | 3/4" NPT      | 105                 | 2,165,000       |                     |          |
| 790-110      | 110762      | 3/4" NPT      | 110                 | 2,260,000       |                     |          |
| 790-115      | 110763      | 3/4" NPT      | 115                 | 2,350,000       |                     |          |
| 790-120      | 110764      | 3/4" NPT      | 120                 | 2,440,000       |                     |          |
| 790-125      | 110127      | 3/4" NPT      | 125                 | 2,535,000       |                     |          |
| 1170-20      | 110765      | 1" NPT        | 20                  | 900,000         |                     |          |
| 1170-25      | 110766      | 1" NPT        | 25                  | 1,035,000       |                     |          |
| 1170-30      | 110129      | 1" NPT        | 30                  | 1,170,000       |                     |          |
| 1170-36      | 110130      | 1" NPT        | 36                  | 1,330,000       |                     |          |
| 1170-40      | 110767      | 1" NPT        | 40                  | 1,440,000       |                     |          |
| 1170-45      | 110131      | 1" NPT        | 45                  | 1,575,000       |                     |          |
| 1170-50      | 110132      | 1" NPT        | 50                  | 1,710,000       |                     |          |
| 1170-55      | 110768      | 1" NPT        | 55                  | 1,845,000       |                     |          |
| 1170-60      | 110769      | 1" NPT        | 60                  | 1,980,000       |                     |          |
| 1170-65      | 110770      | 1" NPT        | 65                  | 2,115,000       |                     |          |
| 1170-70      | 110771      | 1" NPT        | 70                  | 2,250,000       |                     |          |
| 1170-75      | 110133      | 1" NPT        | 75                  | 2,385,000       |                     |          |
| 1170-80      | 110772      | 1" NPT        | 80                  | 2,520,000       |                     |          |
| 1170-85      | 110773      | 1" NPT        | 85                  | 2,655,000       |                     |          |
| 1170-90      | 110774      | 1" NPT        | 90                  | 2,790,000       |                     |          |
| 1170-95      | 110775      | 1" NPT        | 95                  | 2,925,000       |                     |          |
| 1170-100     | 110134      | 1" NPT        | 100                 | 3,060,000       |                     |          |
| 1170-105     | 110776      | 1" NPT        | 105                 | 3,195,000       |                     |          |
| 1170-110     | 110777      | 1" NPT        | 110                 | 3,330,000       |                     |          |
| 1170-115     | 110778      | 1" NPT        | 115                 | 3,465,000       |                     |          |
| 1170-120     | 110779      | 1" NPT        | 120                 | 3,600,000       |                     |          |
| 1170-125     | 110135      | 1" NPT        | 125                 | 3,735,000       |                     |          |
| 3301-30      | 110033      | 1-1/2" x 2"   | 30                  | 3,300,000       |                     |          |
| 3301-36      | 110080      | 1-1/2" x 2"   | 36                  | 3,800,000       |                     |          |
| 3301-45      | 110081      | 1-1/2" x 2"   | 45                  | 4,500,000       |                     |          |
| 3301-50      | 110082      | 1-1/2" x 2"   | 50                  | 4,900,000       |                     |          |
| 4100-30      | 110034      | 2"            | 30                  | 4,100,000       |                     |          |
| 4100-36      | 110084      | 2"            | 36                  | 4,600,000       |                     |          |
| 4100-45      | 110085      | 2"            | 45                  | 5,515,000       |                     |          |
| 4100-50      | 110086      | 2"            | 50                  | 5,990,000       |                     |          |



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