# **VALVES** Pressure Reducing Valves

## **Description**

Reducing valves fill the system to a preset pressure for optimum performance.

#### **Features**

- Fast fill feature reduces start-up time and labor.
- Low inlet pressure check valve helps prevent loss of system pressure if the supply water drops below system pressure.
- Convenient cleanable strainer is designed to prevent dirt and sediment from entering the system.
- Union connection available with 1/2" male NPT thread and 1/2" female sweat tail-piece for fast, flexible system connection.
- Brass body construction is highly resistant to corrosion ideal for water systems.

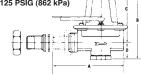


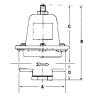
## **Specifications for Combination "Dual Units"**

					Connection in	n Inches	Dimensions in Ir	Approx.	
	Model No.	Part No.	Component Valves	Body Material	Boiler	Fill	Between Connections	Overall Height	Shpg. Wt. lbs. (Kg)
Г			Relief	Iron					
	8	110199	B-38	Brass		1/2 NPT	6 7/16 (164)	5 3/8 (137)	4 (1.8)
Г			Relief	Brass	1/2 NPT				
	F-3	110197	FB-38	Brass		1/2 NPT	6 7/16 (164)	6 (152)	3 3/4 (1.7)
Г			Relief	Brass		1/2 Union		0 (132)	
L	F-3TU	110198	FB-38TU	Brass		NPT/Sweat	8 5/8 (219)		4 (1.8)

PRESSURE SETTING: Relief 30 PSI

Reducing 12 PSI standard; field adustable range: 10 - 25 PSI
Maximum operating temperature 225°F (107°C) - Maximum operating pressure 125 PSIG (862 kPa) Models ending in "TU" feature 1/2" sweat/NPT union connection





## **Specifications for Pressure Reducing Valve**

		Body	Conncection Size - Inches		Factory Setting	Adjustable Range	Dimensions in Inches (mm)				
Model No.	Part No.	Material			(PSIG)	(PSIG)	A	В	С	D	lbs. (Kg)
B-38	110190		1/2				3 1/16 (78)	4 13/16 (122)	3 11/16 (94)	1 1/8 (29)	1 3/4 (0.8)
B7-12	110196		3/4	NPT			3 (76)	4 31/32 (126)	3 21/32 (93)	1 5/16 (33)	2 1/4 (1.0)
B-38TU	110191		1/2	Union*	12	10 - 25	4 31/32 (126)				2 (0.9)
FB-38	110192	Brass	1/2	NPT			3 1/16 (78)	4 13/16 (122)	3 11/16 (94)	1 1/8 (29)	1 3/4 (0.8)
FB-38TU	110193		1/2	Union*			4 31/32 (126)				2 (0.9)
6	110194		1/2				3 1/16 (78)				1 3/4 (0.8)
7	110195		3/4	NPT	45	25 - 60	3 (76)	4 31/32 (126)	3 21/32 (93)	1 5/16 (33)	2 1/4 (1.0)

<sup>\*</sup> Models ending in "TU" feature 1/2" sweat/NPT union connection

# **ASME Safety Relief Valves**

#### **Description**

ASME Safety Relief Valves protect fired and unfired hot water vessels against hazardous operating pressures.

#### **Features**

- Engineered in accordance with Section IV of the ASME boiler & pressure code for heating boilers with capacities certified by the National Board of Boiler and Pressure Vessel Inspectors.
- Offer the highest BTUH ratings available on the market today for valves in their class (790,000 to 5,999,000 BTUH)
- EPDM diaphragm operated (cast iron models) and diaphragm assisted (bronze models) have an effective area approximately 5 times greater than conventional "poptype" relief valves to help overcome the effects of fouling.
- Low differential between opening and closing pressures helps to prevent conditions under which system water might flash to steam and cause hammering.









Nos. 3301 & 4100

Nos. 790 & 1170

Size, Capacity & Relief Setting for B&G ASME Safety Relief Valves <sup>1</sup>									
Relief Setting	Model Number Capacity in BTU Per Hour								
PSIG	Iron	Body	Bronze Body						
20	3301-30	4100-30	790-30	1170-30					
30	3,300,000	4,100,000	790,000	1,170,000					
	3301-36	4100-36	790-36	1170-36					
36	3,800,000	4,600,000	900,000	1,330,000					
45	3301-45	4100-45	790-45	1170-45					
45	4,500,000	5,515,000	1,065,000	1,575,000					
50	3301-50	4100-50	790-50	1170-50					
50	4,900,000	5,990,000	1,160,000	1,710,000					
75			790-75	1170-75					
/5			1,615,000	2,385,000					
100	NOT AV	/AILABLE	790-100	1170-100					
100			2,075,000	3,060,000					
105			790-125	1170-125					
125			2,535,000	3,735,000					

<sup>&</sup>lt;sup>1</sup> Contact your local wholsaler or Bell & Gossett representative for availability of ASME Safety Relief Valves with special pressure settings.

		NPT Conn in Inch		Dimension in Inches (mm)						
Model No.	Body	Inlet	Outlet	Α	В	С	D	E	F	lbs. (Kg)
790		3/4	3/4	2 9/16 (65)	1 1/2 (38)	3/4 (19)	4 9/16 (116)		2 3/32 (53)	1.2 (0.5)
1170	Brass	1	1	2 7/8 (73)	1 3/4 (44)	7/8 (22)	4 15/16 (125)	1 1/32 (26)	2 1/4 (57)	1.5 (0.7)
3301		1 1/2								
4100	Iron	2	2	6 (152)	2 7/8 (73)	3 1/4 (83)	11 (279)	N/A		17 (7.7)

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

Dimensions are approximate and subject to change. Contact factory for certified dimensions

Maximum Operating Temperature: 250°F (121°C) - Maximum Working Pressure: Model 790 & 1170: 125PSIG (862KPa); Model 3301 & 4100: 50 PSIG (345 KPa).

**Specifications**