#### 11 Solid Reasons to Choose Hoffman

- Engineered Reliability
- NPT Inlet, Vent, and Overflow Receiver Openings
- Field tested performance. Thousands installed and operating economically and efficiently
- Close Coupled Pump Design
- Mechanical Seal Construction
- Bronze Fitted Centrifugal Pump
- Stainless Steel Motor Shaft
- Renewable Bronze Wearing Ring
- Quiet, Ball Bearing Motor with Dual Voltages
- 100% Factory Tested
- Available From Factory Stock or Local Stock



# Hoffman<sup>®</sup> VBF Stock Boiler Feed Units



FOR PRECISE WATER LEVEL CONTROL FOR MODERN STEAM BOILERS



# Hoffman Series VBF The Recognized Name in Boiler Feed Pumps

# **Quality features that make Hoffman the leader**

**Availability:** Normally Factory or Local Stock

Corrosion Resistance: Heavy Gauge Steel Receiver

Receiver Mounting Feet

Inlet Baffle

Ease of Installation: Inlet, Vent and Overflow Openings

Gauge Glass

**Ease of Service:** Vertical Pull-out Pumps

Carbon/Ceramic Mechanical Seals

Drain Connection Flange Mounted Pumps

### **Series VBF Standard Features to Compare**

#### Inlet

Low height, NPT Inlet for easy return line piping. Internally baffled to prevent corrosion.

#### **Make-Up Valve**

Float operated, internal water make-up valve to add water at low level. Level adjustment is standard.

#### **Mounting Feet**

To mount unit in place and to keep unit off floor thus preventing corrosion formation.

#### **Drain Connection**

NPT drain connection to allow removal of water when servicing.



**Optional Features** 

Inlet Basket Strainers or "Y" Strainers. Angle or Dial Thermometers. Control Panels for wall mounting.

#### **Vent & Overflow**

Separate NPT connections to provide a secondary vent ensuring safe operation.

#### **Vertical Receiver**

To conserve floor space. Heavy gauge steel for corrosion prevention. Sized to hold approximately 10 minutes of boiler water needs. Has simplex, duplex or triplex pump openings.

#### **Water Level Gauge Glass**

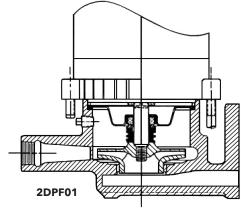
To indicate water level in receiver. Complete with protective brass rods and shut off valves.

#### **Centrifugal Pumps**

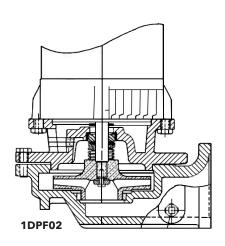
Built to handle high temperature 200°F condensate. Pumps use carbon/ceramic mechanical seals designed for 250°F temperatures for maximum life. See below.

# **Hoffman Centrifugal Pumps**

Hoffman centrifugal pumps are a close coupled, vertical design equipped with enclosed bronze impellers, renewable bronze wear rings, stainless steel shafts and carbon/ceramic mechanical seals. Each pump is individually tested prior to factory shipment. All pump internals can be fully serviced without disturbing the discharge piping. Motors are quiet, ball bearing type with a dual voltage rating and thermal overload protection.



Close Coupled Centrifugal Pump for 30, 50 & 100 VBF Units



Close Coupled Centrifugal Pump for 200VBF Units

#### Series VBF Selection Chart

Select Unit According to Boiler HP

Ordering Instructions: Specify Single (1 Pump), Duplex (2 Pumps), and Unit Model No.

	System Rating			Unit Rating			Description						
Model No. &	Boiler HP	GPM	Lbs./Hr.	Sq. Ft.	Pump		Motor	Receiver Cap in Gallons		Min.	Inlet Size,	Disch. Size	Inlet Height
(No. of Pumps)				E.D.R.	GPW		HP	Total	Storage	Storage	Inches	Inches	Inches
30 VBF (1) or (2)	10 to 30	2.1	1035	4,200	9	22	1/3	30	18	9	2	3/4	17 3/4
50 VBF (1) or (2)	35 to 50	3.5	1725	7,000	15	20	1/3	50	39	11	2	3/4	27 3/4
100 VBF (1) or (2)	60 to 100	6.9	3400	13,800	15	20	1/3	100	83	11	2	3/4	33 3/4
200 VBF (1) or (2)	125 to 200	13.8	6900	27,800	30	20	1/2	200	172	12	2	1 1/2	45 3/4
200 VBF (1) or (2)	125 to 200	13.8	6900	27,800	30	30	1	200	172	12	2	1 1/2	45 3/4

All motors 1 phase, 60 cycle, 115/230 volt, 3500 RPM as standard. 3 phase motors available on special request.

# **Series VBF Specification**

Furnish and install according to manufacture's instructions the quantity of single or duplex boiler feed units as shown on the drawings. Each unit shall consist of (1) vertical steel receiver, (1), (2), or (3) pump(s), make-up water valve and water level gauge.

The receiver shall be fabricated of black steel and shall be equipped with a float operate, adjustable make-up water valve.

The centrifugal water pump(s) shall be flange mounted on the receiver. The pump shall be of the close coupled vertical design, permanently aligned and bronze fitted, and shall be equipped with a closed bronze impeller, renewable bronze casing ring and mechanical shaft seal. Motor shaft shall be stainless steel. Each pump shall be close coupled to a drip proof motor. Motor voltage shall be single phase 115/230 volt.

The unit shall be factory tested as a complete unit. The pump manufacturer shall furnish installation/operation manuals.

Unit shall be Hoffman Series VBF as manufactured by Bell & Gossett, a Xylem brand, Morton Grove, IL.

#### **Capacity Schedule**

Series VBF Boiler Feed Unit(s)

Catalog No		VBF
Capacity	gpm@	psig
Receiver		Gallons
Motors		Hp, 3500 RPM, ODP

Electrical: Single Pase, 60 Hertz, Wire for <u>115</u> volts (Field convertible to 230V)

#### Other Boiler Feed Units

For other pump capacities, Domestic® Pump offers a complete line of centrifugal pumps available for mounting on Series VBF receivers. These units are available on an engineered-to-order basis and incorporate all of the features used in Stock Series VBF units.

For greater durability, Domestic Pump offices Series CM Boiler Feed Units for systems up to 500 Boiler Horsepower. these units feature a cast iron receiver warranty for 20 years against failure due to corrosion.

Consult your Bell & Gossett Representative for information about these and other units.

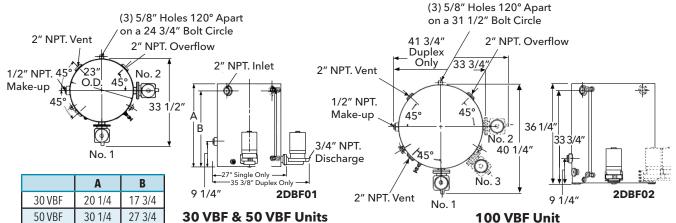


Domestic Pump Series CM Unit with Cast Iron Receiver

(Multiple options shown)

# **Roughing - In Dimensions**

(All dimensions in inches)



(3) 5/8" Holes 120° Apart on "E" Bolt Circle
2" NPT. Overflow
Only

1/2" NPT. Make-up
No. 1

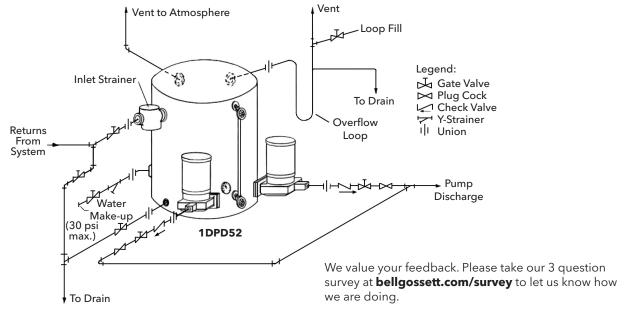
2" NPT. Inlet

200 VBF Unit

Rough in Dimensions - not to be used for installation. All dimensions in inches.

Catalog No.	200 VBF
Rec. Size	35 1/2 x 48
Net Rec. Gal.	172
А	48 1/2
В	46 1/4
С	39 1/2
D	47 3/4
E	37 1/2
Inlet Height (F)	45 3/4

# **Elementary Piping Diagram**





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