



# 4100 SERIES Boiler Feed Pumps - Steel Tank

# **Technical Specifications**

Sterlco® 4100 Series Boiler Feed Pumps set new standards of performance. Reliable and efficient, each unit features heavy gauge, 3/16" steel receivers for long operating life.

In addition, 3450 RPM motors assure maximum efficiency while maintaining minimum motor horsepower. Available in a wide range of sizes, these U.S. made pumps have just the right accessories and options to meet your unique needs. What's more, a nationwide network of stocking distributors means fast, easy, year-round access to pumps and replacement parts.

#### **Features**

#### **Standard Features**

- Heavy gauge steel receivers
- Simplex or duplex construction
- Bronze fitted centrifugal pumps
- Energy efficient 3450 RPM motors
- · Automatic venting
- "Sterl-Seal" ceramic pump seal (250°F)
- Heavy-duty make-up water valve
- Gauge glass
- Wide range of options and accessories

#### **Optional Features**

- Isolation valves
- Electric alternator for duplex units
- Thermometer
- Solenoid operated make-up water valve with reverse acting float switch
- Special motor construction, such as totally enclosed, washdown duty and explosion proof is available
- Magnetic starters with H-O-A selector switches
- 1750 RPM motors, larger pumping capacities and higher discharge pressures - consult factory
- Custom sized and elevated tanks available
- Complete NEMA 12 Control Panel





#### **Product Features**

#### Unit:

Completely factory assembled and tested. Simplex units have one receiver, one make-up water valve, and one vertical pump and motor assembly. Duplex units have 2 vertical pumps. All units are supplied with a gauge glass on the side of the receiver and a flat perforated brass strainer at the inlet to the pump.

#### Motors:

Heavy-duty, ballbearing, closecoupled pump motors with stainless steel shaft. 3450 RPM for greater efficiency and more economical operation.

#### Make-up Water Valve:

Mechanical, plug mounted valve with stainless steel float. Rated up to 45 psi inlet water pressure.

#### Receiver:

Heavy gauge steel construction. All receivers of 45 gallon size and larger are supplied in duplex design, with one pump opening covered when a simplex design is specified. (A pressure reducing valve is required)

#### Operation:

Boiler feed pump(s) are controlled by a water level controller mounted on the boiler. If condensate is lost or delayed in the system, it is automatically replaced in the receiver through the make-up water valve.

#### "SterlSeal" Pump Seal (A):

Features the ultimate in ceramic technology for exceptionally long life. Because the seal runs on the bronze impeller hub, the motor shaft is literally outside the pump. Consequently, the shaft is not exposed to corrosion by condensate. Rated for temperatures up to 250°F.

#### Isolation Valve (B):

Optional on 4100 Series Boiler Feed Pumps. Allows removal of pump without draining the tank.





## Control Panel

# Complete NEMA 12 Control Panel (Optional)

- Motor Circuit Protector
- HOA Selector Switch
- External Reset
- Control Circuit Transformer
- Pilot Light (pump running)
- Removable Mounting Plate and Terminal Strip in a Single NEMA 12 Enclosure
- Mounted and Wired with Single Point Power Connection



## **Specifications**

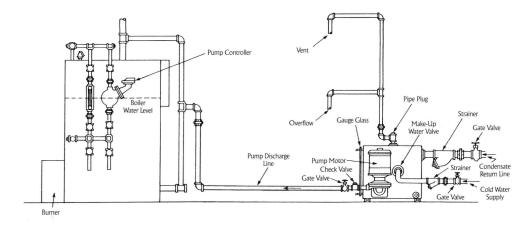
#### 4100 Series Engineering and Capacity Data

Boiler HP	Discharge Pressure PSI	Pump Capacity, GPM	Motor HP	Rec. Capacity,	Unit Mod	el Number	Shipping Weight, lbs.	
				Gallons	Simplex	Duplex	Simplex	Duplex
15	20 30 40 50	3	1/3 1/2 1 2	30	4122-GF 4132-JF 4142-JF 4152-JF	4122-GDF 4132-JDF 4142-JDF 4152-JDF	200 260 265 275	240 300 310 330
30	20 30 40 50	6	1/3 1/2 1 2	30	4124-GF 4134-JF 4144-JF 4154-JF	4124-GDF 4134-JDF 4144-JDF 4154-JD	200 260 265 275	240 300 310 330
45	20 30 40 50	9	1/3 1/2 1 2	45	4126-GF 4136-JF 4146-JF 4156-JF	4126-GDF 4136-JDF 4146-JDF 4156-JDF	240 300 305 315	280 340 350 370
60	20 30 40 50	12	1/3 1/2 1 2	60	4128-GF 4138-JF 4148-JF 4158-JF	4128-GDF 4138-JDF 4148-JDF 4158-JDF	275 335 340 350	335 395 405 425
75	20 30 40 50	15	1/2 3/4 1 2	95	41210-GF 41310-JF 41410-JF 41510-JF	41210-GDF 41310-JDF 41410-JDF 41510-JDF	360 420 425 435	420 480 490 510
100	20 30 40 50	20	1/2 3/4 1 2	95	41215-GF 41315-JF 41415-JF 41515-JF	41215-GDF 41315-JDF 41415-JDF 41515-JDF	360 420 425 435	420 480 490 510
150	20 30 40 50	30	3/4 1 1-1/2 3	120	41220-GF 41320-JF 41420-JF 41520-JF	41220-GDF 41320-JDF 41420-JDF 41520-JDF	415 475 480 490	475 535 545 565

#### **Sample Specification**

Furnish and install, where indicated on plans, a Sterling 4100 Series (simplex or duplex) boiler feed unit(s). Each pump shall deliver \_\_\_\_\_ GPM at a discharge pressure of \_\_\_\_\_ PSI. The unit shall be factory assembled and tested by the pump manufacturer and shall include a receiver, pump(s), make-up water valve, gauge glass, and accessories.

The receiver shall have a capacity of \_\_\_\_\_\_ gallons and be of minimum 3/16" steel construction. Pump(s) shall be of the centrifugal type with two-piece enclosed brass impeller, cast iron housing, high temperature (250°F) mechanical seal and stainless steel motor shaft. The make-up water valve is to be a mechanical, plug-type with a stainless steel float. A flat perforated brass strainer shall be provided at the inlet to the pump from the tank. The motor(s) shall be vertical, 3450 RPM, \_\_\_\_\_\_\_phase, \_\_\_\_\_\_volt, 60 cycle, \_\_\_\_\_\_H.P.

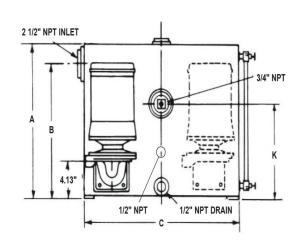


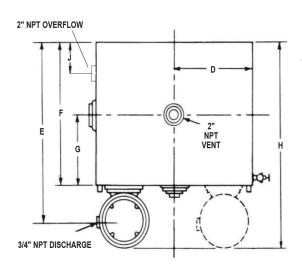




# **Product Diagrams**

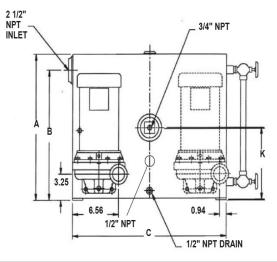
### 4100-GF Series

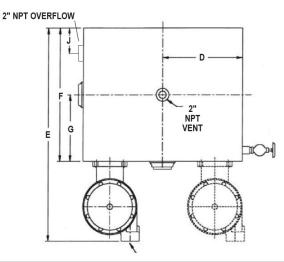




Receiver	A	В	С	D	E	F	G	Н	J	К
30	18.38	16.12	22	11	23.5	18	9	28	4.5	10.88
45	26.38	24.12	22	11	23.5	18	9	28	4.5	10.88
60	28.38	26.12	28	14	23.5	18	9	28	4.5	10.88
95	28.38	26.12	28	14	33.5	28	14	38	4.5	10.88
120	36.38	33.75	28	14	33.5	28	14	38	6	12.00

#### 4100-JF Series





Receiver	A	В	С	D	E	F	G	J	К
30	18.38	16.12	22	11	29.31	18	9	4.5	10.88
45	26.38	24.12	22	11	29.31	18	9	4.5	10.88
60	28.38	26.12	28	14	29.31	18	9	4.5	10.88
95	28.38	26.12	28	14	39.31	28	14	4.5	10.88
120	36.38	33.75	28	14	39.31	28	14	6	12.00