# 4800 SERIES
## Boiler Feed Units - Stainless Steel Tank

## Technical Specifications

**Sterlco® 4800 Series Boiler Feed Units set new standards of performance. Reliable and efficient, each unit features heavy gauge, 3/16" stainless 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 units have just the right accessories and options to meet your unique needs.

## Features

### Standard Features

- Heavy gauge stainless steel receivers
- Simplex or duplex construction
- Stainless steel fitted centrifugal pumps
- Energy efficient 3450 RPM motors
- Automatic venting
- Carbon ceramic pump seal (300°F) with EPDM elastomers
- Heavy-duty make-up water valve
- Gauge glass
- Wide range of options and accessories

### Optional Features

- Electric alternator for duplex units
- Thermometer
- Isolation valves
- 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
- Elevated tanks are available
- Complete NEMA 12 Control Panel

# 4800 SERIES

## Product Features

Elevated Unit

**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.

**Motors:**
Heavy-duty, ballbearing, close-coupled 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. (A pressure reducing valve is required upon installation.)

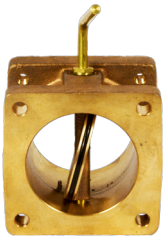
**Receiver:**
Heavy gauge steel construction. All receivers of 45 gallon size and larger are supplied in duplex design, with one pump opening covered when a simplex design is specified.

**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.

**Pump Seal (A):**
Features the ultimate in ceramic technology for exceptionally long life. Seal is carbon ceramic with EPDM elastomers. Rated for temperatures up to 300°F.

**Isolation Valve (B):**
Optional on 4800 Series Boiler Feed Units. Allows removal of pump without draining the tank.

A



B

## Control Panel

Inside view of 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

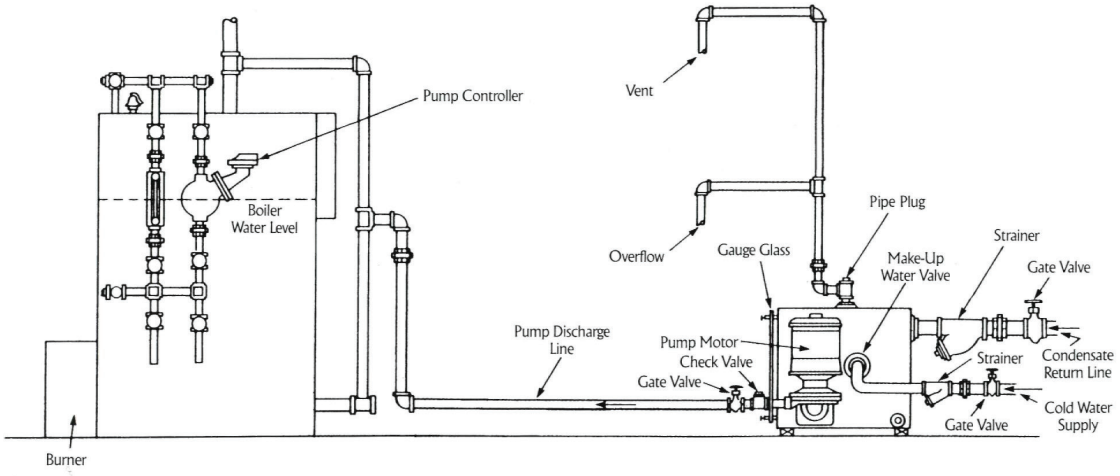
### 4800 Series Engineering and Capacity Data

| Boiler HP | Discharge Pressure PSI | Pump Capacity, GPM | Motor HP | Rec. Capacity, Gallons | Unit Model Number | | Shipping Weight, lbs. | |
|---|---|---|---|---|---|---|---|---|
| | | | | | Simplex | Duplex | Simplex | Duplex |
| 15 | 20<br>30<br>40<br>50 | 3 | 1/2<br>3/4<br>1<br>1-1/2 | 30 | 4822-KF<br>4832-KF<br>4842-KF<br>4852-KF | 4822-KDF<br>4832-KDF<br>4842-KDF<br>4852-KDF | 200<br>260<br>265<br>275 | 240<br>300<br>310<br>330 |
| 30 | 20<br>30<br>40<br>50 | 6 | 1/2<br>3/4<br>1<br>1-1/2 | 30 | 4824-KF<br>4834-KF<br>4844-KF<br>4854-KF | 4824-KDF<br>4834-KDF<br>4844-KDF<br>4854-KDF | 200<br>260<br>265<br>275 | 240<br>300<br>310<br>330 |
| 45 | 20<br>30<br>40<br>50 | 9 | 1/2<br>3/4<br>1-1/2<br>1-1/2 | 45 | 4826-KF<br>4836-KF<br>4846-KF<br>4856-KF | 4826-KDF<br>4836-KDF<br>4846-KDF<br>4856-KDF | 240<br>300<br>305<br>315 | 280<br>340<br>350<br>370 |
| 60 | 20<br>30<br>40<br>50 | 12 | 1/2<br>3/4<br>1-1/2<br>1-1/2 | 60 | 4828-KF<br>4838-KF<br>4848-KF<br>4858-KF | 4828-KDF<br>4838-KDF<br>4848-KDF<br>4858-KDF | 275<br>335<br>340<br>350 | 335<br>395<br>405<br>425 |
| 75 | 20<br>30<br>40<br>50 | 15 | 1/2<br>1<br>1-1/2<br>2 | 95 | 48210-KF<br>48310-KF<br>48410-KF<br>48510-KF | 48210-KDF<br>48310-KDF<br>48410-KDF<br>48510-KDF | 360<br>420<br>425<br>435 | 420<br>480<br>490<br>510 |
| 100 | 20<br>30<br>40<br>50 | 20 | 1/2<br>1<br>1-1/2<br>2 | 95 | 48215-KF<br>48315-KF<br>48415-KF<br>48515-KF | 48215-KDF<br>48315-KDF<br>48415-KDF<br>48515-KDF | 360<br>420<br>425<br>435 | 420<br>480<br>490<br>510 |
| 150 | 20<br>30<br>40<br>50 | 30 | 3/4<br>1<br>1-1/2<br>3 | 120 | 48220-KF<br>48320-KF<br>48420-KF<br>48520-KF | 48220-KDF<br>48320-KDF<br>48420-KDF<br>48520-KDF | 415<br>475<br>480<br>490 | 475<br>535<br>545<br>565 |

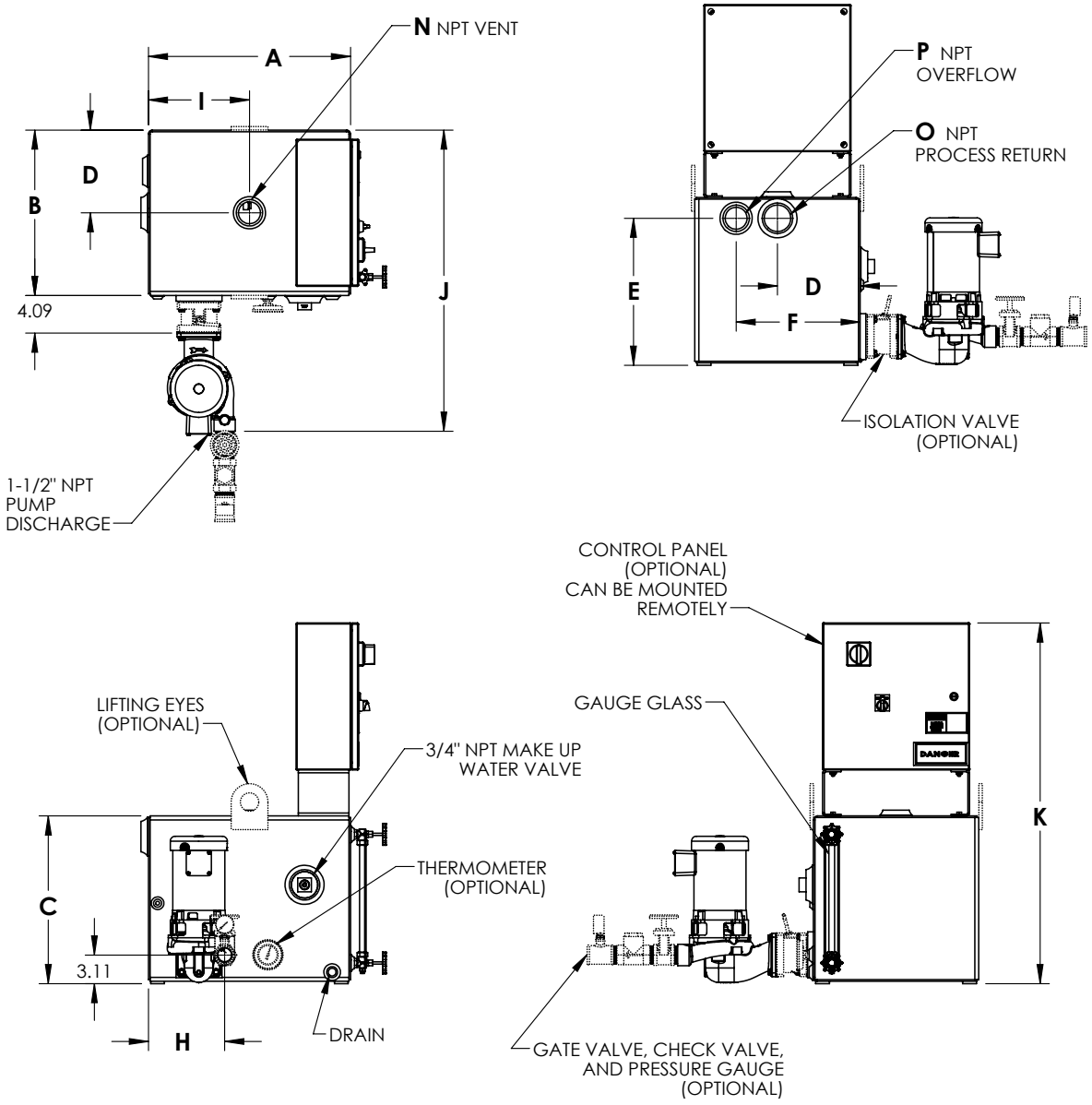
### Sample Specification

Furnish and install, where indicated on plans, a Sterling 4800 Series (simplex or duplex) boiler feed unit(s). Each pump shall deliver _____ 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" stainless steel construction. Pump(s) shall be of the centrifugal type with one-piece enclosed stainless steel impeller, stainless steel inducer, cast iron housing, high temperature (300°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. An optional inlet "Y"or basket strainer is recommended for installation on the tank return inlet for pump protection. The motor(s) shall be vertical, 3450 RPM, _____ phase, _____volt, 60 cycle, _____H.P.



## Product Diagrams




**4800 "K" SERIES BOILER FEED UNIT**
**RECEIVER MATERIAL: STAINLESS STEEL**

| RECEIVER SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | DRAIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 GAL | 24.38 | 19.50 | 15.63 | 9.75 | 13.25 | 16.50 | | 22.25 | 12.19 | 34.25 | 35.63 | 17.50 | 26.13 | 2" | 2-1/2" | 2" | 1/2"NPT |

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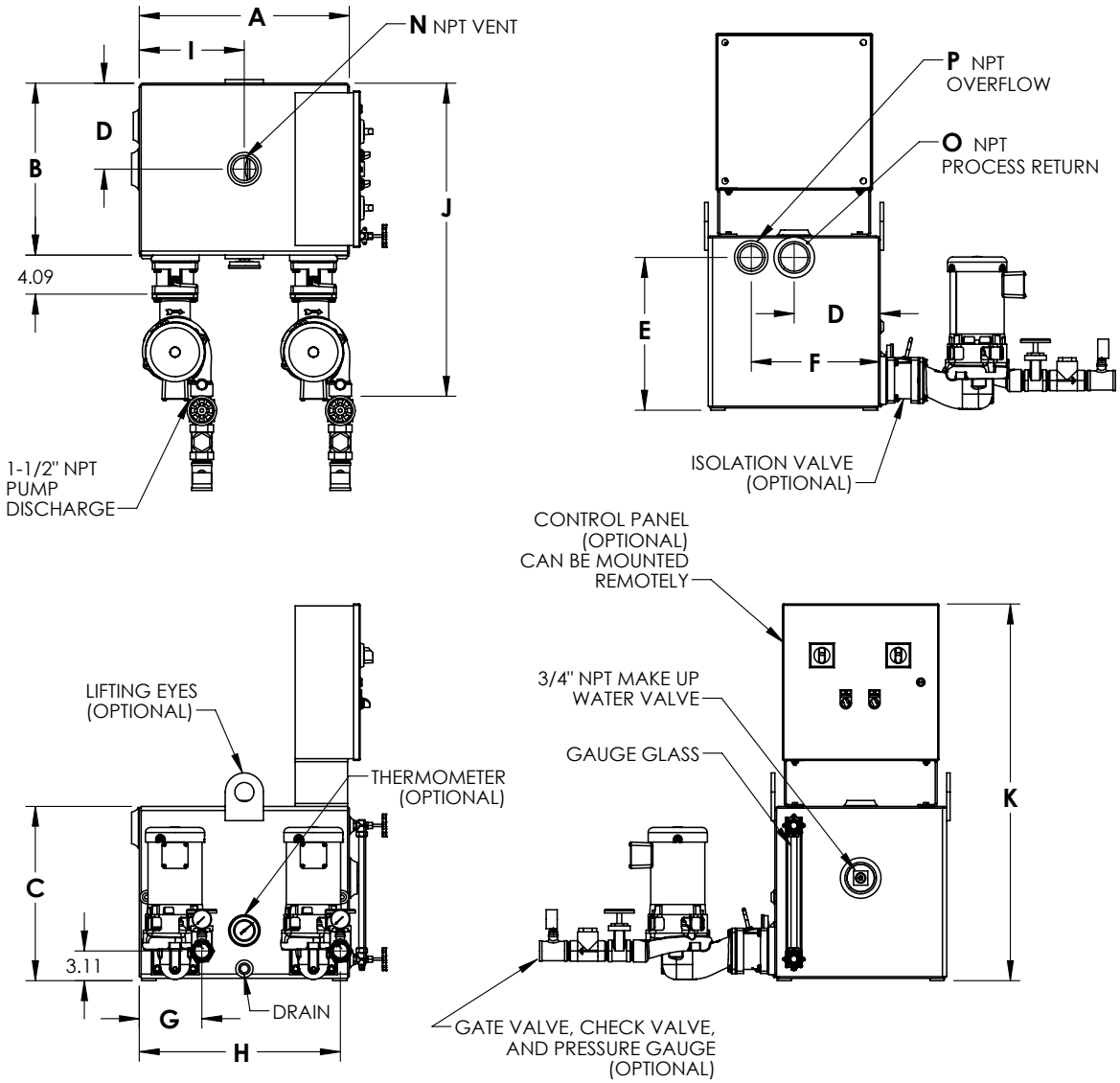
## Product Diagrams




Sterlco®

**4800 "K" SERIES BOILER FEED UNIT**
**RECEIVER MATERIAL: STAINLESS STEEL**

| RECEIVER SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | DRAIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 30 GAL | 22.00 | 18.00 | 18.25 | 9.00 | 16.00 | 13.50 | 6.55 | 21.05 | 11.00 | 32.82 | 39.44 | | | 2" | 2-1/2" | 2" | 1/2"NPT |

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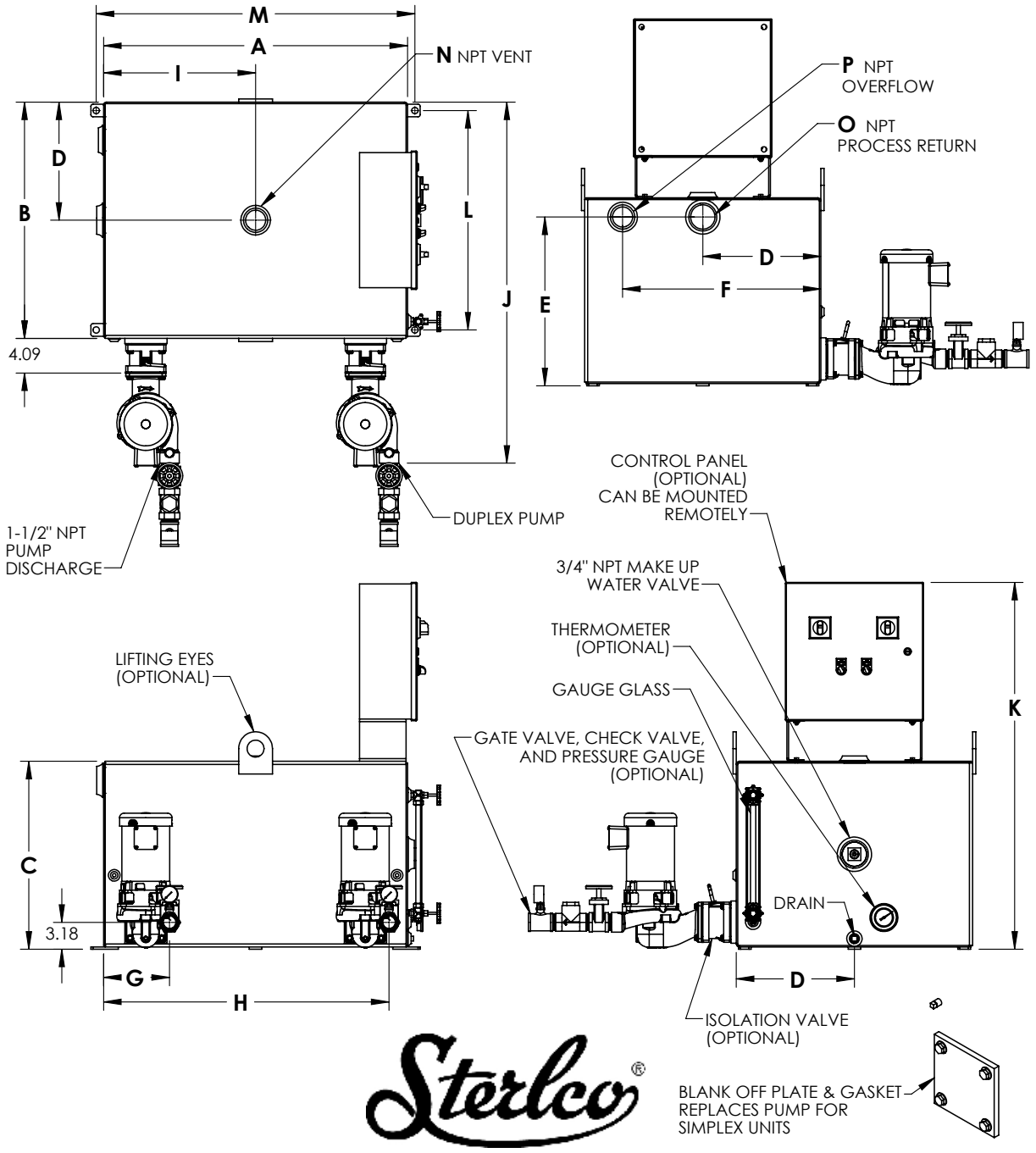
## Product Diagrams

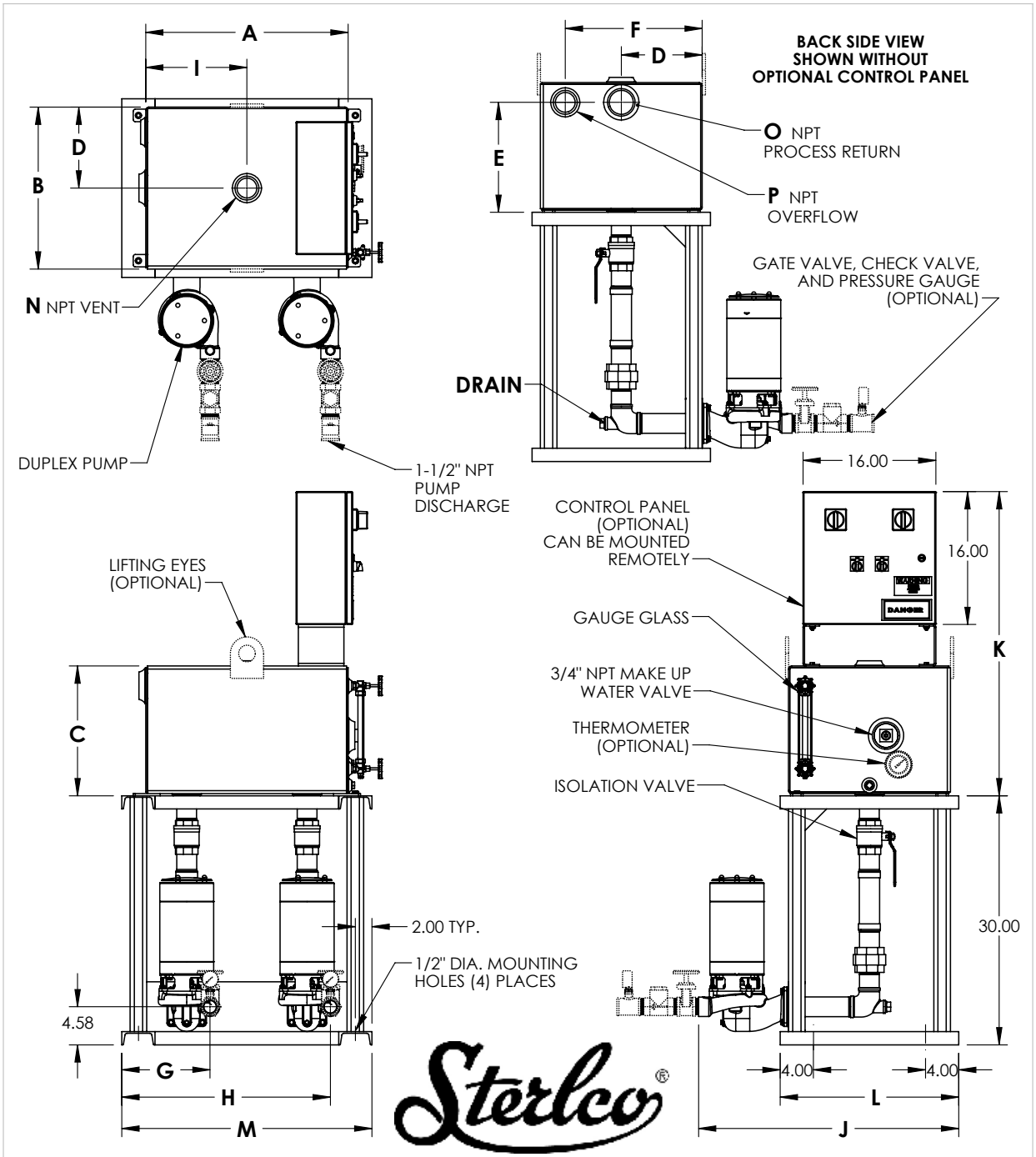



**4800 "K" SERIES BOILER FEED UNIT**
**RECEIVER MATERIAL: STAINLESS STEEL**

| RECEIVER SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | DRAIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **45 GAL** | 24.00 | 22.00 | 20.25 | 11.00 | 18.00 | 19.00 | 7.57 | 22.07 | 12.00 | 36.75 | 41.25 | 20.00 | 25.75 | 2" | 2-1/2" | 2" | 1/2"NPT |
| **60 GAL** | 24.00 | 27.00 | 22.25 | 13.50 | 20.00 | 24.00 | 7.57 | 22.07 | 12.00 | 41.75 | 43.25 | 25.00 | 25.75 | 2" | 2-1/2" | 2" | 1/2"NPT |
| **95 GAL** | 36.00 | 28.00 | 22.25 | 14.00 | 20.00 | 23.50 | 7.81 | 33.81 | 18.00 | 42.75 | 43.25 | 26.00 | 37.75 | 2" | 2-1/2" | 2" | 1/2" NPT |
| **120 GAL** | 36.00 | 36.00 | 22.25 | 18.00 | 20.00 | 31.50 | 7.81 | 33.81 | 18.00 | 50.75 | 43.25 | 34.00 | 37.50 | 2" | 2-1/2" | 2" | 1/2" NPT |

4800SER.K.BF.45-120

## Product Diagrams




**4800 "K" SERIES ELEVATED BOILER FEED UNIT**
**RECEIVER MATERIAL: STAINLESS STEEL**

| RECEIVER SIZE | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | DRAIN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **30 GAL** | 24.38 | 19.50 | 15.63 | 9.75 | 13.25 | 16.50 | 10.63 | 25.13 | 12.19 | 31.33 | 35.63 | 21.50 | 30.13 | 2" | 2-1/2" | 2" | 1"NPT |
| **45 GAL** | 24.00 | 22.00 | 20.25 | 11.00 | 18.00 | 19.00 | 10.45 | 24.95 | 12.00 | 33.83 | 41.25 | 24.00 | 29.75 | 2" | 2-1/2" | 2" | 1"NPT |
| **60 GAL** | 24.00 | 27.00 | 22.25 | 13.50 | 20.00 | 24.00 | 10.45 | 24.95 | 12.00 | 38.83 | 43.25 | 29.00 | 29.75 | 2" | 2-1/2" | 2" | 1"NPT |
| **95 GAL** | 36.00 | 28.00 | 22.25 | 14.00 | 20.00 | 23.50 | 10.69 | 36.69 | 18.00 | 39.83 | 43.25 | 30.00 | 41.75 | 2" | 2-1/2" | 2" | 1" NPT |
| **120 GAL** | 36.00 | 36.00 | 22.25 | 18.00 | 20.00 | 31.50 | 10.69 | 36.69 | 18.00 | 47.83 | 43.25 | 38.00 | 41.75 | 2" | 2-1/2" | 2" | 1" NPT |

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