4600 SERIES
Boiler Feed Units - Steel Tank

Technical Specifications

Sterlco® 4600 Series Boiler Feed Units 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 units have just the right accessories and options to meet your unique needs.

Features

Standard Features

- Heavy gauge 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

4600 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 4600 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

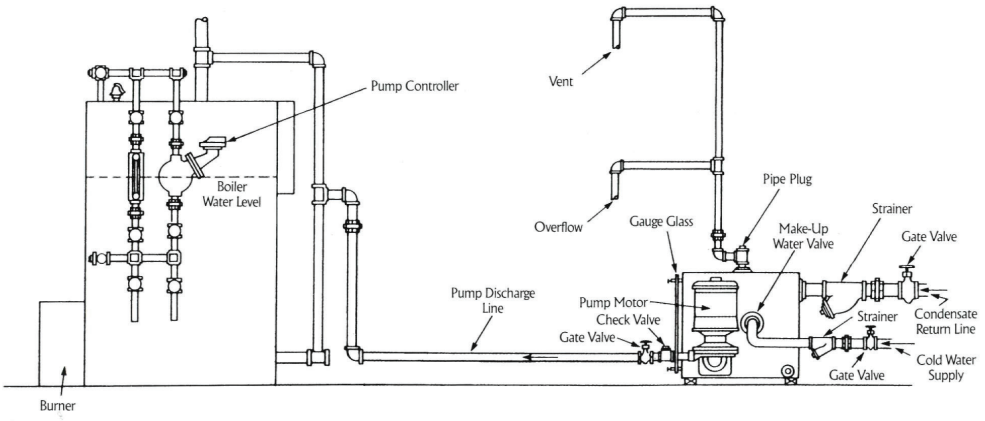
4600 Series Engineering and Capacity Data

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 30 40 50	3	1/2 3/4 1 1-1/2	30	4622-KF 4632-KF 4642-KF 4652-KF	4622-KDF 4632-KDF 4642-KDF 4652-KDF	200 260 265 275	240 300 310 330
30	20 30 40 50	6	1/2 3/4 1 1-1/2	30	4624-KF 4634-KF 4644-KF 4654-KF	4624-KDF 4634-KDF 4644-KDF 4654-KDF	200 260 265 275	240 300 310 330
45	20 30 40 50	9	1/2 3/4 1-1/2 1-1/2	45	4626-KF 4636-KF 4646-KF 4656-KF	4626-KDF 4636-KDF 4646-KDF 4656-KDF	240 300 305 315	280 340 350 370
60	20 30 40 50	12	1/2 3/4 1-1/2 1-1/2	60	4628-KF 4638-KF 4648-KF 4658-KF	4628-KDF 4638-KDF 4648-KDF 4658-KDF	275 335 340 350	335 395 405 425
75	20 30 40 50	15	1/2 1 1-1/2 2	95	46210-KF 46310-KF 46410-KF 46510-KF	46210-KDF 46310-KDF 46410-KDF 46510-KDF	360 420 425 435	420 480 490 510
100	20 30 40 50	20	1/2 1 1-1/2 2	95	46215-KF 46315-KF 46415-KF 46515-KF	46215-KDF 46315-KDF 46415-KDF 46515-KDF	360 420 425 435	420 480 490 510
150	20 30 40 50	30	3/4 1 1-1/2 3	120	46220-KF 46320-KF 46420-KF 46520-KF	46220-KDF 46320-KDF 46420-KDF 46520-KDF	415 475 480 490	475 535 545 565

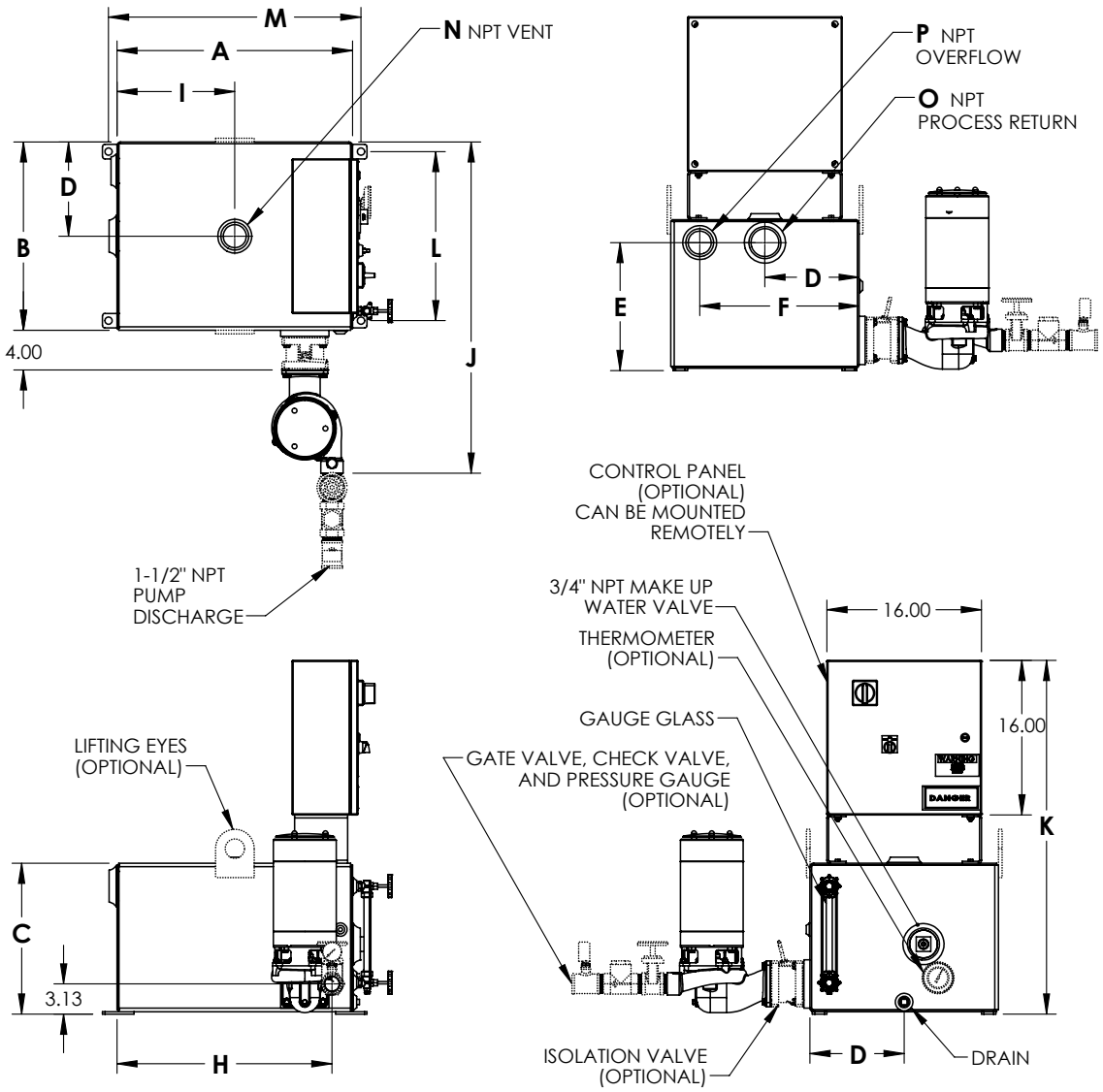
Sample Specification

Furnish and install, where indicated on plans, a Sterling 4600 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 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

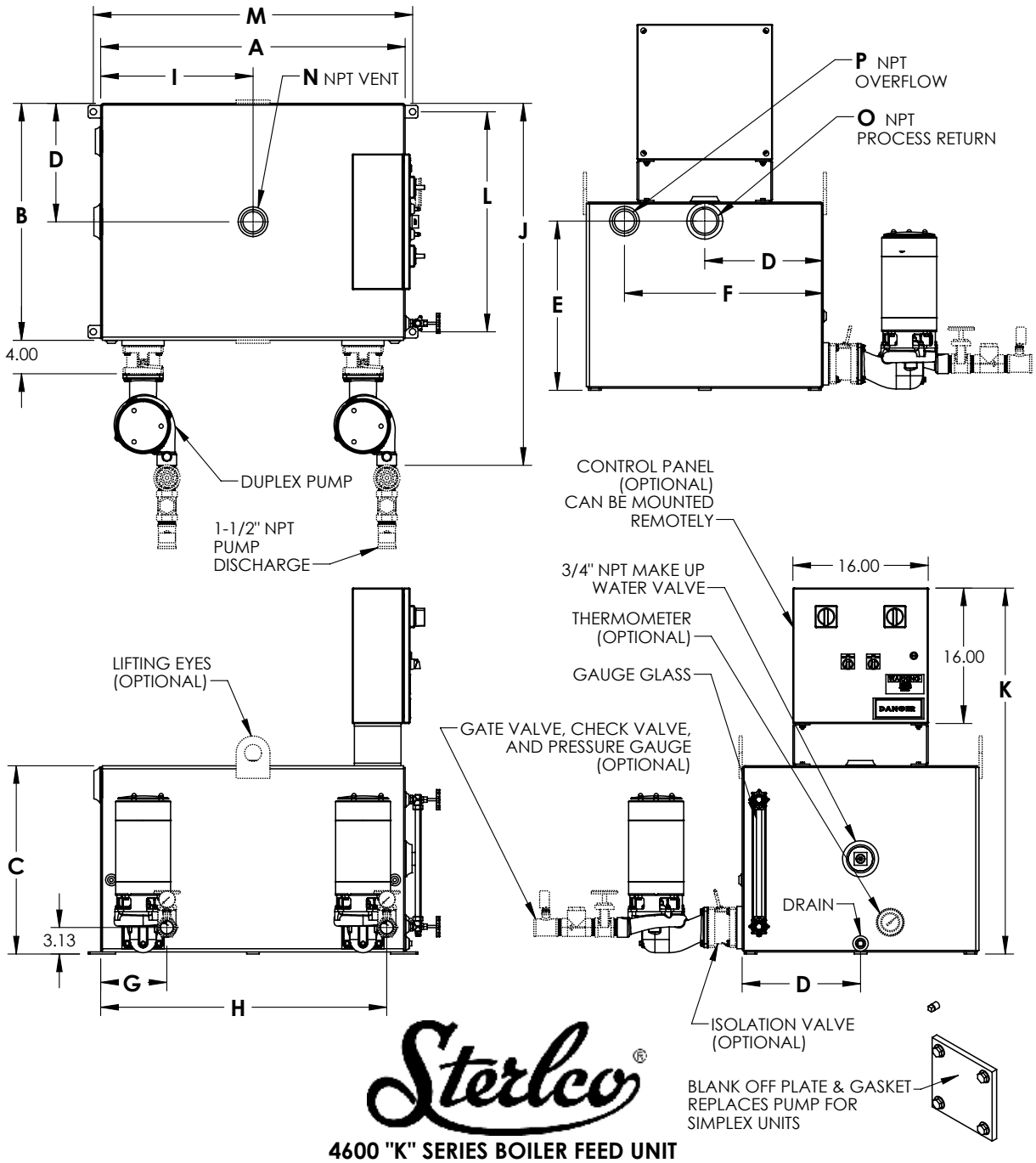


4600 "K" SERIES BOILER FEED UNIT
RECEIVER MATERIAL: STEEL

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

4600SER.K.BF.30SIMP

Product Diagrams



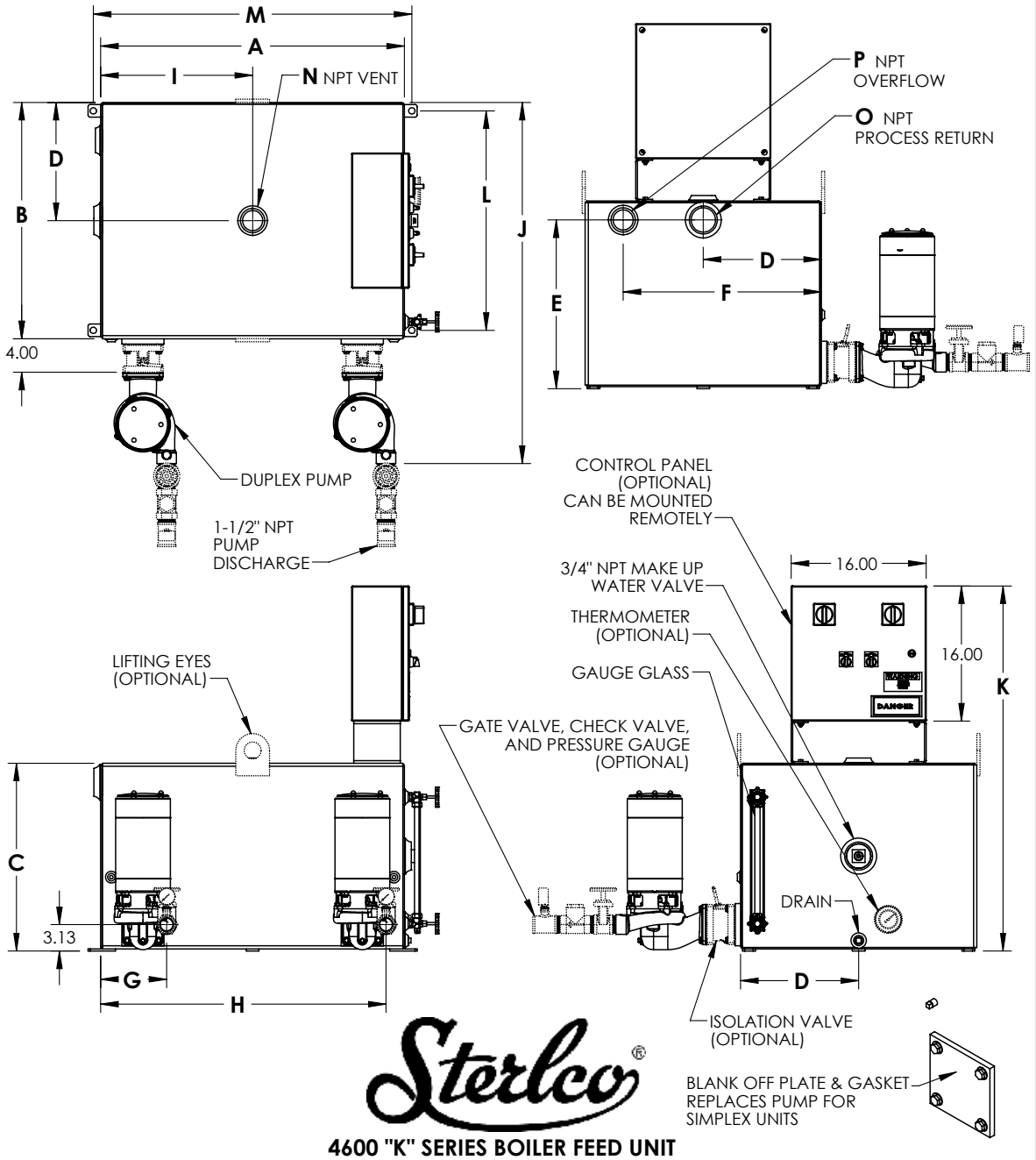
Sterlco®

4600 "K" SERIES BOILER FEED UNIT
RECEIVER MATERIAL: 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	7.75	22.25	12.19	34.25	35.63	17.50	26.13	2"	2-1/2"	2"	1/2"NPT
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

4600SER.K.BF.30-120

Product Diagrams



Sterlco®

4600 "K" SERIES BOILER FEED UNIT
RECEIVER MATERIAL: 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	7.75	22.25	12.19	34.25	35.63	17.50	26.13	2"	2-1/2"	2"	1/2"NPT
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

4600SER.K.BF.30-120