

4100 SERIES CONDENSATE UNIT

STEEL TANK





4100 Series Condensate Units – Steel Tank

ENERGY EFFICIENT DESIGN, PROVEN PERFORMANCE AND THE RIGHT SIZE FOR YOUR APPLICATION

Armstrong Condensate Return 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

- | Heavy gauge steel receivers
- | Simplex or duplex construction
- | Bronze fitted centrifugal pumps
- | Energy efficient 3450 RPM motors
- | Automatic venting
- | Ceramic pump seal
- | Heavy-duty float switch
- | Wide range of options and accessories



Please refer to the following certified drawings for specific dimensions.



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Armstrong International

The Americas | Asia | Europe, Middle East, Africa



BUILT-IN FEATURES FOR PRECISE, DEPENDABLE PERFORMANCE

- | Motors: Heavy-duty, ballbearing, close-coupled pump motors with stainless steel shaft. 3450 RPM for greater efficiency and more economical operation.
- | Float Switch: Two-pole, drip proof case, stainless steel float and float rod, double-break silver-to-silver contacts. Float travel adjustment is easy, visible and accessible.
- | Automatic Venting: Provides for efficient operation and long life by venting air and flushing seal area.
- | Large Tanks: Plenty of capacity for maximum rating of pump. Return inlet is low. Occupies a minimum of floor space.
- | Centrifugal Pump: Offers a wide range of pressures and GPM. Unique design features provide for ease of servicing.
- | Impeller: Made of brass for long life. Efficient design provides maximum capacity, minimum motor load.
- | 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 Condensate Pumps

SPECIAL OPTIONS

- | Mechanical and electrical alternators
- | Gauge glass
- | Thermometer
- | Discharge pressure gauges
- | Isolation valves
- | Special motor construction, such as totally enclosed and explosion proof, is available
- | Magnetic starters with H-O-A selector switches
- | 120 gallon and custom sized tanks available
- | Complete NEMA 12 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.



4100 Series – Engineering and Capacity Data

Capacity sq. ft (sq. m) E.D.R.	Discharge Pressure psi (bar)	Pump Capacity gpm (l/m) (c³/h)	Motor hp (Kw)	Rec. Cap. gal (l)	Unit Model No.		Shipping wt. lbs (kg)	
					Simplex	Duplex	Simplex	Duplex
8,000 (743)	20 (1.4)	12 (45.4) (2.73)	1/3 (0.25)	8 (30)	AFH-4028-G	–	90 (40.8)	–
2,000 (186)	20 (1.4)	3 (11.4) (.68)	1/3 (0.25)	15 (56.8)	AFH-4128-G	AFH-4128-GDA	125 (56.7)	185 (83.9)
4,000 (372)		6 (22.7) (1.36)	1/3 (0.25)				125 (56.7)	185 (83.9)
6,000 (557)		9 (34.1) (2.04)	1/3 (0.25)				125 (56.7)	185 (83.9)
8,000 (743)		12 (45.4) (2.73)	1/3 (0.25)				125 (56.7)	185 (83.9)
10,000 (929)	20 (1.4)	15 (56.8) (3.41)	1/2 (0.37)	30 (113.6)	AFH-41215-G	AFH-41215-GDA	190 (86.2)	240 (108.9)
15,000 (1,394)		22.5 (85.2) (5.11)	1/2 (0.37)		AFH-41220-G	AFH-41220-GDA	190 (86.2)	240 (108.9)
20,000 (1,858)		30 (113.6) (6.81)	3/4 (0.56)		AFH-41225-J	AFH-41225-JDA	200 (90.7)	250 (113.4)
25,000 (2,323)	20 (1.4)	37.5 (141.9) (8.52)	3/4 (0.56)	45 (170.3)	AFH-41230-J	AFH-41230-JDA	285 (129.3)	350 (158.8)
30,000 (2,787)		45 (170.3) (10.22)	1 (0.75)		AFH-41240-J	AFH-41240-JDA	285 (129.3)	355 (161.0)
40,000 (3,716)	20 (1.4)	60 (227.1) (13.63)	1 1/2 (1.12)	60 (227.1)	AFH-41250-J	AFH-41250-JDA	335 (152.0)	405 (183.7)
50,000 (4,645)	20 (1.4)	75 (283.9) (17.0)	2 (1.49)	95 (359.6)	AFH-4138-J	AFH-4138-JDA	385 (174.7)	460 (208.7)
2,000 (186)	30 (2.1)	3 (11.4) (.68)	1/2 (0.37)	15 (56.8)	AFH-41310-J	AFH-41310-JDA	180 (81.6)	250 (113.4)
4,000 (372)		6 (22.7) (1.36)	1/2 (0.37)				180 (81.6)	250 (113.4)
6,000 (557)		9 (34.1) (2.04)	1/2 (0.37)				180 (81.6)	250 (113.4)
8,000 (743)		12 (45.4) (2.73)	1/2 (0.37)				180 (81.6)	250 (113.4)
10,000 (929)		15 (56.8) (3.41)	3/4 (0.56)		AFH-413120-J	AFH-413120-JDA	185 (83.9)	255 (115.7)
15,000 (1,394)	30 (2.1)	22.5 (85.2) (5.11)	1 (0.75)	30 (113.6)	AFH-41325-J	AFH-41325-JDA	230 (104.3)	300 (136.1)
20,000 (1,858)		30 (113.6) (6.81)	1 (0.75)		AFH-41330-J	AFH-41330-JDA	230 (104.3)	300 (136.1)
25,000 (2,323)	30 (2.1)	37.5 (141.9) (8.52)	1 (0.75)	45 (170.3)	AFH-41340-J	AFH-41340-JDA	285 (129.3)	350 (158.8)
30,000 (2,787)		45 (170.3) (10.22)	1 1/2 (1.12)		AFH-41350-J	AFH-41350-JDA	290 (131.5)	355 (161.0)
40,000 (3,716)	30 (2.1)	60 (227.1) (13.63)	2 (1.49)	60 (227.1)	AFH-41410-J	AFH-41410-JDA	340 (154.2)	410 (186.0)
50,000 (4,645)	30 (2.1)	75 (283.9) (17.0)	3 (2.24)	95 (359.6)	AFH-41420-J	AFH-41420-JDA	395 (179.2)	470 (213.2)
2,000 (186)	40 (2.8)	3 (11.4) (.68)	1 (0.75)	15 (56.8)	AFH-41430-J	AFH-41430-JDA	190 (86.2)	270 (122.5)
4,000 (372)		6 (22.7) (1.36)	1 (0.75)				190 (86.2)	270 (122.5)
6,000 (557)		9 (34.1) (2.04)	1 (0.75)				190 (86.2)	270 (122.5)
8,000 (743)		12 (45.4) (2.73)	1 (0.75)				190 (86.2)	270 (122.5)
10,000 (929)		15 (56.8) (3.41)	1 (0.75)		AFH-41435-J	AFH-41435-JDA	190 (86.2)	270 (122.5)
15,000 (1,394)	40 (2.8)	22.5 (85.2) (5.11)	1 1/2 (1.12)	30 (113.6)	AFH-41440-J	AFH-41440-JDA	240 (108.9)	310 (140.6)
20,000 (1,858)		30 (113.6) (6.81)	1 1/2 (1.12)		AFH-41445-J	AFH-41445-JDA	240 (108.9)	310 (140.6)
25,000 (2,323)	40 (2.8)	37.5 (141.9) (8.52)	1 1/2 (1.12)	45 (170.3)	AFH-41450-J	AFH-41450-JDA	290 (131.5)	355 (161.0)
30,000 (2,787)		45 (170.3) (10.22)	2 (1.49)		AFH-41455-J	AFH-41455-JDA	295 (133.8)	360 (163.3)
40,000 (3,716)	40 (2.8)	60 (227.1) (13.63)	2 (1.49)	60 (227.1)	AFH-41510-J	AFH-41510-JDA	340 (154.2)	410 (186.0)
50,000 (4,645)	40 (2.8)	75 (283.9) (17.0)	3 (2.24)	95 (359.6)	AFH-41515-J	AFH-41515-JDA	395 (179.2)	470 (213.2)
2,000 (186)	50 (3.4)	3 (11.4) (.68)	2 (1.49)	15 (56.8)	AFH-41520-J	AFH-41520-JDA	195 (88.5)	275 (124.7)
4,000 (372)		6 (22.7) (1.36)	2 (1.49)				195 (88.5)	275 (124.7)
6,000 (557)		9 (34.1) (2.04)	2 (1.49)				195 (88.5)	275 (124.7)
8,000 (743)		12 (45.4) (2.73)	2 (1.49)				195 (88.5)	275 (124.7)
10,000 (929)		15 (56.8) (3.41)	2 (1.49)		AFH-41525-J	AFH-41525-JDA	195 (88.5)	275 (124.7)
15,000 (1,394)	50 (3.4)	22.5 (85.2) (5.11)	2 (1.49)	30 (113.6)	AFH-41530-J	AFH-41530-JDA	245 (111.1)	320 (145.2)
20,000 (1,858)		30 (113.6) (6.81)	3 (2.24)		AFH-41535-J	AFH-41535-JDA	255 (115.7)	330 (149.7)
25,000 (2,323)	50 (3.4)	37.5 (141.9) (8.52)	3 (2.24)	45 (170.3)	AFH-41540-J	AFH-41540-JDA	305 (138.3)	385 (174.6)
30,000 (2,787)		45 (170.3) (10.22)	3 (2.24)		AFH-41545-J	AFH-41545-JDA	305 (138.3)	385 (174.6)
40,000 (3,716)	50 (3.4)	60 (227.1) (13.63)	5 (3.73)	60 (227.1)	AFH-41550-J	AFH-41550-JDA	370 (167.8)	500 (226.8)
50,000 (4,645)	50 (3.4)	75 (283.9) (17.0)	5 (3.73)	95 (359.6)			430 (195.0)	560 (254.0)

Armstrong International

The Americas | Asia | Europe, Middle East, Africa

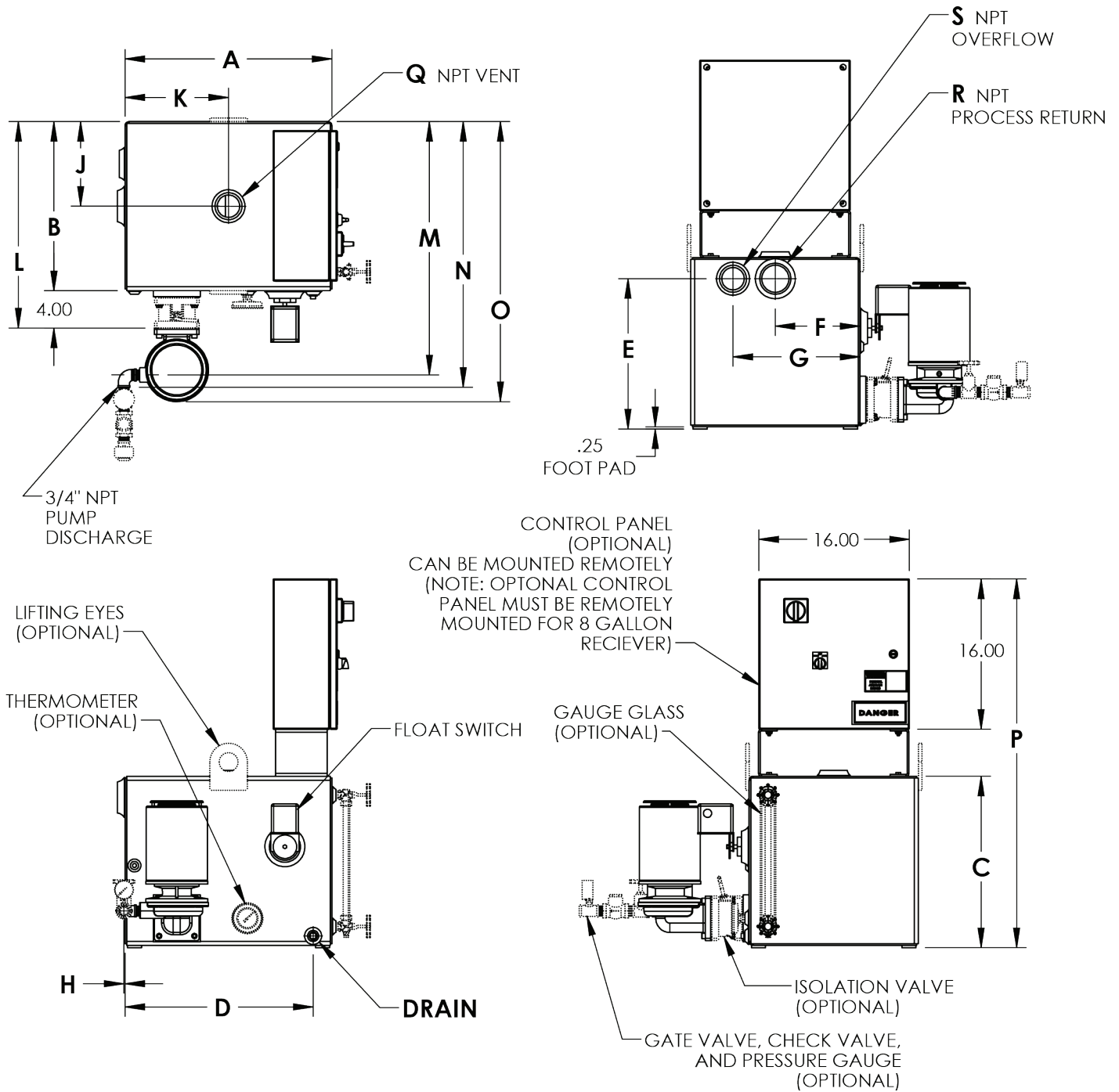


4100 Series – Engineering and Capacity Data

SAMPLE SPECIFICATION

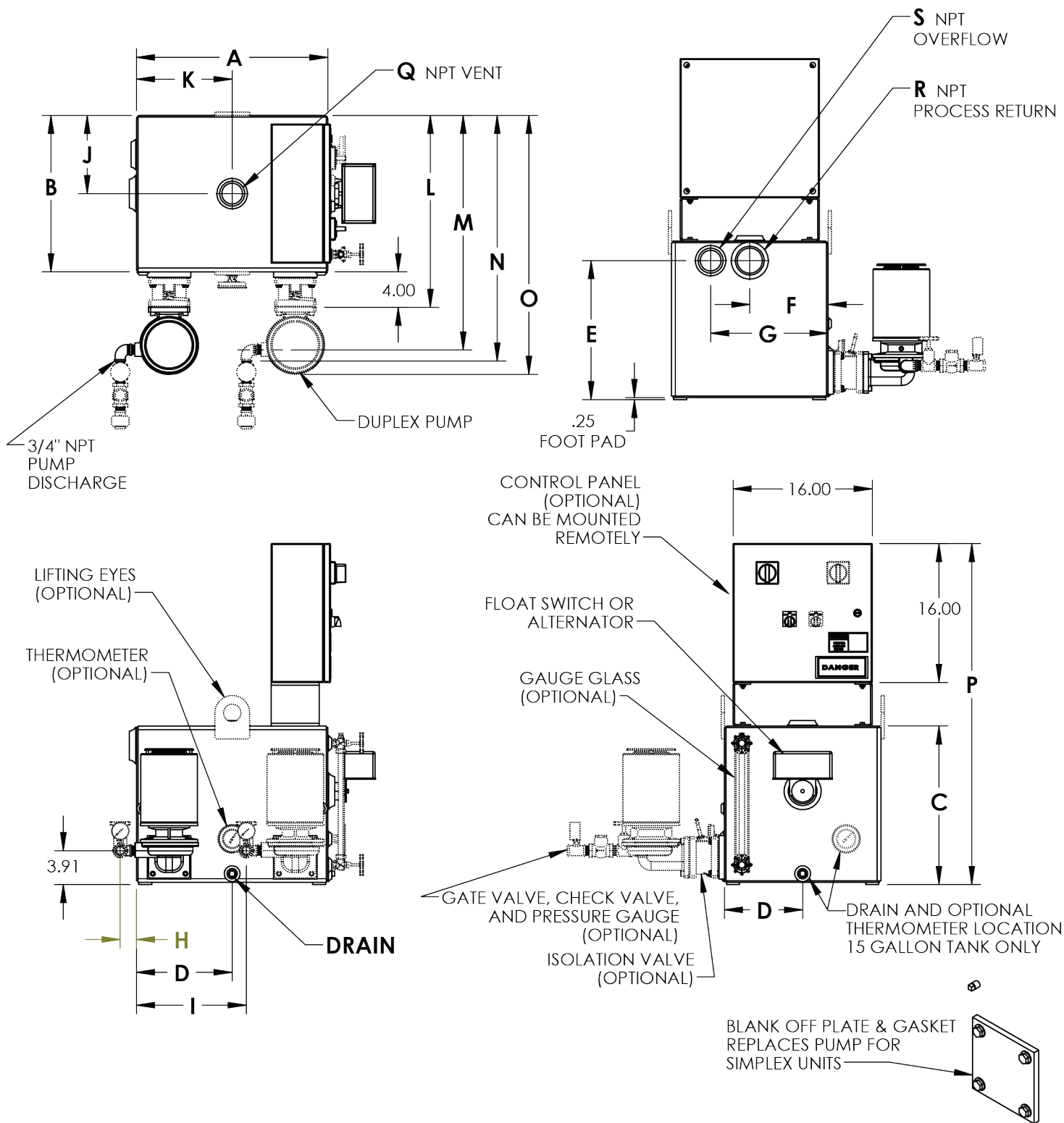
Furnish and install, where indicated on plans, a Armstrong 4100 Series (simplex or duplex) condensate pump, having a capacity of _____sq. ft. E.D.R. _____GPM against a discharge pressure of _____ PSI. The receiver shall have a capacity of _____gallons and be of 3/16" steel construction. Pump(s) shall 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 float switch shall be two-pole with plastic case, stainless steel float and shaft, and double-break silver contacts. 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. The complete unit is to be factory assembled and tested prior to shipment.



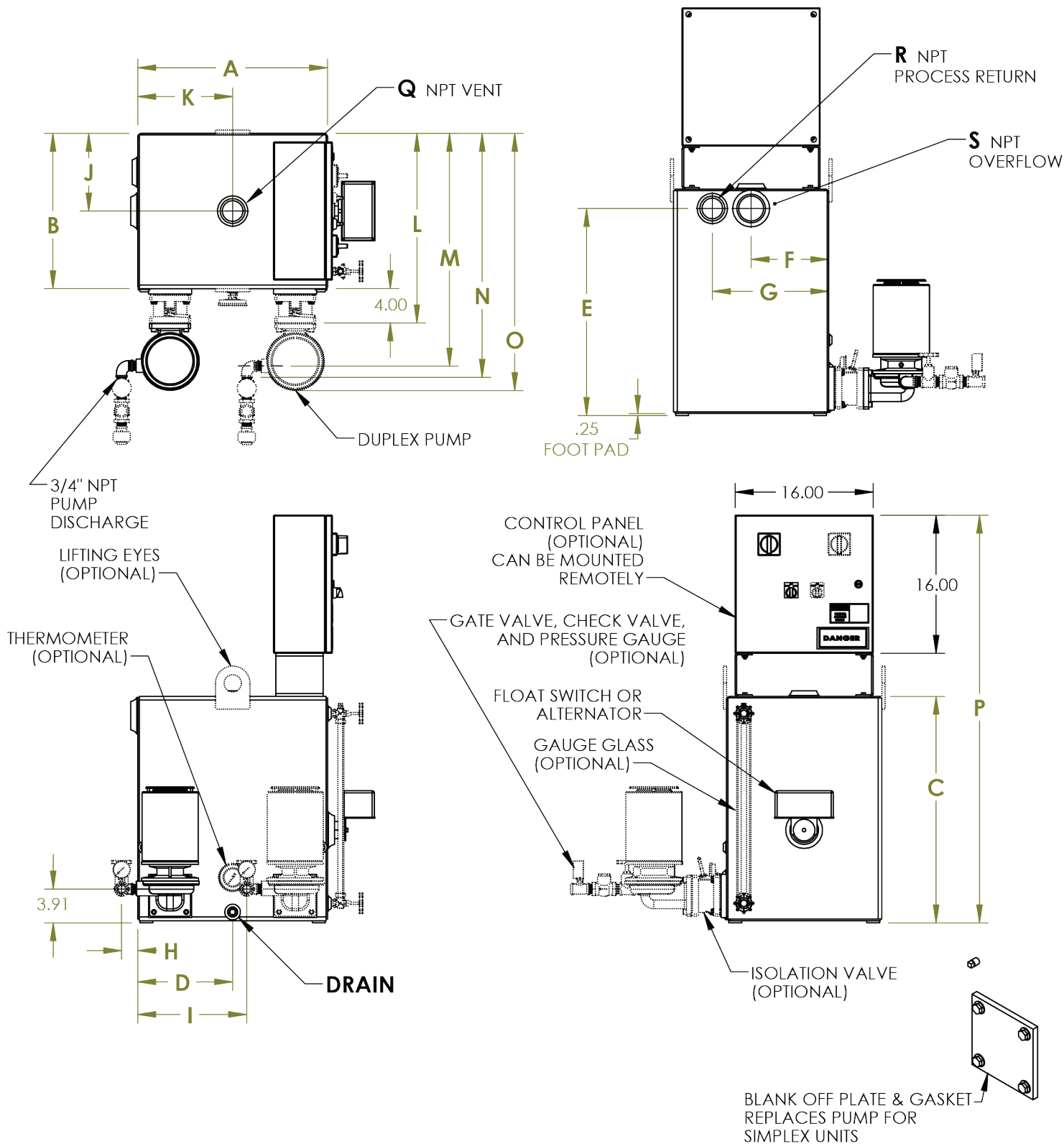
4100 "G" Series Condensate Unit – Receiver Material: Steel (8-30 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
8 (30)	12.50 (318)	12.50 (318)	12.75 (324)	10.50 (267)	10.75 (273)	6.25 (159)	10.25 (260)	2.63 (67)	-	6.25 (159)
15 (57)	16.50 (419)	15.00 (381)	15.25 (387)	14.50 (368)	13.25 (337)	7.50 (191)	12.00 (305)	1.00 (25)	-	7.50 (191)
30 (114)	22.00 (559)	18.00 (457)	18.25 (464)	20.00 (508)	16.00 (406)	9.00 (209)	13.50 (343)	0.13 (3)	-	9.00 (229)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
8 G	6.25 (159)	16.50 (419)	21.43 (544)	22.74 (578)	24.27 (616)	-	1-1/4 (32) NPT	2 (50) NPT	1-1/4 (32) NPT	1/2 (13) NPT
15 (57)	8.25 (210)	19.00 (483)	23.77 (604)	25.08 (637)	26.61 (676)	36.25 (920)	1-1/4 (32) NPT	2 (50) NPT	1-1/4 (32) NPT	1/2 (13) NPT
30 (114)	11.00 (279)	22.00 (559)	26.93 (684)	28.24 (717)	29.77 (756)	39.25 (997)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



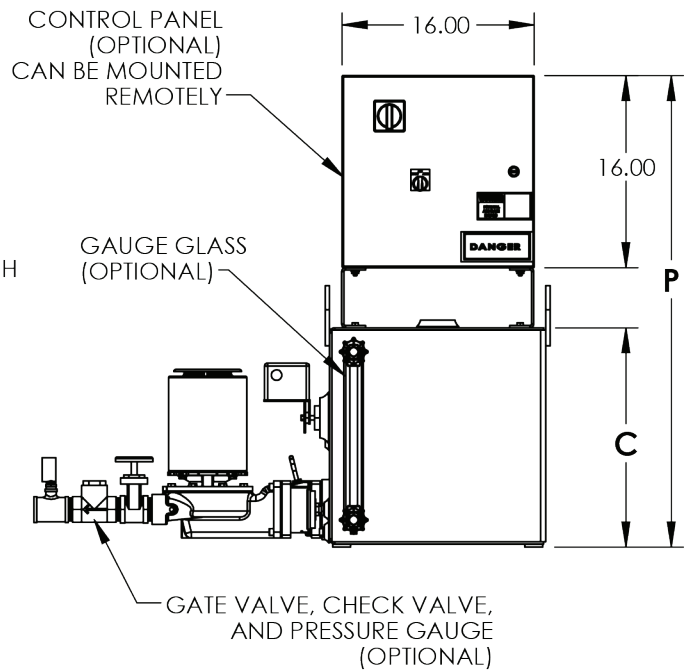
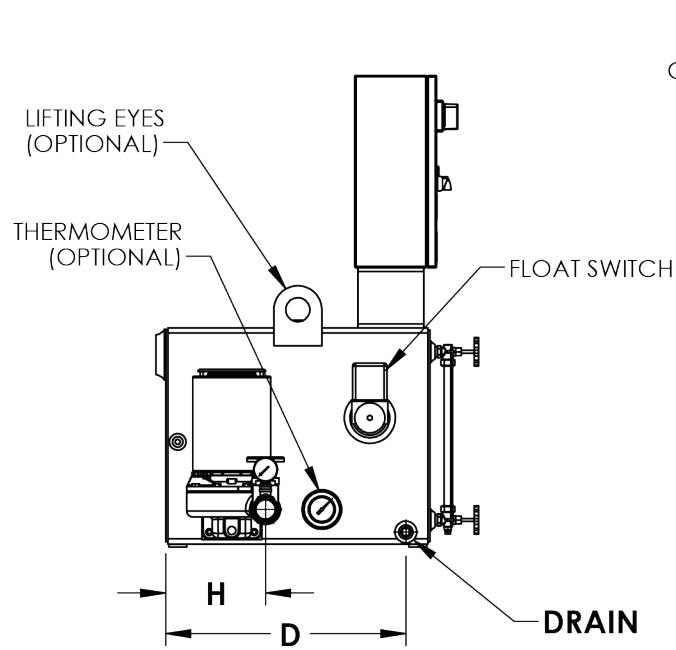
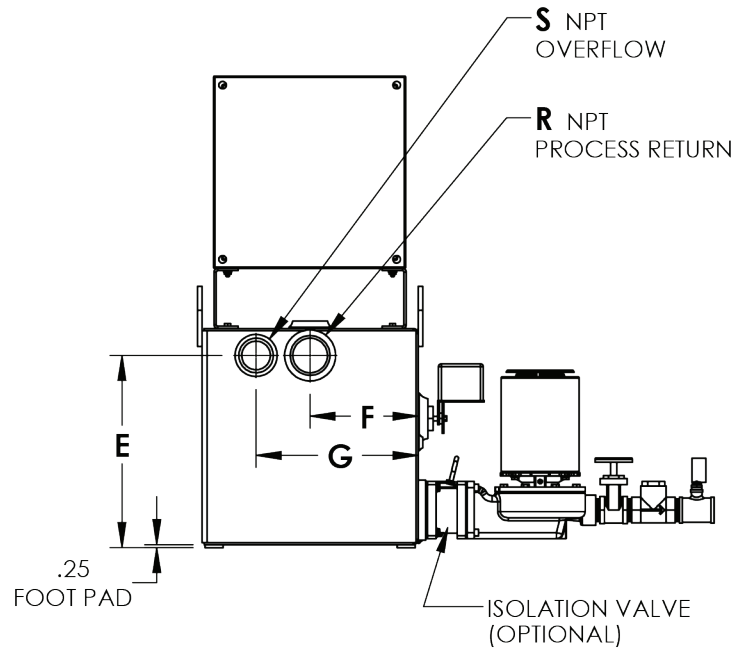
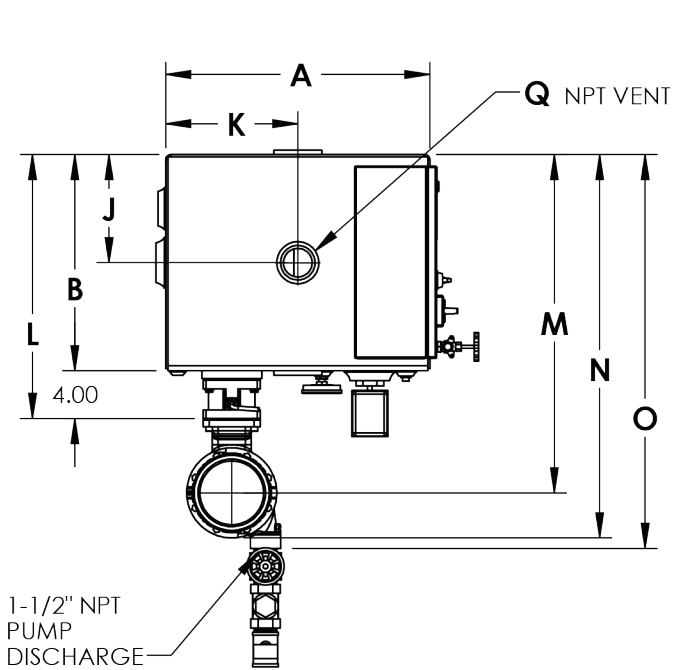
4100 "G" Series Condensate Unit – Receiver Material: Steel (15-45 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
15 (57)	17.00 (432)	15.00 (381)	14.25 (362)	7.50 (191)	12.25 (311)	7.50 (292)	11.50 (292)	2.13 (54)	7.88 (200)	7.50 (191)
30 (114)	22.00 (559)	18.00 (457)	18.25 (464)	11.00 (279)	16.00 (406)	9.00 (229)	13.50 (343)	1.88 (48)	12.63 (321)	9.00 (229)
45 (170)	22.00 (559)	18.00 (457)	26.25 (667)	11.00 (279)	16.00 (406)	9.00 (229)	13.50 (343)	1.88 (48)	12.63 (321)	9.00 (229)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
15 (57)	8.50 (216)	19.00 (483)	23.96 (609)	25.27 (642)	26.77 (680)	35.25 (896)	1-1/2 (38) NPT	2 (50) NPT	1-1/2 (38) NPT	1/2 (13) NPT
30 (114)	11.00 (279)	22.00 (559)	26.96 (685)	28.27 (718)	29.80 (757)	39.25 (997)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
45 (170)	11.00 (279)	22.00 (559)	26.96 (685)	28.27 (718)	29.80 (757)	47.25 (1200)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



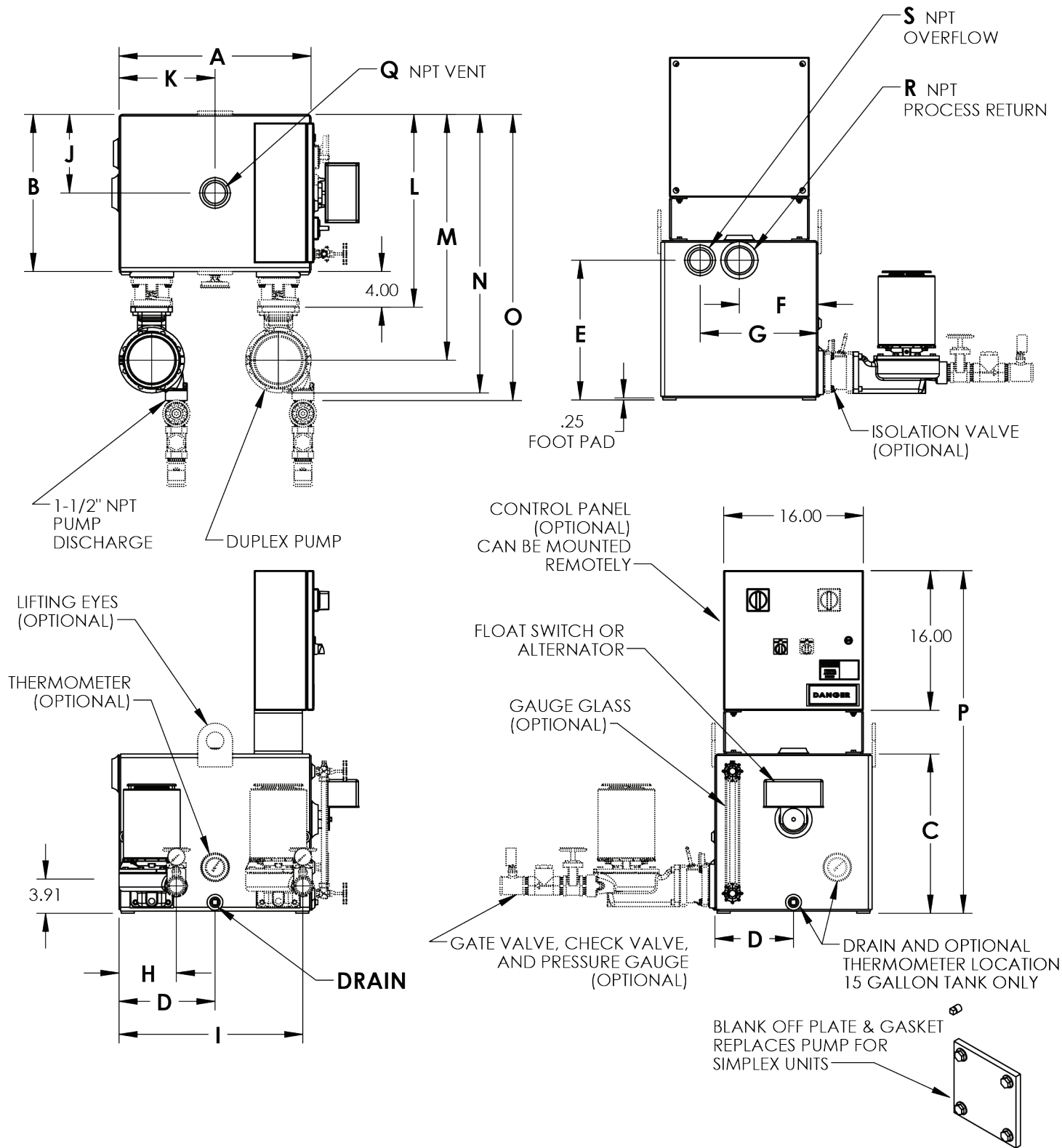
4100 "G" Series Condensate Unit – Receiver Material: Steel (60-120 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
60 (227)	28.00 (711)	18.00 (457)	28.25 (718)	14.00 (356)	26.00 (660)	9.00 (229)	13.50 (343)	1.88 (48)	18.63 (473)	9.00 (229)
95 (360)	28.00 (711)	28.00 (711)	28.25 (718)	14.00 (356)	26.00 (660)	14.00 (356)	23.50 (597)	1.88 (48)	18.63 (473)	14.00 (356)
120 (454)	28.00 (711)	28.00 (711)	36.25 (921)	14.00 (356)	34.00 (864)	14.00 (356)	23.50 (597)	1.88 (48)	18.63 (473)	14.00 (356)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
60 (227)	14.00 (356)	22.00 (599)	26.96 (685)	28.27 (718)	29.80 (757)	49.25 (1251)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
95 (360)	14.00 (356)	32.00 (813)	36.96 (939)	38.27 (972)	39.80 (1011)	49.25 (1251)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
120 (454)	14.00 (356)	32.00 (813)	36.96 (939)	38.27 (972)	39.80 (1011)	57.25 (1454)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



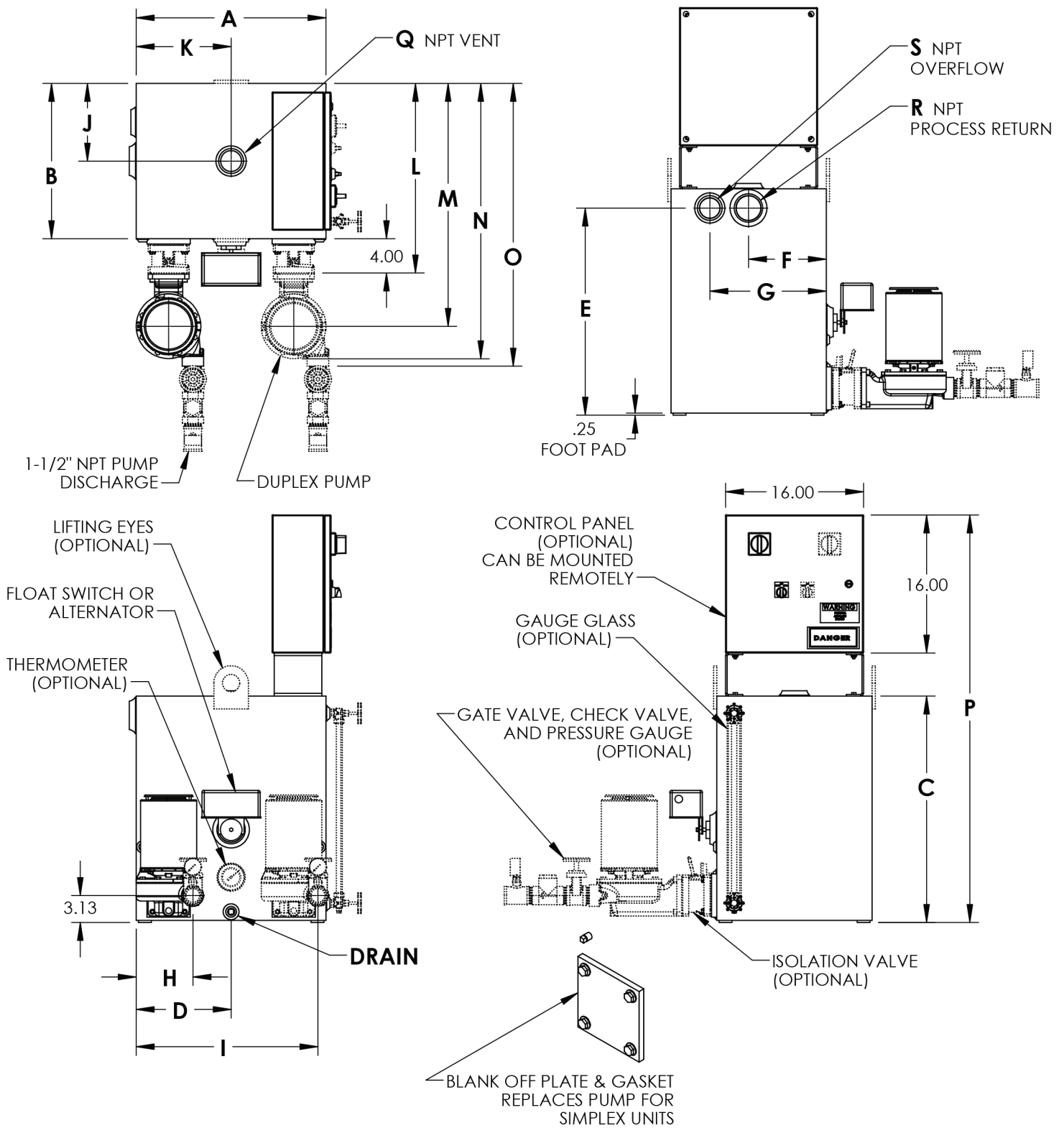
4100 "J" Series Condensate Unit – Receiver Material: Steel (15-30 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
15 (57)	16.50 (419)	15.00 (381)	15.25 (387)	14.50 (368)	13.25 (337)	7.50 (191)	12.00 (305)	7.44 (189)	-	7.50 (191)
30 (114)	22.00 (559)	18.00 (457)	18.25 (464)	20.00 (508)	16.00 (406)	9.00 (229)	13.50 (343)	8.31 (211)	-	9.00 (229)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
15 (57)	8.25 (210)	19.00 (483)	25.16 (639)	28.88 (734)	29.78 (756)	36.25 (921)	1-1/4 (32) NPT	2 (50) NPT	1-1/4 (32) NPT	1/2 (13) NPT
30 (114)	11.00 (279)	22.00 (559)	28.16 (715)	31.88 (810)	32.78 (833)	39.25 (997)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



4100 "J" Series Condensate Unit – Receiver Material: Steel (15-45 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
15 (57)	17.00 (432)	15.00 (381)	14.25 (362)	7.50 (191)	12.25 (311)	7.50 (292)	11.50 (292)	6.31 (160)	16.31 (414)	7.50 (191)
30 (114)	22.00 (559)	18.00 (457)	18.25 (464)	11.00 (279)	16.00 (406)	9.00 (229)	13.50 (343)	6.56 (167)	21.06 (535)	9.00 (229)
45 (170)	22.00 (559)	18.00 (457)	26.25 (667)	11.00 (279)	24.00 (610)	9.00 (229)	13.50 (343)	6.56 (167)	21.06 (535)	9.00 (229)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
15 (57)	8.50 (216)	19.00 (483)	25.16 (639)	28.88 (734)	29.78 (756)	35.25 (896)	1-1/2 (38) NPT	2 (50) NPT	1-1/2 (38) NPT	1/2 (13) NPT
30 (114)	11.00 (279)	22.00 (559)	28.16 (715)	31.88 (810)	32.78 (833)	39.25 (997)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
45 (170)	11.00 (279)	22.00 (559)	28.16 (715)	31.88 (810)	32.78 (833)	47.25 (1200)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



4100 "J" Series Condensate Unit – Receiver Material: Steel (60-120 Gallon)

Receiver G (L)	A in (mm)	B in (mm)	C in (mm)	D in (mm)	E in (mm)	F in (mm)	G in (mm)	H in (mm)	I in (mm)	J in (mm)
60 (227)	28.00 (711)	18.00 (457)	28.25 (718)	14.00 (356)	26.00 (660)	9.00 (229)	13.50 (343)	6.56 (x)	27.06 (x)	9.00 (229)
95 (360)	28.00 (711)	28.00 (711)	28.25 (718)	14.00 (356)	26.00 (660)	14.00 (356)	23.50 (597)	6.56 (x)	27.06 (x)	14.00 (356)
120 (454)	28.00 (711)	28.00 (711)	36.25 (921)	14.00 (356)	34.00 (864)	14.00 (356)	23.50 (597)	6.56 (x)	27.06 (x)	14.00 (356)
	K in (mm)	L in (mm)	M in (mm)	N in (mm)	O in (mm)	P in (mm)	Q Vent in (mm)	R Return in (mm)	S Overflow in (mm)	Drain in (mm)
60 (227)	14.00 (356)	22.00 (599)	28.16 (x)	31.88 (x)	32.78 (x)	49.25 (1251)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
95 (360)	14.00 (356)	32.00 (813)	38.16 (x)	41.88 (x)	42.78 (x)	49.25 (1251)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT
120 (454)	14.00 (356)	32.00 (813)	38.16 (x)	41.88 (x)	42.78 (x)	57.25 (1454)	2 (50) NPT	2-1/2 (64) NPT	2 (50) NPT	1/2 (13) NPT



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