

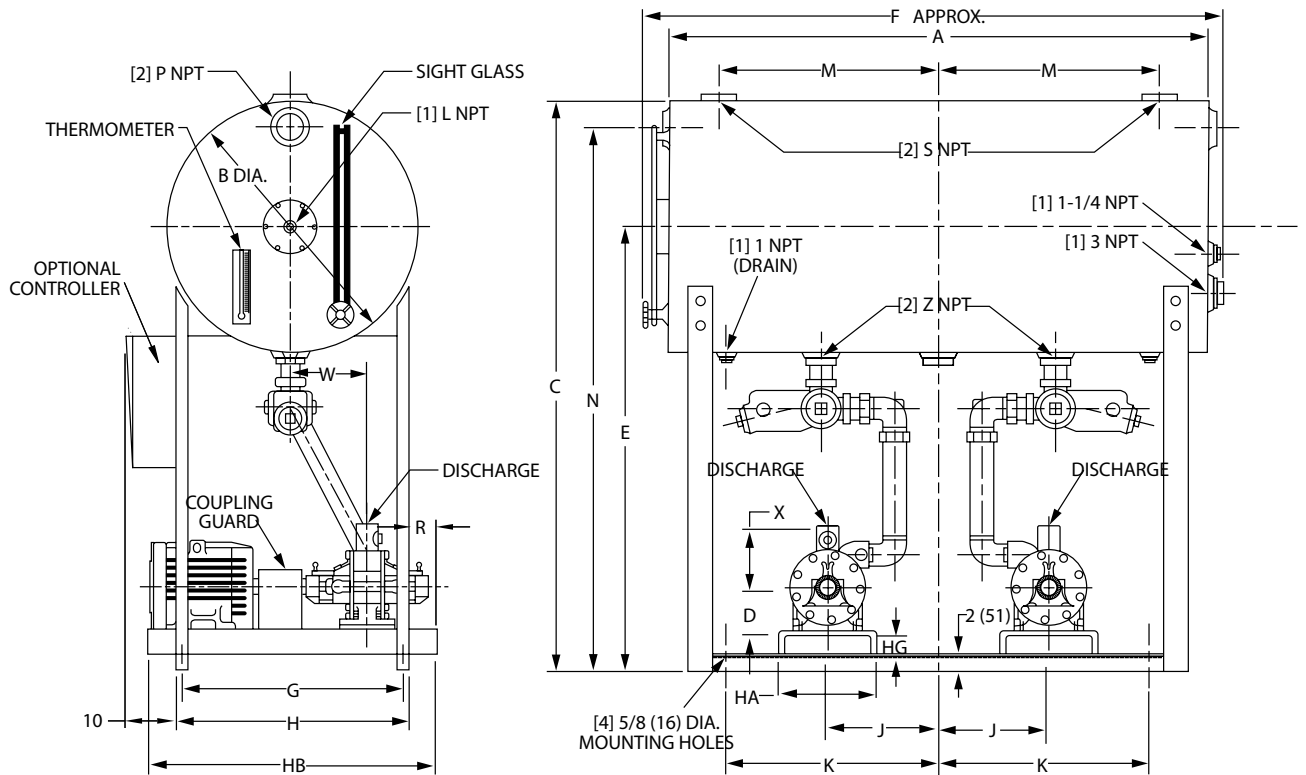
BOILER FEED UNIT

Date **JANUARY 2004**

110A TURBINE PUMP DIMENSIONS

Supersedes Section 280 Page 251

Dated JANUARY 1999



PUMP MODEL	PUMP TYPE	PUMP SIZE	DISCHARGE	D	W	X	FRAME	MOTOR D
114A	4R	A35, A4, B4, C4, D4, E4, F4, G4, H4, I4, I4A	1-1/4 NPT	3-1/2 (89)	5-15/16 (151)	6-1/4 (159)	56	3-1/2 (89)
	4RA	N4, P4, R4	1-1/2 NPT	3-1/2 (89)	8-1/8 (206)	5-3/8 (137)	143T	3-1/2 (89)
	4RTL	D4T, E4T, F4T, G4T, I4T, I4TA	1-1/4 NPT	3-1/2 (89)	6-3/4 (171)	5-3/8 (137)	145T	3-1/2 (89)
115A	5R	D5, E5, F5, G5, H5, I5	1-1/4 NPT	4-3/4 (121)	8-3/8 (213)	7-1/2 (191)	182T	4-1/2 (114)
	5RA	J5, K5, L5, M5, N5, P5	1-1/2 NPT	4-3/4 (121)	9-3/8 (238)	7-1/2 (191)	184T	4-1/2 (114)
	5RTL	D5T, E5T, F5T, G5T, H5T, I5T	1-1/4 NPT	4-3/4 (121)	8-5/8 (219)	7-1/2 (191)	213T	5-1/4 (133)
116A	6RA	G6, H6, J6, K6	2-1/2 - 250#	6-1/4 (159)	12-3/16 (310)	8 (203)	215T	5-1/4 (133)
	6RTL	D6T, E6T, F6T	2 - 250#	6-1/4 (159)	12-3/16 (310)	7-1/2 (191)	254T	6-1/4 (159)
	6RATL	G6T, H6T, J6T, K6T	2-1/2 - 250#	6-1/4 (159)	13-13/16 (335)	7-1/2 (191)	256T	6-1/4 (159)
							284TS	7 (178)
							284T	7 (178)
							286TS	7 (178)
							286T	7 (178)

NOTES:

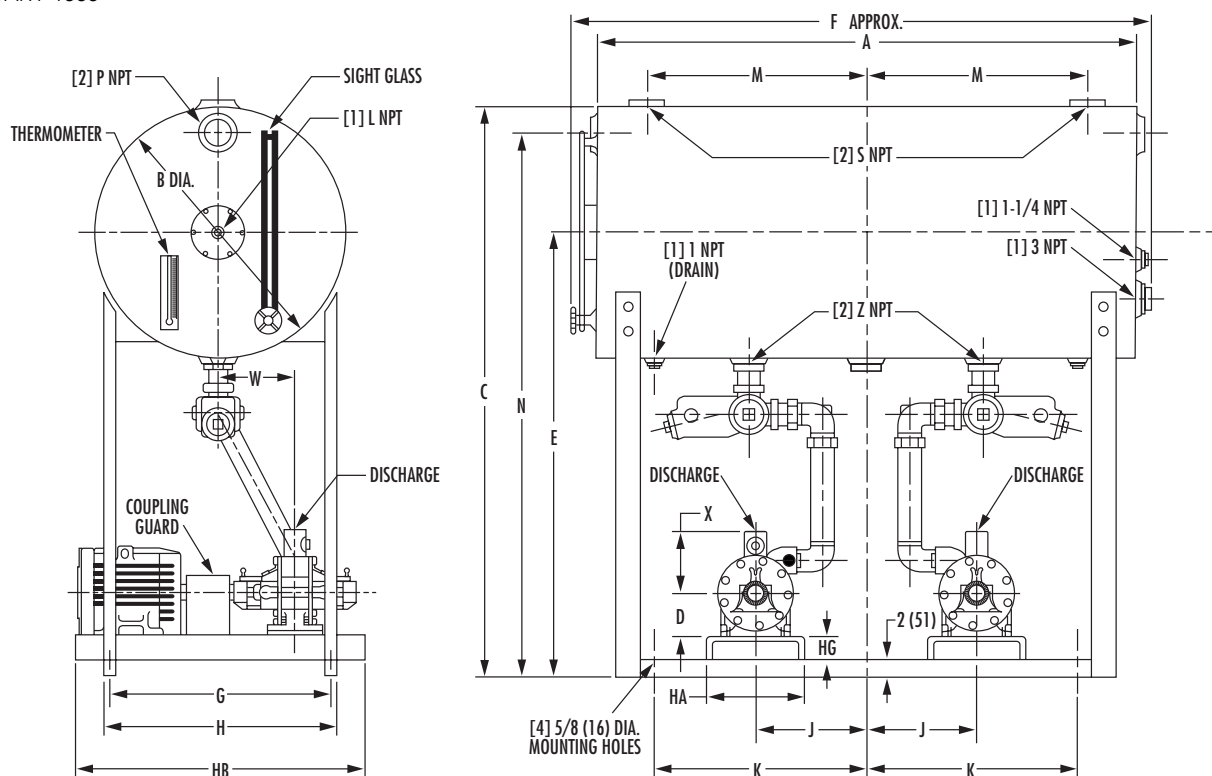
1. All dimensions in inches (mm).
2. Dimensions may vary $\pm .25"$ (6).
3. Not for construction purposed unless certified.
4. Duplex Model 282 illustrated.
Simplex is Model 281.
Duplex is Model 282.
5. Inlet and vent piping by customer.
6. Two "D" dimensions are given. Always use the larger figure.
7. Two base numbers are given. Always use the larger base number.

Date **JULY 1999**

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Dated JANUARY 1999

BOILER FEED UNIT RECEIVER AND BASE DIMENSIONS



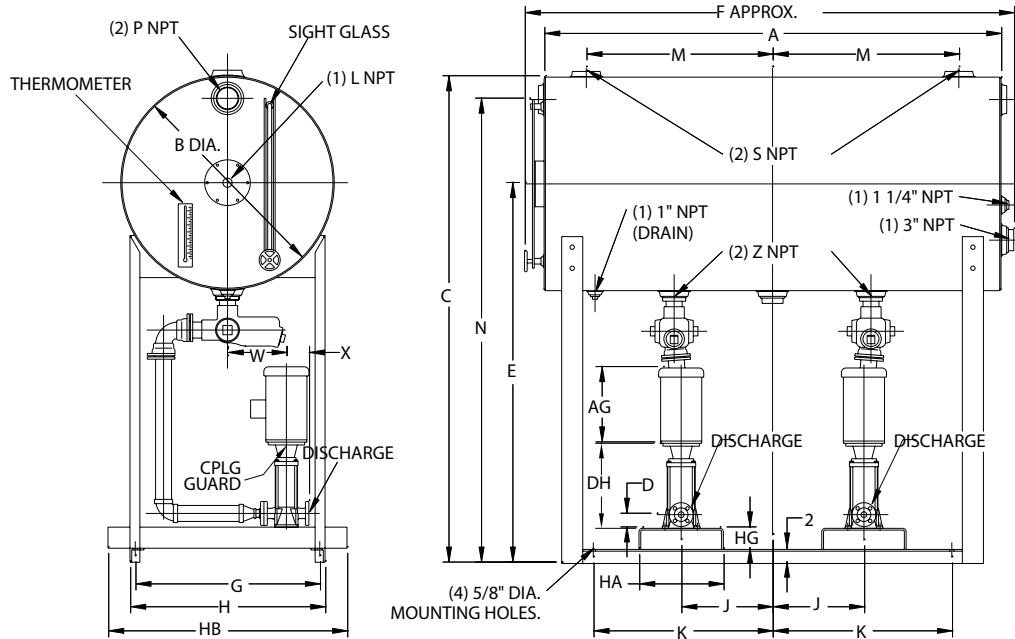
RECEIVER CAPACITY GALLONS	A	B	C	E	F	G	H	J	K	L	M	N	P	S	Z	RECEIVER BASE NUMBER	BASE NUMBER	HA	HB	HG
30	37 (940)	16 (406)	42-3/16 (1072)	34 (864)	44 (1118)	14-1/4 (362)	15-3/4 (400)	9 (229)	16 (406)	3/4 (19)	14-1/2 (368)	40 (1016)	2 (51)	2 (51)	1-1/4 (32)	1	1	7 (178)	18 (457)	2 (51)
60	37 (940)	22 (559)	49-11/16 (1262)	38-1/2 (978)	44 (1118)	20-3/8 (518)	21-7/8 (556)	9 (229)	16 (406)	3/4 (19)	15 (381)	47 (1194)	2 (51)	2 (51)		2	2	9 (229)	24 (610)	2-7/16 (62)
100	51 (1295)	24 (610)	59-11/16 (1207)	47-1/2 (1173)	58 (1473)	21-1/4 (540)	22-3/4 (578)	11 (279)	21 (533)	3/4 (19)	20-1/2 (521)	57 (1448)	2 (51)	3 (76)		2	2	10 (254)	26 (660)	2-5/8 (67)
200	65 (1651)	30 (762)	77-3/16 (1961)	62 (1575)	72 (1829)	26-1/4 (667)	27-3/4 (705)	17 (432)	25-1/2 (648)	1 (25)	26-1/2 (673)	74 (1880)	3 (76)	3 (76)		4	3	12 (305)	30 (762)	3 (76)
250	60 (1524)	36 (914)	80-3/16 (2037)	62 (1575)	67 (1702)	28-3/8 (721)	29-7/8 (759)	17 (432)	25-1/2 (648)	1 (25)	26-1/2 (673)	77 (1956)	3 (76)	3 (76)	3 (76)	5	3	12 (305)	39 (991)	3-1/4 (83)
350	60 (1524)	42 (1067)	80-3/16 (2037)	59 (1499)	67 (1702)	36-3/4 (933)	38-1/4 (972)	17 (432)	25-1/2 (648)	1-1/2 (38)	26-1/2 (673)	76 (1930)	3 (76)	3 (76)	3 (76)	6	3	13 (330)	40 (1016)	4 (102)
500	84 (2134)	42 (1067)	80-3/16 (2037)	59 (1499)	91 (2311)	37-3/8 (949)	38-7/8 (987)	17 (432)	28-1/2 (724)	1-1/2 (38)	38-1/2 (978)	76 (1930)	3 (76)	3 (76)		6	3	15 (381)	40 (1016)	3-3/8 (86)
750	96 (2438)	48 (1219)	88-3/16 (2240)	64 (1626)	103 (2616)	45-1/2 (1156)	47 (1194)	17 (432)	35-1/2 (902)	1-1/2 (38)	40 (1016)	85 (2159)	3 (76)	3 (76)		10	3	15 (381)	44 (1118)	3-3/8 (86)
1000	120 (3048)	48 (1219)	88-3/16 (2240)	64 (1626)	127 (3226)	45-1/2 (1156)	47 (1194)	17 (432)	47-1/2 (1207)	1-1/2 (38)	52 (1321)	85 (2159)	3 (76)	3 (76)	3 (76)	10	3	18 (457)	48 (1219)	4 (102)

PUMP BASE NUMBER								
FRAME	114A			115A			116A	
	4R	4RA	4RTL	5R	5RA	5RTL	6RA	6RTL
56	1		2					
143T	2	2	2	3				
145T	2	2	2	3	3	3		
182T			3	3	3	4		6
184T				3	3	4	6	6
213T					5	5	7	8
215T					5	5	7	8
254T							7	9
256T								9
284TS								9
284T								9
286TS								11
286T								11

NOTES:

1. All dimensions in inches (mm).
2. Dimensions may vary $\pm .25"$ (6).
3. Not for construction purposes unless certified.
4. Duplex Model 282 illustrated.
Simplex is Model 281.
Duplex is Model 282.
5. Inlet and vent piping by customer.
6. Two "D" dimensions are given. Always use the larger figure.
7. Two base numbers are given. Always use the larger base number.

BOILER FEED UNIT
MULTI-STAGE VERTICAL IN-LINE
CENTRIFUGAL PUMPS



PUMP SIZE	DISCHARGE	D	X	AG	DH
391-3	1-1/4-250#	3	4.92	11.82	12
391-8	1-1/4-250#	3	4.92	11.76	16
391-9	1-1/4-250#	3	4.92	11.76	17
391-10	1-1/4-250#	3	4.92	16.5	18.63
391-11	1-1/4-250#	3	4.92	16.5	19.5
391-13	1-1/4-250#	3	4.92	16.5	21.13
391-15	1-1/4-250#	3	4.92	16.5	22.81
391-16	1-1/4-250#	3	4.92	16.5	23.75
391-18	1-1/4-250#	3	4.92	16.5	25.25

PUMP SIZE	DISCHARGE	D	X	AG	DH
392-3	1-1/4-250#	3	4.92	11.82	12
392-4	1-1/4-250#	3	4.92	11.76	12.75
392-8	1-1/4-250#	3	4.92	11.76	17
392-9	1-1/4-250#	3	4.92	16.5	17.88
392-10	1-1/4-250#	3	4.92	16.5	18.63
392-11	1-1/4-250#	3	4.92	16.5	19.50
392-113	1-1/4-250#	3	4.92	16.5	21.13
392-15	1-1/4-250#	3	4.92	16.5	22.75
392-16	1-1/4-250#	3	4.92	16.5	23.63

PUMP SIZE	DISCHARGE	D	X	AG	DH
393-3	2-250#	3.5	5.91	16.5	15.5
393-7	2-250#	3.5	5.91	16.5	19.75
393-8	2-250#	3.5	5.91	16.5	20.88
393-10	2-250#	3.5	5.91	19.5	23
393-12	2-250#	3.5	5.91	19.5	25.5
393-14	2-250#	3.5	5.91	19.5	27.5
394-9	2-250#	3.5	5.91	21.13	25.5
394-10	2-250#	3.5	5.91	21.13	27
394-12	2-250#	3.5	5.91	23.37	28.88

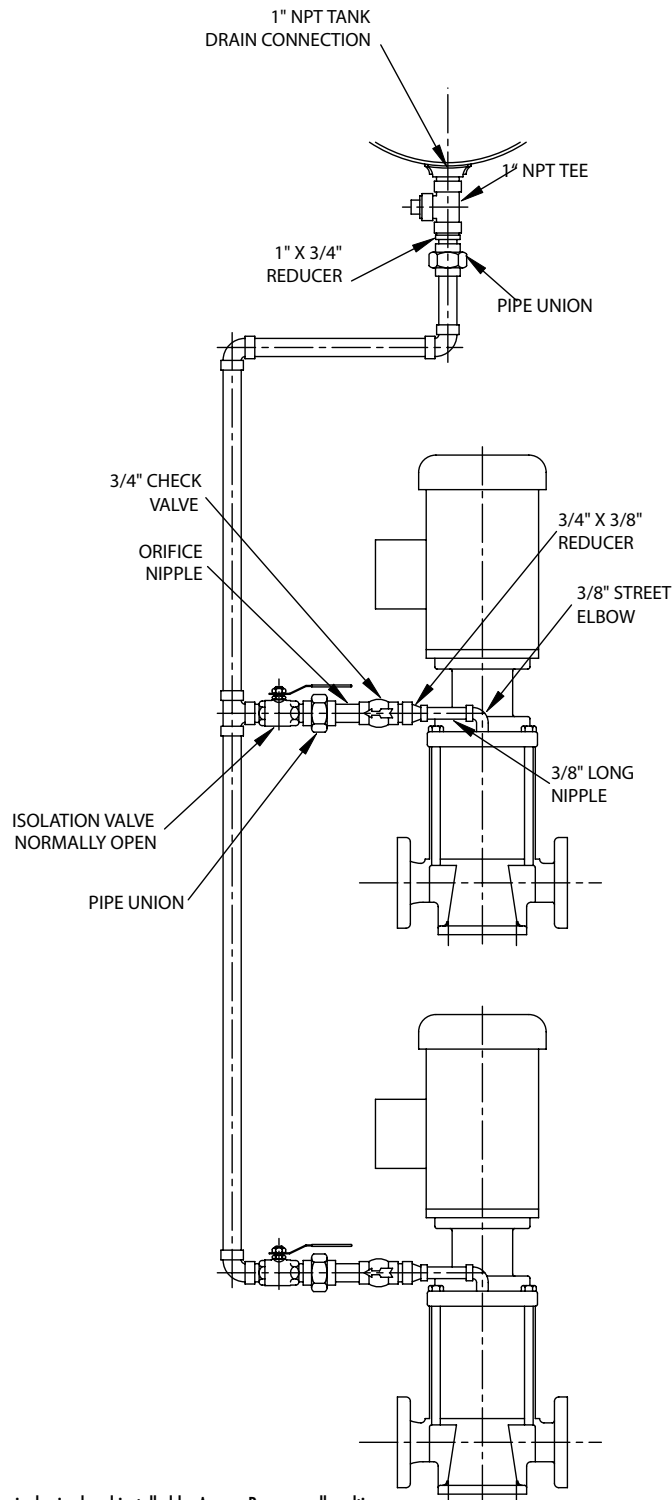
RECEIVER CAPACITY GALLONS	A	B	C	E	F	G	H	J	K	L	M	N	P	S	W	Z	RECEIVER BASE NUMBER	HA	HB	HG
30	37	16	69.19	61	44	14.25	15.75	9	15.5	3/4	14.5	67	2	2	2	1-1/4	1A	10	16	2.63
60	37	22	76.69	65.5	44	20.38	21.88	9	15.5	3/4	15	74	2	2	6	1-1/4	2A	10	24	2.63
100	51	24	86.69	74.5	58	21.25	22.75	11	21	3/4	20.5	84	2	3	6	3	3A	12	26	3
200	65	30	101.19	86	72	26.25	27.75	17	25.5	1	26.5	98	3	3	8	3	5	12	30	3
250	60	36	104.19*	86	67	28.38	29.88	17	25.5	1	26.5	101	3	3	8	3	5	12	30	3
350	60	42	116.19*	95	67	36.75	38.25	17	25.5	1-1/2	26.5	112	3	3	12.5	3	6	12	39	3.25
500	84	42	116.19*	95	91	37.38	38.88	17	28.5	1-1/2	38.5	112	3	3	12.5	3	6	12	39	3.25
750	96	48	124.19*	100	103	45.5	47	20	35.5	1-1/2	40	121	3	3	17	3	10	15	48	3.38
1000	120	48	124.19*	100	127	45.5	47	20	47.5	1-1/2	52	121	3	3	17	3	10	15	48	3.38

* "C" DIMENSIONS OVER 103 WILL REQUIRE SPECIAL SHIPPING ARRANGEMENTS.

NOTES:

1. All dimensions in inches (mm).
2. Dimensions may vary $\pm .25"$ (6).
3. Not for construction purposes unless certified.
4. Duplex Model 282 illustrated.
Simplex is Model 281. Duplex is Model 282.
5. Inlet and vent piping by customer.

BOILER FEED UNIT
MULTI-STAGE VERTICAL IN-LINE
CENTRIFUGAL PUMPS STANDARD
BY-PASS PIPING ARRANGEMENT

**NOTES:**

1. Orifice by-pass nipple sized and installed by Aurora Pump on all multi-stage vertical in-line centrifugal pumps.
2. Drawing depicts typical piping arrangement for 282 or 282A units. Simplex 281 units have one pump.