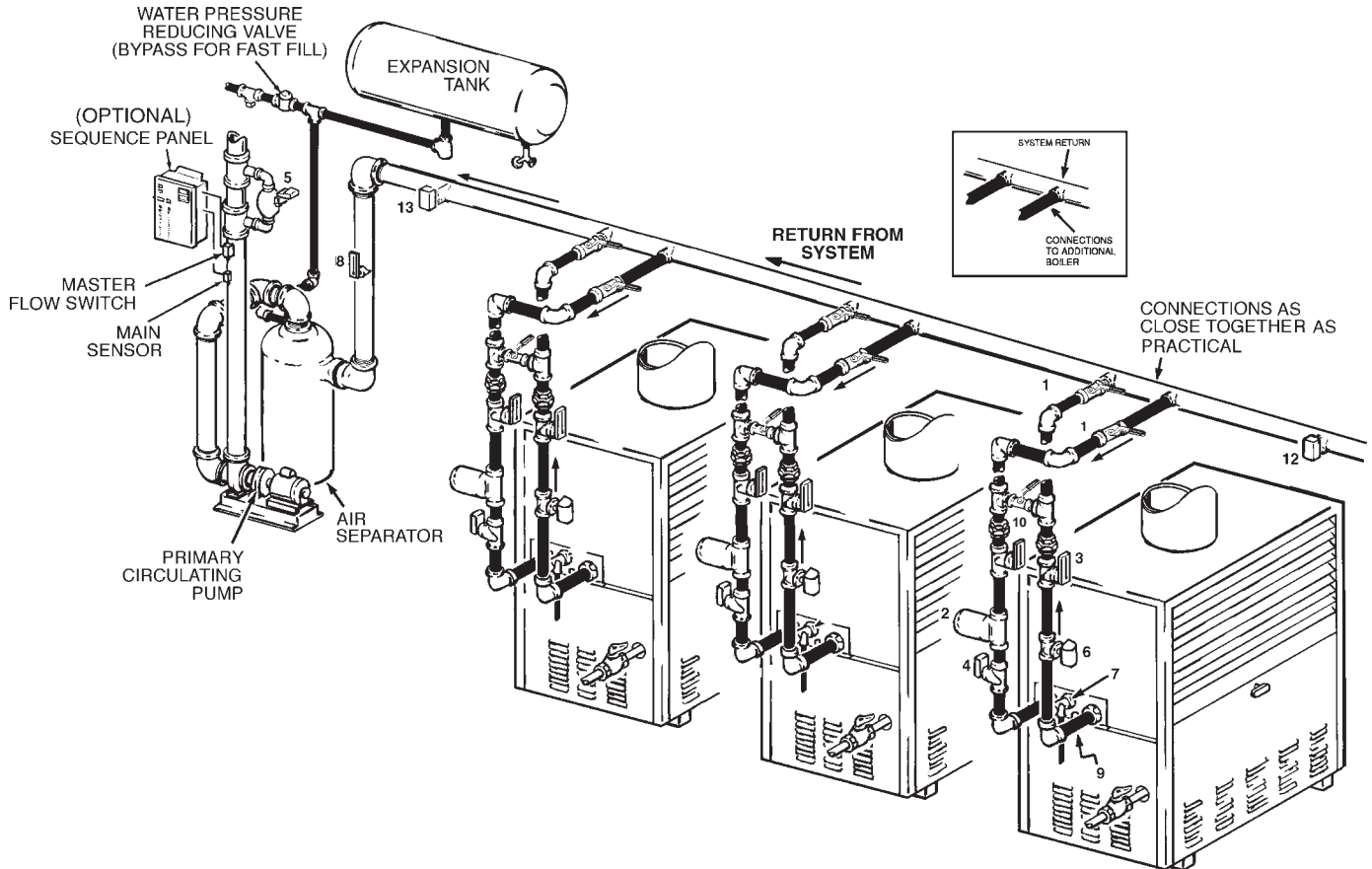


A.O. SMITH

APPLICATION TYPE DIAGRAM
SEE INSTALLATION MANUAL FOR
COMPLETE INSTRUCTIONS

LOW TEMPERATURE SYSTEM DB-720 THRU DB-1810 PRIMARY-SECONDARY PIPING

INSTALL IN ACCORDANCE WITH LOCAL CODES.



SECONDARY PUMP AND PIPE SELECTION DATA FOR
CONNECTIONS TO EACH PAIR OF BOILERS
ASSUMING THAT PRIMARY PUMPING IS SIZED FOR A 20°
TEMPERATURE DROP

Model DB	Temp. Rise 20°(F)		Temp. Rise 30°(F)		Temp. Rise 20°(F)		Boiler Inlet & Outlet (Inches)
	Flow (gpm)	Head Loss (feet)	Flow (gpm)	Head Loss (feet)	Flow (gpm)	Head Loss (feet)	
720	59	3.5	40	1.7	30	1.0	2"
840	69	4.8	46	2.1	35	1.5	2"
960	79	6.8	53	3.3	40	1.9	2"
1080	89	4.5	59	2.1	45	1.4	2.5"
1210	100	5.3	67	2.7	50	1.6	2.5"
1350	111	6.8	74	3.2	56	1.8	2.5"
1480	122	7.9	81	3.9	61	2.1	2.5"
1610	133	9.5	89	5.0	66	3.0	2.5"
1810	149	12.0	100	6.2	75	3.9	2.5"

1. BALL VALVE
2. BOILER CIRCULATING PUMP (Secondary)
3. THERMOMETER
4. THERALTIMETER
5. LOW WATER CUT-OFF (If Required)
6. SAFETY FLOW SWITCH
7. RELIEF VALVE
8. SYSTEM SUPPLY TEMP. THERMOMETER
9. DRAIN or BLOW-DOWN VALVE
10. BY-PASS
11. OUTLET VALVE
12. REMOTE LOOP STAT
13. PROBE-TYPE LOW WATER CUTOFF (If Required)

Secondary flow rate should not create a temperature rise that will force boiler temperatures up to the 240° maximum setting of limit controls.

A minimum inlet temperature of 110° must be maintained to the boiler.

** Flow rates through unequal models must be adjusted to establish equal temperature rise.

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