

A. O. SMITH

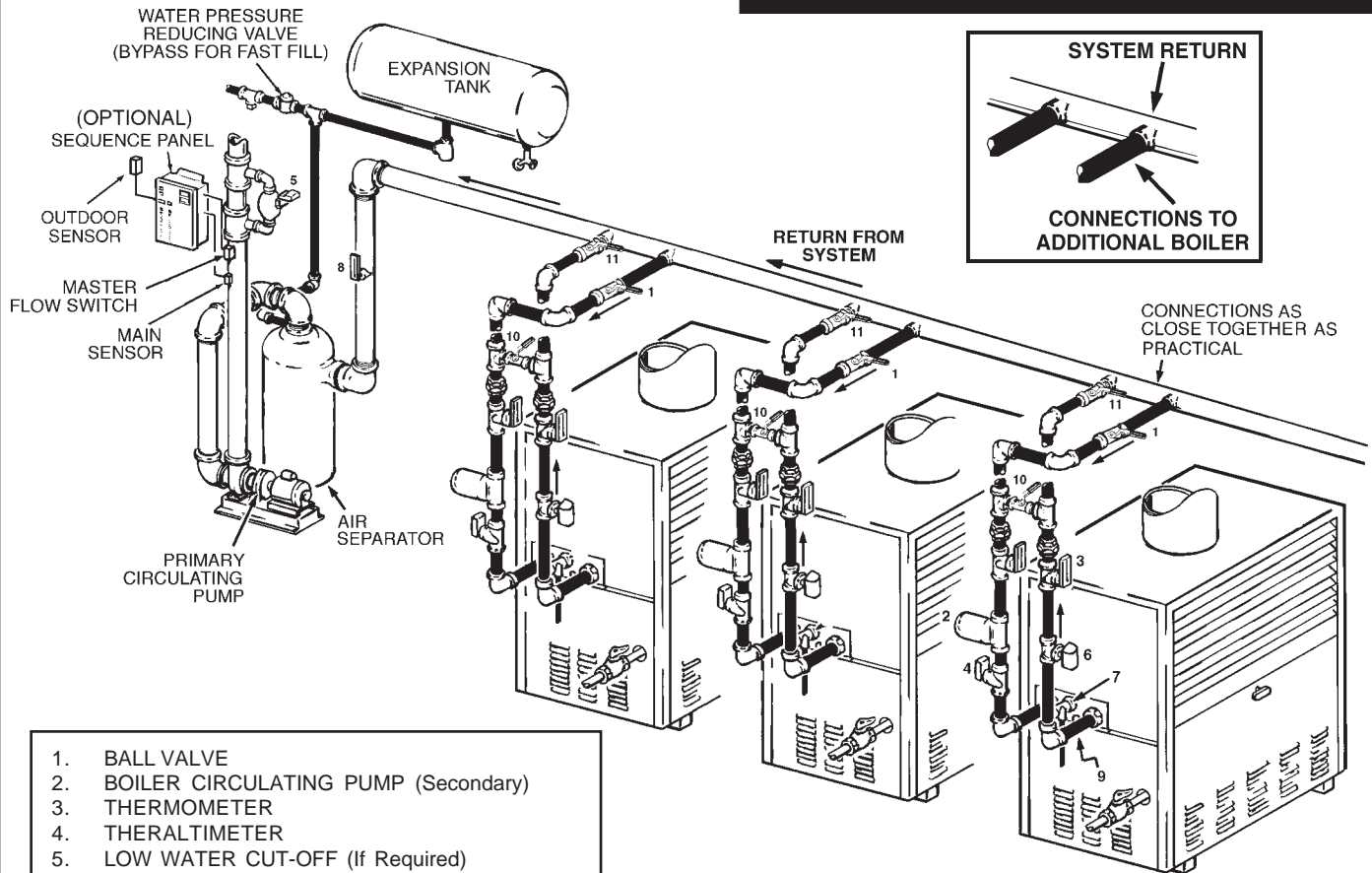
APPLICATION TYPE DIAGRAM
SEE INSTALLATION MANUAL FOR
COMPLETE INSTRUCTIONS

INSTALL IN ACCORDANCE WITH LOCAL CODES.

LINEAR TEMP* SYSTEM



DB-720 THRU DB-1810
PRIMARY-SECONDARY PIPING



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

SECONDARY PUMP AND PIPE SELECTION DATA FOR
CONNECTIONS TO EACH BOILER

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"

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

This piping method is not recommended for systems designed to operate with return water temperatures less than 110°F. (For Low Temperature Heating Systems, see A&E page # E112.0 for the recommended piping method.)

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

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