

Buderus System With INOV8 Model S700 Burner

Buderus Boiler Specifications for INOV8 System	B750	B850	B1050
Boiler Dimensions (no burner)			
Buderus Model #:	G315-8	G315-9	G515-8
Oil Input - GPH (based on 140,000 BTU per gallon)	5.04	5.76	7.50
Gross Output (de-rated 10% from Buderus ratings)	596,700	691,200	908,100
Net IBR (de-rated 10% from Buderus ratings)	519,300	601,200	789,300
Overall Boiler Length	63 1/4"	69 1/2"	69
Boiler Block Length	57"	63 1/2"	61
Minimum Boiler Width	33 1/2"	33 1/2"	33"
Boiler Width with Jacket & insulation	34 3/4"	34 3/4"	38 1/2"
Fire Box Depth	50"	56 1/4"	52 1/2"
Fire Box Diameter	15 3/4"	15 3/4"	20 1/4"
Fire Box Volume (cu. Ft.)	8.79	9.99	17.16
Dry Weight (lbs)	1,779	1,973	3,059
Water Content (gal)	60	67.4	77.7
Operating Weight (lbs)	2,280	2,545	3,707
Foundation Length	54 1/4"	61"	60 1/4"
Water side connections:			
Water connection - inches	3	3	4
Return water connection (NPT)	3	3	4
Drain connection size - inches	3/4"	3/4"	3/4"
Vent connection - inches	7	7	10
Chimney size - inches (minimum)	12	12	12
Chimney height - feet (minimum)	15	15	15
Clearances (in inches)			
Side wall	12	12	32
Side wall - burner door swing	43	43	43
Front of boiler (boiler length plus 40")	95	104	101
Behind (1/2 boiler length plus 20")	49	52	51
Top	12	12	24
Chimney connector	18	18	18
Boiler operating requirements			
Max operating temperature - F	240	240	240
Max operating pressure - PSIG	58	58	58
Max supply temperature - F	248	248	248
Min supply temperature - F	150	150	150
Min required draft - inches of WC	-0.02	-0.02	-0.02
Firebox Pressure (In. W.C.)	0.71	0.75	.40 - .57
Draft Inducer:			
Tjernlund Draft Inducer, model	I	I	IL
Tjernlund connection size (inches)	8	8	10
Standard features of Buderus Boiler System:			
Factory assembled cast iron sections (can be ordered knocked-down)			
Full-size burner door hinged left or right (field adjustable)			
Supply & return connections at rear of boiler			
Blue enamel jacket with 3 1/2" wrap-around thermal insulation (packaged separate from cast iron)			
Flexible GL-180M cast iron with silicon "barrier skin", precision casting eliminates need for manual grinding			
Precision casting eliminates need for manual grinding			
No refractory or target cup needed due to chamber geometry			
Tongue and groove flue side sealing for pressurized operation			
Boiler brushes & Instruction Manual			

Note: boilers de-rated 10% to accommodate waste oil flame when used with atomizing air. Ratings are at clean conditions.