

INOV8 – Buderus Boiler Specifications Chart with INOV8 Model S200 Burner

Buderus Boiler Specifications for INOV8 System:	B120	B175	B225	B275	B325	B400	B500	B650
Buderus Boiler Model #	G115-5	G215-4	G215-5	G215-6	G215-7	G315-5	G315-6	G315-7
Oil Input - GPH (based on 140,000/hour)	.95	1.26	1.53	1.89	2.25	2.70	3.46	4.23
Gross Output (de-rated 10% from Buderus ratings)	122,400	153,900	186,300	230,400	264,600	315,000	408,600	503,100
Net IBR (de-rated 10% from Buderus ratings)	107,100	134,100	162,000	200,700	230,400	273,600	355,500	437,400
Overall Boiler Length in inches	33 3/8	31	35 3/4	40 1/2	45 1/2	44 1/4	55 1/2	56 3/4
Boiler Block Length	30 1/2	26 3/4	31 1/2	36 1/4	41	38 1/4	44 1/12	50 3/4
Minimum Boiler Width	18	18	18	18	18	20	20	20
Boiler Width with Jacket & insulation	23 1/2	23 1/2	23 1/2	23 1/2	23 1/2	34 3/4	34 3/4	34 3/4
Minimum Boiler Height	33 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2	34 1/2
Fire Box Depth	30 1/2	21 1/2	26 1/4	31	35 3/4	31	37 1/2	43 3/4
Fire Box Diameter	11 1/4	13 1/4	13 1/4	13 1/4	13 1/4	15 3/4	15 3/4	15 3/4
Fire Box Volume (cu. Ft.)	2.21	1.73	2.1	2.48	2.86	5.19	6.39	7.59
Dry Weight (lbs)	476	500	600	700	800	1,197	1,391	1,585
Water Content (gal)	12.9	16.1	19.3	22.5	25.6	37.8	45.2	52.6
Operating Weight (lbs)	487	634	761	888	1014	1,512	1,768	2,024
Foundation Length	22 1/2	24 3/4	29 1/2	34	39	36	42 1/2	48 1/2
Boiler & water side connections:								
Water connection -inches	1.25	1.5	1.5	1.5	1.5	3	3	3
Return water connection (NPT)	1	1.5	1.5	1.5	1.5	3	3	3
Drain connection size - inches	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Vent connection - inches	5	6	6	6	6	7	7	7
Chimney size- inches (minimum per Buderus)	6	8	8	8	10	10	10	10
Chimney height - feet (minimum per Buderus)	15	15	15	15	15	15	15	15
Clearances (in inches)								
Side wall	15	15	15	15	15	15 3/4	15 3/4	15 3/4
Side wall - to accommodate burner door swing	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2	43	43	43
Front of boiler (boiler length plus 40")	53 1/8	51 1/8	51 1/8	51 1/8	51 1/8	79	85	91
Behind (1/2 boiler length plus 20")	20	27 1/2	27 1/2	27 1/2	27 1/2	40	43	46
Top	12	12	12	12	12	12	12	12
Chimney connector side	18	18	18	18	18	18	18	18

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Boiler operating requirements							
Max operating temperature - F	240						
Max operating pressure - PSIG	58						
Max supply temperature - F	248						
Min supply temperature - F	150						
Min required draft - inches of WC	-0.02						
Firebox Pressure (In. of W.C.)					.28 - .50	.54 - .71	.53 - .75
Draft Inducer, recommended Tjernlund Model:	D-3	D-3	D-3	I	I	I	I
Tjernlund connection size (inches)	8	8	8	8	8	8	8

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 selectable)

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

No refractory or target cup needed due to chamber geometry

Precision machined steel push nipple sectional construction

Tongue and groove flue side sealing for pressurized operation

Boiler brushes & Installation Manual

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