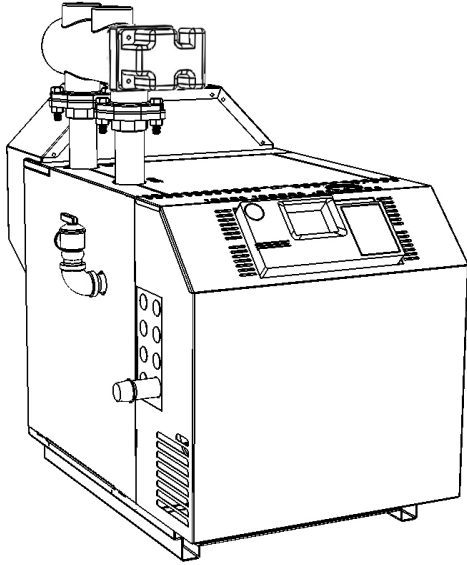


# Brute® Mini

# Hydronic Boiler



BJX Residential Gas-Fired Boiler

Indoor Sizes 50-200 MBTU/h

### Submission Data



Date:

Project #:

Engineer:

Project Name:

Prepared By:

Location:

Bid Date:

Contractor:

## Standard Features

- ASME "H" stamp
- Integral low water cutoff
- Digital temperature display
- Rheostat temperature set point
- 7 Economy run modes
- Outdoor reset
- Warm weather shutdown
- Indirect DHW priority
- Spark to pilot ignition
- Low voltage terminal block
- Field interlocks for external devices
- Powered relay contacts for external devices
- Single-point power connection
- Integral base for approved combustible flooring
- Low loss header with boiler pump (models 125 - 200)
- Contacts to control boiler pump, system pump, and DHW pump
- Built-in draft diverter
- Vent damper included
- Temperature & pressure gauge
- 30psi pressure relief valve
- 20-year limited warranty

## Boiler Data

Number of Units:

## Field Installed Accessory

- DHW pump relay kit
- Outdoor air sensor kit
- Power venter kit
- Low Loss Header Kit for models 50 - 100
- Natural to Propane 0-2000 feet altitude conversion kit
- Natural to Propane 2001-5000 feet altitude conversion kit
- Natural to Propane 5001-8000 feet altitude conversion kit
- Natural to Propane 8001-10000 feet altitude conversion kit
- Natural Gas 8001-10000 feet altitude conversion kit



## Sizing Data

Size	Input		AHRI Certified Heating Capacity Natural Gas		Net AHRI Rating		AHRI Certified AFUE %	Water Conn. inches	Gas Conn. inches	Weight Lbs	Shipping Weight Lbs
	MBTU/h	kW	MBTU/h	kW	MBTU/h	kW					
50	50	14.7	42	12.6	37	10.8	84	1-1/4	3/4	116*	136*
75	75	22.0	63	18.8	55	16.1	84	1-1/4	3/4	127*	148*
100	100	29.3	84	24.9	73	21.4	84	1-1/4	3/4	141*	153*
125	125	36.6	105	31.1	91	26.7	84	1-1/4	3/4	164	191
150	150	44.0	126	37.2	110	32.2	84	1-1/4	3/4	176	202
200	199	58.3	168	49.2	146	42.8	84	1-1/4	3/4	206	237

Note: The Net AHRI Water Ratings shown are based on a piping and pickup allowance of 1.15.

\*Add approximately 9 Lbs for unit with pump.

## Water Flow Requirements

Temperature Rise												
Size	15°F 8°C				20°F 11°C				25°F 14°C			
	Flow Rate		Headloss		Flow Rate		Headloss		Flow Rate		Headloss	
	gpm	l/s	ft	m	gpm	l/s	ft	m	gpm	l/s	ft	m
50	5.3	0.3	0.3	0.1	4.0	0.3	0.2	0.1	3.2	0.2	0.1	0.1
75	8.0	0.5	0.6	0.2	6.0	0.4	0.3	0.1	4.8	0.3	0.2	0.1
100	10.7	0.7	1.3	0.4	8.0	0.5	0.7	0.2	6.4	0.4	0.5	0.2
125*	13.3	0.8	2.2	0.7	10.0	0.6	1.3	0.4	8.0	0.5	0.8	0.2
150*	17.0	1.1	2.5	0.8	12.8	0.8	1.8	0.5	10.3	0.6	1.2	0.4
200*	22.8	1.4	5.0	1.5	17.0	1.0	3.1	0.9	13.7	0.9	1.9	0.6

\*Models 125-200 ship with a low loss header with integral pump, so a separate boiler pump does not need to be sized or field-supplied.

NOTES:

1. Shaded area represents typical temperature rise.
2. gpm = water flow in gallons per minute.
3. l/s = water flow in liters per second.
4. ft = pressure drop (headloss) through the boiler in feet of water.
5. m = pressure drop (headloss) through the boiler in meters of water.

## Minimum Clearances from Adjacent Construction

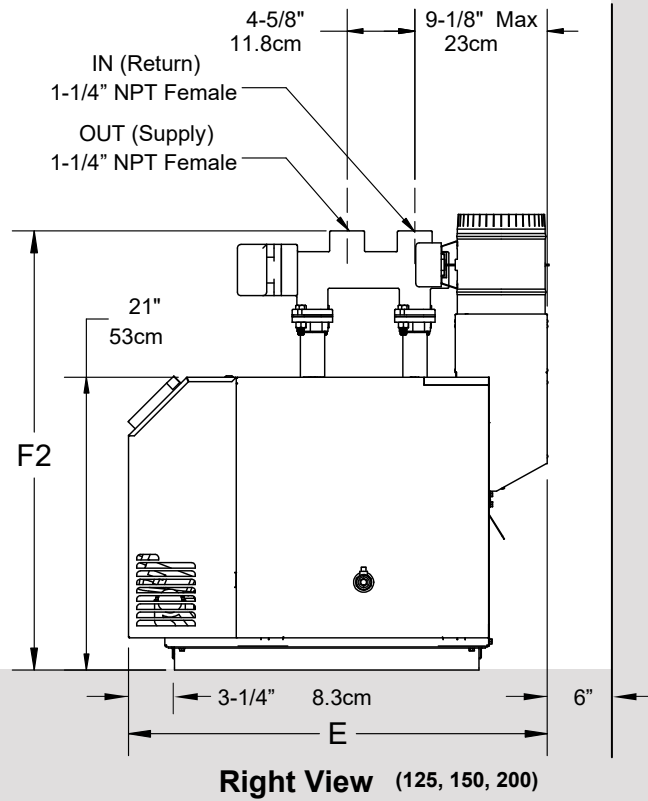
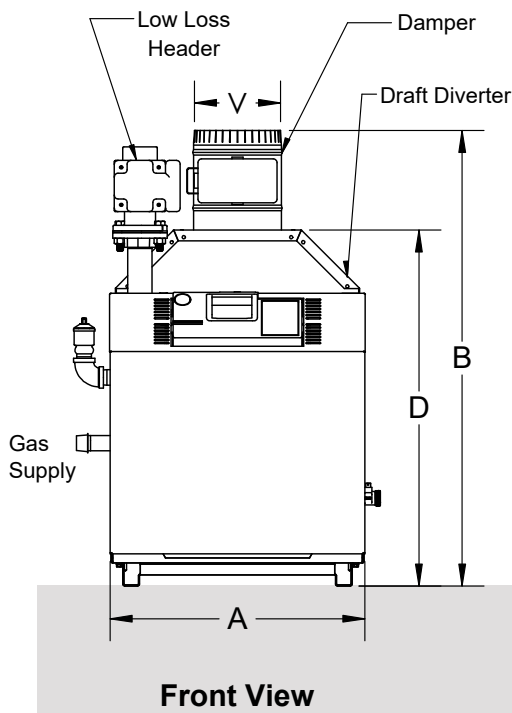
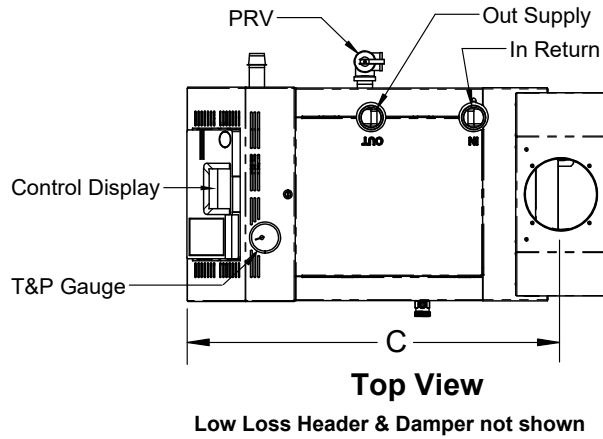
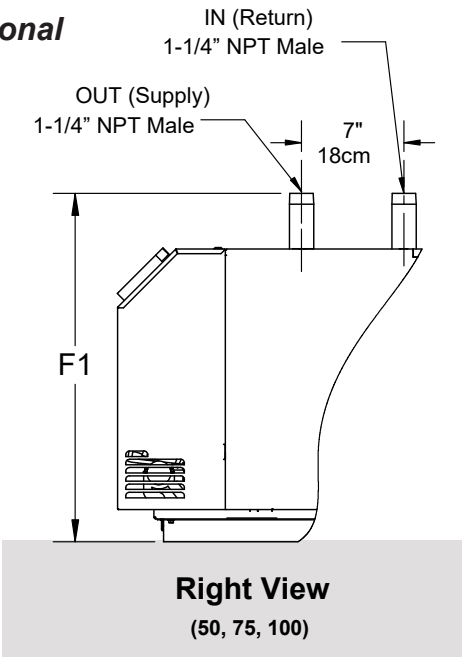
### Minimum Clearances

	Left + Right Sides		Front		Flue and Rear		Top	
Size	inches	cm	inches	cm	inches	cm	inches	cm
ALL	4	10	2	5	6	15	20	51

## Electrical Data

	All Sizes	
	with Low Loss Header	without Low Loss Header
Voltage	120 V	120 V
FLA	0.70 A	0.20 A
MCA	0.90 A	0.25 A
MOP	15 A	15 A

**Dimensional Data**



SIZE	A		B		C		D		E		F1		F2		V		WATER CONN (inches)	GAS CONN (inches)
	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm	in.	cm		
50	11-3/4	30	31-5/8	80	25-1/8	64	24-3/4	63	27-5/8	70	24-7/8	63	-	-	4	10	1-1/4	3/4
75	14-1/2	37	31-5/8	80	25-5/8	65	24-3/4	63	28-5/8	73	24-7/8	63	-	-	5	13	1-1/4	3/4
100	17-3/8	45	32-1/8	82	25-1/2	65	25-3/8	65	28-5/8	73	24-7/8	63	-	-	5	13	1-1/4	3/4
125	20-1/8	52	32-1/8	82	25	64	25-3/8	65	28-5/8	73	-	-	31	79	6	15	1-1/4	3/4
150	23	59	32-1/8	82	25	64	25-3/8	65	28-5/8	73	-	-	31	79	6	15	1-1/4	3/4
200	28-3/8	73	32-1/4	82	24-5/8	63	26-1/4	67	28-5/8	73	-	-	31	79	7	18	1-1/4	3/4

