

Selas Superflame™ Burners

Superflame™ 10000

Capacity: 10,000,000 Btu/hr (2638 kW)

Parameter	Burner Velocity		Superflame™ 10000
Maximum Input, Btu/hr (kW)¹	Medium and High Velocity		10,000,000 (2638)
Minimum Input, Btu/hr (kW)¹ <i>For lower inputs, contact Selas</i>	Medium and High Velocity		1,000,000 (264)
Minimum Input Fixed Air, Btu/hr (kW)¹	Medium and High Velocity		250,000 (66)
Main Gas Inlet Pressure, "w.c. (mbar)	High Velocity	Natural Gas	9.8 (24)
	Medium Velocity	Natural Gas	8.7 (22)
Air Inlet Pressure, "w.c. (mbar)	High Velocity	Natural Gas	13.6 (34)
	Medium Velocity	Natural Gas	12.5 (31)
High Fire Visible Flame Length, inches (mm)	High Velocity	Natural Gas	130 (3300)
	Medium Velocity	Natural Gas	145 (3680)
Approximate Flame Velocity, ft/s (m/s)	High Velocity		350 (107)
	Medium Velocity		260 (79)
Maximum Combustion Air Temperature	700°F (371°C)		
Flame Detection	Flame rods or UV scanners can be used with all combustors, any gaseous fuel ² , and up to the maximum operating temperature.		
Fuels	Natural Gas ²		

- All imperial inputs based upon gross calorific values (HHV). All metric inputs based upon net calorific values (LHV).
- Consult Selas for other fuels.
- Other notes:
 - > All information is based on laboratory testing in neutral (0 "w.c., 0 mbar) pressure chamber. Different chamber conditions may affect emissions and pressure.
 - > All information is based on standard outer tube design. Changes in combustor will alter performance and pressures.
 - > All inputs based upon standard conditions; 1 atmosphere, 70°F (21°C). Fuel composition at 1000 BTU / ft³ HHV for natural gas.
 - > Selas reserves the right to change the construction and/or configuration of our products at any time without being obliged to adjust earlier supplies accordingly.
 - > Plumbing of air and gas will affect accuracy of orifice readings. All information is based on generally acceptable air and gas piping practices.

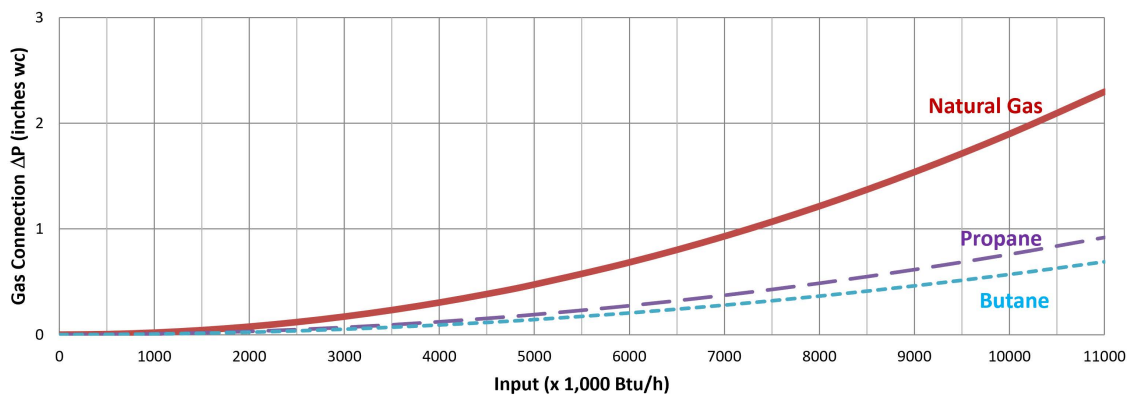


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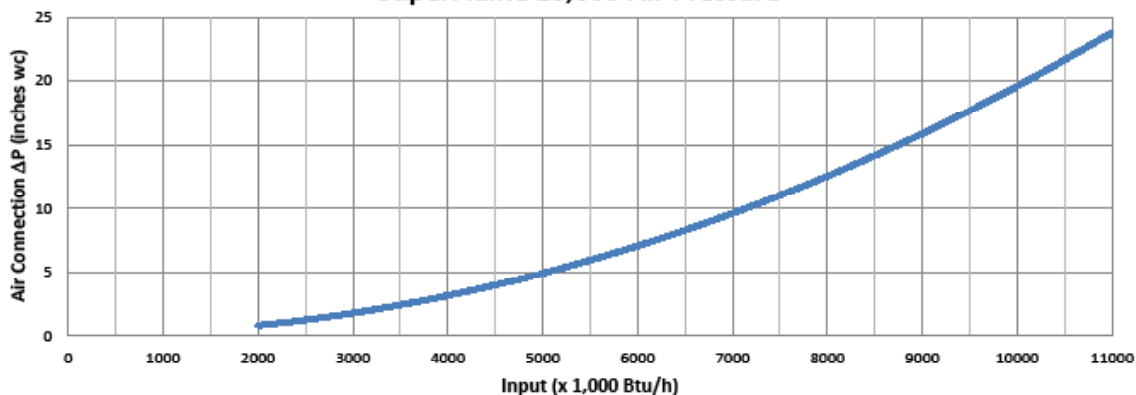
Selas Superflame™ Burners

Performance Graphs, Imperial

SuperFlame 10,000 Natural Gas Pressure

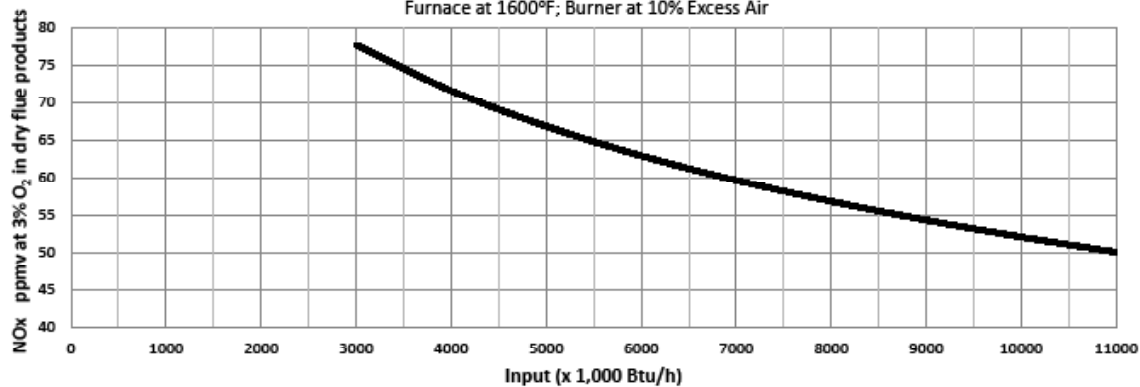


SuperFlame 10,000 Air Pressure



SuperFlame 10,000 NOx Emissions

Furnace at 1600°F; Burner at 10% Excess Air

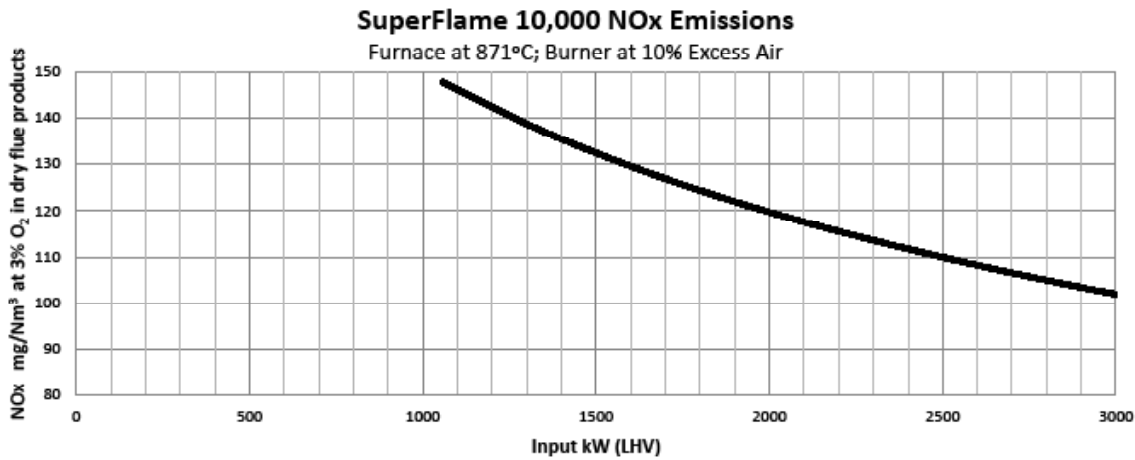
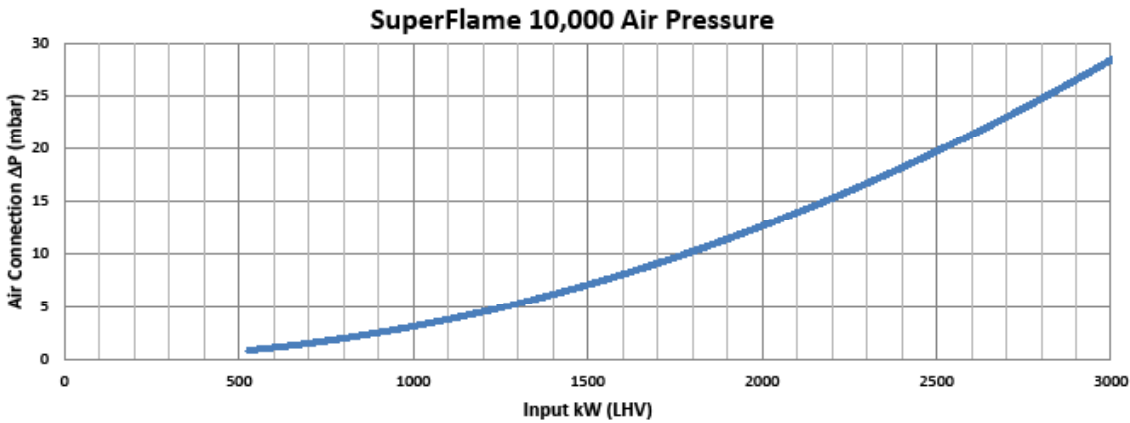
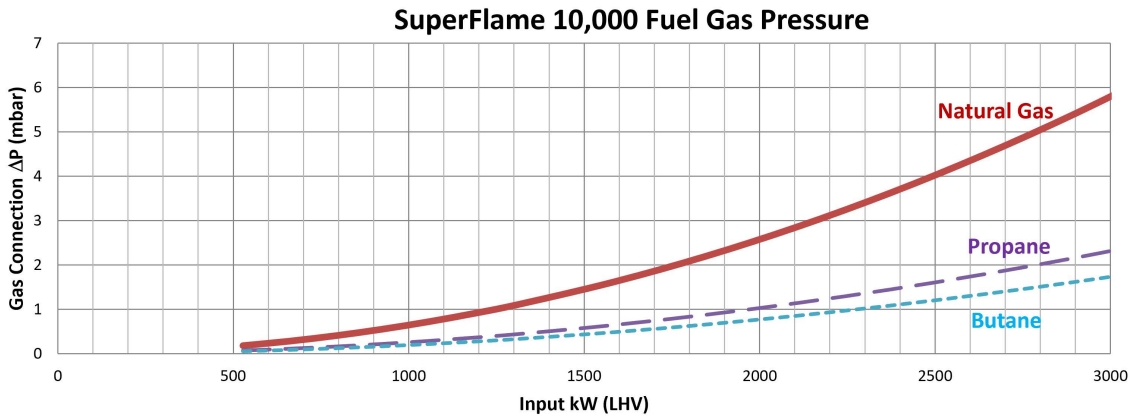


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Data Sheet

Selas Superflame™ Burners

Performance Graphs, Metric



Technical drawings of the 10000MV-BW model, showing front, side, and detail views with dimensions.

Front View Dimensions:

- Overall Diameter: $\phi 15"$
- Center-to-Center Distance: $\phi 13\frac{1}{16}" \pm \frac{1}{16}"$
- Gas Inlets: 8X $\phi \frac{9}{16}"$
- Base Diameter: $\phi 13.80$ BC
- Base Thickness: $12\frac{7}{16}" \pm \frac{1}{16}"$
- Base Material: $\phi 8"$ SCH 40 STL PIPE
- Connection: BUTT WELD (BW) CONNECTION SHOWN

ANSI Flange (AN) Connection Detail:

- Outer Diameter: $\phi 13\frac{1}{2}"$
- Inner Diameter: $\phi \frac{7}{8}"$
- Bolt Holes: 8 @ 45°
- Base Diameter: $\phi 11\frac{3}{4}"$ BC

Side View Dimensions:

- Total Length: $26\frac{1}{4}" \pm \frac{1}{4}"$
- Distance from Inlet to Front Flange: $22\frac{1}{4}" \pm \frac{1}{8}"$
- Distance from Inlet to Rear Flange: $19\frac{3}{8}" \pm \frac{1}{8}"$
- Base Diameter: $\phi 11\frac{9}{16}" \pm \frac{1}{16}"$
- Base Thickness: $12\frac{15}{16}" \pm \frac{1}{16}"$
- Base Material: $\phi 8"$ SCH 40 STL PIPE
- Connection: BUTT WELD (BW) CONNECTION SHOWN

Table 1: Dimensions for "A" ID

Model	"A" ID
10000MV-BW	9-7/8"

Model	"A" ID
10000MV-BW	9-7/8"
10000MV-AN	
10000HV-BW	8-1/4"
10000HV-AN	

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