

## Gun type burner corresponding to various gas types such as natural gas, LP gas, city gas.

### Feature

**1 Enabling stable combustio**

It is a gun type burner with universal performance that can completely burn both natural gas and LP gas.

**2 Easy to handle**

The blower and the burner main body are integrated, and the combustion safety device is equipped. It can easily ignite with a power supply / ignition switch. When abnormal, the gas solenoid valve automatically closes and issues an alarm, so you can use safely and with peace of mind.

**3 Easy adjustment**

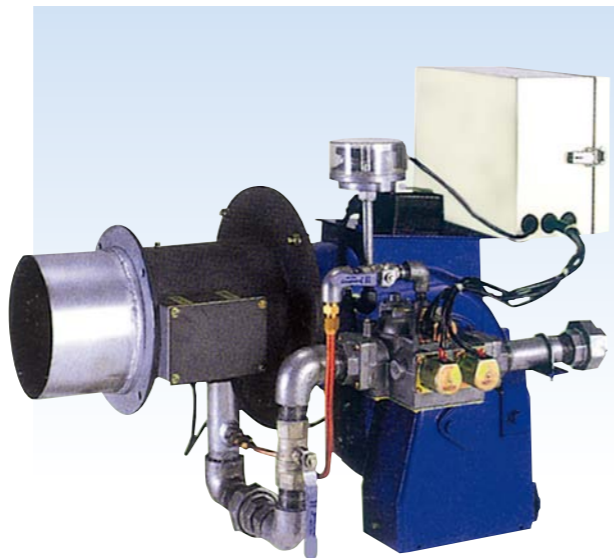
By arranging the fuel adjustment part on the burner body side, it is easy to adjust.

**4 Easy to maintain**

Because various parts can be removed and installed easily, maintenance and regular inspection etc. can be done easily.

**5 Proportional control unit can also be installed (option specification)**

Although the standard specification is ON-OFF control by solenoid valve, Hi-Low control and proportional control can be performed by installing control valve (proportional valve) · control motor.



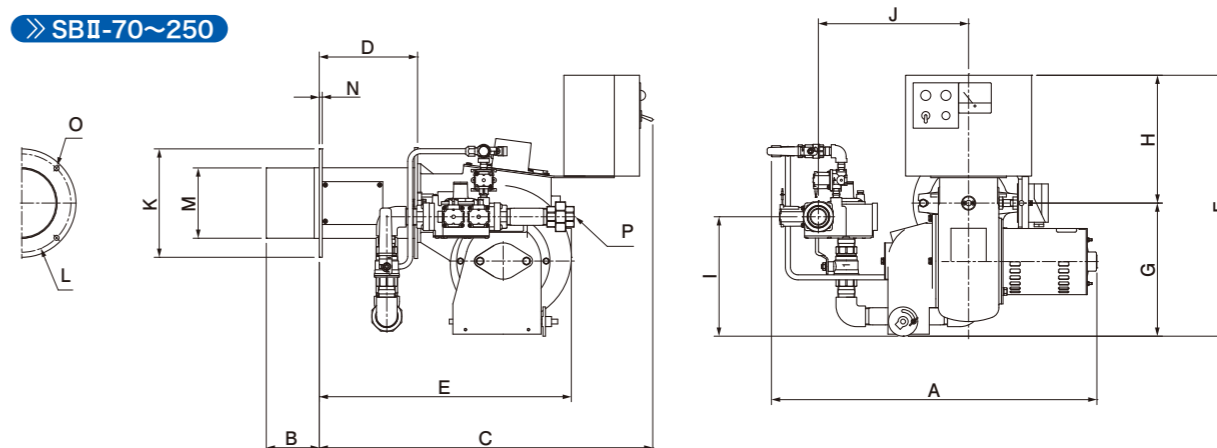
### Specifications

Model	SBI-70		SBI-150		SBI-250		SBI-350	
maximum combustion quantity(kW)	81.4		174.4		290.7		407.0	
used gas	13A	LPG	13A	LPG	13A	LPG	13A	LPG
used gas pressure (kPa)	2.0	2.8	2.0	2.8	2.0	2.8	2.0	2.8
gas connecting size	3/4	3/4	1	1	1 1/2	1	1 1/2	1 1/2
power supply	AC200V							
motor (W)	120		250		400		75	
ignition method	Direct ignition by pilot gas							
detection method	flame rod							
control method	ON-OFF, PI*							
air damper	fixed damper							
weight (kg)	40		45		60		70	

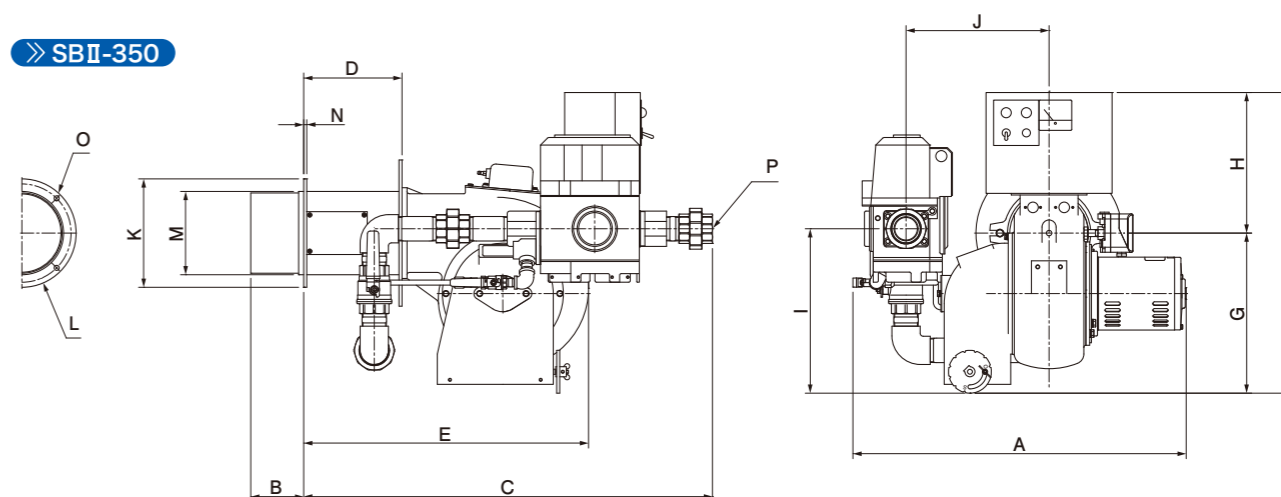
\* Gas proportional control is optional setting.

### Overall size

» SBI-70~250



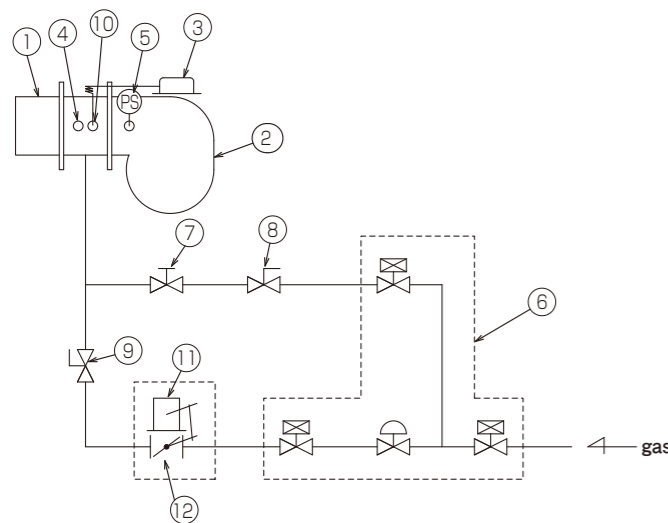
» SBI-350



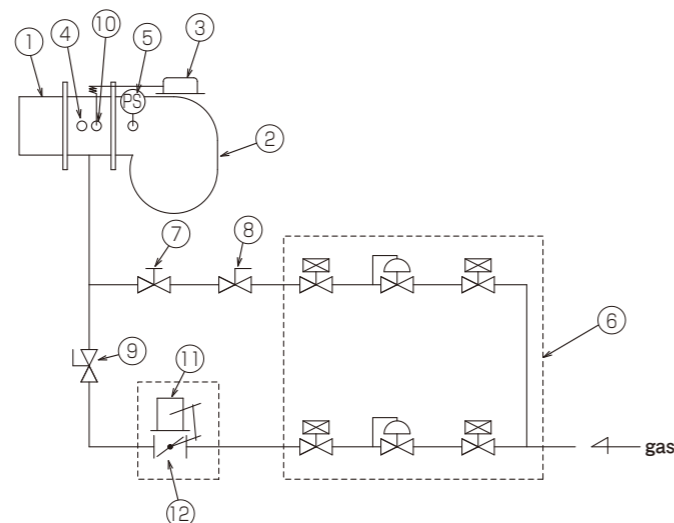
Model	SBI-70	SBI-150	SBI-250	SBI-350	
overall size (mm)	A	575	645	632	661
	B	70	115	105	105
	C	620	655	811	811
	D	160	195	195	195
	E	465	500	530	565
	F	456	518	551	596
	G	254	264	283	317.5
	H	202	254	269	279
	I	209	237	291	326
	J	215	298	284	284
	K(φ)	165	215	215	215
	L(PCD)	145	195	195	195
	M(φ)	114.3	140	165.2	165.2
	N	6	6	6	6
connecting size	O (furnace wall) 4-φ10				
connecting size (Rc)	P (gas)	13A	1	1 1/2	1 1/2
		LPG		1	

## Example of flow sheet

### » SBI-70~SBI-250(LPG)



### » SBI-250(13A)~SBI-350

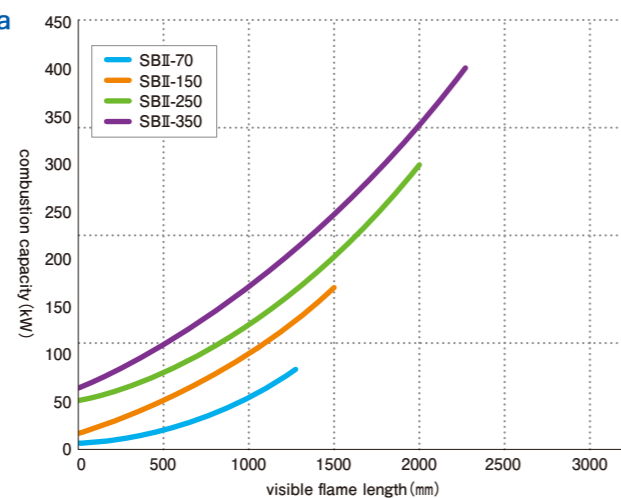


No.	Name	Q'ty	remarks	No.	Name	Q'ty	remarks
1	burner	1		7	Pilot solenoid valve	1	
2	blower	1		8	pilot valve	1	
3	ignition transformer	1		9	main valve	1	
4	inspection rod	1		10	ignition plug	1	
5	air pressure switch	1		11	control motor	1	option
6	Compound solenoid valve	2		12	Gas proportional valve	1	option

<Caution> The control motor and control valve are an option.  
The electrical parts are standard 200 V specifications.

## Data

### ■ SBI visible flame length data (※open combustion)



### ■ Combustion capacity by furnace pressure

Model	SBI-70	SBI-150	SBI-250	SBI-350	
Combustion capacity by furnace pressure (kW)	±0kPa	81.4	174.4	290.7	407.0
	+0.05kPa	58.1	139.5	255.8	372.1
	+0.1kPa	—	—	232.6	348.8
	+0.15kPa	—	—	209.3	302.3
	+0.2kPa	—	—	—	232.6

※ For negative pressure it shall be -5 mmAq.

## Burner Selection and Installation Precautions

### Installation condition

- Please ensure sufficient maintenance space for fire prevention or after-sales service.
- Please support the piping so that the load of the primary gas piping does not reach the burner.

### Installation space

- Keep away from water and chemicals
- The atmosphere temperature is less than 40 °C and humidity is low.
- Flammable objects are not nearby.
- That the burner parts are not used as a foothold.

### Furnace structure

- For the internal structure of the burner furnace wall and the mounting flange, make sure the framework is solid.
- For installation, be sure to set up a sight hole so that the entire flame can be seen.
- Take measures such as providing an inner cylinder (punching) so that the fresh air in the furnace and the circulating air inlet do not hit the burner flame directly.

### Before ignition

- Please check whether installation precautions are observed.
- Check the direction of rotation of the combustion fan.
- Please check the operation of each electrical equipment section. In addition, please check whether movement according to sequence is carried out.
- When burning for the first time, please air bleeding gas line fully.
- Please consider the piping until the burner gas connection so that the pressure loss will not become large.

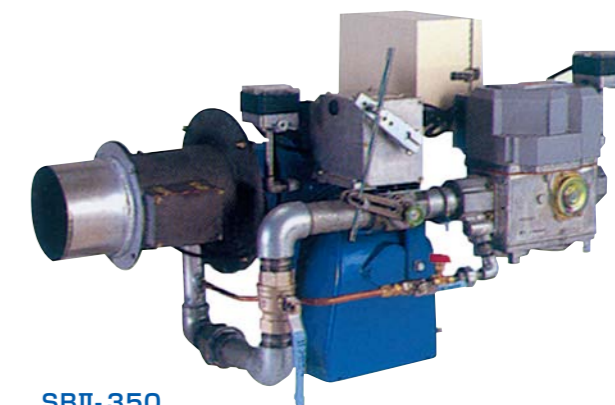
### ■ Motor capacity table

Model	output	voltage	frequency	electric current	Number of poles	
SBI-70	125W	200V	50/60Hz	1.15/1.25A	2P	Single phase
SBI-150	250W	200V	50/60Hz	2.7/2.5A	2P	Single phase
SBI-250	400W	200V	50/60Hz	2.1/1.9A	2P	3 phase
SBI-350	750W	200V	50/60Hz	3.5/3.3A	2P	3 phase

## Option·The others

- The gas pressure switch can be installed as an option.
- Hi-Low control · Proportional control is possible by installing a control motor and a control valve (proportional valve SVP).
- SBI has sister devices besides 70, 150, 250 and 350. Please contact the nearest sales representative for details.

OGA-50 (581.4kW)  
OGA-75 (814.0kW)  
OGA-100(1163kW)  
OGA-150(1744kW)



**SBI-350**

w/control motor(option)  
w/control valve(SVP)