

Compact design, stable combustion and easy combustion adjustment.

Feature

Blue jet burner BJ-300·400·600 are package type gas burner for oven which developed as large capacity type model. The air / gas control mechanism and the ignition / detection mechanism are built in the main body, and the piping space has become compact.

1 Compact design

Air-Gas control device and ignition-detection mechanism are built-in compact.

2 Stable combustion

This burner adapts nozzle mixing method for mixing method, so there is no cause for worry about backfire, can be obtained stable combustion widely.

3 Widely turndown ratio

Turndown ratio can take largely.

4 Easy combustion adjustment

Easy to adjust combustion because it just sets designation pressure.



Easy maintenance

- Easy to replace the burner, spark rod, ultraviolet phototube and gas nozzle

Model Table

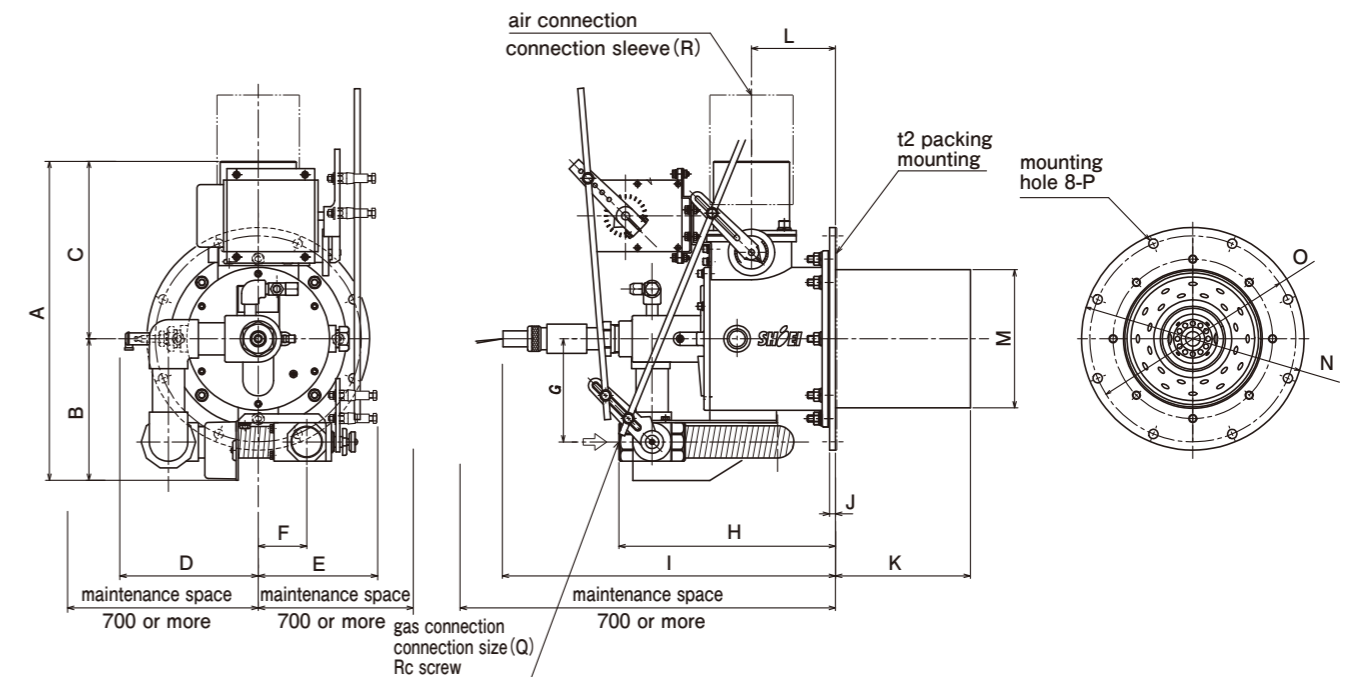
BJ-	combustion capacity		gas type		burner top		control	
	signal	Select Specifications	signal	Select Specifications	signal	Select Specifications	signal	Select Specifications
	300	470kW	N	natural gas (45MJ/m ³ N)	M	with burner metal top (SUS)	H	High/Low
	400	700kW	P	LPG (100MJ/m ³ N)	T	with burner tile top	P	PI (PI control)
	600	1200kW	O	the others	O	the others	O	the others

Specifications

Model	BJ-300	BJ-400	BJ-600
maximum combustion quantity(kW)*	470	700	1200
ignition method	direct ignition by pilot line		
detection method	ultraviolet phototube		
control method	Hi/Low or PI control by control motor		
weight(kg)	33	40	58
power source(V)	100/200 (Please contact us for different voltage supply)		

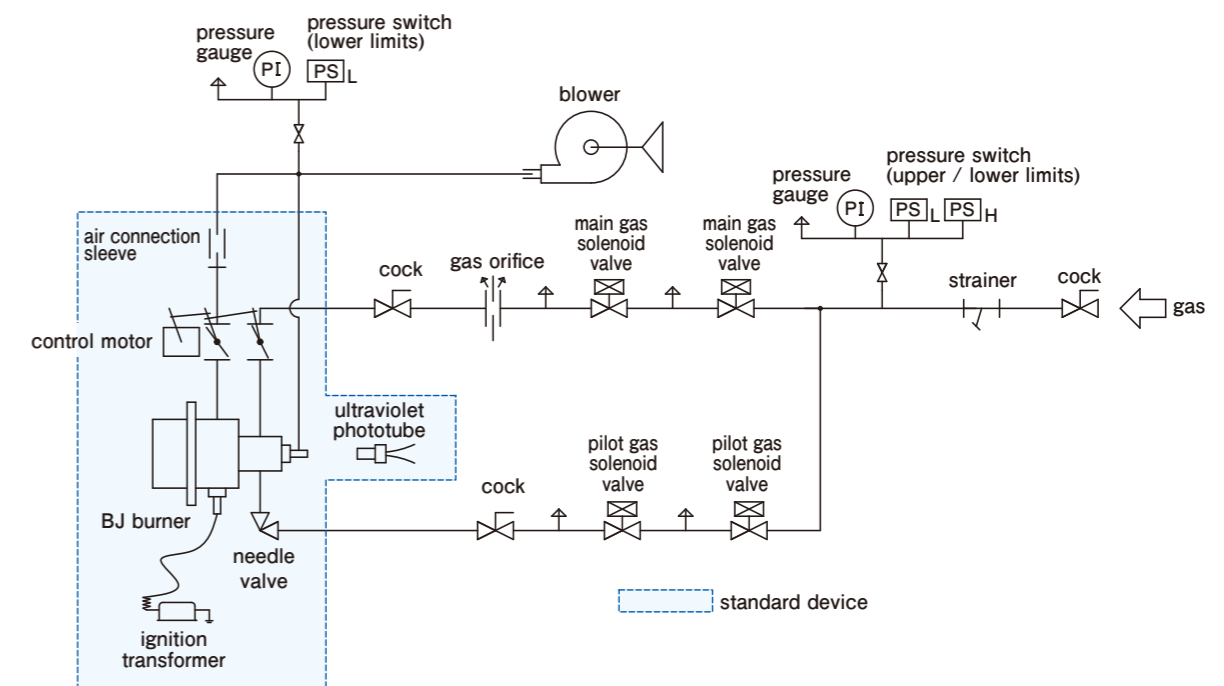
* Please select the blower according to the combustion capacity used separately (Burner capacity table).
 Please contact us for conditions other than the following. And also, please be sure to read the handling manual before using.
 • Hot air use temperature : 350 °C or less • Combustion air temperature : 60°C or less • Correspondence furnace pressure : -1~+2kPa
 For air connection method, connecting sleeve (Rubber tube for tube socket) is standard. Please contact us separately if you would like other connection method.

Overall size



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
BJ-300N	515	273	242	181	180	73	130	315	500	t9	203	128	φ160	φ275	PCD250	φ15	Rc1½	ID114 160L
BJ-300P	515	273	242	181	170	73	130	305	500	t9	203	128	φ160	φ275	PCD250	φ15	Rc1	ID114 160L
BJ-400N	513	246	267	210	180	73	155	326	500	t9	203	127	φ209	φ335	PCD310	φ15	Rc1½	ID114 160L
BJ-400P	513	246	267	210	170	73	155	316	500	t9	203	127	φ209	φ335	PCD310	φ15	Rc1	ID114 160L
BJ-600N	605	272	333	213	216	105	187	356	570	t9	203	144	φ260	φ400	PCD370	φ15	Rc2	ID165 160L
BJ-600P	605	272	333	213	210	105	187	346	570	t9	203	144	φ260	φ400	PCD370	φ15	Rc1½	ID165 160L

Flow sheet

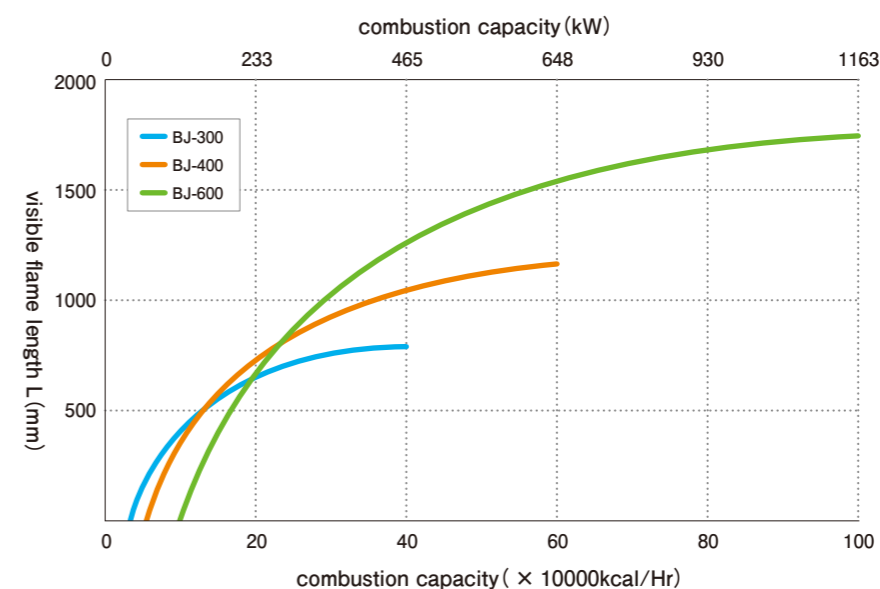


Burner capacity table

combustion capacity at air differential pressure for combustion			combustion air differential pressure(kPa)								
			0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50
BJ-300N 13A (45MJ)	combustion capacity (kW)	maximum capacity	190.7	236.0	286.0	319.8	359.3	387.2	414.0	432.6	465.1
		minimum capacity	23.3	24.4	26.7	29.1	31.4	34.9	37.2	39.5	41.9
		pilot capacity	9.3	9.3	10.5	10.5	10.5	11.6	12.8	14.0	14.0
	gas pressure (kPa)	inlet pressure	0.22	0.33	0.47	0.57	0.72	0.84	0.95	1.04	1.22
		head pressure	0.18	0.26	0.35	0.44	0.56	0.62	0.71	0.78	0.91
air capacity (m³/min)		3.8	4.8	5.8	6.4	7.2	7.8	8.3	8.7	9.3	
BJ-300P LPG (100MJ)	combustion capacity (kW)	maximum capacity	204.7	250.0	300.0	325.6	368.6	398.8	414.0	439.5	465.1
		minimum capacity	33.7	37.2	40.7	44.2	46.5	48.8	50.0	52.3	57.0
		pilot capacity	8.1	8.1	9.3	9.3	10.5	11.6	11.6	12.8	14.0
	gas pressure (kPa)	inlet pressure	0.46	0.70	0.90	0.98	1.26	1.44	1.56	1.72	1.90
		head pressure	0.38	0.56	0.77	0.90	1.16	1.30	1.41	1.55	1.70
air capacity (m³/min)		4.1	5.0	6.0	6.6	7.4	8.0	8.3	8.8	9.3	
BJ-400N 13A (45MJ)	combustion capacity (kW)	maximum capacity	291.9	348.8	401.2	454.7	514.0	558.1	604.7	646.5	697.7
		minimum capacity	12.8	12.8	12.8	14.0	14.0	15.1	15.1	15.1	16.3
		pilot capacity	9.3	9.3	9.3	9.3	9.3	10.5	10.5	10.5	11.6
	gas pressure (kPa)	inlet pressure	0.35	0.46	0.61	0.73	0.91	1.07	1.31	1.43	1.66
		head pressure	0.25	0.33	0.41	0.49	0.61	0.71	0.86	0.93	1.19
air capacity (m³/min)		5.8	7.0	8.0	8.8	10.3	11.2	12.0	12.9	13.9	
BJ-400P LPG (100MJ)	combustion capacity (kW)	maximum capacity	290.7	348.8	398.8	452.3	514.0	569.8	611.6	650.0	677.9
		minimum capacity	11.6	12.8	12.8	14.0	14.0	14.0	15.1	15.1	17.4
		pilot capacity	8.1	8.1	8.1	9.3	9.3	9.3	10.5	10.5	12.8
	gas pressure (kPa)	inlet pressure	0.51	0.71	0.89	1.13	1.43	1.68	2.04	2.25	2.51
		head pressure	0.38	0.53	0.67	0.83	1.04	1.22	1.47	1.63	1.80
air capacity (m³/min)		5.8	7.0	8.0	9.0	10.3	11.4	12.2	13.0	13.6	
BJ-600N 13A (45MJ)	combustion capacity (kW)	maximum capacity	486.0	667.4	805.8	848.8	944.2	1017.4	1110.5	1173.3	1270.9
		minimum capacity	15.1	17.4	18.6	18.6	19.8	19.8	22.1	23.3	23.3
		pilot capacity	11.6	11.6	11.6	11.6	12.8	12.8	12.8	12.8	12.8
	gas pressure (kPa)	inlet pressure	0.50	0.82	1.21	1.32	1.61	1.85	2.20	2.25	2.79
		head pressure	0.37	0.62	0.93	1.01	1.23	1.43	1.70	1.76	2.08
air capacity (m³/min)		9.8	13.4	16.1	17.0	18.9	20.4	22.2	23.5	25.5	
BJ-600P LPG (100MJ)	combustion capacity (kW)	maximum capacity	493.0	611.6	807.0	898.8	920.9	984.9	1058.1	1141.9	1214.0
		minimum capacity	14.0	17.4	18.6	18.6	19.8	20.9	20.9	20.9	22.1
		pilot capacity	10.5	10.5	10.5	11.6	11.6	12.8	12.8	12.8	12.8
	gas pressure (kPa)	inlet pressure	0.57	0.76	1.29	1.57	1.62	1.83	2.11	2.43	2.47
		head pressure	0.46	0.62	1.03	1.25	1.29	1.44	1.65	1.91	2.14
air capacity (m³/min)		10.3	12.3	16.2	18.1	18.4	19.8	21.2	22.9	24.3	

note) ·Air differential pressure for combustion is the differential pressure between air inlet pressure (refer the piping flow) and combustion chamber pressure.
 Please be sure to provide an air inlet pressure measuring port on the inlet side of the air control valve. Be sure to provide an air inlet pressure measuring port on the inlet side of the air control valve.
 ·Gas inlet pressure is the pressure of inlet side of gas control valve. (Refer the piping flow) Please be sure to install gas inlet pressure measuring port.

Visible flame length



Shape of the flame

model	combustion capacity	flame diameter
	kW	approximately ϕD_{mm}
BJ-300	174	180
	233	200
	349	200
BJ-400	465	250
	698	310
BJ-600	698	370
	1163	420

