



High Temperature Burners

Osaka gas development product

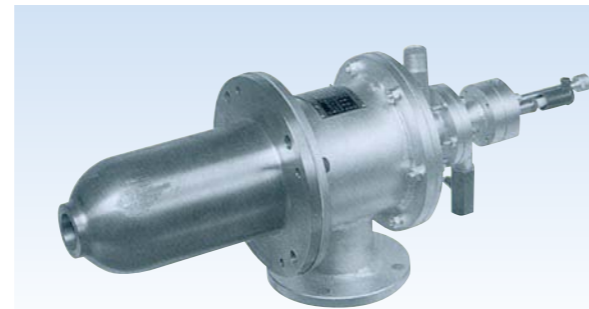
Metallic High speed burner

MK-80K, 150K, 300K, 500K

Stirring effect by high speed exhaust flow, and high-speed burner which was reduced in weight by adopting a metal combustion tube

Feature

- 1 The combustion gas has a high flow rate of 180 m / s.
- 2 Lightweight by adopting metal combustion tube.
- 3 Furnace stirring effect by the high-speed exhaust flow is large.
- 4 Large convective heat transfer effect by fast exhaust flow.



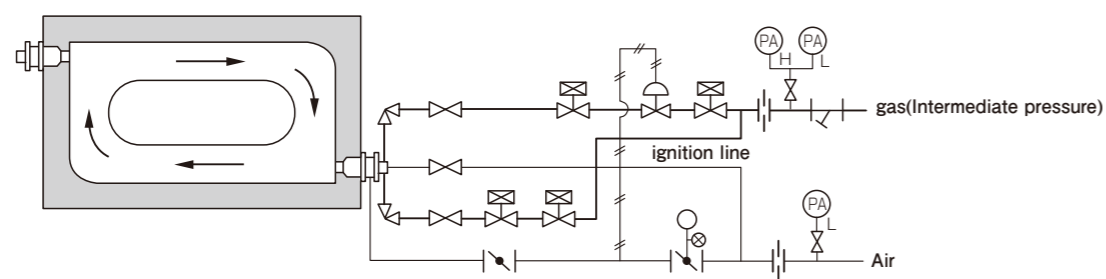
● flame



Main Usage

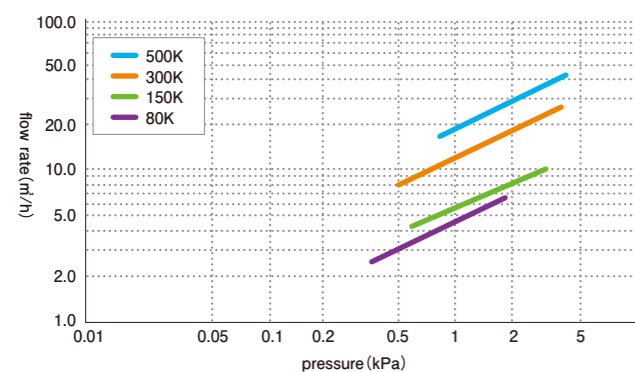
- Heat treatment furnace
- Heating furnace
- Galvanizing furnace

Flow sheet (Galvanizing furnace using MK burner)

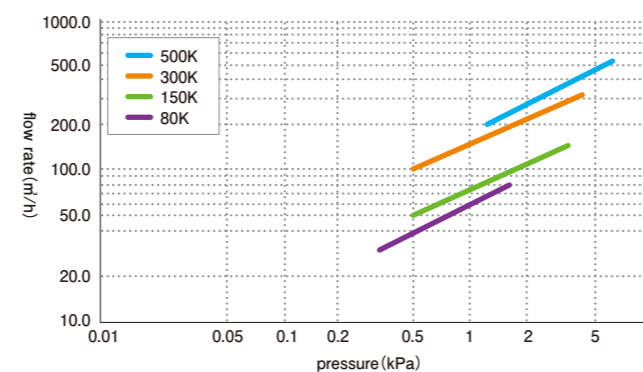


Data

Gas flow rate & Gas pressure

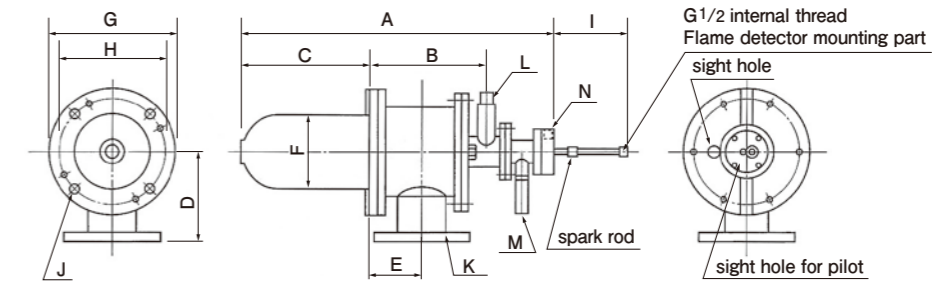


Air flow rate & Gas pressure

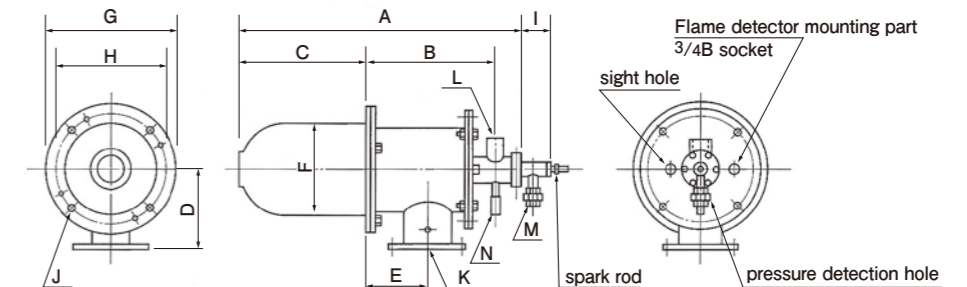


Specifications · Overall size

» MK-80K,150K



» MK-300K,500K



Model	MK-80K	MK-150K	MK-300K	MK-500K	Remarks
Gas type	13A				
Rated burning capacity (kW)	84	157	315	525	Low calorific value
Standard gas quantity (m³/h)	7.3	13.6	27.3	45.5	
Standard gas head pressure (kPa)	2.0	4.5	3.6	4.2	
Standard air quantity (m³/h)	88	165	330	550	m=1.1
Standard air head pressure (kPa)	1.7	4.0	3.8	5.9	
Overall size (mm)	A	511	561	585	710
	B	191		246	326
	C	210	260	283	320
	D	140		150	200
	E	90	90	114	157
	F (φ)	120	145	171	222
	G (φ)	210		240	325
H (PCD)	180	210		280	P.C.D.
I	120			79	
Mounting size	J (mounting bolt hole) 4-φ14			4-φ18	
Connecting size (Flange JIS 5K)	K (main air) 2 1/2		3	4	JIS 5K Flange
Connecting size	L (main gas) R 3/4		Rc 1	Rc 1 1/2	PT
Connecting size (Rc)	M (center air) 1/2		3/4		PT
	N (pilot gas) 1/4		3/8		PT
Weight (kg)	16	19	31	50	
Turndown	3:1				
Ignition method	pilot ignition				
Detection method	ultraviolet phototube				

Handling Precautions

- The top of the combustion tube should be flush with the inside of the furnace wall.
- Control method is in principle the High-Low-PILOT.
- Air ratio control is based on equalization valve control as standard.
- Pilot ignites all the time
- Turn down 3: 1.
- When using the preheated air, flowing a cooling air to ultraviolet phototube.