

Datasheet - Metric

ITAS INTENSITYFLAME BURNERS

MODEL IF0205-GAS

Parameter	Value	
Maximum Capacity input [kWlhv]	20500	
(Air pre-heating limits the maximum capacity)		
Minimum Capacity input [kWlhv]	1500	
Fuels	Natural gas, propane, butane, mixed gases	
(Contact Fives ITAS S.p.A. for dual gas or oil options)	(Contact Fives ITAS S.p.A . for using special gases)	
Pressure drop gas gun [mbar]	Natural gas: 102,7	
(maximum capacity)	Propane: 41,3	
Nominal combustion Air Inlet [Nm³/h]	24 600	
Air inlet pressure [mbar]	21,9	
(At nominal input, 20°C)		
Lambda [-]	1,2 to 1,7	
Combustion air temperature [°C]	Standard <20	
	On request <300	
Fuel guns	Single - Gun for single gas	
	Double - Gun for dual gas	
Combustor options	Alloy (AISI 310)	
	Refractory (83% alumina air bond)	
Maximum chamber temperature [°C]	Alloy combustor: 600 (@ Lambda 1,4)	
	Refractory combustor: 900	
Flame dimensions [mm]	Length 4600	
(Measured from outlet of combustor)	Diameter 1400	
Ignition	Raw gas pilot, natural gas or propane	
Pilot	Capacity [kW]: 205	
	Gas pressure NG [mbar]: 30	
	Gas pressure Propane [mbar]: 12,5	
Flame Monitoring	UV scanner or Infrared scanner	
Emissions	On request	
Mounting position	Horizontal	
	Vertical up	
N/ 11 / 7	Vertical down (use a continuous fan operation)	
Weight [kg]	Burner with alloy combustor: 650	
	Burner with refractory: 1250	

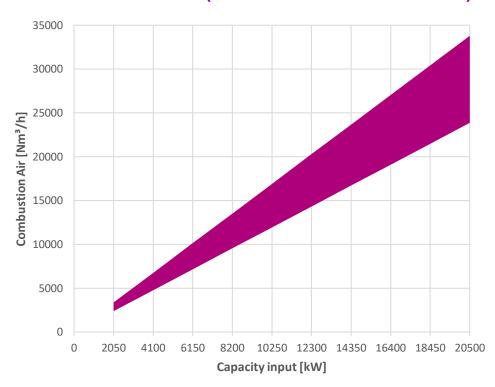
Notes:

- All data are based on net calorific values = lhv
- All information is based on common practice for gas and air pipe design. If support is needed please contact Fives ITAS S.p.A.
- All inputs are based on laboratory testing at neutral chamber conditions
- Natural gas: lhv = 9,97 kWh/Nm³; d=0,56
- Propane: lhv 26,3 kWh/Nm³; d=1,58

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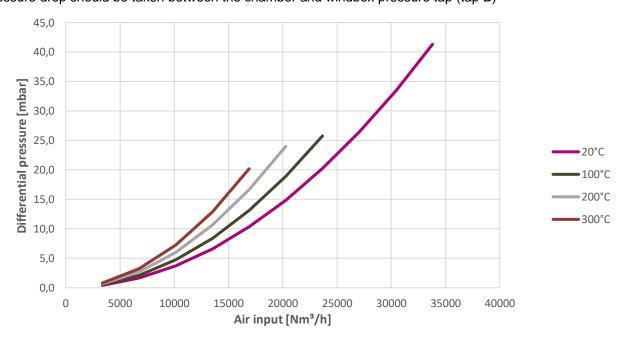


1. OPERATION CURVE (AMBIENT COMBUSTION AIR)



2. COMBUSTION AIR PRESSURE DROP

Pressure drop should be taken between the chamber and windbox pressure tap (tap B)

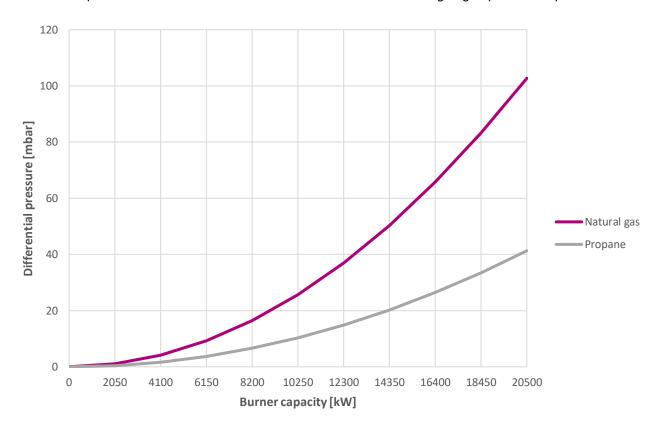


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3. GAS GUN PRESSURE DROP

Pressure drop should be taken as differential between the chamber and gas gun pressure tap A

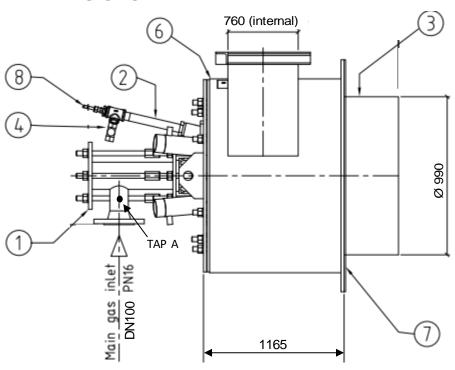


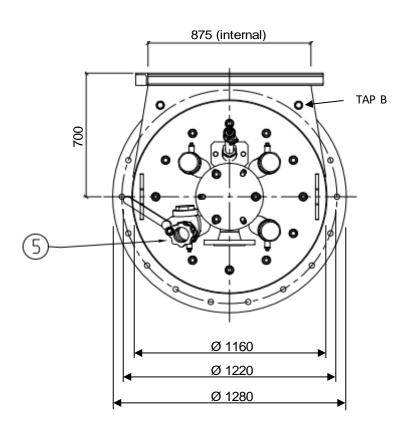
Note: Pressure drop curves should be used as a guide for setting up burner. It is recommended to use fuel flow measurements for determining actual fuel flows.

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4. DIMENSIONS





Pos	Description
1	Gas gun
2	Pilot burner
3	Combustor (refractory/alloy)
4	Pilot gas adjusting tee
5	Sight glass with valve
6	Burner body
7	Burner gasket
8	Ignition spark rod

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