

Datasheet - Metric

ITAS INTENSITYFLAME BURNERS

MODEL IF0085-GAS

| Parameter | Value | |
|---|---|--|
| Maximum Capacity input [kWlhv] | 8500 | |
| (Air pre-heating limits the maximum capacity) | | |
| Minimum Capacity input [kWlhv] | 600 | |
| 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: 54,8 | |
| (maximum capacity) | Propane: 22,0 | |
| Nominal combustion Air Inlet [Nm³/h] | 10 200 | |
| Air inlet pressure [mbar] | 22,3 | |
| (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 3200 | |
| (Measured from outlet of combustor) | Diameter 1100 | |
| Ignition | Raw gas pilot, natural gas or propane | |
| Pilot | Capacity [kW]: 85 | |
| | 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 | |
| | Vertical down (use a continuous fan operation) | |
| Weight [kg] | Burner with alloy combustor: 310 | |
| | Burner with refractory: 640 | |

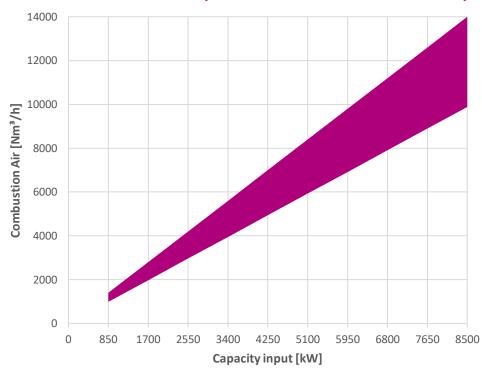
Notes:

- 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

1/4

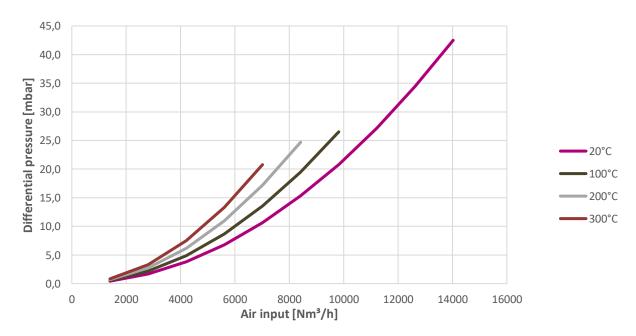


1. OPERATION CURVE (AMBIENT COMBUSTION AIR)



2. COMBUSTION AIR PRESSURE DROP

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

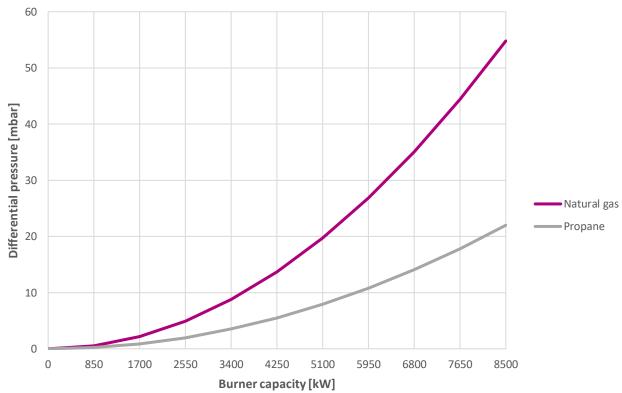


2/4



3. GAS GUN PRESSURE DROP



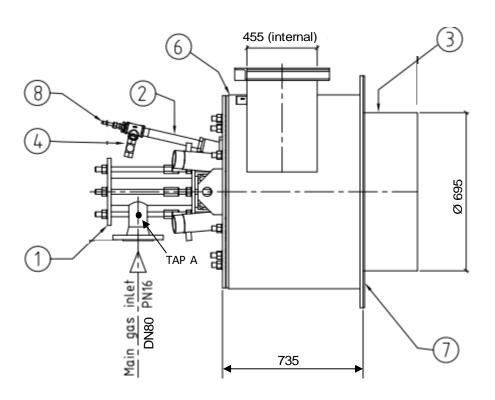


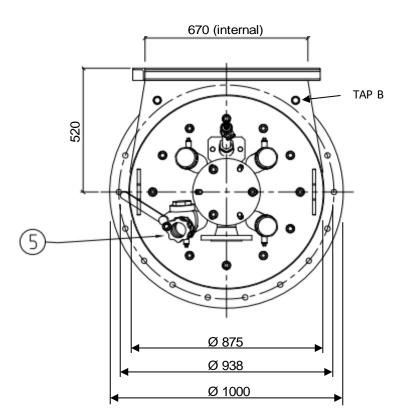
Note: Pressure drop curves should be used as a guide for setting up burner. It is recommended to use fuel flow measurements for determining actual fuel flows.

3/4



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 |
| | |

4/4