

ITAS DUCTFLAME-R BURNERS

TECHNICAL DATASHEET (METRIC)

Parameter	Value
Nominal gas input per 150 mm module [kWlhv]	125
Fuels	Natural gas, Propane <i>(Contact Fives ITAS S.p.A. for other gas options)</i>
Turndown gas	10:1
Gas inlet pressure [mbar] <i>(At nominal input, see page 4, tap C)</i>	Natural gas - Italian: 90 Natural gas – Russian: 76 Propane: 40
Nominal combustion air per 150 mm module [Nm ³ /h]	145 ($\lambda = 1,2$)
Lambda [-]	Minimal: 1,16 Maximal: 1,4
Turndown air	10:1
Combustion air Inlet pressure [mbar] <i>(At nominal input, 20°C, see page 4, tap A)</i>	15
Combustion air differential pressure [mbar] <i>(At nominal input, 20°C, between tap B and D, page 4)</i>	2
Combustion air temperature [°C]	Up to 300
Upstream process air temperature [°C]	Up to 750
Downstream process air temperature [°C]	Up to 1200
Process air pressure drop [mbar]	1,5 (0,5 to 2,5)
Ignition	Intermittent pilot
Pilot	Capacity [kW]: 25 Air flow [Nm ³ /h]: 35 Air inlet pressure [mbar]: 12 Gas inlet pressure [mbar]: 80
Flame Monitoring	UV scanner
Flame length [mm] <i>(At nominal input)</i>	1500
Emissions estimates [mg/Nm ³ @ 17% O ₂] <i>(Call ITAS for emission estimates on your application)</i>	Possible: CO 40, NO _x 40
Weight [kg]	On request

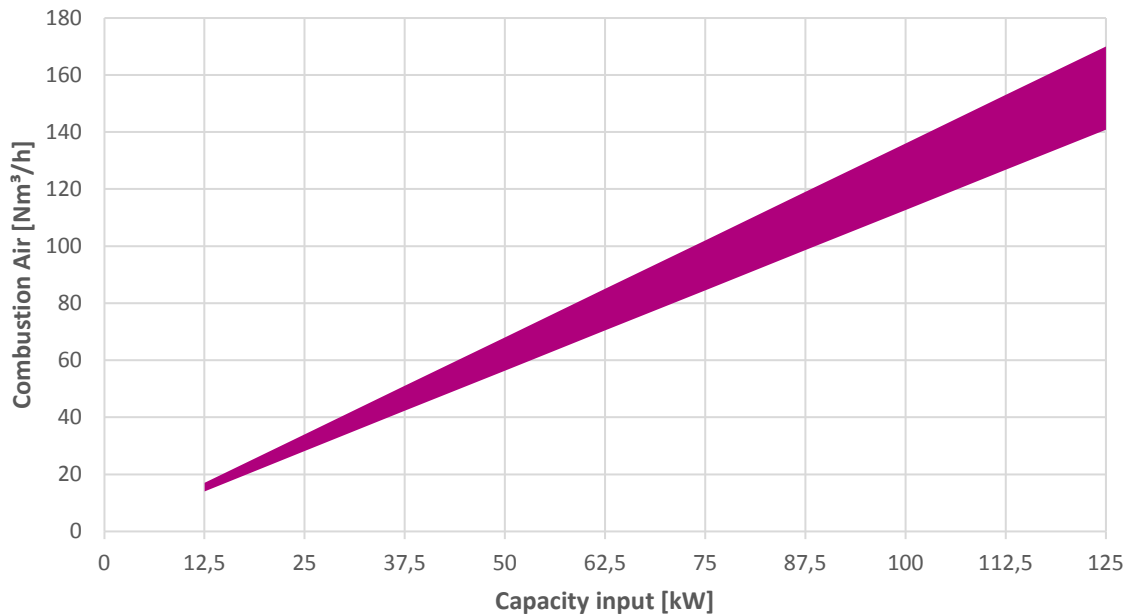
Notes:

- All data are based on net calorific values = lhv
- All information is based on common practice for gas and air pipe design. Contact Fives ITAS S.p.A. if you need further support.
- All inputs are based on laboratory testing at neutral chamber conditions
- Natural gas - Italian: lhv = 9,5 kWh/Nm³; d=0,6
- Natural gas - Russian: lhv = 9,97 kWh/Nm³; d=0,56
- Propane: lhv 26,3 kWh/Nm³; d=1,58

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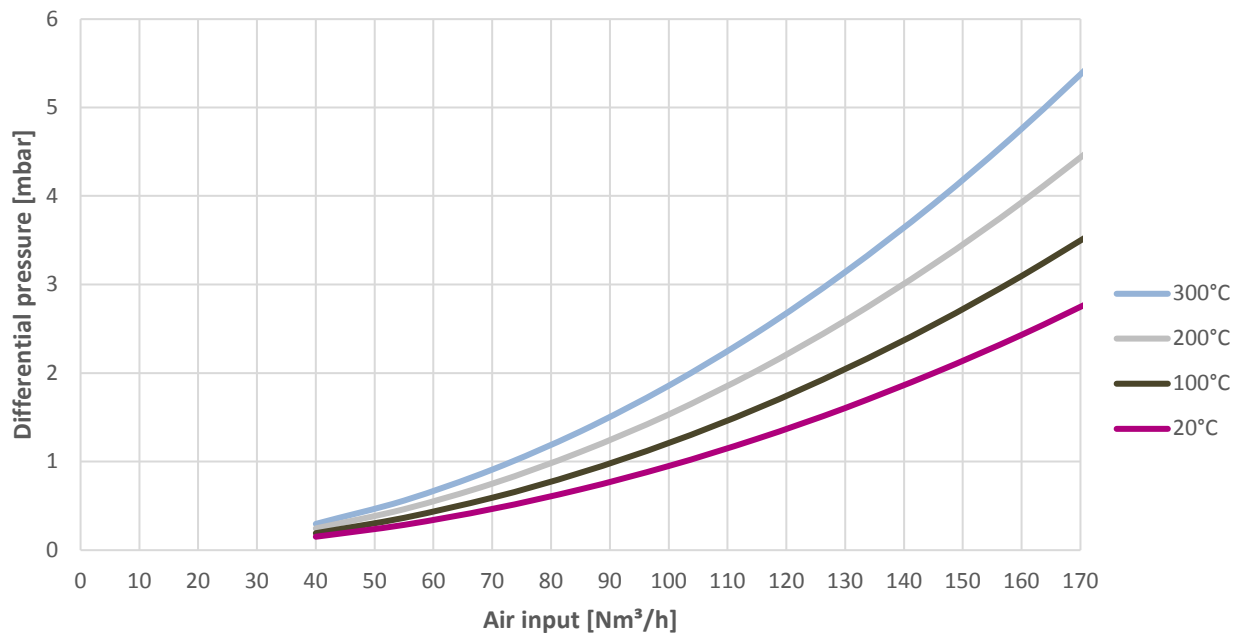
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1. OPERATION CURVE



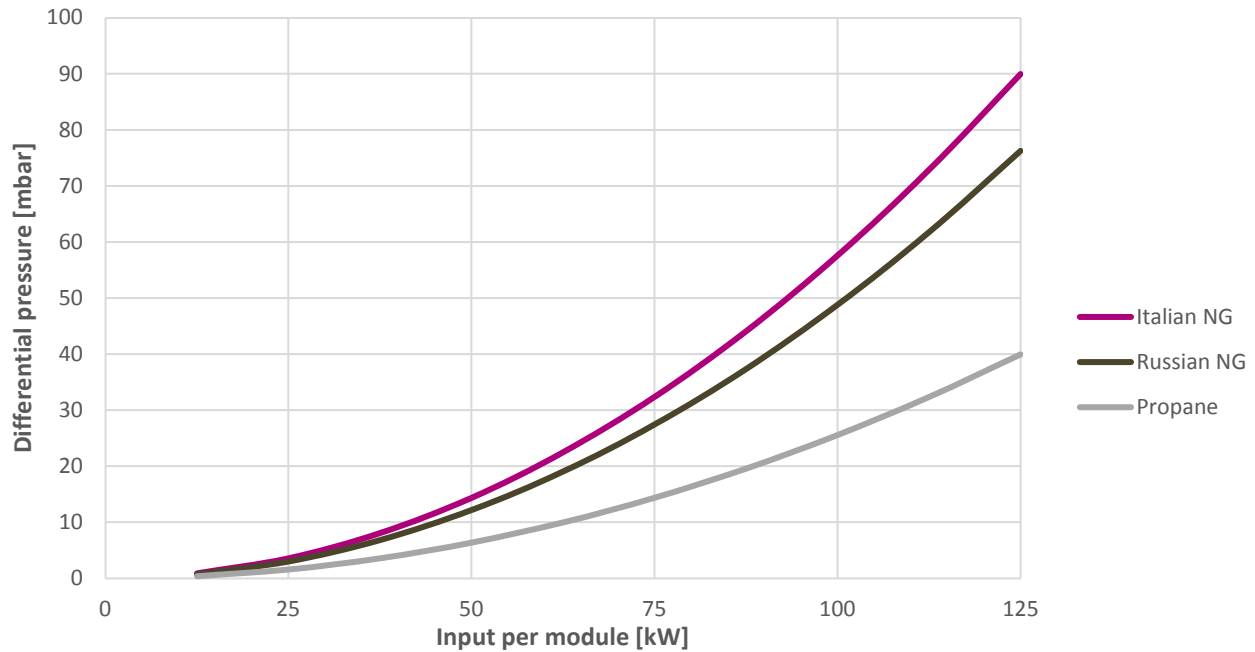
2. COMBUSTION AIR PRESSURE DROP

Differential pressure should be taken over the stabilization plate (between Tap B and Tap D)



3. GAS PRESSURE DROP

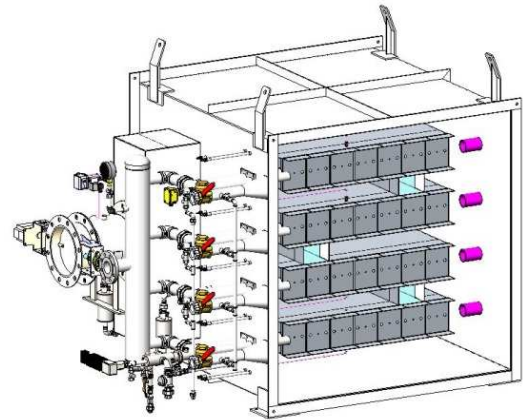
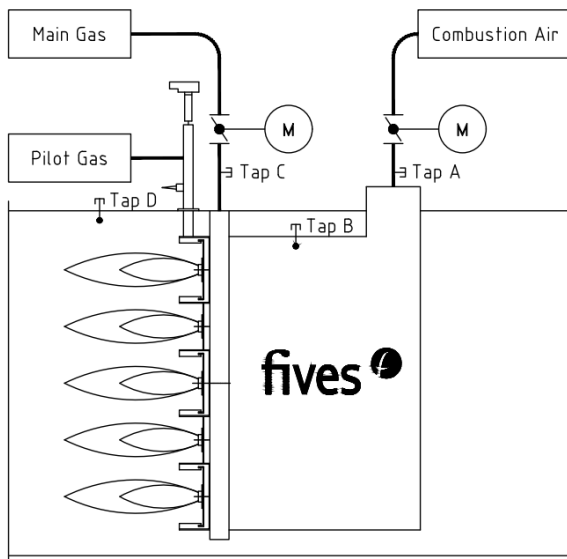
Differential pressures shall be taken between Tap C and Tap D



Note: Pressure drop curves shall be used as an indication for setting up the burner. It is recommended to use fuel flow measurements to determine actual fuel flows.

4. DRAWING EXAMPLE

Ductflame-R burner sizing is customized. Therefore a drawing shall be taken from the project manual.



ITAS Pilot burner for Ductflame-R burners

