

TDSF10M-20200604

# ITAS SPEEDFLAME MODEL SF-10-MV TECHNICAL DATASHEET (METRIC)

Parameter	Value	
Maximum Capacity input [kWlhv]	440	
Minimum input – on ratio controlled [kWlhv]	22	
Minimum input – gas controlled (fixed air) [kWlhv]	44	
Fuels	Natural gas, propane (Contact Fives ITAS for using other gases or mixed gases)	
Required fuel pressure at gas inlet [mbar] (at maximum capacity, see page 4, Tap A)	Natural gas-Italian: 43 Natural gas – Russian: 36,4 Propane: on request	
Maximum combustion air flow [Nm3/h]	554	
Required air pressure at maximum flow [mbar] (see page 4, Tap C)	63	
Combustion air temperature [°C]	< 150	
Flame dimensions [mm] (Measured from outlet of combustor)	Length Diameter	1400 150
Combustor options	Silicon Carbide Refractory	
Flame velocity at combustor outlet [m/s]	Up to 70	
Maximum chamber temperature [°C]	SiC combustor: 1200 Refractory combustor: 1200	
Ignition	Via bypass in gas line	
Ignition capacity [kW]	8	
Flame Monitoring	UV scanner or Infrared scanner	
Emissions	On request	
Installation position	Horizontal Vertical up Vertical down (use a continuous fan operation)	
Weight [kg]	Burner with SiC: 20 Burner with refractory: ~45	

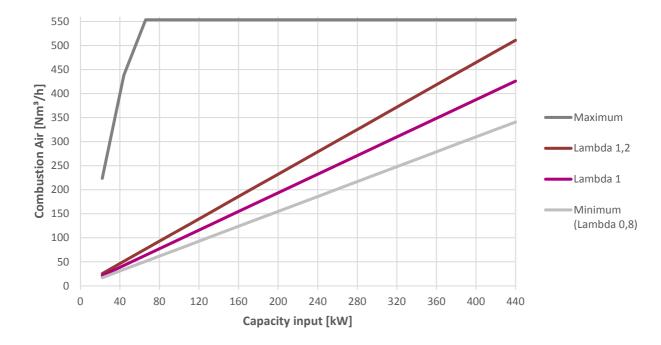
Notes:

- 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/Nm<sup>3</sup>; d=0,6
- Natural gas Russian: lhv = 9,97 kWh/Nm<sup>3</sup>; d=0,56
- Propane: lhv 26,3 kWh/Nm<sup>3</sup>; d=1,58

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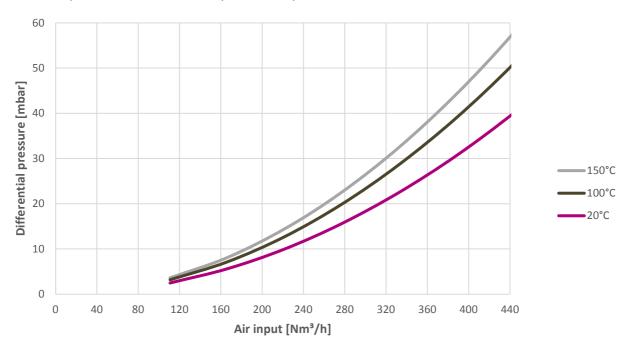
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## **1. OPERATION CURVE**

#### 2. COMBUSTION AIR PRESSURE DROP



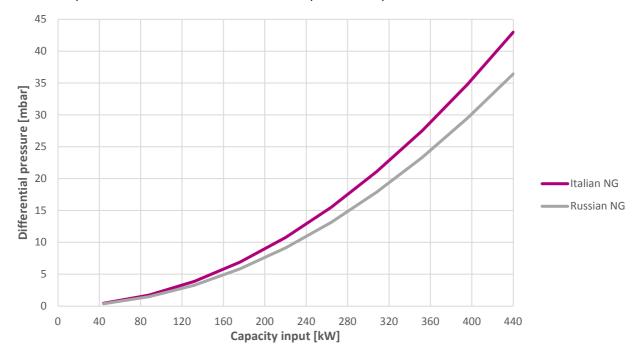
Pressure drop shall be taken between pressure Tap B and C

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## 3. GAS PRESSURE DROP



Pressure drop shall be taken as differential between pressure Tap A and B

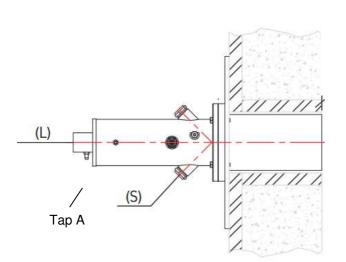
Note: Pressure drop curves shall be used as a guide for setting up burner. It is recommended to use fuel flow measurements for determining actual fuel flows.

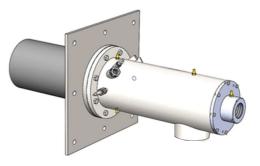
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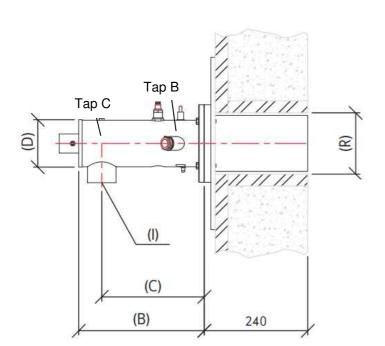
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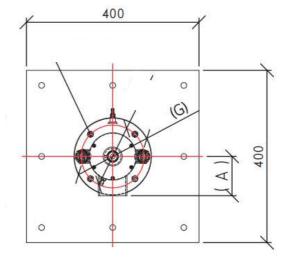


### 4. **DIMENSIONS**









SF-10-MV dimensions		
Α	91 mm	
В	335 mm	
С	238 mm	
D	110 mm	
G	180 mm	
1	2" Air inlet	
L	1" Gas inlet	
R	130 mm SiC outer diameter	
S	3/4" UV port	

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