Ecoflam

HTS 105 S/70.38

SILICON CARBIDE BURNER CONE

HTS 105 S/70 - HV Ø38

Maximum output [kW]		105
Fuel pressure at maximum capacity [mbar] (measured at $P_{1.F}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	80
	LPG (22500 kcal/Nm^3)	68
Air pressure at maximum capacity [mbar] (measured at $P_{1.A}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	80
	LPG (22500 kcal/Nm^3)	
Flame length at maximum capacity [mm] (measured from the end of the burner body)	Natural gas (8250 kcal/Nm^3)	650
	LPG (22500 kcal/Nm^3)	680
Flame speed at maximum capacity [m/s] (with 20% excess of air)	High speed	160
Flame detection	Ionization flame detection electrode or UV cell	
Fuel	Natural gas (LPG and other fuel on request)	

All information is based on laboratory tests in a neutral pressure chamber. Different conditions and chamber sizes can affect the data.
All information is based on a standard combustor design. Modifications to the combustor will alter performance and pressures.
All data are based on gross calorific values.
All information is based on tests conducted on generally acceptable air and gas piping systems.
Data reported in this technical sheet are subject to change without notice.
Performance data and dimensions are guidelines only and are not binding.
ECOFLAM reserves the right to modify the construction and / or configuration of its products at any time

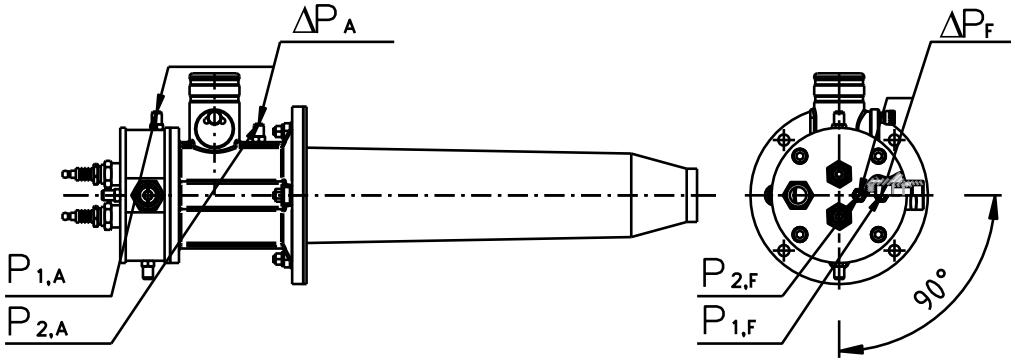
CHARACTERISTICS OF THE BURNER

Fuel 1: CH4
Fuel 1 diaphragm: Ø8.5

Fuel 2: LPG
Fuel 2 diaphragm: Ø7.25

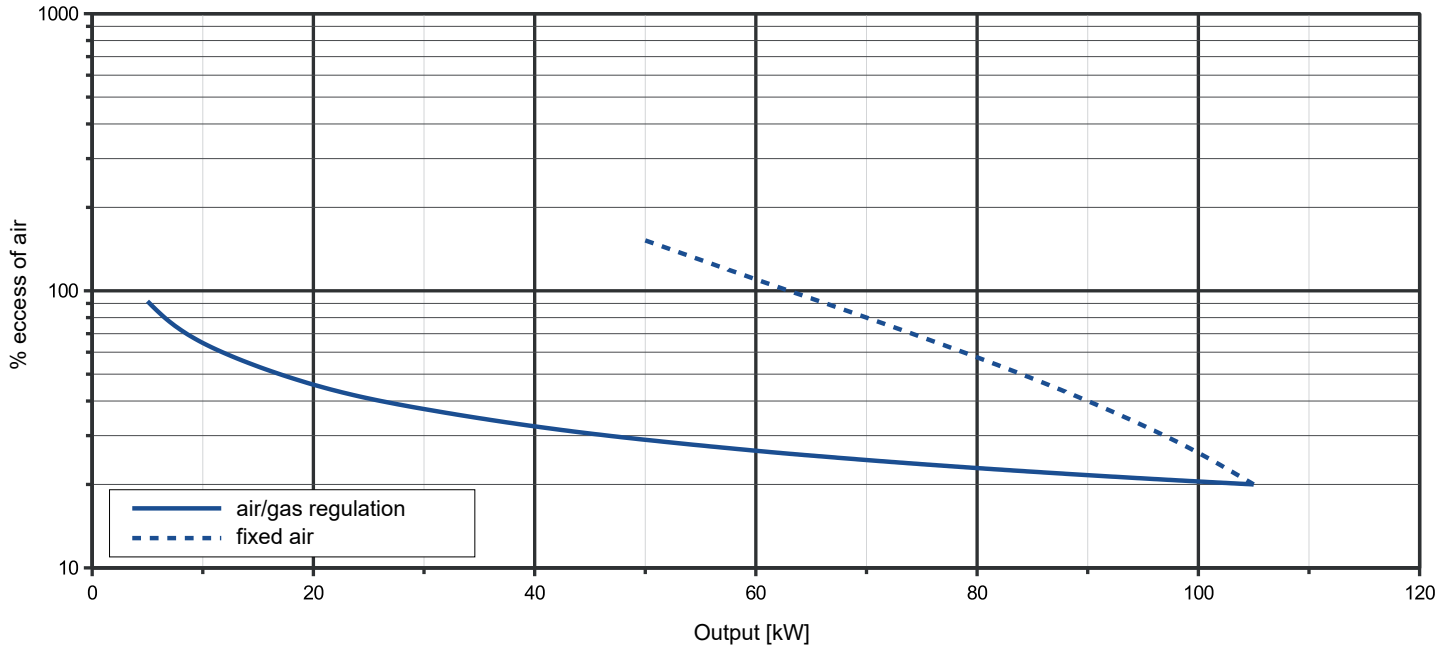
Comburent: Air
Comburent diap.: Gr.26%

Cone: Ø38



OPERATING RANGE

TYPICAL OPERATING RANGE



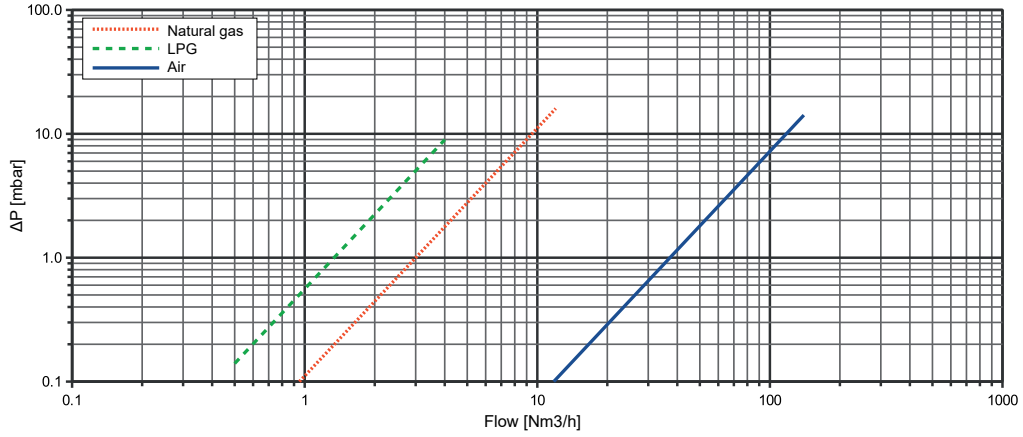
LEGENDA

Q_F Fuel flow
Q_A Air flow
$P_{1.F}$ Fuel pressure upstream the diaphragm
$P_{1.A}$ Air pressure upstream the diaphragm
$P_{2.F}$ Fuel pressure downstream the diaphragm
$P_{2.A}$ Air pressure downstream the diaphragm
ΔP_F Differential fuel pressure between ports 1 and 2
ΔP_A Differential air pressure between ports 1 and 2

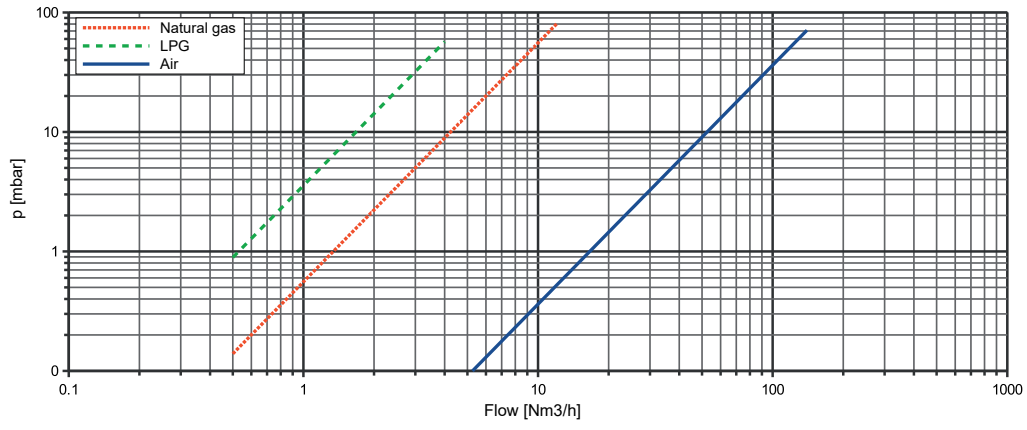
FLOW RATE CURVES

FUEL				
Q_F [Nm³/h]	$P_{1.F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
0.5	0.14	0.89	0.03	0.14
1	0.56	3.56	0.11	0.56
1.5	1.25	8.01	0.25	1.26
2	2.23	14.24	0.44	2.24
2.5	3.48	22.24	0.69	3.50
3	5.01	32.03	1.00	5.03
3.5	6.82	43.59	1.36	6.85
4	8.90	56.94	1.78	8.95
4.5	11.27		2.25	
5	13.91		2.78	
5.5	16.83		3.36	
6	20.03		4.00	
6.5	23.51		4.69	
7	27.26		5.44	
7.5	31.30		6.24	
8	35.61		7.11	
8.5	40.20		8.02	
9	45.07		8.99	
9.5	50.22		10.02	
10	55.64		11.10	
10.5	61.34		12.24	
11	67.33		13.43	
11.5	73.59		14.68	
12	80.12		15.99	

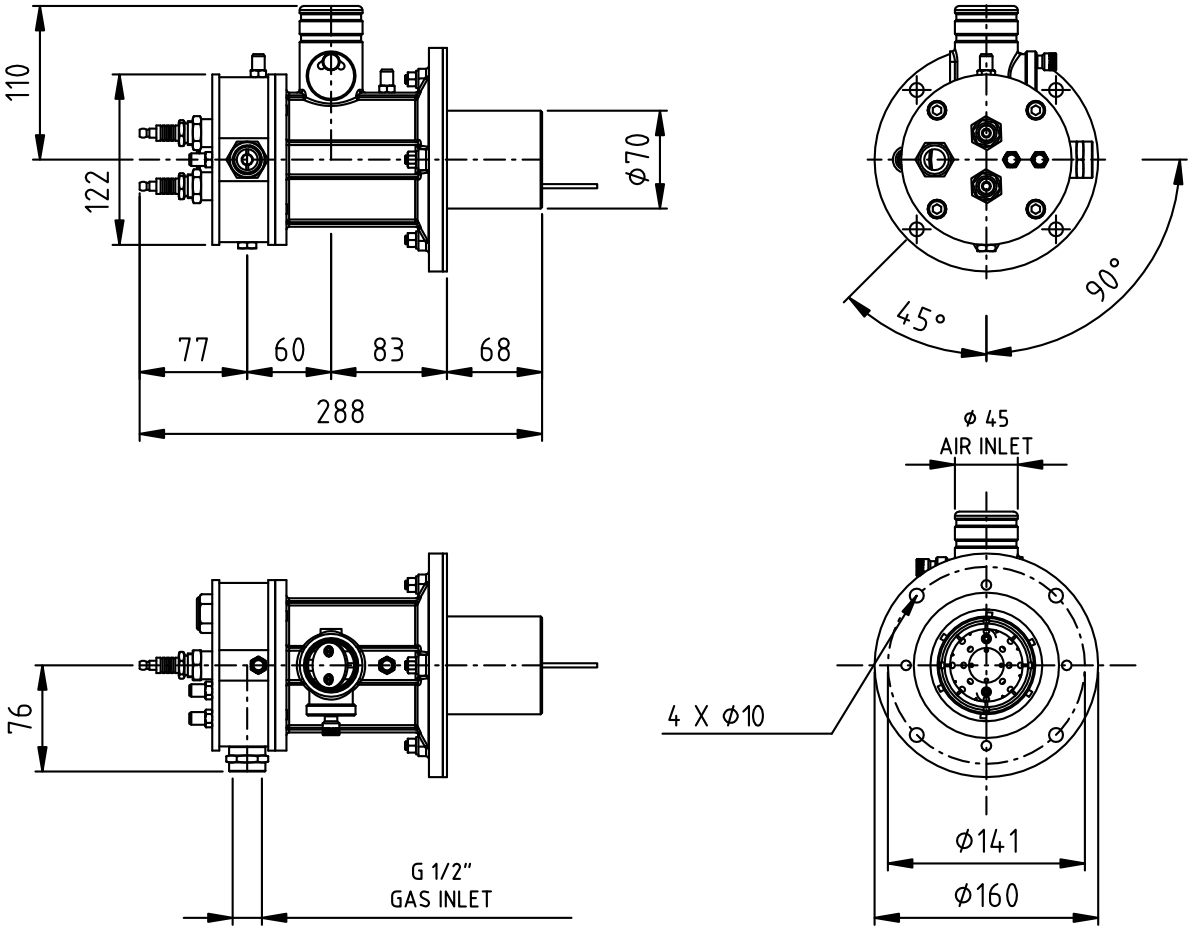
AIR		
Q_A [Nm³/h]	$P_{1.A}$ [mbar]	ΔP_A [mbar]
5	0.09	0.02
10	0.36	0.07
20	1.45	0.29
30	3.26	0.65
40	5.79	1.16
50	9.05	1.81
55	10.95	2.18
60	13.03	2.60
65	15.29	3.05
70	17.74	3.54
75	20.36	4.06
80	23.16	4.62
85	26.15	5.22
90	29.32	5.85
95	32.67	6.52
100	36.19	7.22
105	39.90	7.96
110	43.80	8.74
115	47.87	9.55
120	52.12	10.40
125	56.55	11.28
130	61.17	12.21
135	65.96	13.16
140	70.94	14.16



STATIC PRESSURE REQUIRED



DIMENSIONS [mm]



Silicon carbide burner cone: