

HTS 300 S/90.85

SILICON CARBIDE BURNER CONE

HTS 300 S/90 - MV Ø85

Maximum output [kW]		300
Fuel pressure at maximum capacity [mbar] (measured at P _{1,F} - pag. 2)	Natural gas (8250 kcal/Nm ³)	36
	LPG (22500 kcal/Nm ³)	45
Air pressure at maximum capacity [mbar] (measured at P _{1,A} - pag. 2)	Natural gas (8250 kcal/Nm ³)	43
	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)	530
	LPG (22500 kcal/Nm ³)	
Flame speed at maximum capacity [m/s] (with 20% excess of air)	Medium speed	88
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.

ELCO reserves the right to modify the construction and / or configuration of its products at any time

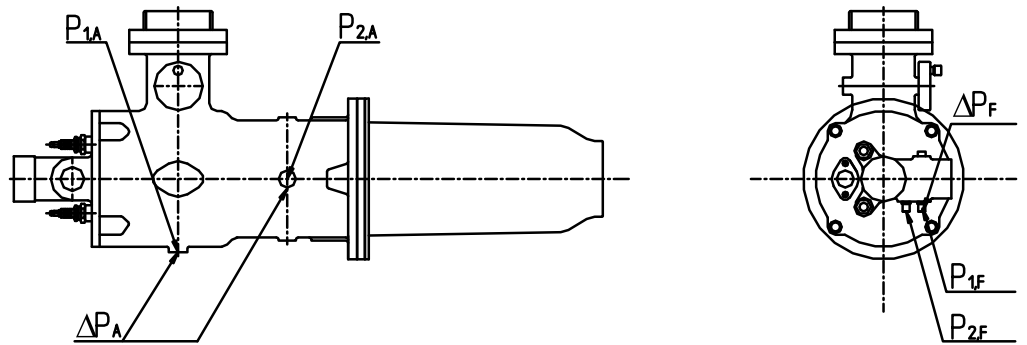
CHARACTERISTICS OF THE BURNER

Fuel 1: CH₄
 Fuel 1 diaphragm: Ø20

Fuel 2: LPG
 Fuel 2 diaphragm: Ø15

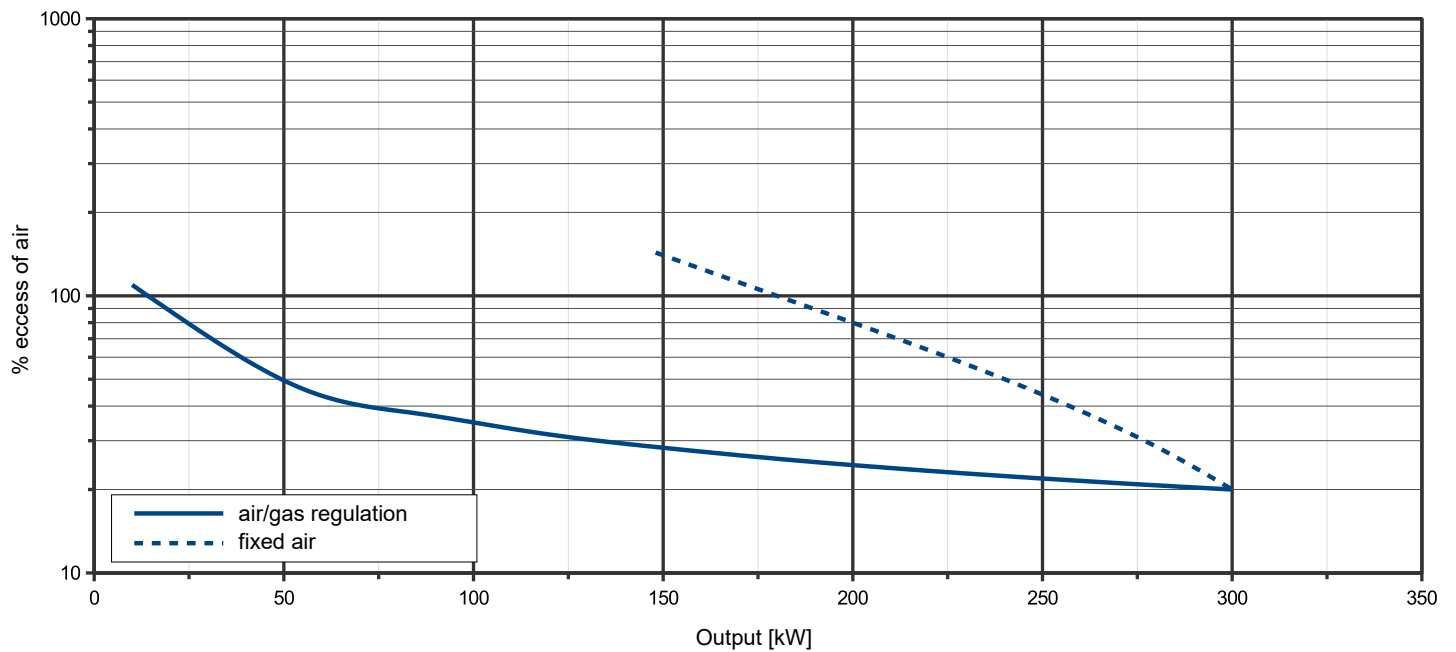
Comburent: Air
 Comburent diap.: Ø100

Cone: Ø85



OPERATING RANGE

TYPICAL OPERATING RANGE



LEGENDA

Q_F Fuel flow
 Q_A Air flow

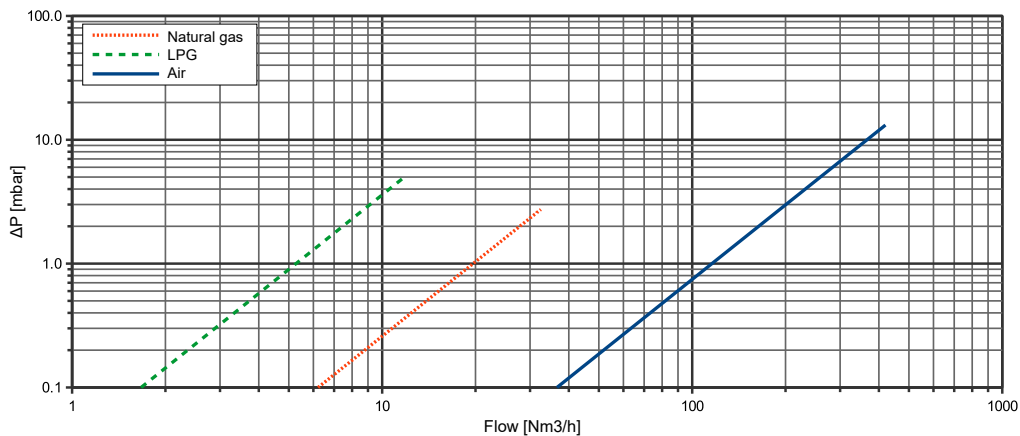
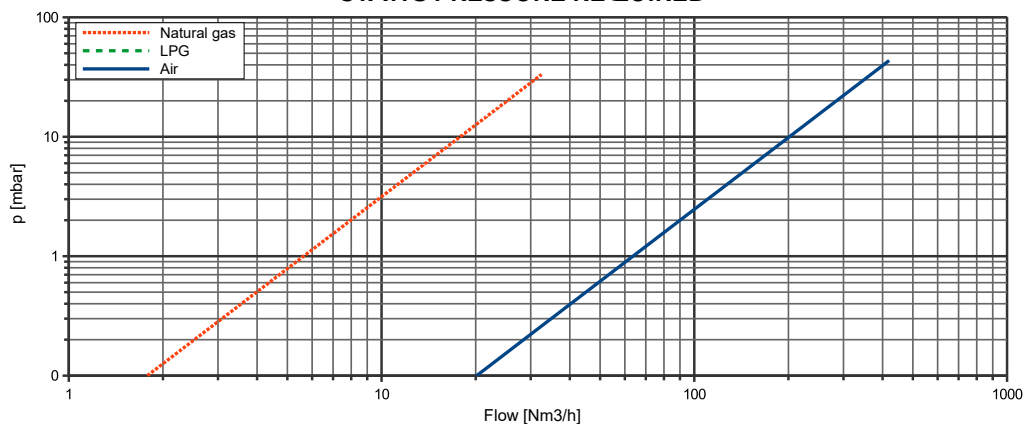
$P_{1,F}$ Fuel pressure upstream the diaphragm
 $P_{1,A}$ Air pressure upstream the diaphragm
 $P_{2,F}$ Fuel pressure downstream the diaphragm

$P_{2,A}$ 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

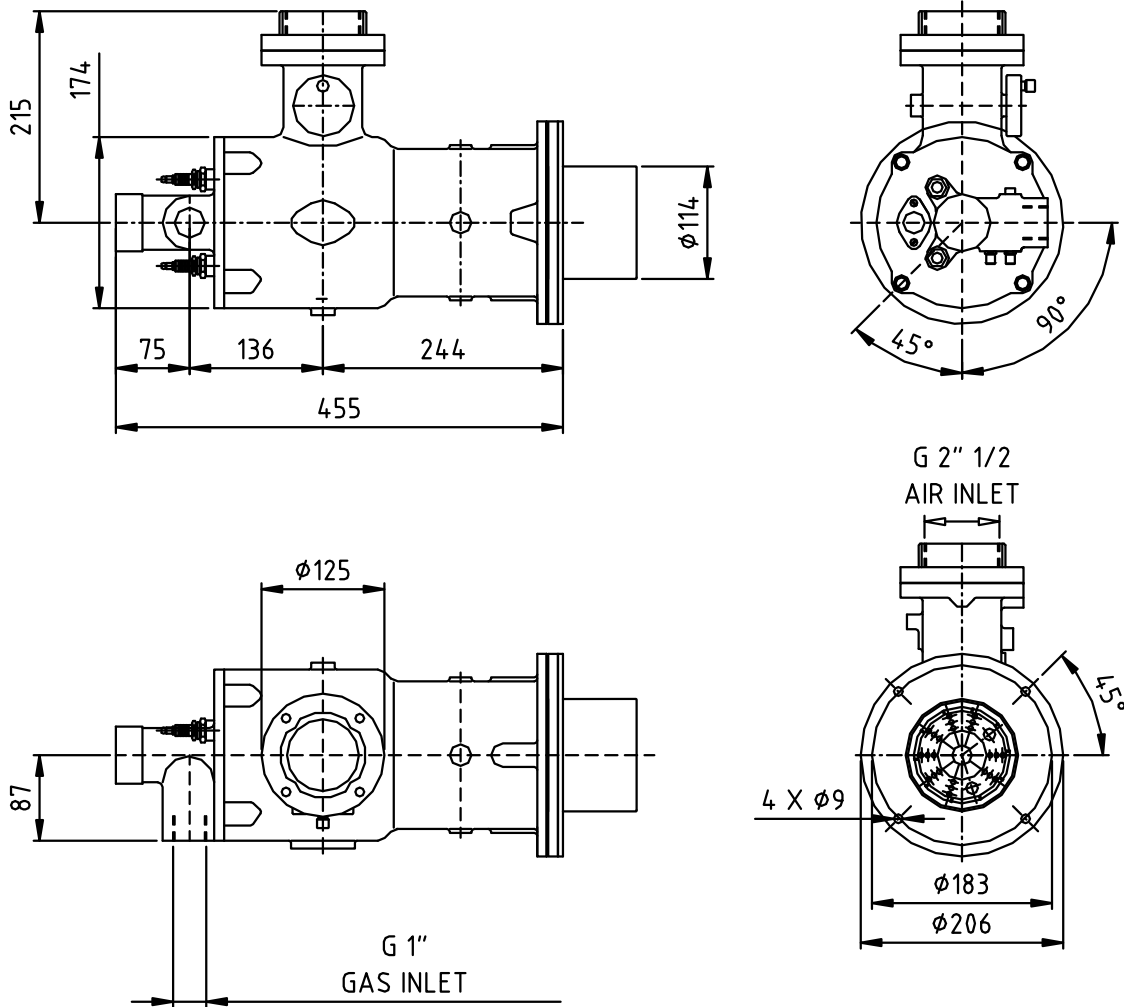
FLOW RATE CURVES

Q_F [Nm ³ /h]	FUEL			
	$P_{1,F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
1	0.03		0.00	0.04
2.5	0.20		0.02	0.22
4	0.50		0.04	0.57
6	1.13		0.09	1.29
8	2.01		0.17	2.30
10	3.15		0.26	3.59
12	4.53		0.37	5.17
14	6.17		0.51	
16	8.05		0.66	
18	10.19		0.84	
20	12.58		1.04	
22	15.23		1.25	
24	18.12		1.49	
25	19.66		1.62	
26	21.26		1.75	
27	22.93		1.89	
28	24.66		2.03	
29	26.46		2.18	
30	28.31		2.33	
30.5	29.26		2.41	
31	30.23		2.49	
31.5	31.21		2.57	
32	32.21		2.65	
32.5	33.23		2.74	

Q_A [Nm ³ /h]	AIR	
	$P_{1,A}$ [mbar]	ΔP_A [mbar]
15	0.06	0.02
30	0.22	0.07
45	0.50	0.15
60	0.89	0.27
90	2.00	0.60
120	3.55	1.07
150	5.55	1.68
180	7.99	2.41
200	9.86	2.98
220	11.93	3.61
240	14.20	4.29
260	16.66	5.04
280	19.32	5.84
300	22.18	6.71
320	25.24	7.63
340	28.49	8.61
350	30.19	9.13
360	31.94	9.66
370	33.74	10.20
380	35.59	10.76
390	37.49	11.34
400	39.44	11.92
410	41.43	12.53
420	43.48	13.15


STATIC PRESSURE REQUIRED


DIMENSIONS [mm]



Silicon carbide burner cone:

