

HTC 450 GV S0.150

CONCRETE CASTING BURNER CONE

HTC 450 GV S0 - MV Ø150

Maximum output [kW]		450
Fuel pressure at maximum capacity [mbar] (measured at P _{1,F} - pag. 2)	Natural gas (8250 kcal/Nm ³)	38
	LPG (22500 kcal/Nm ³)	42
Air pressure at maximum capacity [mbar] (measured at P _{1,A} - pag. 2)	Natural gas (8250 kcal/Nm ³)	50
	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)	600
	LPG (22500 kcal/Nm ³)	600
Flame speed at maximum capacity [m/s] (with 20% excess of air)	Medium speed	44
Flame detection	Ionization flame detection electrode or UV cell	
Fuel	Natural gas, LPG	

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

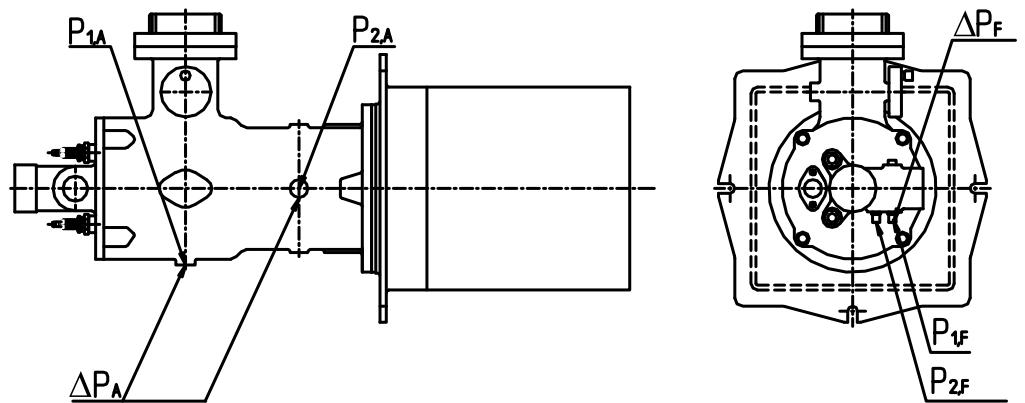
CHARACTERISTICS OF THE BURNER

Fuel 1: CH₄
 Fuel 1 diaphragm: Ø20

Fuel 2: LPG
 Fuel 2 diaphragm: Ø15

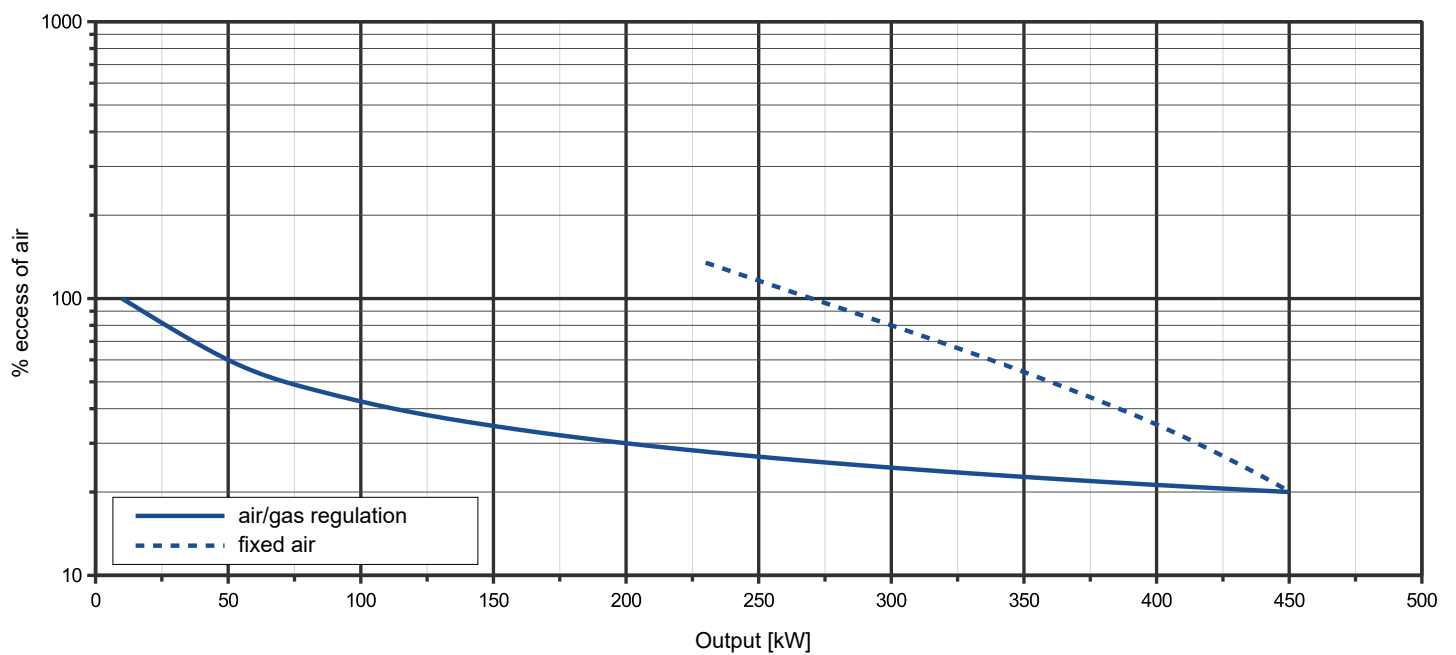
Comburent: Air
 Comburent diap.: Ø100

Cone: Ø150



OPERATING RANGE

TYPICAL OPERATING RANGE



LEGENDA

Q_F Fuel flow
 Q_A Air flow

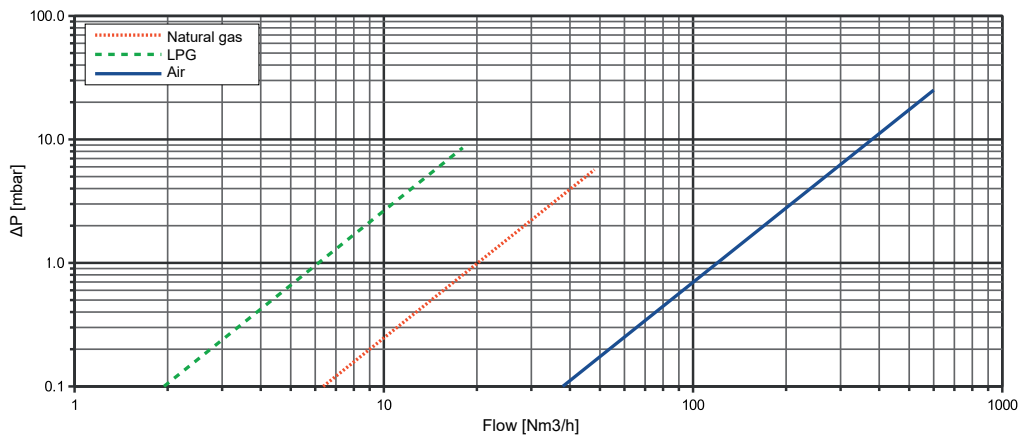
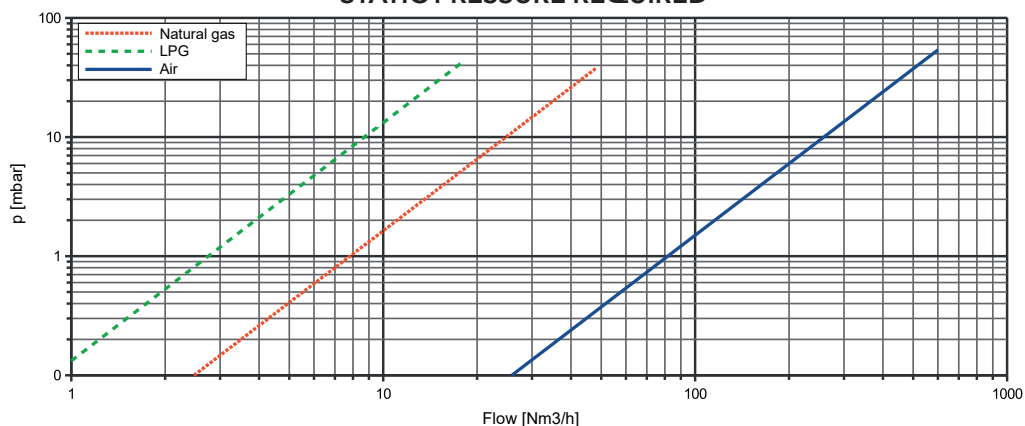
$P_{1,F}$ Fuel pressure upstream the diaphragm
 $P_{1,A}$ Air pressure upstream the diaphragm
 $P_{2,F}$ Fuel pressure downstream the diaphragm

$P_{2,A}$ 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

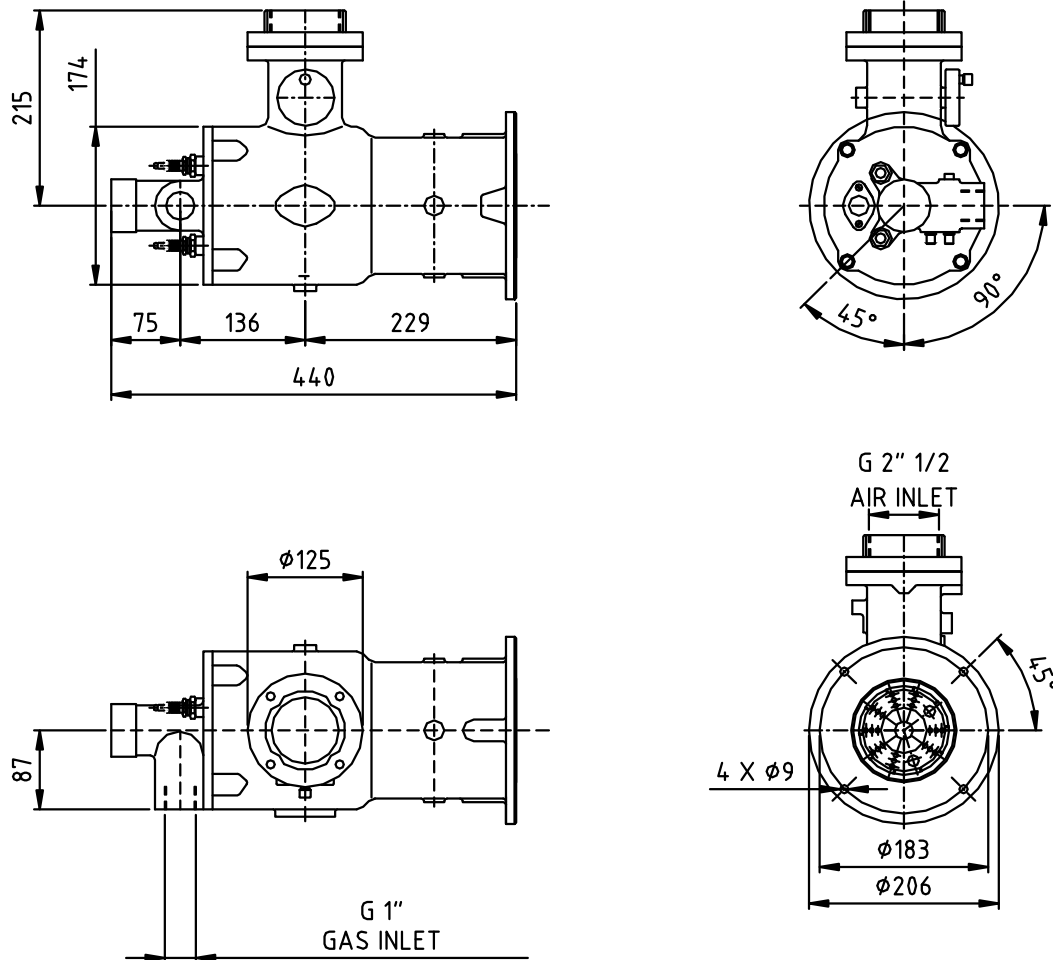
FLOW RATE CURVES

Q_F [Nm ³ /h]	FUEL			
	$P_{1,F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
1	0.02	0.13	0.00	0.03
3	0.15	1.19	0.02	0.24
6	0.59	4.76	0.09	0.95
8	1.04	8.45	0.16	1.69
10	1.63	13.21	0.25	2.64
12	2.35	19.02	0.36	3.80
14	3.20	25.89	0.48	5.18
16	4.18	33.82	0.63	6.76
18	5.29	42.80	0.80	8.56
20	6.53		0.99	
22	7.90		1.19	
24	9.40		1.42	
26	11.04		1.67	
28	12.80		1.93	
30	14.70		2.22	
32	16.72		2.53	
34	18.88		2.85	
36	21.16		3.20	
38	23.58		3.56	
40	26.12		3.95	
42	28.80		4.35	
44	31.61		4.77	
46	34.55		5.22	
48	37.62		5.68	

Q_A [Nm ³ /h]	AIR	
	$P_{1,A}$ [mbar]	ΔP_A [mbar]
25	0.09	0.04
50	0.37	0.17
75	0.84	0.39
100	1.50	0.70
125	2.34	1.09
150	3.37	1.57
175	4.58	2.13
200	5.99	2.78
225	7.58	3.52
250	9.35	4.35
275	11.32	5.26
300	13.47	6.26
325	15.81	7.35
350	18.33	8.53
375	21.05	9.79
400	23.95	11.14
425	27.03	12.57
450	30.31	14.10
475	33.77	15.71
500	37.42	17.40
525	41.25	19.19
550	45.27	21.06
575	49.48	23.01
600	53.88	25.06


STATIC PRESSURE REQUIRED


DIMENSIONS [mm]



Concrete casting cone:

