HTC 1160 S/0 PC.190

CONCRETE CASTING BURNER CONE

HTC 1160 S/0 PC - MV Ø190

Maximum output [kW]		1160
Fuel pressure at maximum capacity [mbar] (measured at $P_{1.F}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	33
	LPG (22500 kcal/Nm^3)	
Air pressure at maximum capacity [mbar] (measured at $P_{1.A}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	45
	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)	1300
	LPG (22500 kcal/Nm^3)	
Flame speed at maximum capacity [m/s] (with 20% excess of air)	Medium speed	65
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

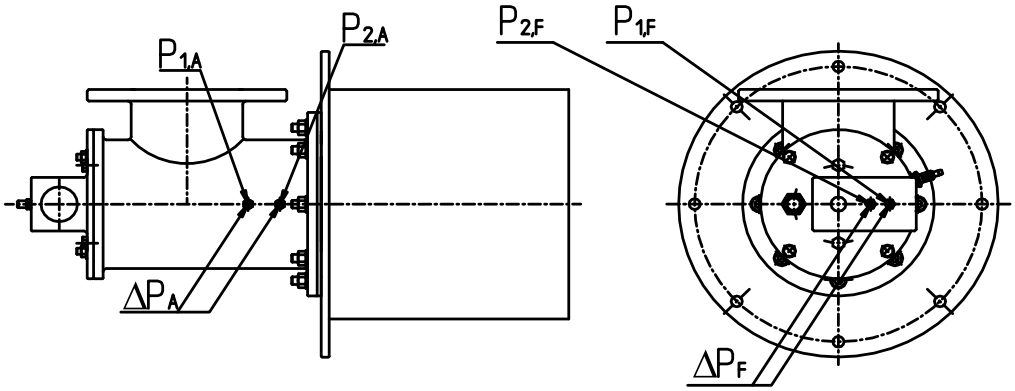
CHARACTERISTICS OF THE BURNER

Fuel 1: CH4
Fuel 1 diaphragm: Ø30

Fuel 2: LPG
Fuel 2 diaphragm: Ø25

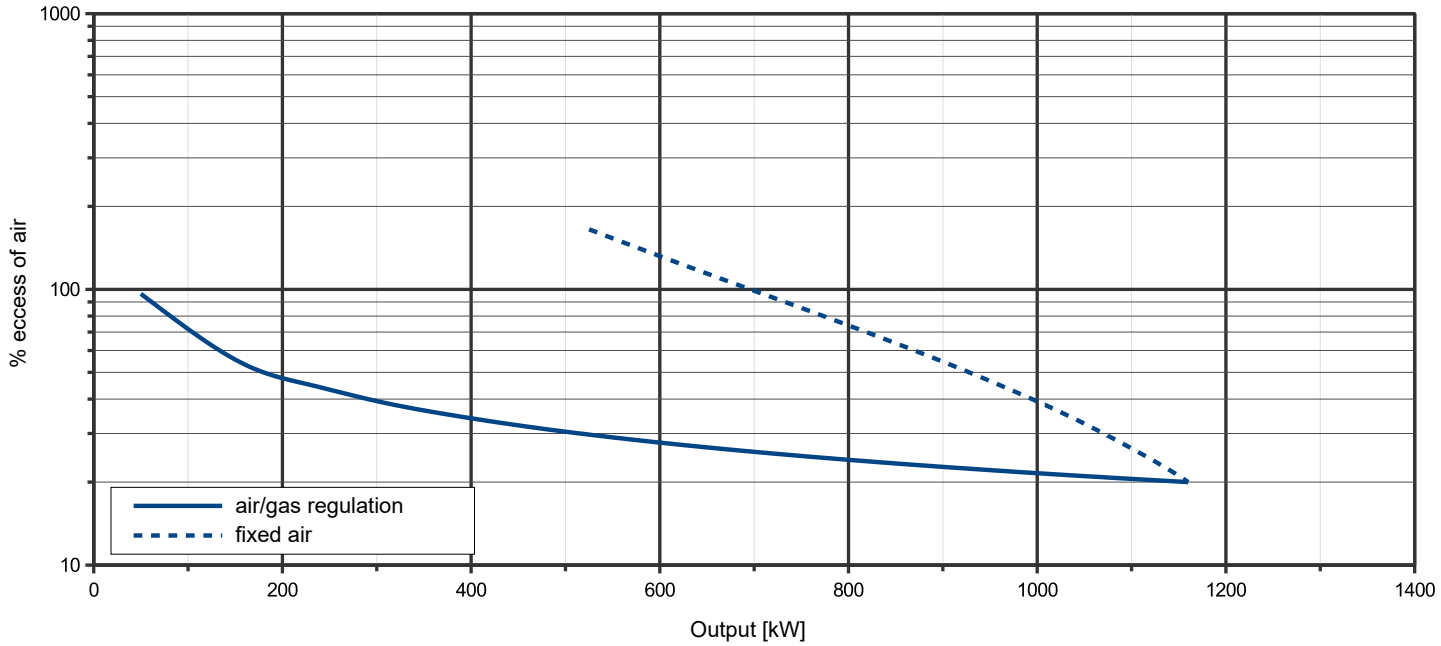
Comburent: Air
Comburent diap.: Ø130

Cone: Ø190



OPERATING RANGE

TYPICAL OPERATING RANGE



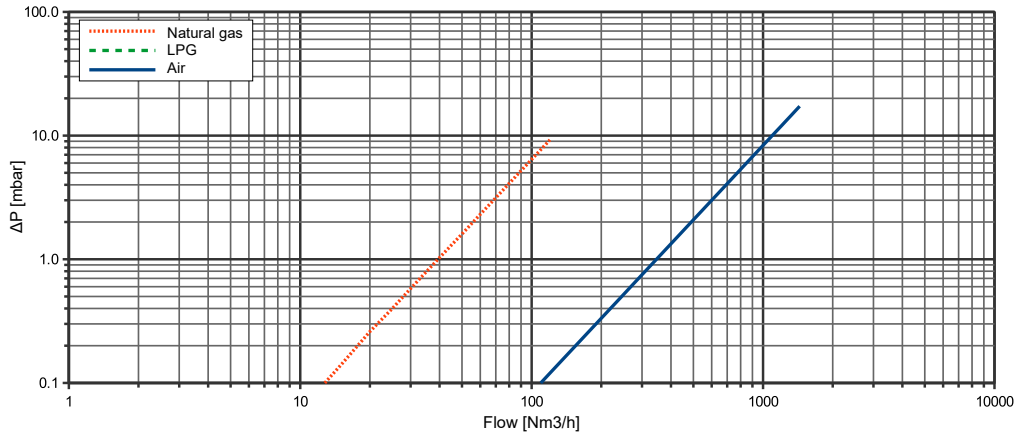
LEGENDA

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

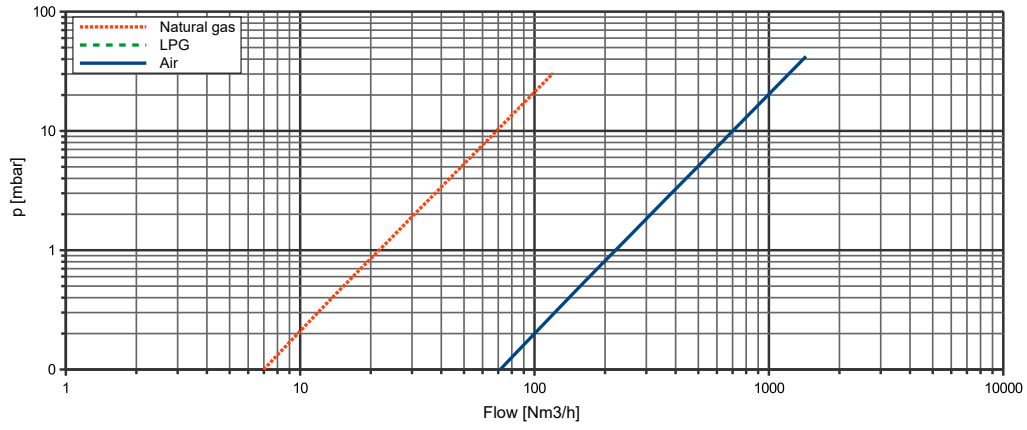
FLOW RATE CURVES

FUEL				
Q_F [Nm³/h]	$P_{1.F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
5	0.05		0.02	
10	0.21		0.06	
15	0.48		0.14	
20	0.85		0.26	
25	1.32		0.4	
30	1.91		0.58	
35	2.59		0.79	
40	3.39		1.03	
45	4.29		1.3	
50	5.29		1.6	
55	6.4		1.94	
60	7.62		2.31	
65	8.94		2.71	
70	10.37		3.14	
75	11.91		3.61	
80	13.55		4.11	
85	15.29		4.64	
90	17.15		5.2	
95	19.1		5.79	
100	21.17		6.42	
105	23.34		7.07	
110	25.61		7.76	
115	27.99		8.48	
120	30.48		9.24	

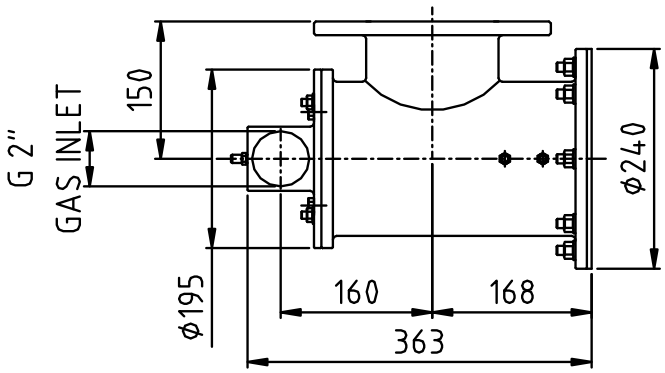
AIR		
Q_A [Nm³/h]	$P_{1.A}$ [mbar]	ΔP_A [mbar]
60	0.07	0.03
120	0.29	0.12
180	0.66	0.27
240	1.17	0.48
300	1.83	0.75
360	2.64	1.08
420	3.59	1.47
480	4.68	1.92
540	5.93	2.43
600	7.32	3
660	8.86	3.63
720	10.54	4.32
780	12.37	5.07
840	14.35	5.88
900	16.47	6.75
960	18.74	7.68
1020	21.15	8.67
1080	23.72	9.72
1140	26.42	10.82
1200	29.28	11.99
1260	32.28	13.22
1320	35.43	14.51
1380	38.72	15.86
1440	42.16	17.27

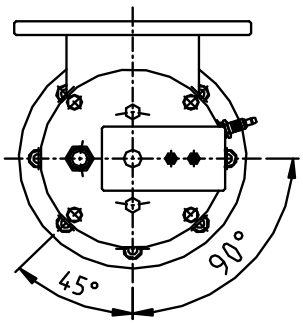


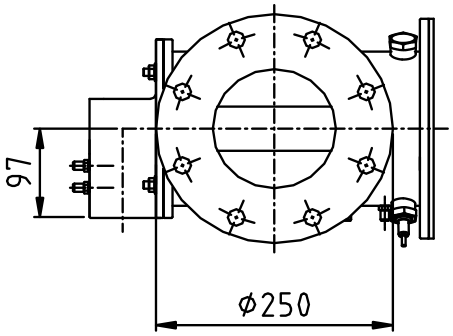
STATIC PRESSURE REQUIRED

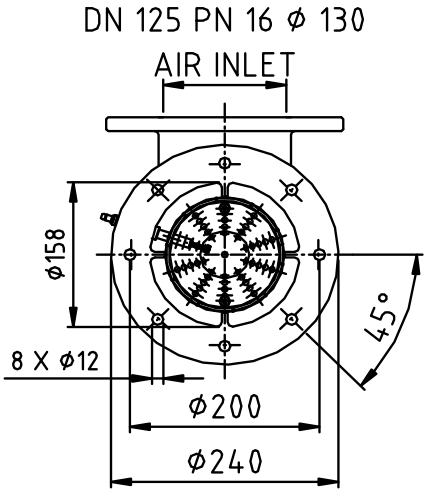


DIMENSIONS [mm]

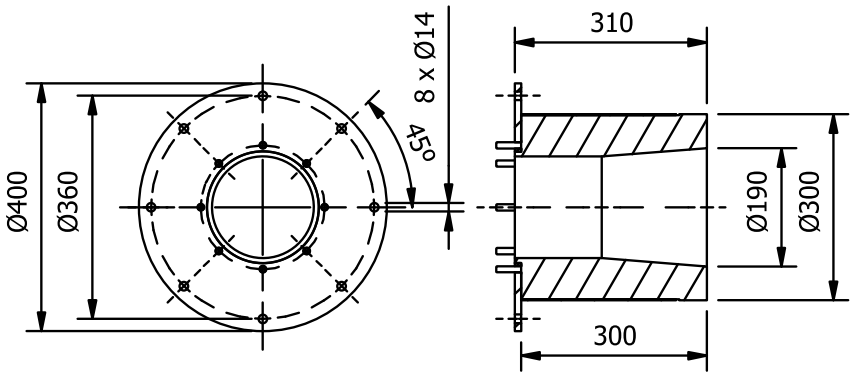




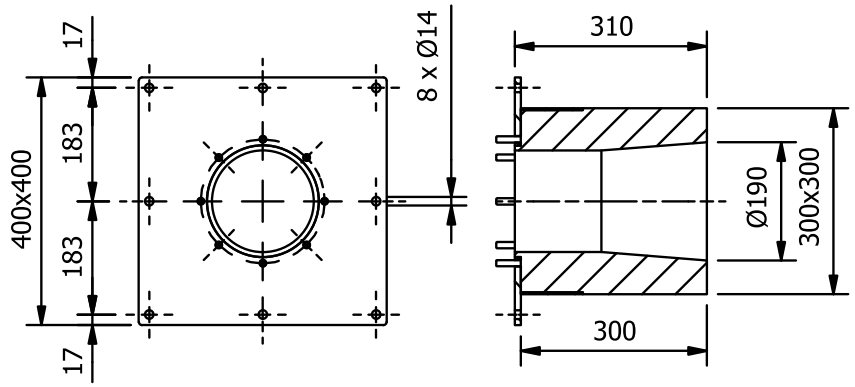




Concrete casting cone:



Round flange



Square flange