HTC 1750 S/0 PC.225

CONCRETE CASTING BURNER CONE

HTC 1750 S/0 PC - MV Ø225

Maximum output [kW]		1750
Fuel pressure at maximum capacity [mbar] (measured at $P_{1.F}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	20
	LPG (22500 kcal/Nm^3)	
Air pressure at maximum capacity [mbar] (measured at $P_{1.A}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	40
	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)	1800
	LPG (22500 kcal/Nm^3)	
Flame speed at maximum capacity [m/s] (with 20% excess of air)	Medium speed	75
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

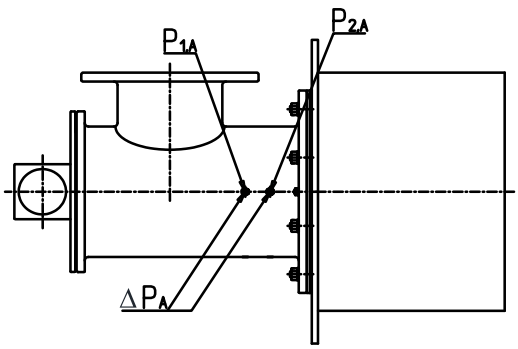
CHARACTERISTICS OF THE BURNER

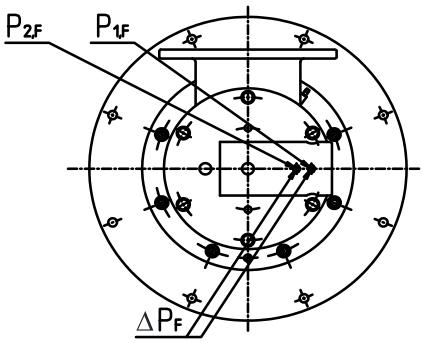
Fuel 1: CH4
Fuel 1 diaphragm: Ø42

Fuel 2: LPG
Fuel 2 diaphragm: Ø26

Comburent: Air
Comburent diap.: Ø170

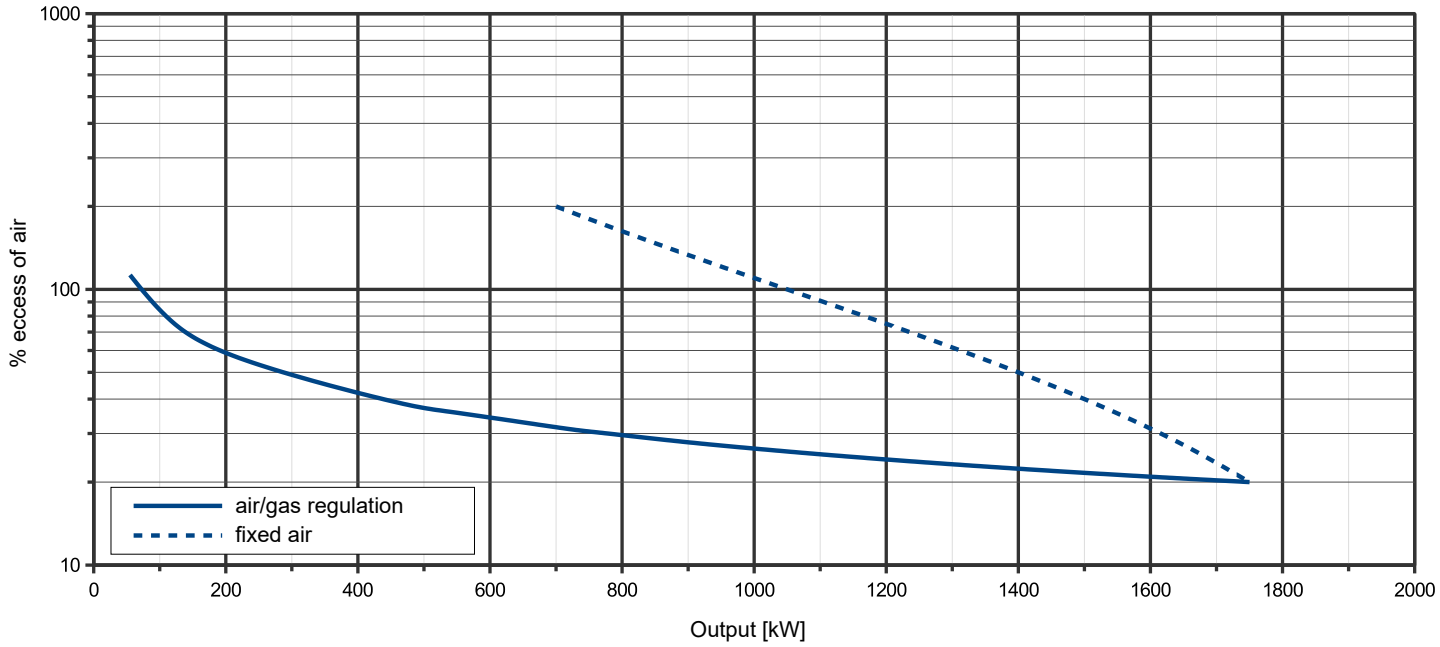
Cone: Ø225





OPERATING RANGE

TYPICAL OPERATING RANGE



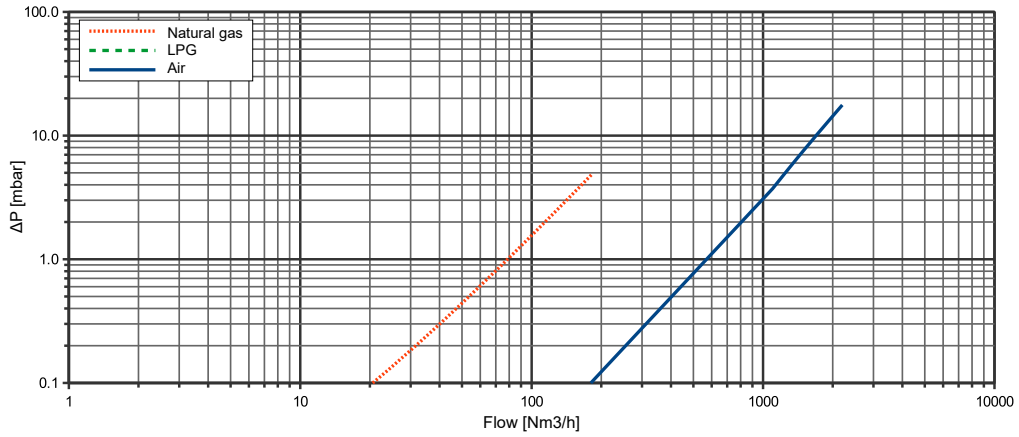
LEGENDA

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

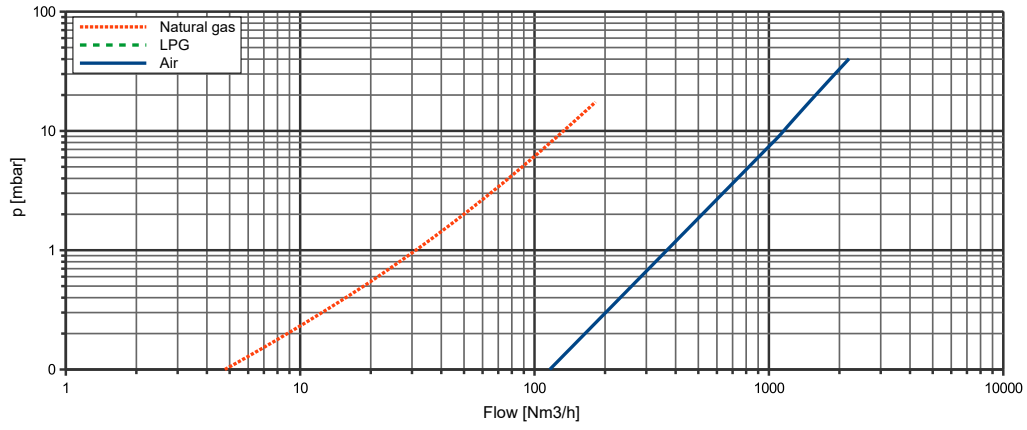
FLOW RATE CURVES

FUEL				
Q_F [Nm³/h]	$P_{1.F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
4	0.08		0.01	
8	0.18		0.03	
16	0.41		0.07	
24	0.70		0.13	
32	1.04		0.20	
40	1.43		0.30	
48	1.88		0.41	
56	2.39		0.54	
64	2.94		0.69	
72	3.56		0.85	
80	4.22		1.03	
88	4.94		1.23	
96	5.72		1.44	
104	6.54		1.68	
112	7.43		1.93	
120	8.36		2.20	
128	9.35		2.48	
136	10.40		2.78	
144	11.50		3.10	
152	12.65		3.44	
160	13.86		3.79	
168	15.12		4.16	
176	16.44		4.55	
182	17.46		4.86	

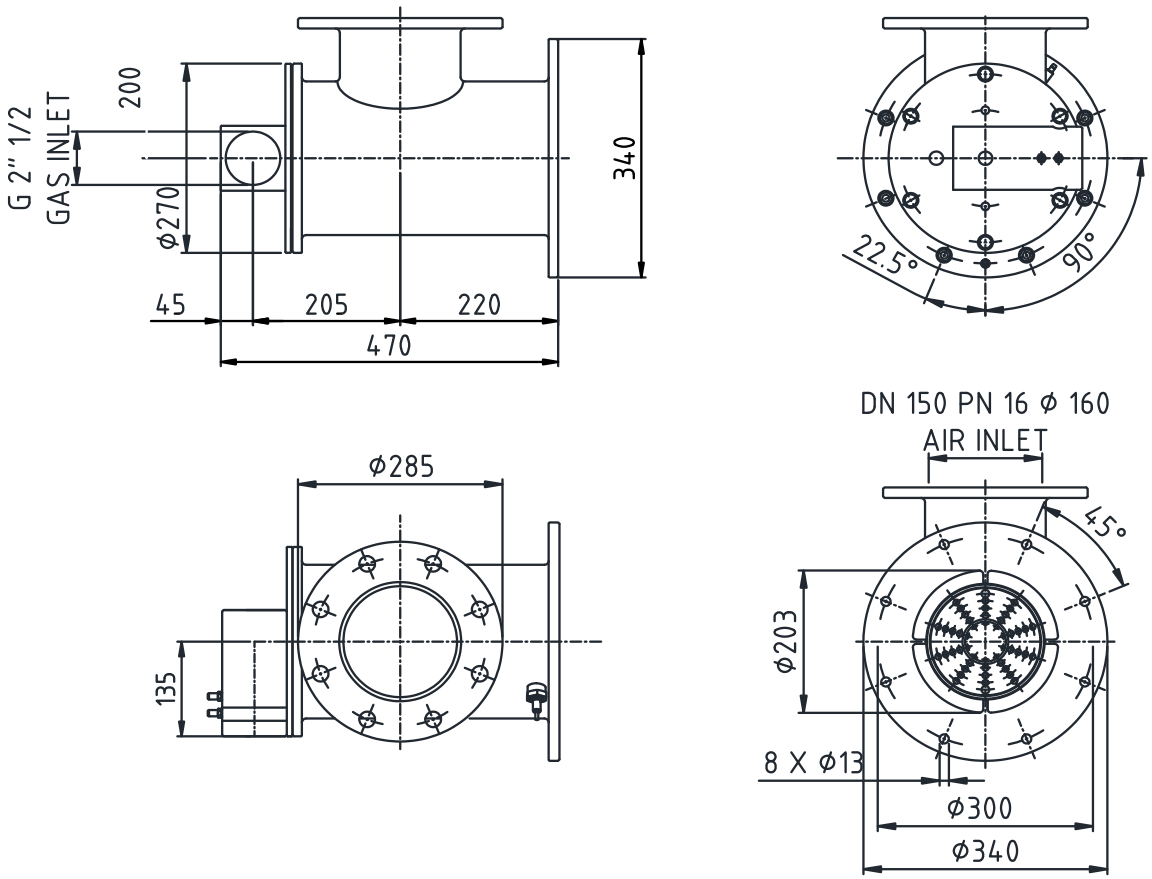
AIR		
Q_A [Nm³/h]	$P_{1.A}$ [mbar]	ΔP_A [mbar]
50	0.02	0.01
100	0.07	0.03
200	0.30	0.12
300	0.67	0.28
400	1.19	0.49
500	1.85	0.77
600	2.67	1.11
700	3.63	1.51
800	4.74	1.97
900	6.00	2.49
1000	7.41	3.08
1100	8.97	3.72
1200	10.89	4.57
1300	13.01	5.50
1400	15.30	6.51
1500	17.79	7.61
1600	20.46	8.79
1700	23.31	10.06
1800	26.35	11.41
1900	29.57	12.85
2000	32.98	14.37
2100	36.57	15.98
2150	38.44	16.81
2200	40.35	17.67



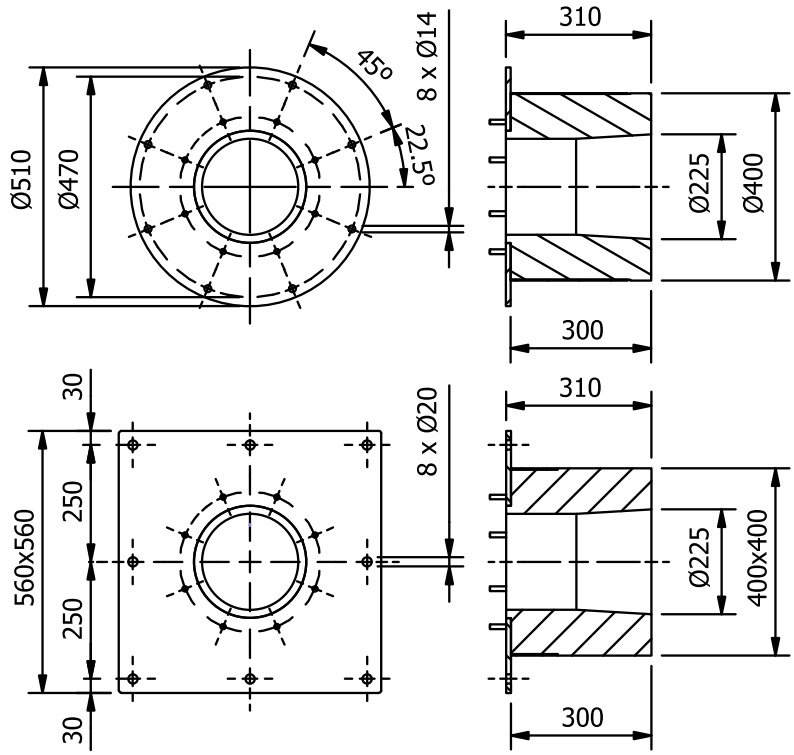
STATIC PRESSURE REQUIRED



DIMENSIONS [mm]



Concrete casting cone:



Round flange

Square flange