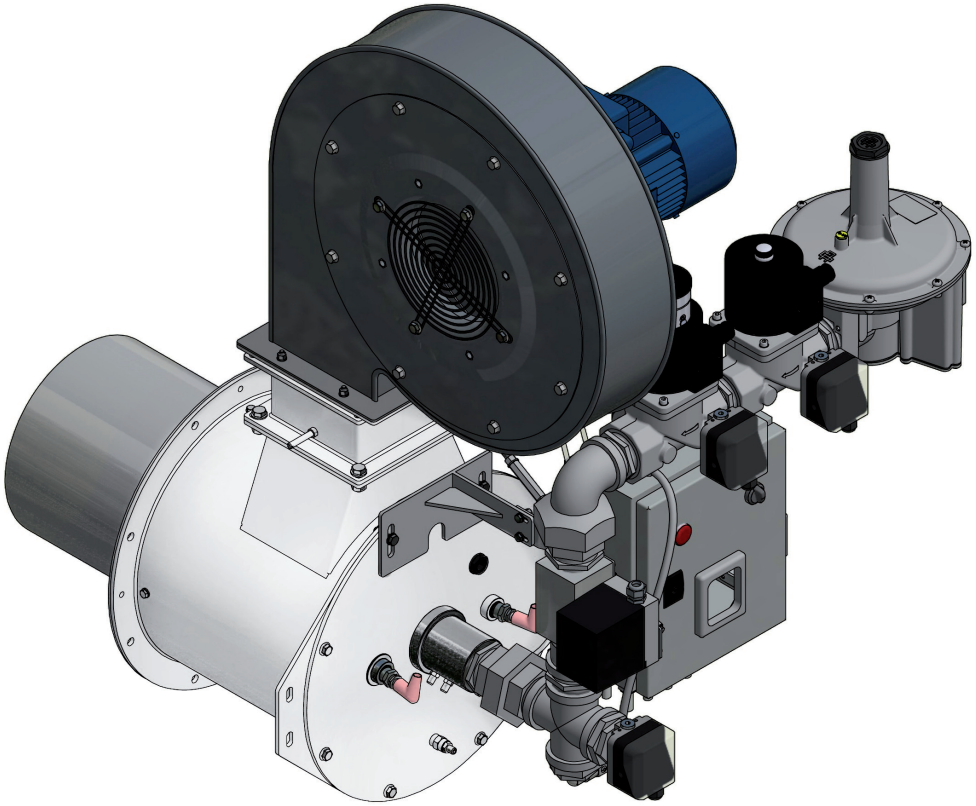
MB LMT 1450

Monoblock High Ratio Regulation

THERMAL STEEL FLAME TUBE



MB LMT 1450

Maximum output [kW]		1450
Minmum output (air/gas regulation) [kW]		48
Minmum output (fixed air) [kW]		60
Fuel pressure at maximum capacity (upstream of the stabilizer) [mbar]	Natural gas (8250 kcal/Nm^3)	100
	LPG (22500 kcal/Nm^3)	100
Operating conditions in the combustion chamber at maximum capacity [mbar]	Maximum back pressure	0
	Minimum depression	-8
Flame length at maximum capacity [mm] (measured at the end of the burner body)	Natural gas (8250 kcal/Nm^3)	2500
	LPG (22500 kcal/Nm^3)	2800
Flame detection	Ionization flame detection electrode (UV cell on request)	
Fuel	Natural gas (LPG and other gaseous fuel on request)	

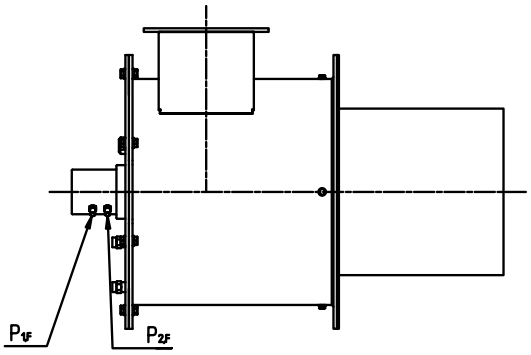
All information is based on laboratory tests in a neutral pressure chamber. Different conditions and chamber sizes can affect the data.
All information is based on a standard combustor design. Modifications to the combustor will alter performance and pressures.
All data are based on gross calorific values.
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

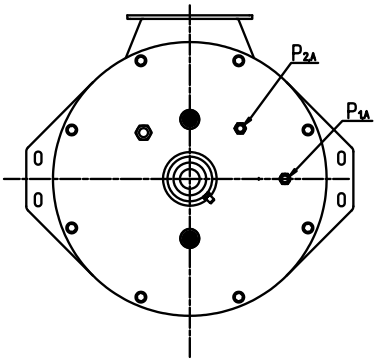
CHARACTERISTICS OF THE BURNER

Fuel 1: CH4
Fuel 1 diaphragm: Ø33

Fuel 2: LPG
Fuel 2 diaphragm: Ø28

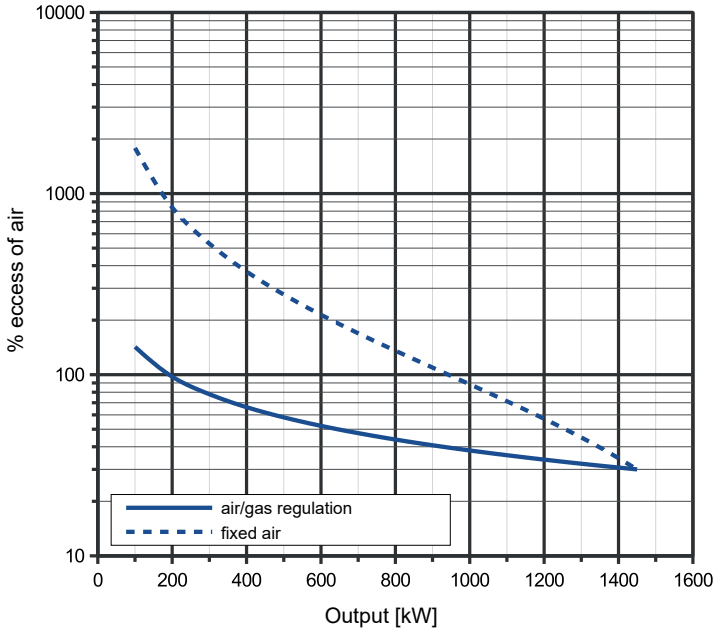
Comburent: Air
Comburent diaphragm: Sp25



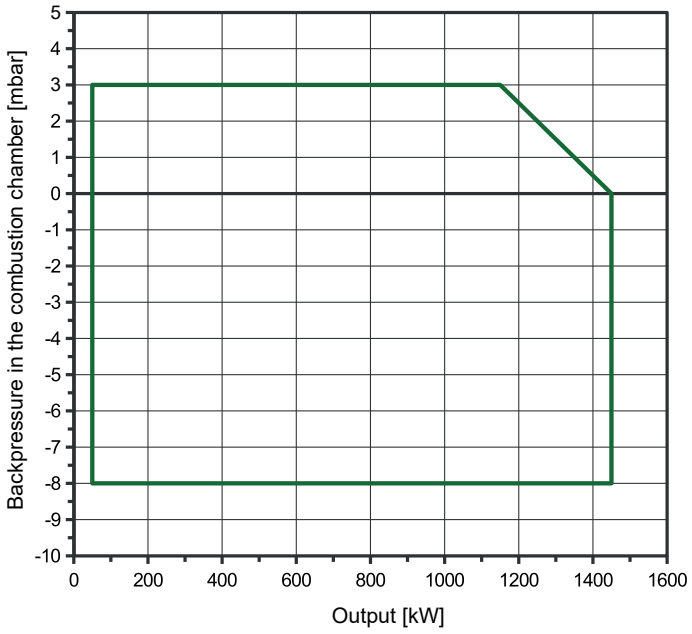


OPERATING RANGE

TYPICAL OPERATING RANGE



WORKING FIELD



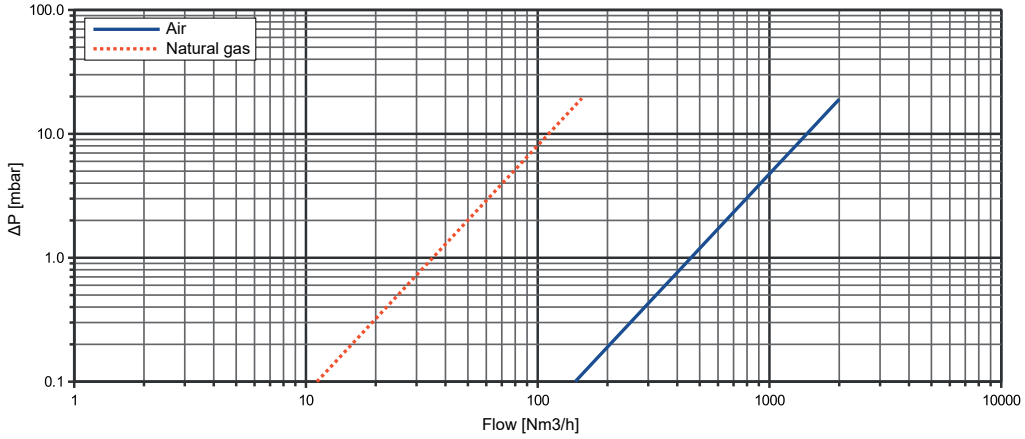
LEGENDA

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

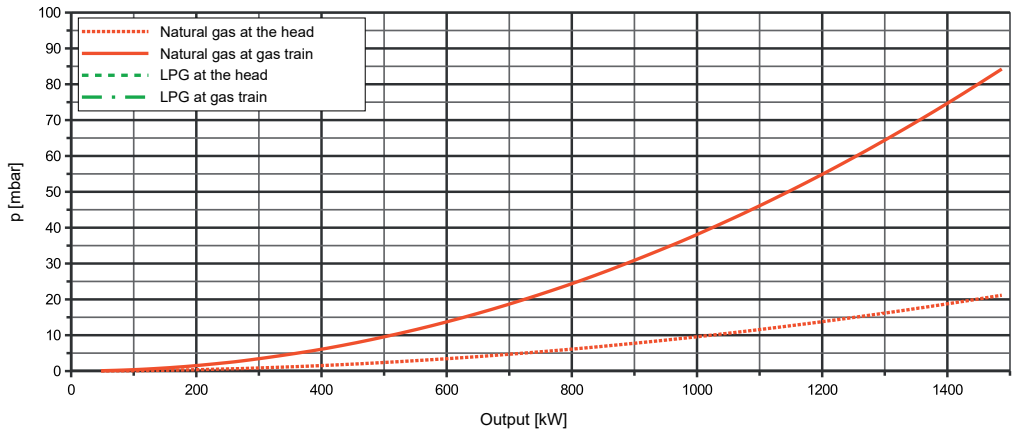
FLOW RATE CURVES

FUEL		
Q_F [Nm³/h]	$P_{1.F}$ [mbar]	ΔP_F [mbar]
	Natural gas	Natural gas
5	0.02	0.02
10	0.09	0.08
15	0.20	0.18
20	0.35	0.32
25	0.55	0.50
30	0.79	0.72
40	1.41	1.29
50	2.20	2.01
60	3.17	2.90
70	4.31	3.94
80	5.63	5.15
90	7.13	6.52
100	8.80	8.05
105	9.71	8.87
110	10.65	9.74
115	11.64	10.64
120	12.68	11.59
125	13.76	12.57
130	14.88	13.60
135	16.05	14.66
140	17.26	15.77
145	18.51	16.92
150	19.81	18.10
155	21.15	19.33

AIR		
Q_A [Nm³/h]	$P_{1.A}$	ΔP_A
	[mbar]	[mbar]
100	0.04	0.05
200	0.18	0.19
300	0.40	0.43
400	0.72	0.76
500	1.12	1.19
600	1.62	1.71
700	2.20	2.33
800	2.88	3.04
900	3.64	3.85
1000	4.49	4.75
1100	5.44	5.75
1200	6.47	6.85
1300	7.59	8.03
1400	8.81	9.32
1500	10.11	10.70
1600	11.50	12.17
1650	12.23	12.94
1700	12.99	13.74
1750	13.76	14.56
1800	14.56	15.40
1850	15.38	16.27
1900	16.22	17.16
1950	17.09	18.08
2000	17.97	19.02



FUEL SUPPLY PRESSURE



DIMENSIONS [mm]