MVRT 800

METALLIC VOLUMETRIC FOR RADIANT TUBE

MVRT 800

Maximum output [kW]		800
Minimum Power (air/gas modulating) [kW]		80
Fuel pressure at maximum power [mbar] (measured at tapping $P_{1.F}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	25
	LPG (22500 kcal/Nm^3)	
Air inlet pressure at maximum power [mbar] (measured at tapping $P_{1.A}$ – pag. 2)	Natural gas (8250 kcal/Nm^3)	25
	LPG (22500 kcal/Nm^3)	
Flame length at maximum power [mm] (measured from the end of the burner body)	Natural gas (8250 kcal/Nm^3)	1500
	LPG (22500 kcal/Nm^3)	
Flame speed at maximum power [m/s] (with 20% excess of air)	Medium speed	
Flame detection	Ionization probe 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 the information is based on tests undertaken using air and gas piping of generally acceptable design. Any deviation will affect the accuracy of orifice readings.
The information reported on this document may be subject to change without notice.
The data listed on this paper are purely for informational purposes and not binding.
ELCO reserves the right to change the construction and/or configuration of its products in every moment without being obligated to alter previous supplies.

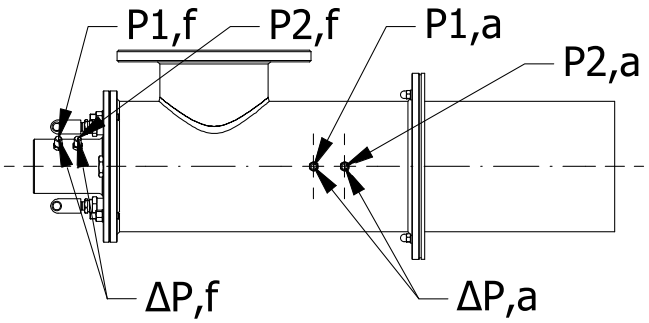
CHARACTERISTICS OF THE BURNER

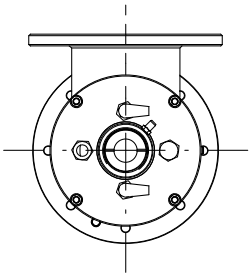
Fuel 1: natural gas
Fuel 1 orifice: Ø30

Fuel 2: LPG
Fuel 2 orifice: Ø25

Comburent: air
Comburent orifice: Ø130

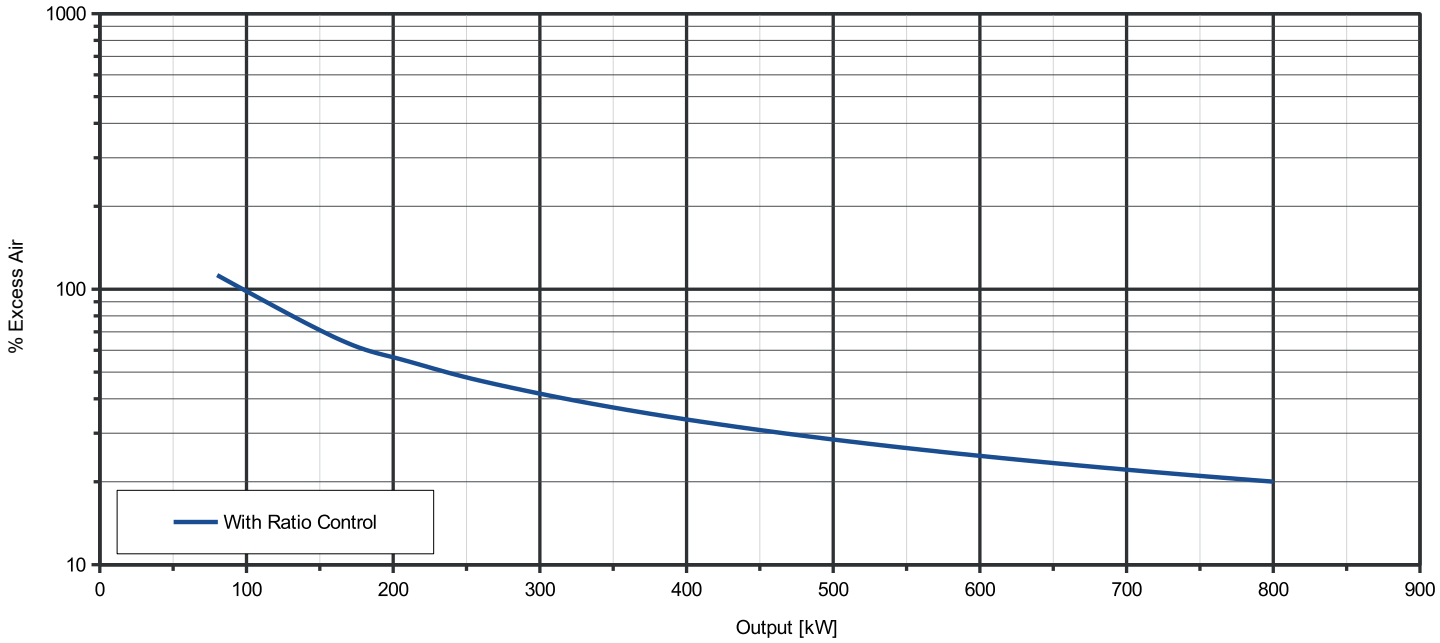
Stainless steel cone exit: Ø130





OPERATING RANGE

TYPICAL OPERATING RANGE



LEGENDA

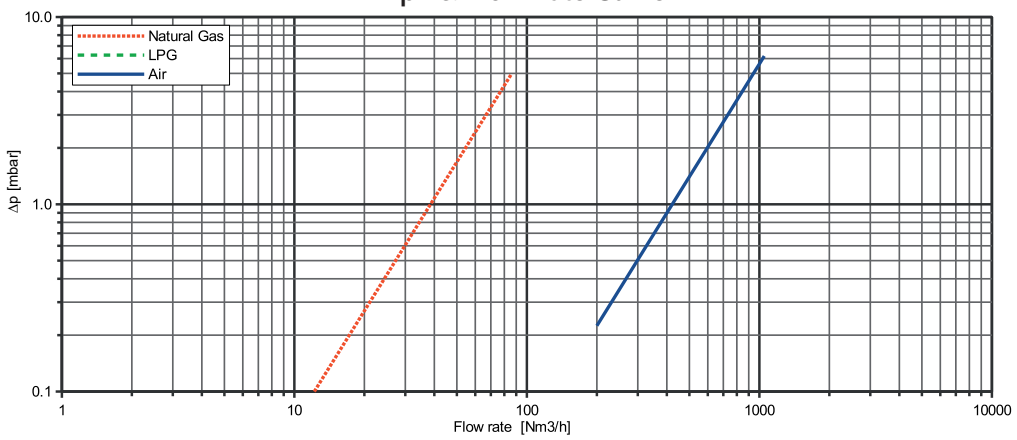
Q_F Fuel flow
Q_A Air flow
$P_{1.F}$ Fuel pressure before the diaphragm
$P_{1.A}$ Air pressure before the diaphragm
$P_{2.F}$ Fuel pressure after the diaphragm
$P_{2.A}$ Air pressure after the diaphragm
ΔP_F Differential fuel pressure between tapping 1 and 2
ΔP_A Differential air pressure between tapping 1 and 2

FLOW RATE CURVES

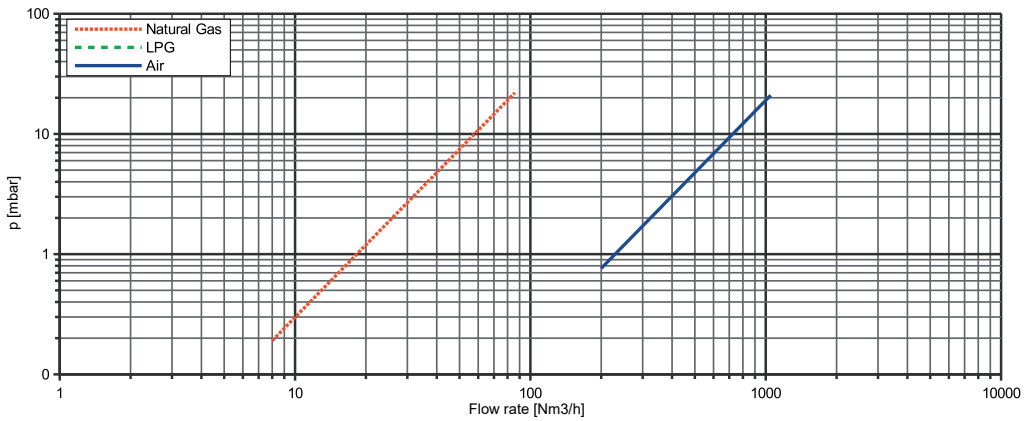
FUEL				
Q_F [Nm³/h]	$P_{1.F}$ [mbar]		ΔP_F [mbar]	
	Natural gas	LPG	Natural gas	LPG
8	0.19		0.04	
15	0.67		0.15	
25	1.86		0.42	
30	2.68		0.61	
35	3.65		0.83	
40	4.77		1.08	
40	4.77		1.08	
45	6.04		1.36	
50	7.46		1.68	
60	10.74		2.43	
62	11.47		2.59	
64	12.22		2.76	
64	12.22		2.76	
66	12.99		2.93	
68	13.79		3.12	
70	14.62		3.30	
72	15.46		3.49	
74	16.33		3.69	
76	17.23		3.89	
78	18.15		4.10	
80	19.09		4.31	
82	20.06		4.53	
84	21.05		4.75	
86	22.06		4.98	

AIR		
Q_A [Nm³/h]	$P_{1.A}$	ΔP_A
	[mbar]	[mbar]
200	0.76	0.22
225	0.96	0.28
250	1.19	0.35
300	1.71	0.51
350	2.33	0.69
400	3.05	0.90
450	3.86	1.14
500	4.76	1.40
550	5.76	1.70
600	6.85	2.02
650	8.04	2.37
700	9.33	2.75
750	10.71	3.16
800	12.18	3.59
825	12.96	3.82
850	13.75	4.06
875	14.58	4.30
900	15.42	4.55
925	16.29	4.80
950	17.18	5.07
975	18.10	5.34
1000	19.04	5.61
1025	20.00	5.90
1050	20.99	6.19

Δp Vs. Flow Rate Curve



Inlet Static Pressure



DIMENSIONS [mm]