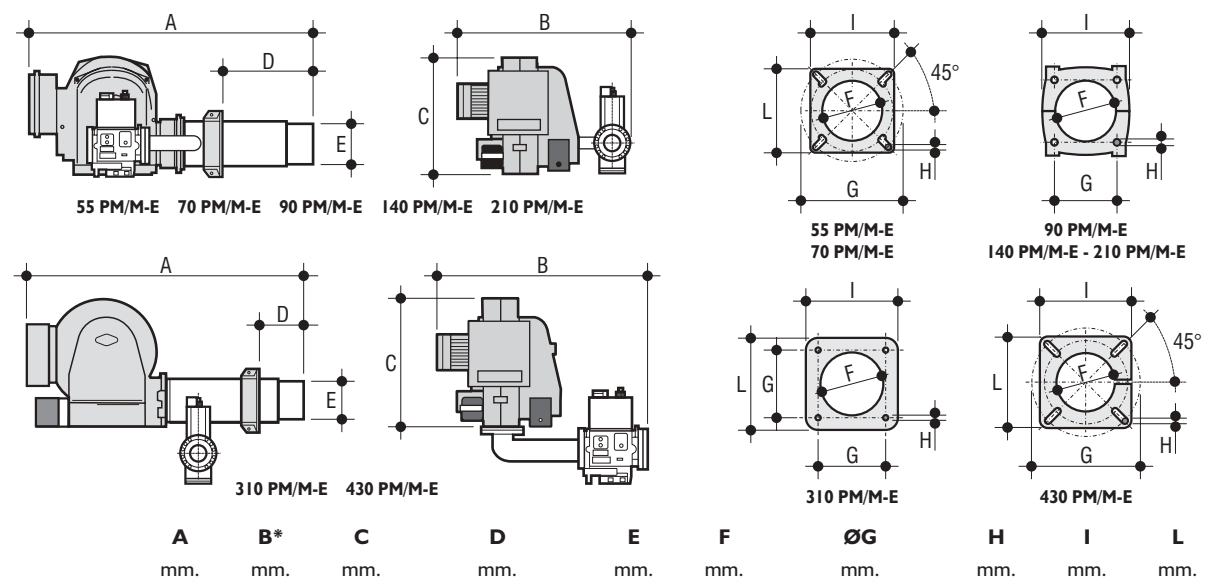


Dimensions mm.



	A	B*	C	D		E	F	ØG		H	I	L
				min.	max.			min.	max.			
55 PM/M-E	1.210	740	470	140	400	170	180	225	283	M14	230	230
70 PM/M-E	1.210	760	470	140	400	170	180	225	283	M14	230	230
90 PM/M-E	1.350	745	470	200	460	197	210		200	M14	280	-
140 PM/M-E	1.350	745	510	200	460	197	210		200	M14	280	-
210 PM/M-E	1.450	815	510	200	460	228	240		220	M14	310	-
310 PM/M-E	1.710	855	700	250	550	256	270		235	M16	320	320
430 PM/M-E	1.760	855	700	250	600	303	320		380	M16	400	400

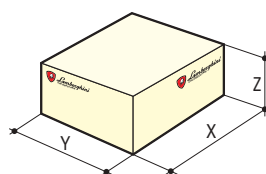
* Dimensions refer to the burner with 20 mbar gas train installed. For other dimensions see Lamborghini Burner Sale Technical Catalogue.

Technical data

PM/M-E		55	70	90	140	210	310	430
Flow-rate	min	m ³ /h	24	35,2	50,3	57	88	94
	max	m ³ /h	55,7	78,8	90,5	120,7	191	290
Heat output	min.	kW	240	350	500	567	875	940
	max	kW	554	784	900	1.200	1.900	2.900
	min.	kcal/h	206.400	301.000	430.000	487.620	752.500	808.000
	max	kcal/h	476.440	674.240	774.000	1.032.000	1.634.000	2.490.000
Max. absorption at 230 V	A	5	5,5	6,5	9,5	11	29	35
Max. absorption at 400 V	A	3,5	4	5	6,5	7,5	17,5	21
Motor 2800 rpm	W	740	740	1.100	1.800	2.200	5.500	9.200
Electrical power supply		230/400 V - 50 Hz three-phase						
Gas category		II 2H 3+						

Packaging and weight

Model	Dimensions			Gross weight
	X	Y	Z	
55 PM/M-E	140	83	54	75
70 PM/M-E	140	83	54	75
90 PM/M-E	150	100	65	124
140 PM/M-E	150	100	65	124
210 PM/M-E	150	100	65	130
310 PM/M-E	176	98	100	173
430 PM/M-E	192	100	100	238



PM/M-E



PM/M-E two progressive stage gas burners

PM/M-E: modern technology

The PM/M-E series gas burners are of the forced draught type with gas/air mixing in the combustion head. They have been manufactured with the very latest technology and some additional characteristics are:

- High-powered fan ensuring a perfect burner operation even in the presence of high backpressure in the combustion chamber.
- Precision shaping and engineering of mixing head providing high combustion efficiency with low CO and NOx emissions.
- Universal holed sliding flange for easier on-boiler installation.

PM/M-E series burners can operate with natural or liquid gas and conform to European directives.

Maximum safety and reliability

PM/M-E series burners can operate with natural or liquid gas and conform to European directives.

At the production stage particular attention was given to the safety aspect by equipping the burners with:

- Electronic control box
- Flame control with ionisation electrode
- Class A gas valves
- Air pressure switch
- Gas pressure switch

All PM/M-E burners are EC certified.

The range

The PM/M-E burner range comprises 7 models with reduced-delivery starting and two progressive stage operation, obtained with class A progressive opening/closing gas valve synchronised with the electrical servo control (automatic air shutter). They can operate on modulation if equipped with the Modul kit.

- **55 PM/M-E**
Max. heat output: 554 kW
- **70 PM/M-E**
Max. heat output: 784 kW
- **90 PM/M-E**
Max. heat output: 900 kW
- **140 PM/M-E**
Max. heat output: 1.200 kW
- **210 PM/M-E**
Max. heat output: 1.900 kW
- **310 PM/M-E**
Max. heat output: 2.900 kW
- **430 PM/M-E**
Max. heat output: 4.275 kW



Special characteristics

Universal holed flange for quick installation

PM/M-E burners are equipped with an universal holed sliding flange facilitating burner installation on any type of boiler.

This flange is independent from the burner body to allow a quick maintenance.

Kits on request

PM/M-E series burners can be completed with special devices/equipment supplied in kit form in compliance with standards in the various countries of use:

Seal control kit

A device to prevent gas leaks.

Assembly accessory kit

For an increasingly efficient gas train.

Pressure modulation kit

Controls vapour pressure in installations with heat generators operating with oil or gas.

Temperature modulation kit

Controls boiler temperature in installations with heat generators operating with oil or gas.

Combustion head adjustment

This can be done while the burner is on. It is carried out by acting on the two knobs located on the conveyor pipe near the hinge.



Combustion head adjustment

Air adjustment

The air shutter is activated by an electrical servo control. The air adjustment is carried out on the appropriate servo control cams.



Combustion head inspection

Second stage

For reasons of safety, the ignition of the second stage is subject to the air servo control operation.

There is a short delay for the second stage ignition with regard to the initial air opening. This delay is adjustable with a suitable cam on the servo control, for adjustment to the type of system installed.

Air shutter with automatic closing

This slows down the cooling process of the boiler when the burner is turned off, limiting the thermal shock and allowing for a saving in energy.

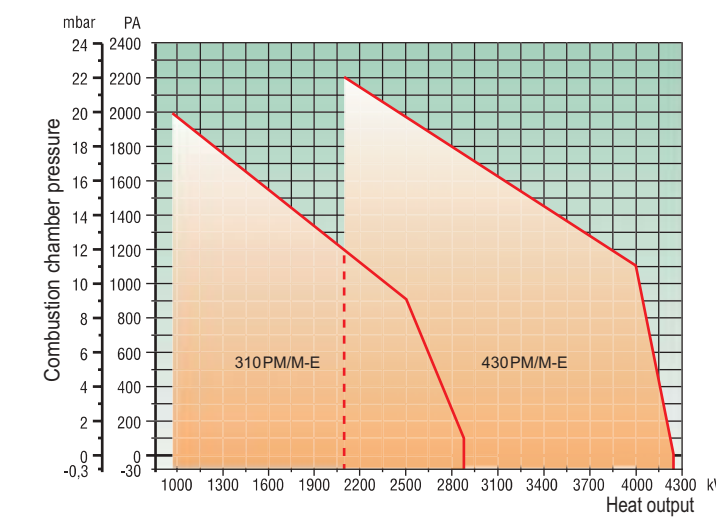
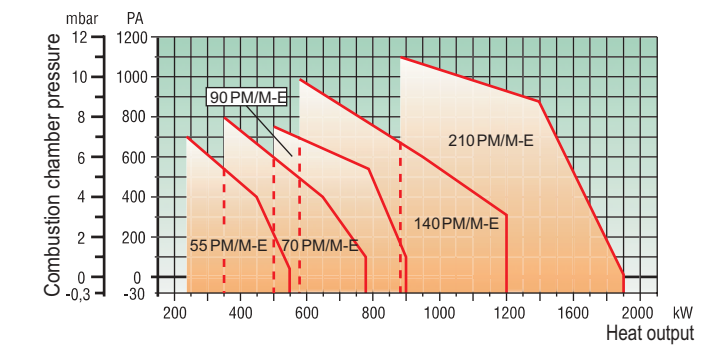


Combustion air adjustment



Combustion head

Pressure curves



Burner and gas train matching

Model	Burner		Gas train				L.P.G. kit
	Line connection	Heat output kW	Size *	Min. press**		Max. press***	
	Ø	min. max.	Ø	Natural gas mbar	L.P.G. mbar	mbar	
55 PM/M-E.D9	1 1/2"	240 554	1 1/2"	20	-	360	NO
55 PM/M-E.D7	1 1/2"	240 554	1 1/4"	23	16	360	YES (see price list)
70 PM/M-E.D11	2"	350 784	2"	18	-	360	NO
70 PM/M-E.D7	1 1/4"	350 784	1 1/2"	35	24	360	YES (see price list)
90 PM/M-E.F1	DN 65	500 900	DN 65	20	-	500	NO
90 PM/M-E.D7	1 1/2"	500 900	1 1/4"	49	-	360	NO
90 PM/M-E.D8	1 1/2"	500 900	1 1/4"	-	33	360	NO
140 PM/M-E.F3	DN 80	567 1.200	DN 80	16	-	500	NO
140 PM/M-E.D11	2"	567 1.200	2"	29	-	360	NO
140 PM/M-E.D7	1 1/2"	567 1.200	1 1/4"	72	-	360	NO
140 PM/M-E.D12	2"	567 1.200	2"	-	42	360	NO
210 PM/M-E.F5	DN 100	875 1.900	DN 100	18	-	500	NO
210 PM/M-E.D11	2"	875 1.900	2"	54	-	360	NO
210 PM/M-E.F6	DN 100	875 1.900	DN 80	-	27	500	NO
310 PM/M-E.F5	DN 100	940 2.900	DN 100	28	-	500	NO
310 PM/M-E.F1	DN 65	940 2.900	DN 65	67	-	500	NO
310 PM/M-E.F3	DN 80	940 2.900	DN 80	-	22	500	NO
430 PM/M-E.F5	DN 100	2.088 4.275	DN 100	29	-	500	NO
430 PM/M-E.F1	DN 65	2.088 4.275	DN 65	99	-	500	NO

* For further information on burner-gas train matching see Lamborghini Burner Sale Technical Catalogue.

** Minimum gas pressure to obtain burner maximum output.

*** Maximum operation pressure of gas valves.



Lamborghini
CALORECLIMA

Company with UNI EN ISO 9001: 2000 certification