

GAS P 750/M MEC

GAS P 1000/M MEC

GAS P 1300/M MEC

GAS P 1500/M-MEC

GAS P 1800/M-MEC



Burners for gas two stages progressive (hi-low flame) or modulating (PID fully modulating) if equipped with addition of optional modulation kit and probe. Fan at high pressurisation, combustion head with adjustment at high efficiency and high flame stability. Equipped with ignition pilot flame.

Disposition rationalized of the components with accessibility facilitated for the operations of setting and maintenance.

Gas train complete of working valve with flow adjustment, safety valve, gas pressure switch, filter stabiliser of gas pressure, completely assembled, electrically linked and tested.





TECHNICAL DATA

MODEL		GAS P 750/M MEC	GAS P 1000/M MEC	GAS P 1300/M MEC
Thermal power 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1200/3400-7500	1200-3400-10000	1700/3600-11500
Thermal power 1°st./min 2°st.-max 2°st. *	[kW]	1395/3953-8721	1395-3953-11628	1978/4186-13372
Gas flow G20 //(NATURAL GAS) 1°st./min 2°st.-max 2°st. *	[Nm³/h]	140/398-877	140/398-1170	199/421-1345
Gas flow G31 //(LPG) 1°st./min 2°st.-max 2°st. *	[Nm³/h]	54/153-338	54/153-450	77/162-518
Fuel		Natural gas (second family) - LPG (third family)		
Fuel category		2R 2H 2L 2E 2E+ 2Er 2ELL 2E(R)B 3B/P 3+, 3P, 3B, 3R		
Intermittent working operation (min. 1 stop every 24 hours) modulating				
Environmental conditions operation / storage		-15...+40°C / -20...+70°C , rel. humidity max. 80%		
Max temperature combustion air	[°C]	60	60	60
Minimum gas train pressure (DN65-S F65 natural gas/ LPG)**	[mbar]	271/105	-	-
Minimum gas train pressure (DN80-S F80 natural gas/ LPG)**		156/60	285/110	366/141
Minimum gas train pressure (DN100-S F100 natural gas/ LPG)**	[mbar]	101/39	176/68	248/95
Minimum gas train pressure (DN125-S F125 natural gas/ LPG)**	[mbar]	-	130/50	180/70
Maximum supply gas pressure (Pe.max)	[mbar]	500	500	500
Nominal electric power	[kW]	22.2	30.2	37.2
Fan motor	[kW]	22	30	37
Nominal absorption current (powers)	[A]	42	56	67
Nominal absorption current (auxiliary)	[A]	0.4	0.4	0.4
Power supply		3~400V-1/N~230V-50Hz		
Electric protection degree		IP54	IP54	IP54
Sound level*** min-max	[dB(A)]	84-88	86-92	86-93
Burner weight	[kg]	540	570	590

MODEL		GAS P 1500/M MEC	GAS P1800/M-MEC
Thermal power 1°st./min 2°st.-max 2°st. *	[Mcal/h]	1700/3600-13000	2000/5000-15000
Thermal power 1°st./min 2°st.-max 2°st. *	[kW]	1978/4186-15116	2325/5814-17442
Gas flow G20 //(NATURAL GAS) 1°st./min 2°st.-max 2°st. *	[Nm³/h]	199/421-1521	234/585-1754
Gas flow G31 //(LPG) 1°st./min 2°st.-max 2°st. *	[Nm³/h]	77/162-585	90/225-676
Fuel		Natural gas (second family) - LPG (third family)	
Fuel category		2R 2H 2L 2E 2E+ 2Er 2ELL 2E(R)B 3B/P 3+, 3P, 3B, 3R	
Intermittent working operation (min. 1 stop every 24 hours) modulating			
Environmental conditions operation / storage		-15...+40°C / -20...+70°C , rel. humidity max. 80%	
Max temperature combustion air	[°C]	60	60
Minimum gas train pressure (DN80-S F80 natural gas/ LPG)**		460/177	-
Minimum gas train pressure (DN100-S F100 natural gas/ LPG)**	[mbar]	310/119	327/126
Minimum gas train pressure (DN125-S F125 natural gas/ LPG)**	[mbar]	225/87	216/83
Minimum gas train pressure (DN150-S F150 natural gas/ LPG)**	[mbar]	206/79	196/75



MODEL		GAS P 1500/M MEC	GAS P1800/M-MEC
Maximum supply gas pressure (Pe.max)	[mbar]	500	500
Nominal electric power	[kW]	45.2	55.2
Fan motor	[kW]	45	55
Nominal absorption current (powers)	[A]	78	96
Nominal absorption current (auxiliary)	[A]	0.4	0.4
Power supply		3~400V-1/N~230V-50Hz	
Electric protection degree		IP54	IP54
Sound level*** min-max	[dB(A)]	87-93	88-94
Burner weight	[kg]	660	760

\* Reference conditions: Environment temperature 20°C - Barometric pressure 1013 mbars - Altitude 0 metre (sea level)

\*\* Minimal feeding-gas pressure to the gas train to get the maximum power of the burner, considering counter-pressure in combustion chamber of value 0 (zero)

\*\*\* Measured sonorous pressure in the laboratory combustion, with functional burner on beta boiler to 1m of distance (UNI EN ISO 3746).

**FIRING RATES**

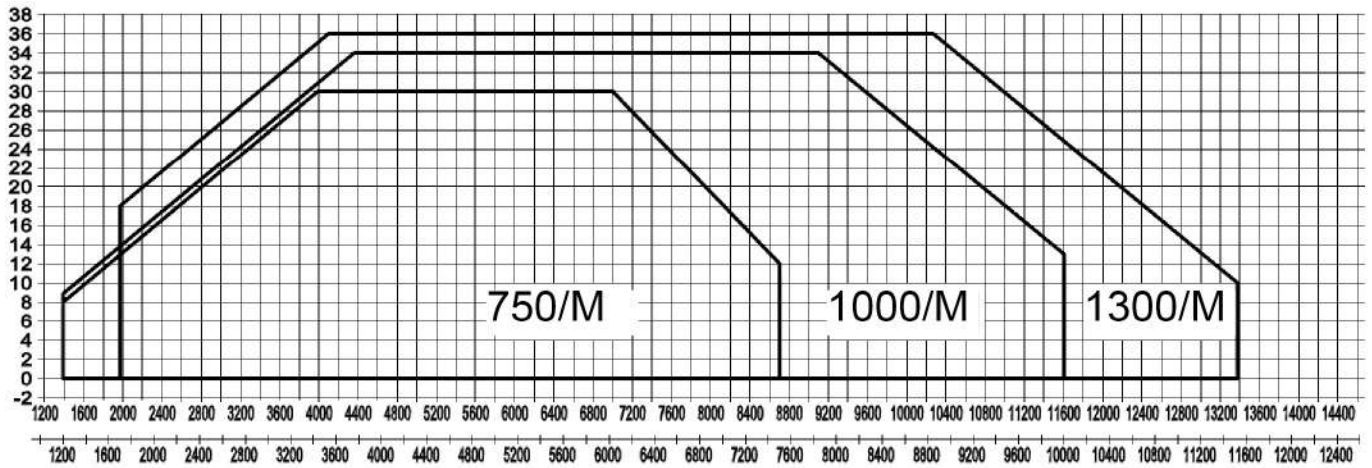


Fig. 1 X = Thermal power [kg/h - Mcal/h] Y = Pression in the combustion

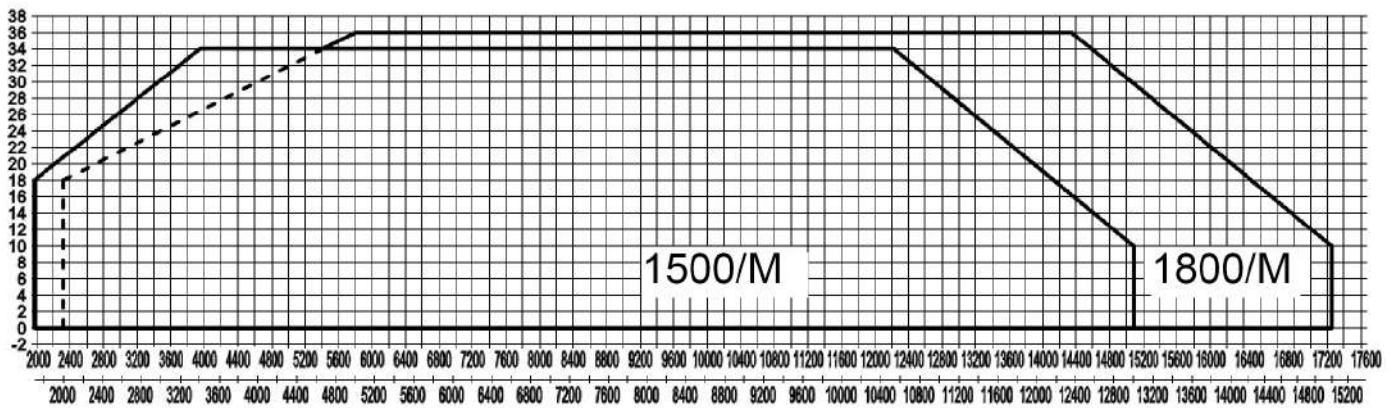
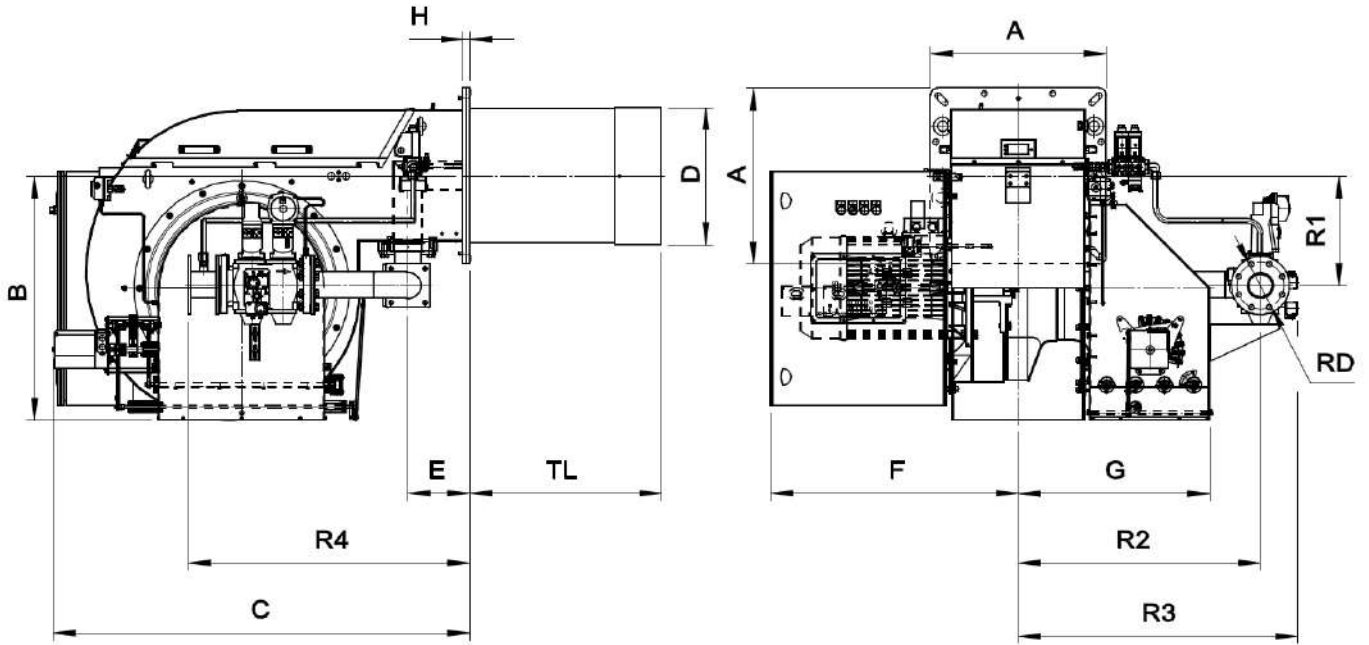


Fig. 2 X = Thermal power [kg/h - Mcal/h] Y = Pression in the combustion

The firing rates has been obtained based on test boilers in accordance with EN267 standards and are indicative of matching the burner to the boiler. For the correct operation of the burner bruciatore, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact the manufacturer.

DIMENSIONS [MM]



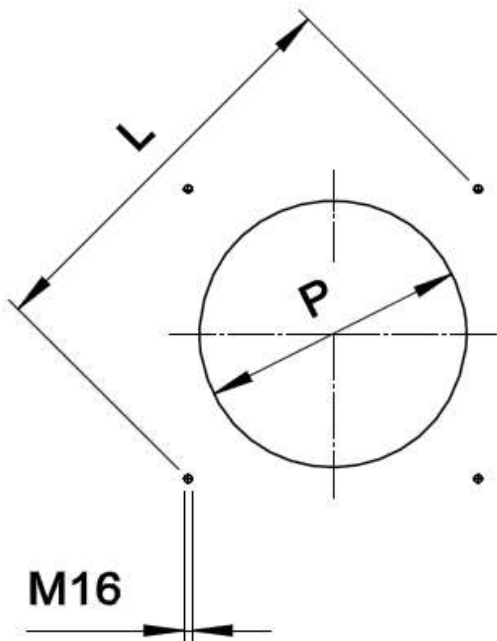
MODEL	A	B	C	D	E	F	G	H
GAS P750/M CE-MEC-DN65	600	832	1420	448	210	845	653	22
GAS P750/M CE-MEC-DN80	600	832	1420	448	210	845	653	22
GAS P750/M CE-MEC-DN100	600	832	1420	448	210	845	653	22
GAS P750/M CE-MEC-DN125	600	832	1420	448	210	845	653	22
GAS P1000/M CE-MEC-DN80	600	832	1420	448	210	845	653	22
GAS P1000/M CE-MEC-DN100	600	832	1420	448	210	845	653	22
GAS P1000/M CE-MEC-DN125	600	832	1420	448	210	845	653	22
GAS P1300/M CE-MEC-DN80	600	832	1420	499	210	845	653	22
GAS P1300/M CE-MEC-DN100	600	832	1420	499	210	845	653	22
GAS P1300/M CE-MEC-DN125	600	832	1420	499	210	845	653	22
GAS P1500/M-MEC-DN80	600	832	1420	499	210	870	653	22
GAS 1500/M-MEC-DN100	600	832	1420	499	210	870	653	22
GAS P1500/M-MEC-DN125	600	832	1420	499	210	870	653	22
GAS P1800/M-MEC-DN80	700	945	1585	540	222	908	690	22
GAS 1800/M-MEC-DN100	700	945	1585	540	222	908	690	22
GAS P1800/M-MEC-DN125	700	945	1585	540	222	908	690	22



MODEL	TL	R1	R2	R3	R4	RD	Gas train weight
GAS P750/M CE-MEC-DN65	655	373	825	953	940	DN65	22 kg
GAS P750/M CE-MEC-DN80	655	373	825	953	960	DN80	24 kg
GAS P750/M CE-MEC-DN100	655	373	825	968	1000	DN100	27 kg
GAS P750/M CE-MEC-DN125	655	373	825	982	1050	DN125	32 kg
GAS P1000/M CE-MEC-DN80	655	373	825	953	960	DN80	24 kg
GAS P1000/M CE-MEC-DN100	655	373	825	968	1000	DN100	27 kg
GAS P1000/M CE-MEC-DN125	655	373	825	982	1050	DN125	32 kg
GAS P1300/M CE-MEC-DN80	655	373	825	953	960	DN80	24 kg
GAS P1300/M CE-MEC-DN100	655	373	825	968	1000	DN100	27 kg
GAS P1300/M CE-MEC-DN125	655	373	825	982	1050	DN125	32 kg
GAS P1500/M-MEC-DN80	655	373	825	953	960	DN80	24 kg
GAS 1500/M-MEC-DN100	655	373	825	968	1000	DN100	27 kg
GAS P1500/M-MEC-DN125	655	373	825	982	1050	DN125	32 kg
GAS P1800/M-MEC-DN80	685	476	896	1025	971	DN80	24 kg
GAS 1800/M-MEC-DN100	685	476	896	1040	1011	DN100	27 kg
GAS P1800/M-MEC-DN125	685	476	896	1055	1061	DN125	32 kg

**BOILER PLATE**

The dimensions of the boiler plate must be as indicated in the drawing.





# GAS BURNERS \_ SERIE P

SK073042\_en

MODEL	L min	L max*	P min	P max
GAS P750/M CE-MEC-DN65	707	778	460	540
GAS P750/M CE-MEC-DN80	707	778	460	540
GAS P750/M CE-MEC-DN100	707	778	460	540
GAS P750/M CE-MEC-DN125	707	778	460	540
GAS P1000/M CE-MEC-DN80	707	778	480	540
GAS P1000/M CE-MEC-DN100	707	778	480	540
GAS P1000/M CE-MEC-DN125	707	778	480	540
GAS P1300/M CE-MEC-DN80	707	778	510	540
GAS P1300/M CE-MEC-DN100	707	778	510	540
GAS P1300/M CE-MEC-DN125	707	778	510	540
GAS P1500/M-MEC-DN80	707	778	510	540
GAS 1500/M-MEC-DN100	707	778	510	540
GAS P1500/M-MEC-DN125	707	778	510	540
GAS P1800/M-MEC-DN80	806	890	550	630
GAS P1800/M-MEC-DN100	806	890	550	630
GAS P1800/M-MEC-DN125	806	890	550	630

\* Suggested dimension of connection between burner and generator



## PRODUCT SPECIFICATION

### SHORT DESCRIPTION

Burners for gas two stages progressive (hi-low flame) or modulating (PID fully modulating) if equipped with addition of optional modulation kit and probe. Fan at high pressurisation, combustion head with adjustment at high efficiency and high flame stability. Equipped with ignition pilot flame.

### DETAILED SPECIFICATION

Monoblock forced draught burners for gas with two stage progressive (hi-low flame) or modulating (PID fully modulating) operation, fully automatic, made up of:

- burner frame made of steel completed by specific boiler plate
- combustion head with adjustment at high efficiency and high flame stability equipped with blast tube made of stainless steel and flame stability disk made of steel
- safety air pressure switch -air side- that stops the burner in case of failed or irregular fan operation
- spherical gas valve servo-controlled; progressive start and free way passage with total opening
- servomotor for air flaps and spherical gas valve
- moving shutter with total closure when idle in order to reduce at the least energy losses related to boiler cooling down
- ionisation probe for flame detection
- control panel
- high performance centrifugal fan with backward curved blades for low noise
- complete with A class safety gas valve and A class adjustment gas valve
- valve proving system
- set up for the additional specific kit that transforms burner operation as modulating i.e. the modulating kit allows to supply any power between the minimum and the maximum value based on instantaneous loading request

### CONFORMING TO:

- CE rules
- IP 54 electric protection level
- 2006/42/EC directive (MD)
- 2004/108/EC directive (E.M.C.)
- 2006/95/EC directive (L.V.)
- 97/23/EC directive (PED)
- Approval: EN 746-2 (INDUSTRIAL THERMOPROCESSING EQUIPMENT)

### OPTIONAL

- Power modulating kits for temperatures
- Power modulating kits for pressures
- Temperature probe 0°C-400°C (PT 100  $\Omega$  a 0° C)
- Temperature probe 0°C-1200°C (K probe)
- Pressure probe 0-3 bar, 0-6 bar, 0-16 bar, 0-20 bar, 0-30 bar
- Noise protection

The illustrations and data here shown are indicative. F.B.R. Bruciatori S.r.l. reserves the right to bring, without any obligation of warning, any changes that would be appropriate to the continuing development of their products.