

FGP 750/M - FGP 1000/M - FGP 1300/M - FGP 1500/M - FGP 1800/M

Burners for light-oil two stages progressive (hi-low flame) or modulating (PID fully modulating) if equipped with addition of optional modulation kit and probe.

They are composed by: fan at high pressurisation and combustion head with adjustment at high efficiency and high flame stability.

Compact overall dimensions and disposition rationalized of the components with accessibility facilitated for the operations of setting and maintenance.

The adoption of strong metal components makes the burner durable also in heavy duty conditions.

Complete of nozzle, flexible pipes and line filter.

Complete of flange and gasket for installation on generator.

Available with mechanical cam or with electronic cam.

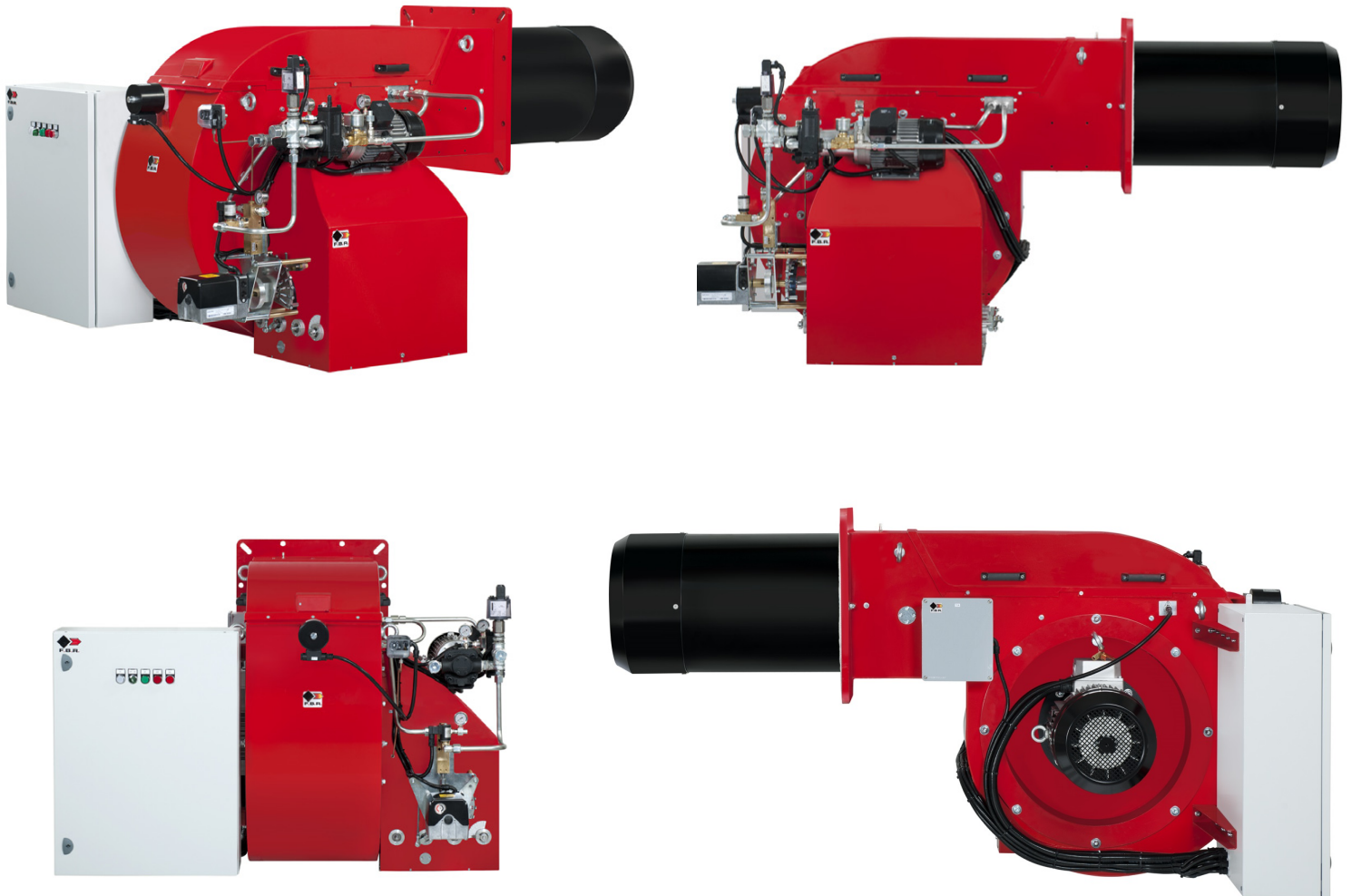


Fig. 1 FGP 750/M

TECHNICAL DATA

MODEL		FGP 750/M	FGP 1000/M	FGP 1300/M	FGP 1500/M	FGP 1800/M
Thermal power min.1°st. / min.2°st. - max.2°st. *	[Mcal/h]	968/3400-7500	968/3400-10000	998/3600-11500	998/3600-13000	1416/5000-15000
Thermal power min.1°st. / min.2°st. - max.2°st. *	[kW]	1125/3953-8721	1125/3953-11628	1160/4186-13372	1160/4186-15116	1647/5814-17442
Light-oil flow min.1°st. / min.2°st. - max.2°st. *	[kg/h]	97/333-735	97/333-980	100/353-1127	100/353-1274	142/490-1471
Fuel: Light-oil 1.5°E at 20°C = 6.2 cSt = 35 sec Redwood N°1						
Intermittent working operation (min. 1 stop every 24 hours) two stages progressive or modulating						
Environmental conditions operation / storage:		-15...+40°C / -20...+70°C, rel. humidity max. 80%				
Max. temperature combustion air	[°C]	60	60	60	60	60
Nominal electric power	[kW]	27	35	41.5	49.5	61
Fan motor	[kW]	22	30	37	45	55
Pump motor	[kW]	3	4	4	4	5.5
Fan motor absorption	[A]	43	55.5	64.2	77.6	94
Pump motor absorption	[A]	6.7	8.6	8.6	8.6	11.7
Power supply		3~400V - 1/N~230V-50Hz				
Degree of electric protection		IP40				
Noisiness ** max.	[dB(A)]	84-88	86-92	90-93	92-95	94-98

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

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

OPERATING RANGE DIAGRAM

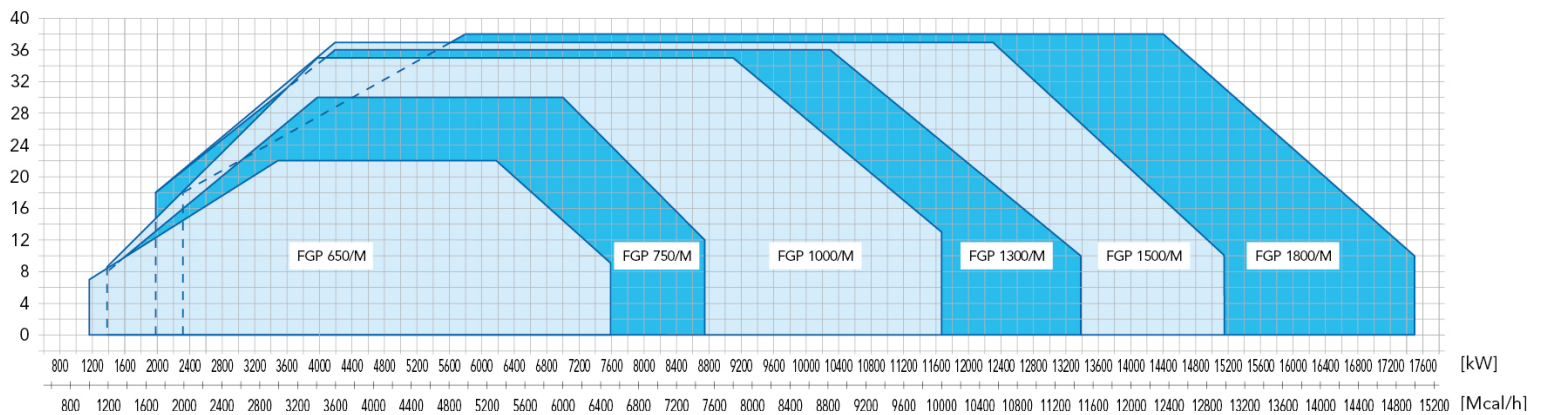


Fig. 2 X = Thermal power Y = Pression in the combustion chamber

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, combustion chamber dimensions must be in accordance with current regulation. In case of non-compliance, contact the manufacturer.

BURNER DIMENSIONS [MM]

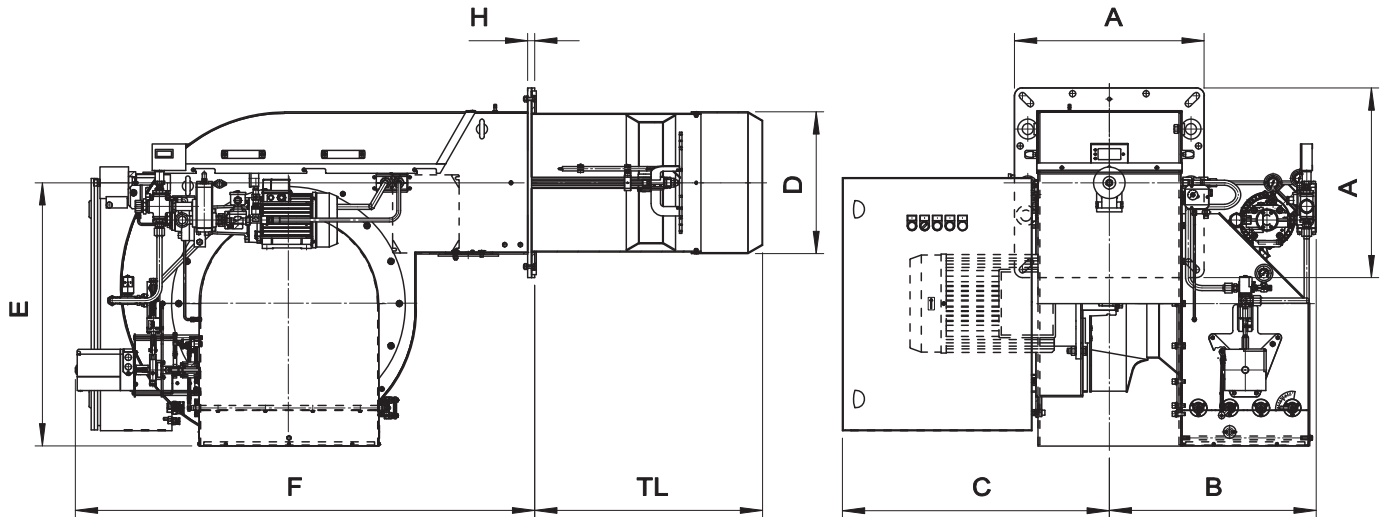
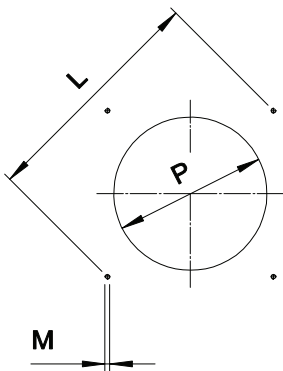


Fig. 3 Burner dimensions

MODEL	A	B	C	D	E	F	H	TL
FGP 750/M	600	654	845	448	832	1453	22	685
FGP 1000/M	600	654	845	468	832	1453	22	685
FGP 1300/M	600	654	845	500	832	1453	22	655
FGP 1500/M	600	654	845	500	832	1453	22	655
FGP 1800/M	700	664	880	540	945	1560	22	685

BOILER PLATE



The dimensions of the boiler plate (threaded holes or studs) must be as indicated in the drawing.

Fig. 4 Boiler plate

MODEL		M	L min	L* max	P min	P max
FGP 750/M	mm	M16	707	778	460	540
FGP 1000/M	mm	M16	707	778	480	540
FGP 1300/M	mm	M16	707	778	520	540
FGP 1500/M	mm	M16	707	778	520	540
FGP 1800/M	mm	M18	806	890	550	630

* Suggested dimension.

PRODUCT SPECIFICATION**SHORT DESCRIPTION**

Light-oil burners two stages progressive (hi-low flame) or modulating (PID fully modulating) if equipped with addition of optional modulation kit and probe.

DETAILED SPECIFICATION

Light-oil burner two stages progressive (hi-low flame) or modulating (PID fully modulating) if equipped with addition of optional modulation kit and probe; composed by:

- Frame made of steel;
- Centrifugal fan at high pressurization with reverse curved blades at low noisiness;
- Combustion head with adjustment at high performance and elevated flame stability equipped with inox steel blast tube and steel flame disc;
- Easy extraction of combustion head without get off the burners by bolier;
- Flange and insulating gasket for fixing at boiler/furnace;
- Control box for control and supervision of burner;
- Photoresistance for flame detection;
- Three-phase power supply;
- Fan motor start-up made by delta/star system FGP 750/M - FGP 1000/M;
- Fan motor start-up made by soft-starter system FGP 1300/M - FGP 1500/M - FGP 1800/M;
- IP40 electric protection level;
- Safety air pressure switch to stop the fuel pump in case of failed or anomalous fan operation, causing the lockout of the burner;
- Servomotor for air shutter and for the fuel pressure regulator;
- Mobile shutter with total closure when idle for minimize the energetic losses related at boiler cooling;
- Light-oil gear pump operated by specific electric motor;
- Nozzle assembly with magnet to control inlet/return needle nozzle;
- Maximum light-oil pressure switch to stop the burner in case of the light-oil pressure on the return is higher then the set point value;
- 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 maximum value based on instantaneous loading request.

CONFORMING TO:

- CE rules;
- 2014/30/UE Directive E.M.C.;
- 2014/35/UE Directive L.V.;
- 2014/68/EU Directive M.D.;
- 97/23/CE Directive P.E.D.;
- Reference rules: EN267 (liquid fuel) - EN746-2 (industrial thermoprocessing equipment).

STANDARD EQUIPMENT

- Flexible hoses for connection;
- Line filter;
- Isomart gasket;
- Nozzle;
- Flange with insulating gasket;
- Burner nameplate;
- Warranty;
- Instruction handbook for installation, use and maintenance.

OPTIONAL

- Power modulating kits for temperatures;
- Power modulating kits for pressures;
- Temperature probe 0°C-400°C (PT 100 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;
- Minimum light-oil pressure switch.
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