

## FGP 75/2 LX - FGP 100/2 LX EVO

Burners for light-oil two stages - Low NOx (NOx < 120 mg/kWh).

Composed by die-cast aluminum body, an at high pressurisation and combustion head with adjustment at high efficiency and high flame stability. Hydraulic system of regulation combustive air on the two stages of flame.

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

Complete of flange and gasket for installation on generator, nozzles, flexible pipes, line filter.



Fig. FGP 100/2 LX EVO

## TECHNICAL DATA FGP 75/2 LX - FGP 100/2 LX EVO

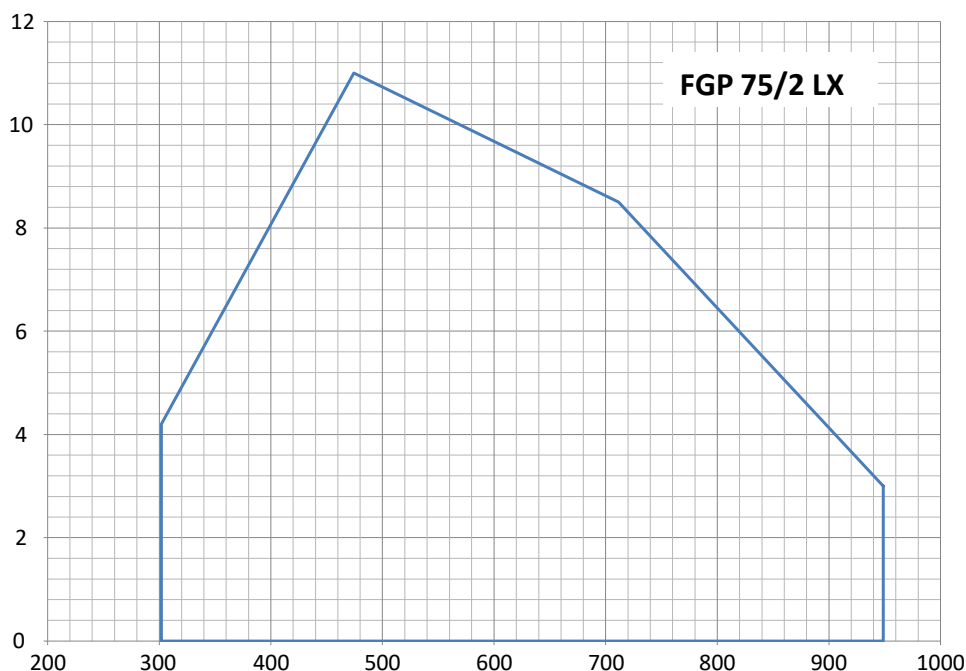
| MODEL                                                                  |                                                   | FGP 75/2 LX | FGP 100/2 LX EVO |
|------------------------------------------------------------------------|---------------------------------------------------|-------------|------------------|
| Flow min. 1°st. / min. 2°st. - max. 2°st. *                            | [kg/h]                                            | 25.5/40-80  | 28/50-100        |
| Thermal power min. 1°st. / min. 2°st. -max. 2°st. *                    | [Mcal/h]                                          | 260/408-816 | 286.4/510-1020   |
| Thermal power min. 1°st. / min. 2°st. -max. 2°st. *                    | [kW]                                              | 302/474-949 | 333/593-1186     |
| 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 |                                                   |             |                  |
| Environmental conditions operation / storage:                          | -15...+40°C / -20...+70°C, rel. humidity max. 80% |             |                  |
| Max. temperature combustion air                                        | [°C]                                              | 60          | 60               |
| Nominal electric power                                                 | [kW]                                              | 1.6         | 2.1              |
| Fan motor                                                              | [kW]                                              | 1.5         | 1.5              |
| Pump motor                                                             | [kW]                                              | -           | 0.37             |
| Nominal fan motor current absorption                                   | [A]                                               | 3.4         | 4.5              |
| Nominal pump motor current absorption                                  | [A]                                               | 0.3         | 0.82             |
| Power supply:                                                          | 3~400V, 1N~230V - 50Hz                            |             |                  |
| Electric protection degree:                                            |                                                   | IP 40       | IP 40            |
| Noisiness ** min-max                                                   | [dBA]                                             | 78-82.5     | 82-83.6          |
| Average NOx , EN267:2020.                                              | [mg/kWh]                                          | 99.4        | 93.1             |
| NOx Class                                                              |                                                   | 3           | 3                |
| Burner weight ***                                                      | [kg]                                              | 47          | 52               |

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

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

\*\*\* For burner with long head add 3 kg.

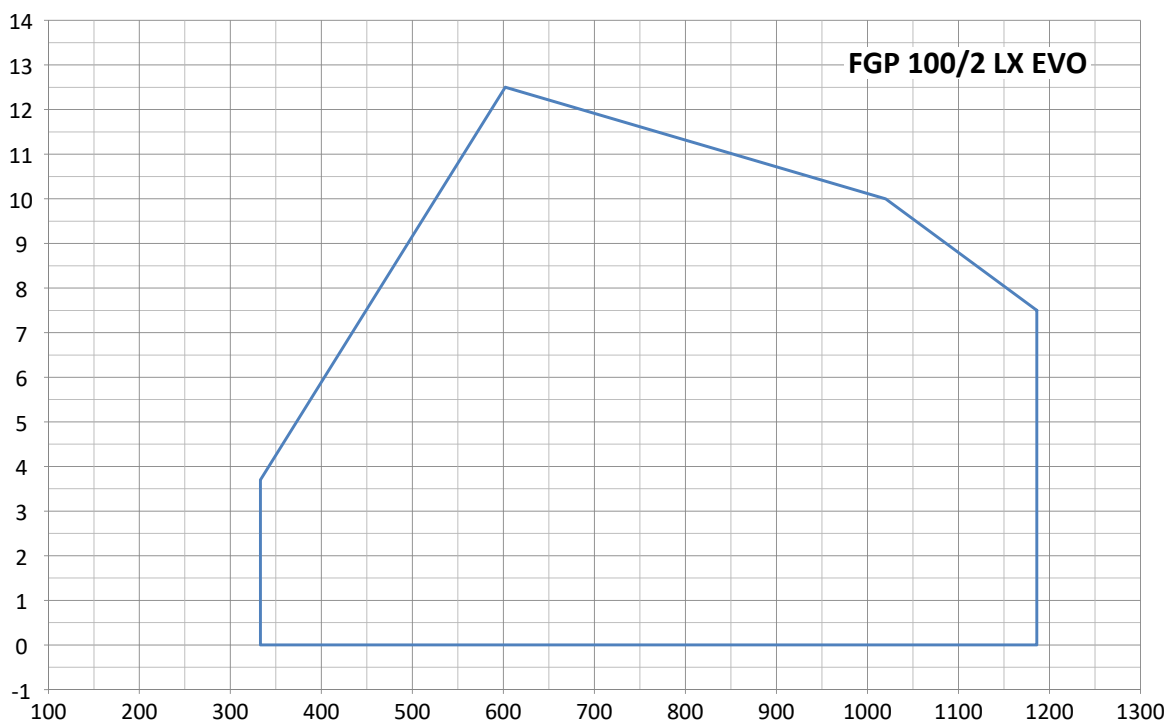
## OPERATING RANGE DIAGRAM FGP 75/2 LX



**Fig.** X = Thermal power [kW] Y = Pression in the combustion chamber [mbar]

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.

## OPERATING RANGE DIAGRAM FGP 100/2 LX EVO



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## DIMENSIONS [MM]

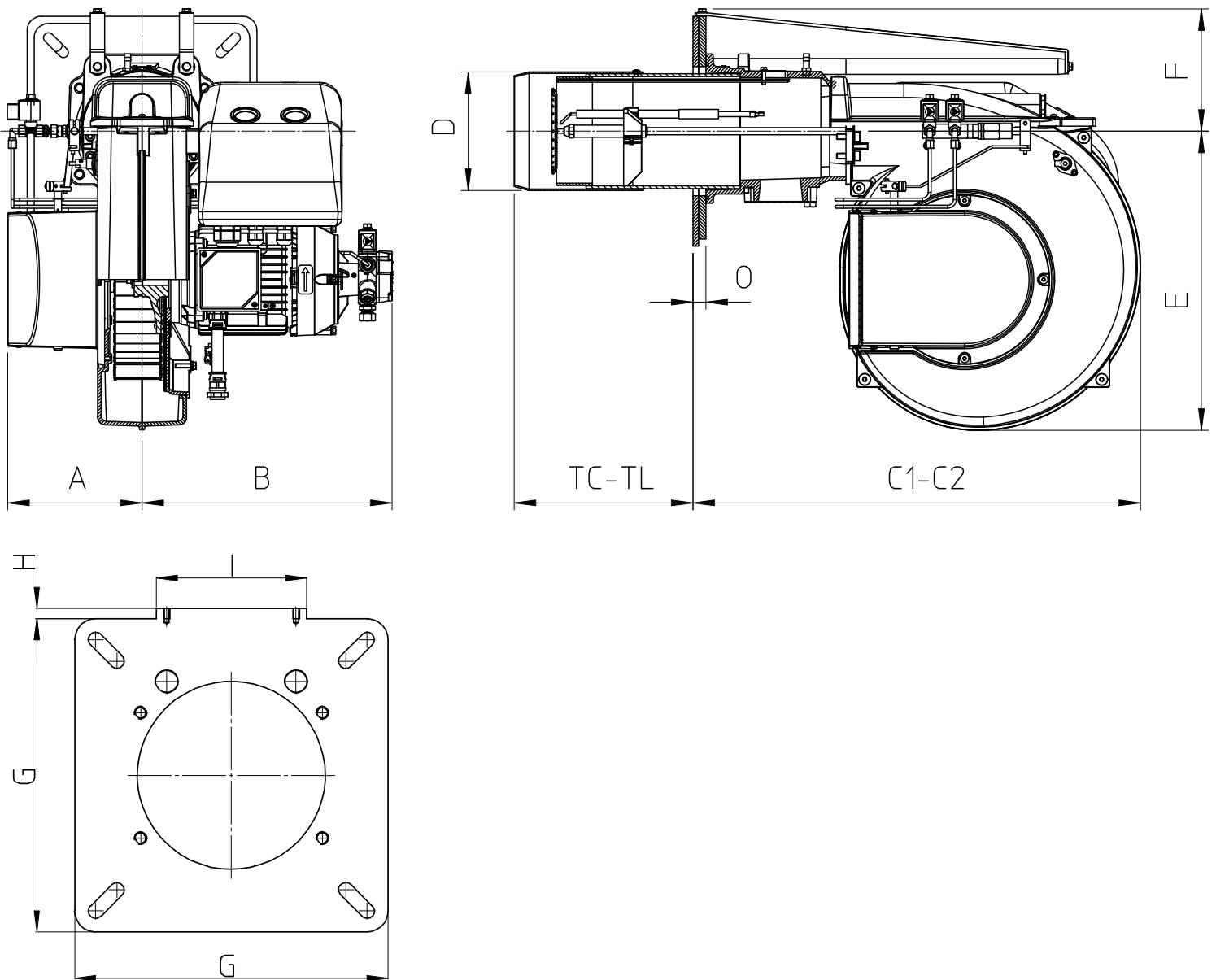


Fig. Dimensions FGP 75/2 LX

| MODEL       | A   | B   | C1  | C2   | D   | E   | F   | G   | H  | I   | O  |
|-------------|-----|-----|-----|------|-----|-----|-----|-----|----|-----|----|
| FGP 75/2 LX | 187 | 350 | 623 | 1062 | 165 | 417 | 170 | 300 | 10 | 144 | 18 |

C2: Overall dimension with the burner out in position of maintenance.

TC - TL: see "flame tube length"

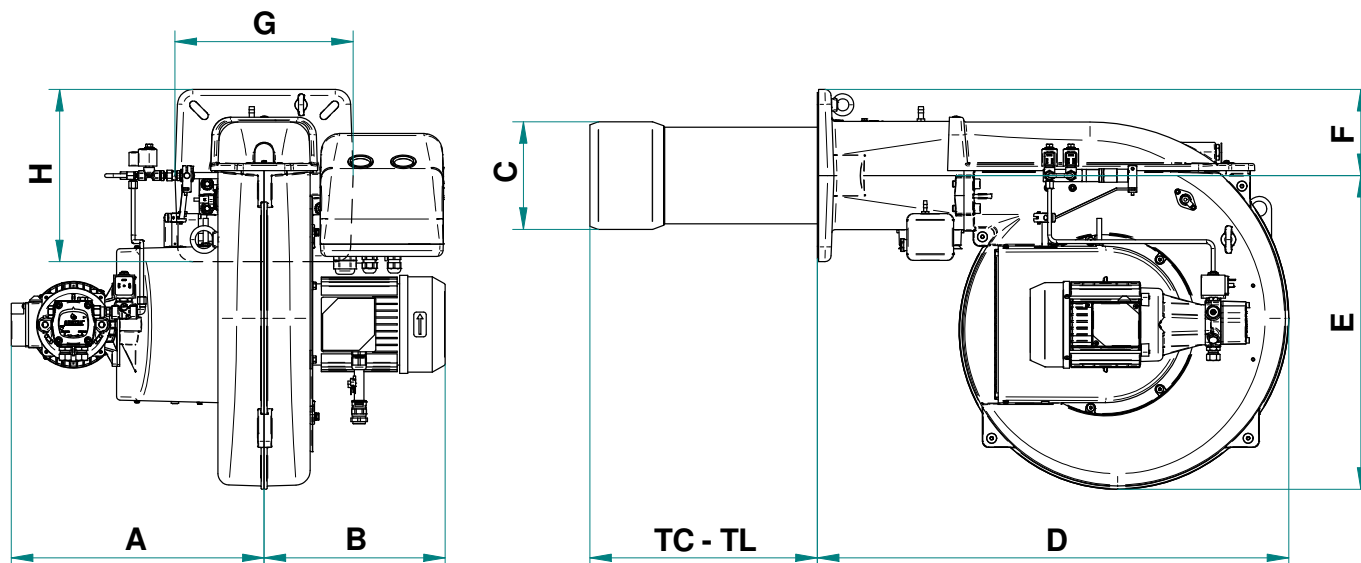
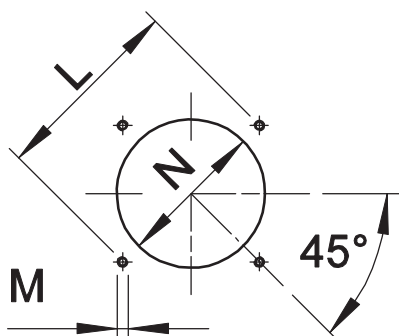


Fig. Dimensions FGP 100/2 LX EVO

| MODEL            | A   | B     | C   | D     | E   | F   | G   | H   |
|------------------|-----|-------|-----|-------|-----|-----|-----|-----|
| FGP 100/2 LX EVO | 411 | 294.5 | 175 | 766.5 | 510 | 140 | 290 | 280 |

TC - TL: see "flame tube length"

## BOILER PLATE



\* Suggested dimension of connection between burner and generator.

Fig. Boiler plate

| MODEL            |    | L min | L max | M   | N min | N * | N max |
|------------------|----|-------|-------|-----|-------|-----|-------|
| FGP 75/2 LX      | mm | 310   | 368   | M12 | 180   | 180 | 250   |
| FGP 100/2 LX EVO | mm | 275   | 325   | M10 | 185   | 185 | 220   |

## FLAME TUBE LENGTH

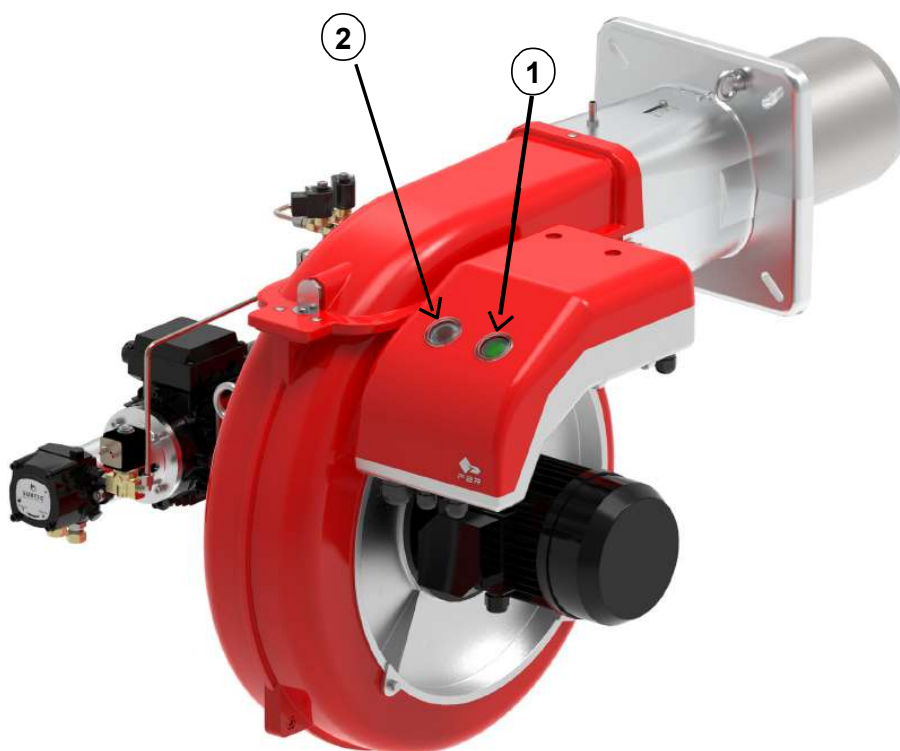
Flame tube length must be selected based on the specifications supplied by boiler manufacturer and, in any case, it must be greater than the thickness of the boiler door included its insulation.  
In case of boilers with flame inversion or front flue combustion chambers, it is necessary to insulate the area between the flame tube and front door with refractory material. This protection material must not impede flame tube extraction.

| MODEL            |    | TC  | TL ** |
|------------------|----|-----|-------|
| FGP 75/2 LX      | mm | 250 | 335   |
| FGP 100/2 LX EVO | mm | 235 | 370   |

\*\* For different flame lengths, please contact our Technical-Sales Department.

## BURNER SIGNAL DESCRIPTION

In the picture below there are indicated all the signalation present on the burner:



**Fig.** Burner signal description

### LEGEND

- 1) ON/OFF button
- 2) Reset from lockout button + status lamp

💡 The multicolor signal lamp in the lockout reset button (pos.2) is the key indicating element for visual diagnostics and interface diagnostics.  
In normal operation, the different operating states are indicated in the form of color codes; please refer to electrical device handbook supplied with the present instructions.

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up.  
By pressing the lockout reset button (pos.2) for more than 3 seconds, the visual diagnostics of the cause of fault can be activated; please refer to electrical device handbook supplied with the present instructions.

For close the diagnostics mode and for switch on the burner again, it is necessary to reset the burner control.  
Press the lockout reset button (pos.2) for about 1 second (<3 seconds).

💡 After a non-alterable lockout, the red signal lamp in the lockout reset button (pos.2) lights up. For reset the control box press the lockout reset button (pos.2) for about 1 second (<3 seconds).

## PRODUCT SPECIFICATION

### SHORT DESCRIPTION

Light-oil burners two stages Low NOx (NOx < 120 mg/kWh).

### DETAILED SPECIFICATION

Light-oil burner two stages - Low NOx (NOx < 120 mg/kWh), composed by:

- Die-cast aluminum body;
- Fan at high pressurisation, at reverse blades for model FGP 100/2 LX EVO;
- Combustion head with adjustment at high performance and elevated flame stability;
- Flange and insulating gasket for fixing at boiler;
- Three-phase power supply;
- Photodiode for flame detection;
- IP 40 electric protection level;
- Supports and tierods for burner extraction for model FGP 75/2 LX;
- Safety air pressure switch to stop the burner in lock-out (by stopping the pump motor) in case of failed or anomalous fan operation for model FGP 100/2 LX EVO;
- Dedicated motor for the activation of the light-oil pump for model FGP 100/2 LX EVO;
- Easy extraction of combustion head without get off the burners by bolier.

### CONFORMING TO:

- CE rules;
- 2014/30/UE Directive E.M.C.;
- 2014/35/UE Directive L.V.;
- 2006/42/CE - 2006/42/EG - 2006/42/EC Directive M.D.;
- Directive PED 2014/68/UE (ART.4,PAR.3);
- 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

- Noise protection.

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