

SUN G10

bruciatore di gasolio

oil burner

bruleur de fuel

Heizölbrenner

quemador de gasóleo

ISO 9001 : 2000
CERTIFIED COMPANY



CE

ISTRUZIONI PER L'USO L'INSTALLAZIONE E LA MANUTENZIONE
OPERATING, INSTALLATION AND MAINTENANCE INSTRUCTIONS
MODE D'EMPLOI, INSTALLATION ET ENTRETIEN
BEDIENUNGS-, INSTALLATIONS- UND WARTUNGSANLEITUNG
INSTRUCCIONES DE USO, INSTALACIÓN Y MANTENIMIENTO



- Carefully read the warnings in this instruction booklet, as they provide important indications on the safety of installation, operation and maintenance.
- The instruction booklet is an integral and essential part of the product and must be carefully kept by the user for future reference.
- The installation and maintenance operations must be performed according to the standards in force, the instructions of the manufacturer and must be carried out by professionally qualified personnel.
- Incorrect installation or poor maintenance may cause damage to people, animals or things. The manufacturer declines all liability for damage deriving from errors in the installation and operation of the appliance, and in any case from the failure to observe the instructions provided by the manufacturer.
- Before performing any cleaning or maintenance operations, disconnect the appliance from the mains power supply using the system switch and/or the corresponding on-off devices.
- In the event of faults and/or poor operation of the appliance, it should be deactivated. Do not attempt to repair the appliance. Contact professionally qualified personnel only.
- After having removed the packaging, check that the contents are intact.
- The parts of the packaging must not be left within the reach of children, as they are potential sources of danger.



Certification

The CE Mark attests that Ferroli appliances conform to the requirements specified in the corresponding European directives.

In particular, this appliance conforms to the following EEC directives:

- Directive 92/42, Efficiency, accepted into Italian law by Presidential Decree no. 660, 15.11.96
- Directive 73/23, Low Voltage, (amended by no. 93/68)
- Directive 89/336, Electromagnetic Compatibility (amended by no. 93/68) accepted into Italian law by Presidential Decree no. 615, 15/11/96



This symbol indicates **"Warning"** and is placed near all warnings regarding safety. Such provisions must be strictly adhered to so as to avoid danger and damage to people, animals and things.



This symbol highlights a note or an important warning

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1. OPERATING INSTRUCTIONS

1.1 Introduction

Dear Customer,

Thank you for having chosen the **SUN G10**, an advanced-concept FERROLI burner featuring cutting-edge technology, high reliability and constructional quality.

The **SUN G10** is an oil burner, whose compact dimensions and original design make it ideal for use with most of the boilers currently present on the market. The attention paid to the design and industrial production of the appliance has resulted in a product that is well-balanced and highly efficient, with very low CO and NOx emissions and a very silent flame.

1.2 Operating instructions

The operation of the burner, once correctly installed and adjusted, is completely automatic and does not require any intervention by the user. In the event of no fuel or operating anomalies, the burner stops and shuts-down (the red light on the reset button turns on). It is recommended to replete the supply of fuel before it runs out completely, to avoid the inlet of air (irregular operation of the burner) or the loss of prime of the pump (in which case the assistance of the service centre is required).

If the fuel tank is outside, in areas where the temperature falls below -10 °C, the tank and fuel supply pipes must be adequately protected. Use winter oil or add a specific anti-freeze.

Make sure that the room where the burner is installed is free of inflammable objects or materials, corrosive gas or volatile substances, and is not dusty. Dust, in fact, is sucked in by the fan and sticks to the blades of the rotor and reduces air flow, or alternatively blocks the flame stability disk, compromising efficiency.

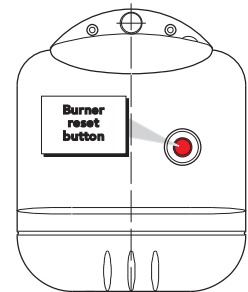


fig. 1



Do not allow the burner to be tampered with by inexperienced persons or children.

1.3 Maintenance

Make sure that maintenance is performed on the burner periodically, at least once a year. The maintenance operations must be performed by qualified and specialist personnel according to the indications contained in chapter 3.

1.4 Anomalies

If the burner does not ignite and the red light on the reset button is not on, check that there is electrical power, that the heating system switch is on, that the fuses are intact and that there is an effective request for heat from the boiler.

If the burner is still off (red light on the reset button on), wait 15 seconds and press the reset button to reset operation. The burner will attempt to ignite. If it shuts down again, check that there is fuel in the tank and that the manual valves located on the oil supply pipe are open. If these checks do not resolve the problem, contact the service centre.

If noise is produced during the operation of the burner, contact the service centre.

2. INSTALLATION

2.1 general instructions

This appliance must only be used for the purposes it has been specifically designed for. This appliance may be applied, according to its characteristics, performance and heating capacity, to water boilers, steam boilers, diathermic oil boilers and other utilities, as expressly envisaged by the manufacturer of such. All other uses are considered improper and thus dangerous.

The appliance may not be opened nor its components tampered with, except for the parts included in the maintenance operations. The appliance may not be modified to alter its performance or use.

If the burner is fitted with optional devices, kits or accessories, only original products should be used.



THE BURNER MUST ONLY BE INSTALLED AND ADJUSTED BY QUALIFIED AND SPECIALIST PERSONNEL, IN COMPLETE COMPLIANCE WITH ALL THE INSTRUCTIONS REPORTED IN THIS TECHNICAL MANUAL, THE LEGAL STANDARDS IN FORCE, THE PRESCRIPTIONS OF THE UNI AND CEI STANDARDS AND ANY LOCAL STANDARDS, AND ACCORDING TO THE RULES OF GOOD PRACTICE.

2.2 installation in the boiler

Place of installation

The room in which the boiler and burner are installed must have openings to the outside according to the standards in force. If the same room features a series of burners or air inlet devices that can operate at the same time, the ventilation openings must be large enough for the simultaneous operation of all the appliances.

The place of installation must be free of inflammable objects or materials, corrosive gas, dust or volatile substances that, sucked in by the fan, may block the internal tubing of the burner or the combustion head. The environment must be dry and not exposed to rain, snow or frost.

Fastening to the boiler

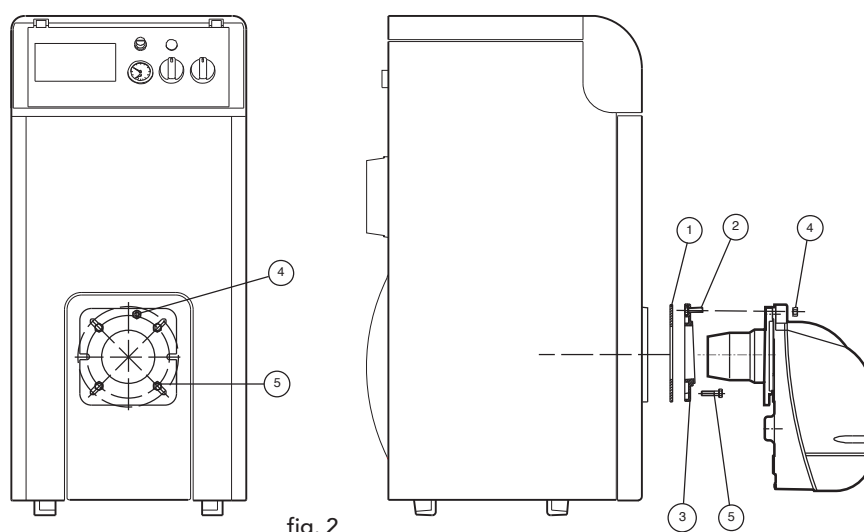


fig. 2

- 1) Insert screw 2 (m8x40) in flange 3.
- 2) Fasten flange 3 to the boiler using screws 5 (4 ea., m8x20), with the insulating gasket 1 placed in between.
- 3) Insert the burner into the boiler flange and fasten it to screw 2 using nut 4.

2.3 Fuel supply

General instructions

The burner must be supplied by the type of fuel it is set for, as shown on the rating plate on the appliance and in the table of technical specifications in Chap. 4.3 of this manual.

The pipe supplying fuel to the burner must be perfectly sealed, to avoid air entering into the pump, must be fitted with a filter upstream of the burner, and all the safety and control devices required by the standards in force. There must be no impurities or processing residues inside the pipe: clean the pipes before using.

In addition, before operating the burner, make sure that the fuel return pipe is not blocked. Excessive backpressure will break the pump seal device.

The tank must be positioned as required by the standards in force, and must be built and installed in a way that no water or impurities may enter. The tank must be carefully cleaned before filling with fuel.

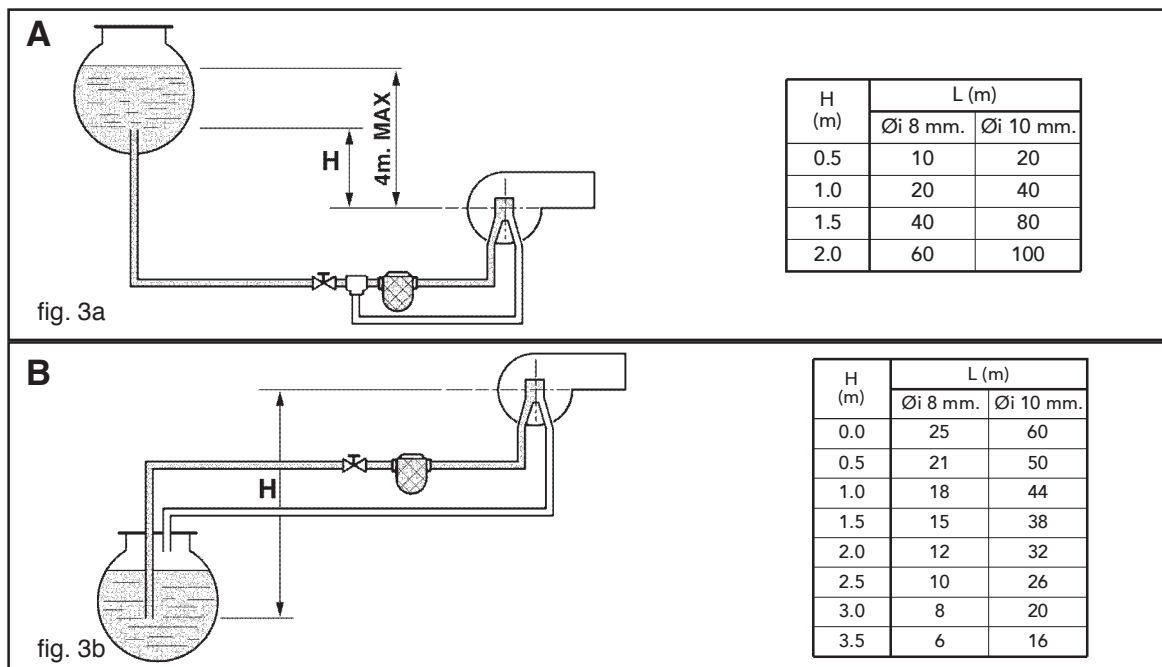
The tank and supply pipe must be protected from frost.

Fuel circuit

The burner is fitted with a self-suction pump that can supply itself autonomously, within the limits shown below. The fuel supply circuits can be divided into 4 types, as shown in the following figure:

- A** Gravity feed
- B** Suction feed
- C** Siphon feed
- D** Ring feed

For each type of system there is a table for sizing the supply pipe in relation to the length (L) of the inlet pipe, and the difference in height (H) from the tank. Do not exceed the MAX distances shown in the figures so as not to excessively stress the pump seal devices.



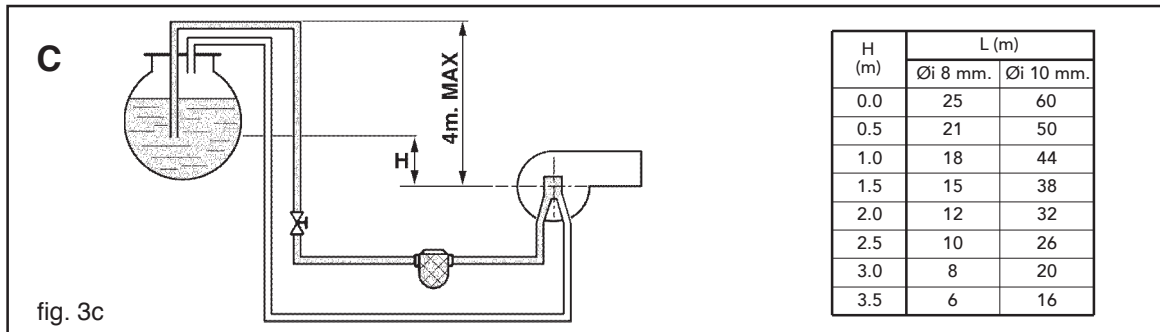


fig. 3c

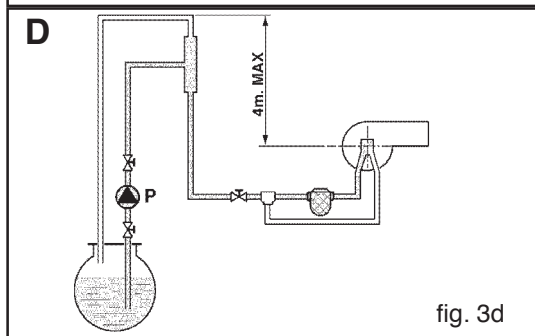


fig. 3d

Nota: for each curve or gate valve, add 0.25 metres to the length of the pipe (pressure drop).

- L** Total length of the inlet pipe, including the vertical sections
- H** Difference in height
- Øi** Internal diameter of pipes
- P** Auxiliary pump

Connection to the pump

The burner leaves the factory with the internal pump bypass closed, that is, the burner is fitted for two-pipe connection. Remove the caps and connect the two flexible pipes to the pump inlet (1) and return (2), as shown in Figure 4, making sure the flexible pipes are not twisted and that they are positioned so that they will not be stepped on or come into contact with the hot parts of the boiler.

If the internal pump bypass needs to be used for single-pipe connections, remove the bypass screw (7) and cap the return fitting (2) on the pump, connecting only the flexible pipe to the inlet fitting (1).



If the pump is operated with the return closed and the bypass screw inserted, it will be damaged immediately.

Key

- 1** Inlet
- 2** Return with internal bypass screw
- 3** Outlet to the nozzle
- 4** Pressure gauge attachment
- 5** Vacuumeter attachment
- 6** Pressure adjustment screws
- 7** Bypass screw

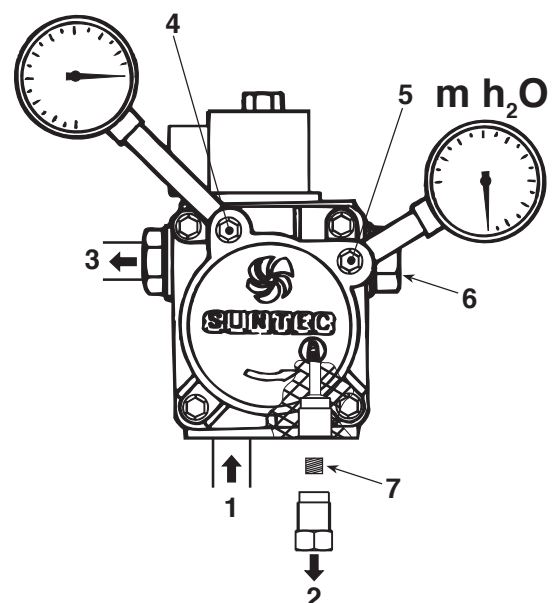


fig 4

2.4 Nozzle and electrodes

Choosing the nozzle

Determine the required fuel flow-rate, based on the heat input of the boiler and the minimum heat output (Hi) of the fuel used (see table of technical specifications, Chap. 4). Based on the flow-rate calculated, use the table below, according to the pump pressure, to determine the most suitable nozzle size (in GPH). The bold values in the table are the most suitable for the operation of the burner. In the case of burners with preheater, the effective flow-rate value is lower by around 10% than the values shown in table.

Nozzle G.P.H.	Pump pressure (bar)					
	9	10	11	12	13	14
0,40	1,44	1,52	1,59	1,67	1,73	1,80
0,50	1,80	1,90	1,99	2,08	2,17	2,25
0,60	2,16	2,28	2,39	2,50	2,60	2,70
0,65	2,34	2,47	2,59	2,71	2,82	2,92
0,75	2,70	2,85	2,99	3,12	3,25	3,37
0,85	3,06	3,23	3,39	3,54	3,68	3,82
1,00	3,61	3,80	3,99	4,16	4,33	4,50
1,10	3,97	4,18	4,38	4,58	4,77	4,95
1,20	4,33	4,56	4,78	5,00	5,20	5,40
1,25	4,50	4,75	5,00	5,20	5,40	5,60
1,35	4,87	5,13	5,38	5,62	5,85	6,07
1,50	5,41	5,70	5,90	6,24	6,50	6,75
1,65	5,95	6,27	6,58	6,87	7,15	7,42
1,75	6,31	6,65	6,98	7,29	7,58	7,87
2,00	7,21	7,60	7,97	8,33	8,67	8,99
2,25	8,15	8,55	8,97	9,37	9,75	10,12
2,50	9,01	9,50	9,97	10,41	10,83	11,24
3,00	10,82	11,40	11,96	12,49	13,00	13,49
	Flow-rate at the outlet in kg/h					


Table of oil nozzle flow-rates



The values shown below are purely indicative, as it should be remembered that the flow-rates of the nozzles may change by $\pm 5\%$.

Table of spray values

The nozzles are available with different sprays, identified by one or more letters, depending on the manufacturer. The table shows the most suitable types of spray for the burner.

SPRAY	Angle	Type of cone	Type of nozzle					
			Delavan	Monarch	Danfoss	Steinen	Hago	Fluidics
	60°	Full	B	AR	S	S - SS	ES	SF - S

Assembling the nozzle

Once the correct nozzle has been selected, proceed as follows for the assembly:

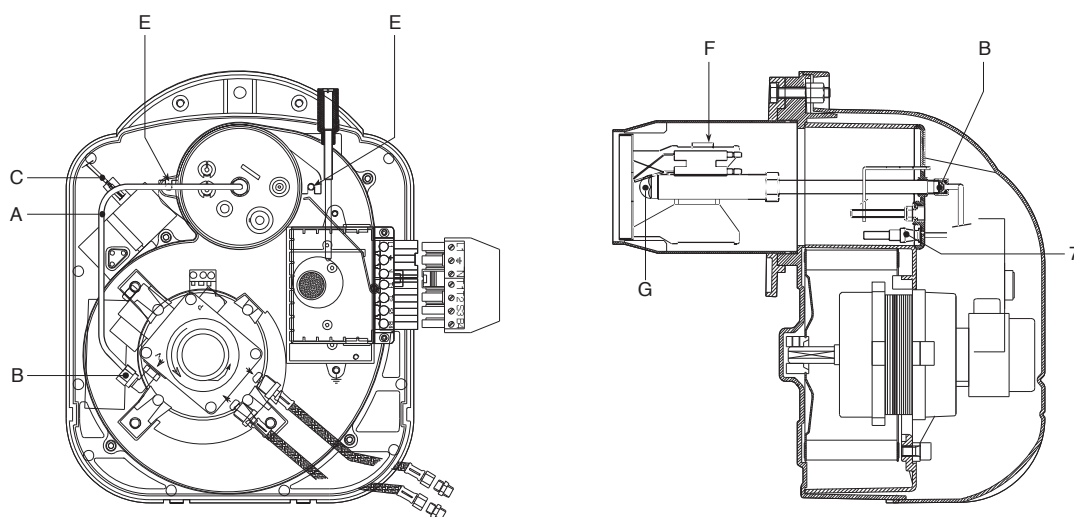



fig. 5

- 1 Disconnect the oil supply pipe "A"
- 2 Remove the photo cell "7" and disconnect the cables from the ignition electrodes "C"
- 3 Loosen the two fastening screws "E"
- 4 Turn and remove the combustion head "D"
- 5 Remove the nozzle holder from the combustion head "F"
- 6 Replace the nozzle "G"

Positioning the electrodes

After having fitted the nozzle, check the correct positioning of the electrodes and the baffle, according to the distances shown below.

 The distances should be checked after any operations performed on the head.

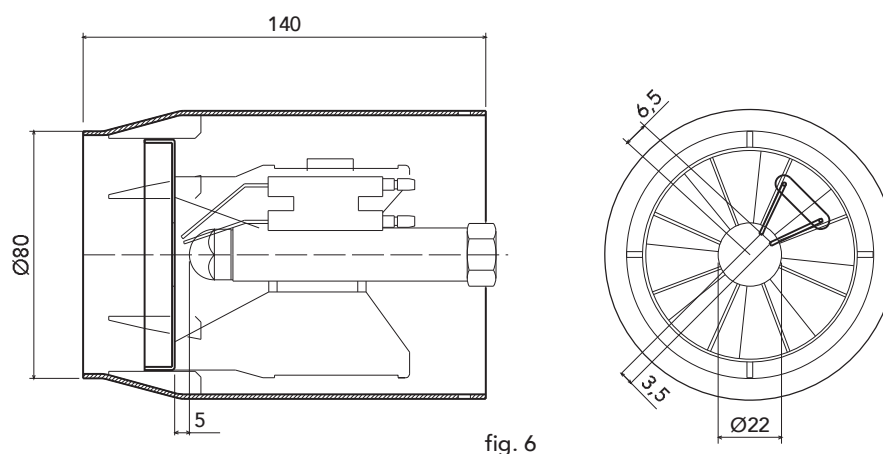


fig. 6

2.5 Electrical connections

The burner is fitted with a multi-pole socket for the electrical connections; refer to the wiring diagram in Chapter "4 Characteristics and technical specifications" for the connections. The following connections are to be performed by the installer:

- power line
- thermostat line
- any shut-down and/or hour counter lights

The length of the connection cables must allow the burner, and the boiler door, if required, to be opened. In the event of faults involving the burner power cable, it should only be replaced by specialist persons.

The burner should be connected to a single-phase, 230 Volt-50 Hz electrical line.



Have professionally qualified personnel check the efficiency and the suitability of the earth system; the manufacturer is not responsible for any damage caused by the failure to earth the system. Also check that the electrical system is adequately rated for the maximum power absorbed by the appliance, indicated on the boiler rating plate.

The correct polarity must be respected (PHASE: brown wire / NEUTRAL: blue wire / EARTH: yellow - green wire) in the electrical connections.

3. SERVICE AND MAINTENANCE

All the adjustment, commissioning and maintenance operations must be performed by Qualified Personnel, in compliance with the standards in force. The local sales organisation and Customer Service Centre is available for any further information.

FERROLI S.p.A. declines all liability for damage to persons and/or things deriving from tampering with the appliance by non-authorized persons

3.1 Settings

Head and air damper adjustment

The adjustment of the head depends on the flow-rate of the burner. The head is adjusted by rotating the adjustment screws "B" clockwise or anticlockwise until the notch on rod "A" is in line with the reference.

This modifies the position of the baffle in respect to the draught tube, and as a consequence the flow of air.

To adjust the air flow-rate, use screw "C" after loosening nut "D".

At the end of adjustment tighten nut "D".



To limit the amount of dispersion from the stack when the boiler is off, the burner is fitted with a gravity-closing air damper that closes automatically when the burner stops.

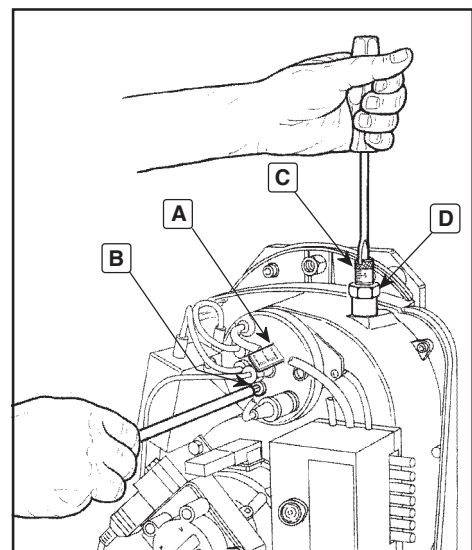


fig. 7

To perform a preliminary adjustment of head and air damper during installation (before commissioning and consequently calibrating the appliance using instruments), use the graph below:

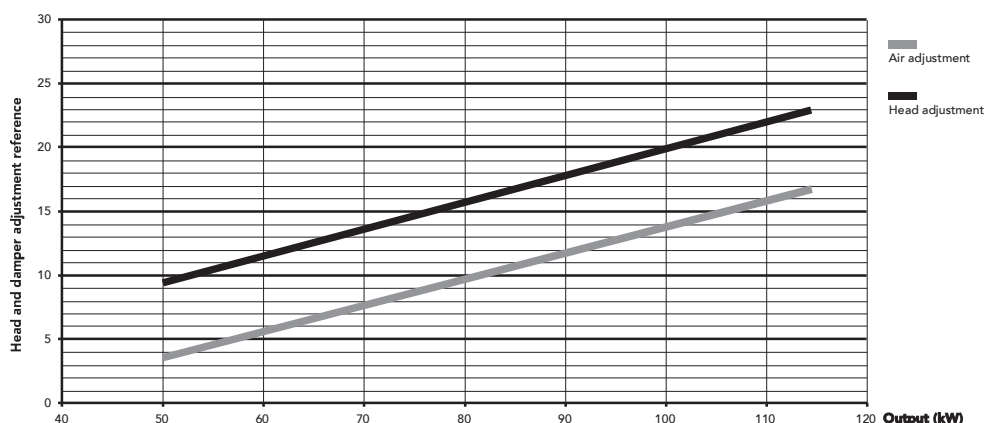


fig. 8

Adjusting pump pressure

The pressure of the pump is factory-set to 12 bars, for optimum operation, and normally should not be modified. Nonetheless, if under specific circumstances a different pressure needs to be set, once having attached the pressure gauge and ignited the burner, use the adjustment screws "6" indicated in fig. 4. In any case, it is recommended to keep within the range 10 - 14 bars.

3.2 Commissioning

Checks to be performed on first ignition, and after all maintenance operations that involve the disconnection of the appliance from systems or intervention on the safety devices or parts of the burner:

Before igniting the burner,

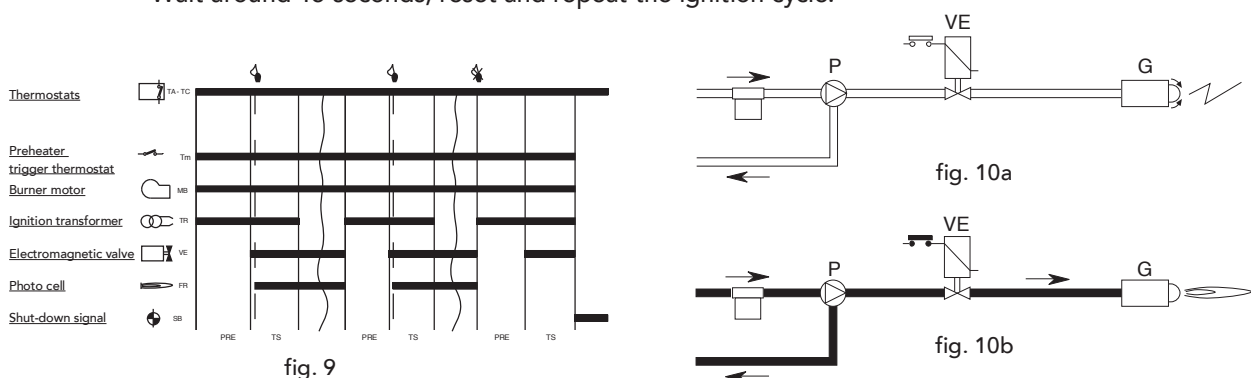
- Check that the burner is correctly fastened to the boiler, and the preliminary adjustments described previously have been performed.
- Make sure that boiler and the system have been filled with water or diathermic oil, that the valves in the water circuit are open and that the flue gas exhaust pipe is free and correctly sized.
- Check that the boiler door is closed, so that the flame only propagates inside the combustion chamber.
- Fit the pressure gauge and the vacuumeter to the pump (removed before operation).
- Open the gate valves in the oil pipes, making sure that there is fuel in the tank and that the return pipe is not blocked.

Attention: Blockages may cause the pump seal device to break.

Igniting the burner

- Connect electrical power by closing the main switch upstream of the burner
- Close the thermostat line (boiler/room)
- Reset the appliance (pressing the red button)
- Operation will start according to Figs. 10a and 10b and the diagram in Fig. 9:

- 1 The burner motor will start turning, together with the pump: the oil fed in is completely sent to the return (Fig. 10a). The ignition transformer is activated at the same time.
- 2 The following phases are performed: pre-ventilation of the furnace, pre-washing of part of the oil circuit, pre-ignition, with discharge between the tips of the electrodes.
- 3 At the end of the pre-washing phase, the appliance opens the electromagnetic valve (Fig. 10b): the oil reaches the nozzle, from where it is sprayed. Contact with the discharge between the electrodes ignites the flame. At the same time, the safety time starts, within which the photo cell must detect the flame.
- 4 If the photo cell does not detect the flame, the burner shuts-down (the red light comes on). Wait around 15 seconds, reset and repeat the ignition cycle.



In particular, with single-tube systems, if the fuel inlet pipe is initially empty, the air contained in the pipe must be vented for the fuel pump to be primed. It is recommended, before igniting the burner, to loosen the pressure gauge connection screw on the pump and then perform the ignition cycle.

When the oil comes out of the screw, the pump is primed. Switch off the burner and tighten the screw.

Checks and adjustments during operation

- Connect a combustion analyser to the boiler outlet and operate the burner at full power for 10 minutes; in the meantime, check the operation of the flue gas exhaust pipe.
- Slowly adjust the air damper until reaching the required excess air value for operation, using the combustion analyser to check the O2 content in the flue gas. The O2 content in the flue gas should not be less than 2.5% (risk of polluting combustion) and should not exceed 5% (risk of difficulty in ignition and production of soot).
- Then perform a number of ignition cycles. In the event of flame pulsation or difficulty in igniting, adjust the head, again using the combustion analyser to check the O2 content in the flue gas.
- Make sure that the pressure in the combustion chamber corresponds to the value indicated by the manufacturer of the boiler
- Perform a complete analysis of the flue gas and check compliance with the limits set by the standards in force.


3.3 Maintenance

The burner requires periodic maintenance, to be performed at least once a year by authorised enabled.

The following basic operations must be performed:

- check and clean the internal parts of the burner, the tank and the boiler, as shown in the following paragraphs;
- complete analysis of combustion (after normal operation for at least 10 minutes) and check the adjustments are correct;

Opening the cover and dismantling the burner

 Before performing any cleaning operations or checks inside the burner, disconnect the burner from the power supply using the main switch and close the fuel supply.

- To open the appliance, unscrew the screws (A) and remove the cover (B). The internal components, pump, motor, damper, etc. can be accessed directly.
- To dismantle the appliance, unscrew the nut (C), remove the burner from the boiler and position it so as to allow access to the head, electrodes and nozzle.

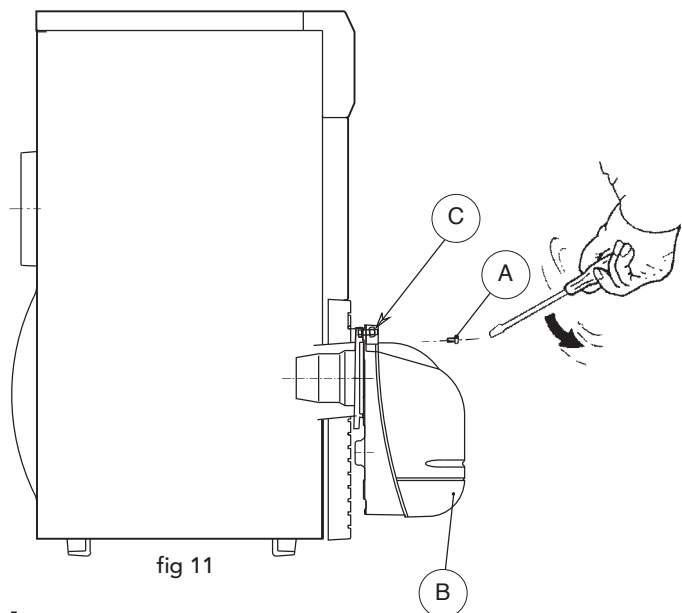


fig 11

Checking the parts and components

Pump

The pressure must be stable at the value set during installation, and in any case between 10 and 14 bars. No noise must be produced.

In the case of instable pressure or noisy pump, disconnect the flexible pipe from the line filter and feed in the fuel from a tank located near the burner. This identifies whether the cause of the anomaly is the inlet pipe or the pump.

Filters

Check and clean or replace, if necessary, the filters in the line, pump and nozzle.

If there is rust or other impurities in the pump filter, use a separate pump to remove water and other impurities from the bottom of the tank.

Fan

Check that dust is not accumulated inside the fan and on the rotor blades: this reduces the air flow and causes, as a consequence, polluting combustion.

Combustion head

Check that all the parts of the combustion head are intact, not deformed by the high temperatures, free of impurities from the surrounding environment, and correctly positioned.

Nozzles

Avoid cleaning the hole of the nozzles, so as to not damage them

Replace the nozzles every 2-3 years, or when necessary. Combustion must be checked when changing the nozzle.

Photo cell

Clean the glass for dust. The photo cell is pushed into place; to remove it, simply pull it out.

Flexible pipes

Check that they are in good condition, that they have not been stepped on or deformed.

Tank

Every 5 years or so, remove the water from the bottom of the tank using a separate pump.

3.4 Troubleshooting

<u>Problem</u>	<u>Possibile causes/Recommended solution</u>
The burner does not ignite	No electrical power /Close the switches, check the fuses Appliance shut-down/Reset the appliance Electrical devices defective/Replace Pump blocked/Replace Electric motor defective/Replace
During pre-ventilation, the burner shuts down	Electrical connections incorrect /Check Photo cell short-circuited/Replace the photo cell External light strikes the photo cell/Eliminate source of light Electrical devices defective/Replace Oil valve defective/Replace
The burner performs the pre-ventilation and ignition cycle, but there is no flame and the burner shuts-down.	No fuel in the tank, or water on the bottom/Top up fuel or remove the water Oil supply valve closed/Open Filters dirty (line – pump - nozzle)/Clean Pump not primed/Prime and look for cause of loss of prime Ignition electrodes poorly adjusted, or dirty/Adjust or clean Nozzle blocked, dirty or deformed/Replace Head and damper poorly adjusted/Adjust Electrodes defective or earthed/Replace Ignition transformer defective/Replace Electrode cables defective or earthed/Replace Electrode cables deformed due to high temperature/Replace and protect Electrical connections to the valve or transformer incorrect /Check Defective appliance/Replace Motor-pump joint broken/Replace Pump inlet connected to the return pipe/Correct the connection

Italiano	<p>The flame is ignited normally, but the burner shuts down at the end of the safety time</p>	<p>Photo cell defective/Replace Photo cell dirty /Clean photo cell Defective appliance/Replace</p>
	<p>Ignition with pulsating or disjointed flame, delayed ignition</p>	<p>Head poorly adjusted /Adjust Ignition electrodes poorly adjusted or dirty /Adjust or clean Fan damper poorly adjusted, too much air /Adjust Nozzle not suitable for the burner or the boiler /See nozzle table Nozzle defective /Replace Pump pressure not suitable /Adjust between min 10 and max 14 bars</p>
English	<p>Pump noisy, fluctuating pressure</p>	<p>Air in the inlet piping /Tighten the fittings Too much difference in height between the burner and the tank/Supply burner using a ring circuit and auxiliary pump Pipe diameter too small /Increase diameter Inlet filters dirty /Clean Oil supply valve closed /Open Paraffin solidification due to low temperature /Add additive to the oil</p>
	<p>The pump loses prime after extended shut-down</p>	<p>Return pipe not immersed in the fuel /Move to same height as the inlet pipe Air in the inlet piping /Tighten the fittings</p>
Français	<p>Pump leaks oil</p>	<p>Seal device leaking/Replace pump</p>
	<p>Fuel supply irregular</p>	<p>Supply system or pump blocked or defective /Supply the burner from a tank located near the burner to identify whether the problem depends on the pump or the system</p>
	<p>Bacharach soot dark</p>	<p>Insufficient air /Adjust the head and fan damper Dirty or worn nozzle/Replace Nozzle filter dirty/Clean or replace Incorrect pump pressure/Adjust between min 10 and max 14 bars Flame stability disk dirty, loose or deformed /Clean, tighten or replace Insufficient ventilation in the boiler room/Check ventilation openings in the room, clean or enlarge</p>
Deutsch	<p>Bacharach yellow</p>	<p>Excess air /Adjust the head and fan damper.</p>
	<p>Combustion head dirty</p>	<p>Head poorly adjusted or insufficient air /Adjust the head, open the air damper Nozzle or nozzle filter dirty/Replace Incorrect nozzle angle or flow-rate/Replace Nozzle loose /Tighten Impurities from the surrounding environment on the stability disk/Clean</p>
Español		

4. CHARACTERISTICS AND TECHNICAL SPECIFICATIONS

4.1 Dimensions

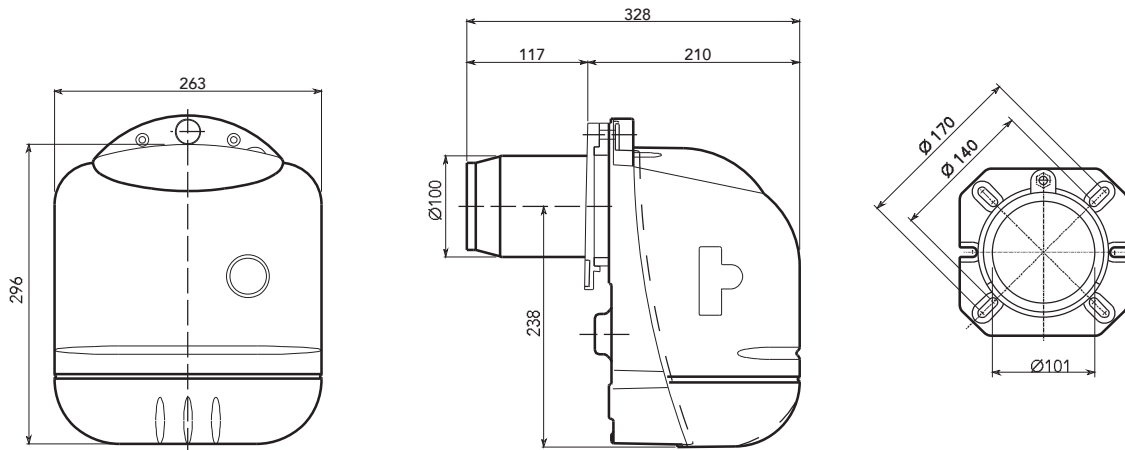


fig. 12

4.2 Overall view and main components

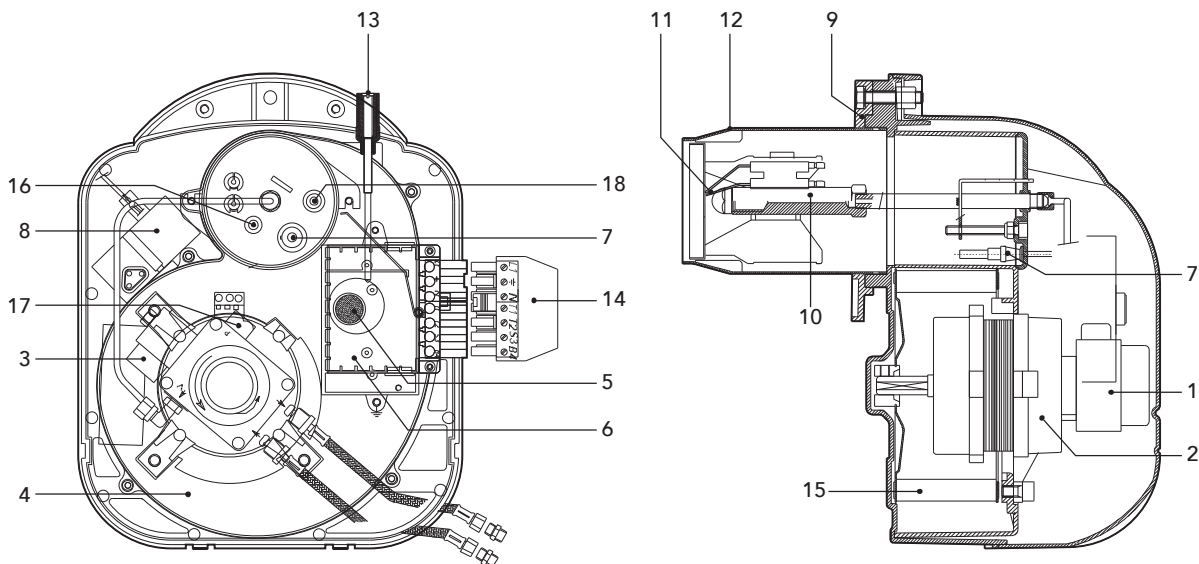


fig. 13

Key

- | | |
|-----------------------------------|---------------------------------------|
| 1 Oil pump | 10 Nozzle line |
| 2 Motor | 11 Ignition electrodes |
| 3 Electromagnetic valve | 12 Draught tube |
| 4 Burner body | 13 Air damper adjustment screw |
| 5 Reset button | 14 Electrical connection plug |
| 6 Appliance | 15 Fan |
| 7 Photo cell | 16 Combustion head adjustment |
| 8 Ignition transformer | 17 Pump pressure adjustment |
| 9 Burner attachment flange | 18 Pressure test point |

Italiano

English

Français

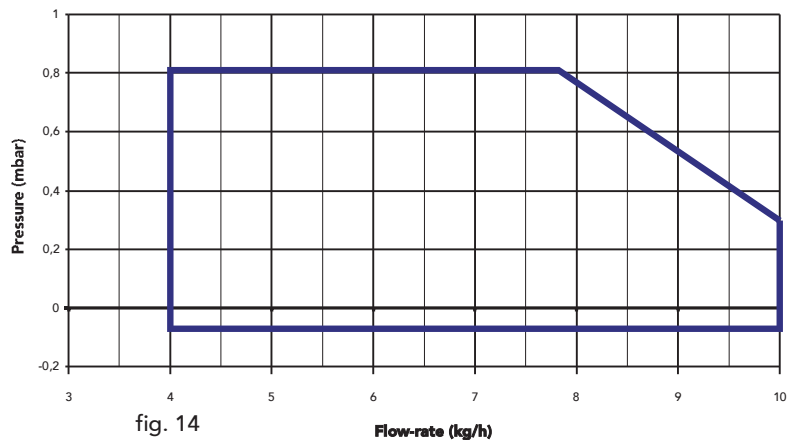
Deutsch

Español

4.3 Table of technical specifications

Burner		SUN G10	
		Max	Min
Output	kW	118,6	47,4
Flow-rate	kg/h	10	4
Fuel	Hi kWh/kg	11,86	
	Oil Density kg/dm ³	0,82-0,85	
	Viscosity at 20°C	1,5° E	
Operation		Intermittent single stage	
Electrical power supply	V/Hz	220-240V 50HZ	
Motor	W	90	
Power input	W	160	
Index of protection	IP	40	

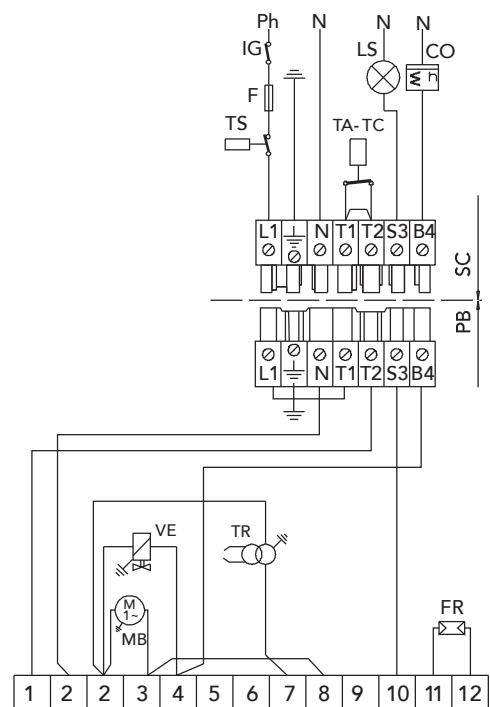
4.4 Operating field



4.5 Wiring diagram

Key

- CO** Hour counter
- F** Fuse
- FR** Photo cell
- IG** Main switch
- LS** Safety light
- MB** Burner motor
- PB** Burner socket
- SC** Plug
- TA-TC** Boiler - room thermostat
- TR** Ignition transformer
- TS** Safety thermostat
- TM** Minimum thermostat
- VE** Electromagnetic valve



**Should you require help during installation
call our Technical Helpline on
08707 282 885 option 1
To book a Ferroli service engineer
call Ferroli caresafe on
08707 282 885 option 2**

Phone numbers:

Installer _____

Service Engineer _____

**BECAUSE OF OUR CONSTANT ENDEAVOUR FOR IMPROVEMENT DETAILS
MAY VARY SLIGHTLY FROM THOSE QUOTED IN THESE INSTRUCTIONS.**

ALL SPECIFICATIONS SUBJECT TO CHANGE

Please note - to avoid incurring unnecessary expense, in the event of a boiler shut down, check this is not caused by lack of electricity supply, gas supply or low water pressure before calling our Customer Service Helpline.

**Lichfield Road, Branston Industrial Estate, Burton Upon Trent, Staffordshire DE14 3HD
Tel. 08707 282 885 - Fax 08707 282 886**