

# Pump

## STANDARD EQUIPMENT

Code	Pump	Coupling	Instruction
3006918	1	1	1
3007480	1	1	1
3007771	1	1	1
3007800	1	1	1
3007805	1	1	1
3007807	1	1	1
3007808	1	1	1
3007810	1	1	1
3007812	1	1	1
3008470	1	1	1
3008570	1	1	1
3008798	1	1	1
3008831	1	1	1
3008848	1	1	1
20013964	1	1	1
20034559	1	1	1

## TECHNICAL CHARACTERISTICS

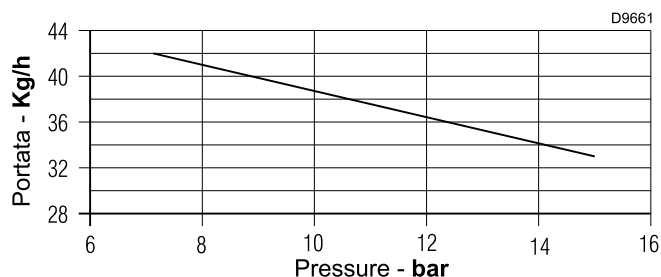
Pump	Light oil
Viscosity range	1.8 - 12mm <sup>2</sup> /s (cSt)
Rotation speed	2800 - 3600 min <sup>-1</sup>
Pressure range	7 - 15 bar
Factory calibration	See Tab. A
Coil voltage	53V (+ 0.5 -2) 50/60 Hz
Temperature range	-10 to +70°C

Code	Pump calibration bar
3006918	12
3007480	12
3007771	12
3007800	12
3007805	12
3007807	12
3007808	12
3007810	12
3007812	12
3008470	8
3008570	12
3008798	12
3008831	12
3008848	12
20013964	14
20034559	12

Tab. A

## Output

Fig. 1 shows the output of the pump at the nozzle. The pumps are factory-adjusted to the standard pressure, in accordance with Tab. A.



Viscosity: 5 cSt Speed: 2850 gpm

Fig. 1

## Pump venting



WARNING

When the system is started up with empty piping, the pump must not operate in dry conditions for more than 5 minutes.

- Only necessary with one-pipe systems (Fig. 2). In the system of Fig. 2, just loosen the connection of the vacuumeter 4) (Fig. 5) and wait for the fuel to come out.

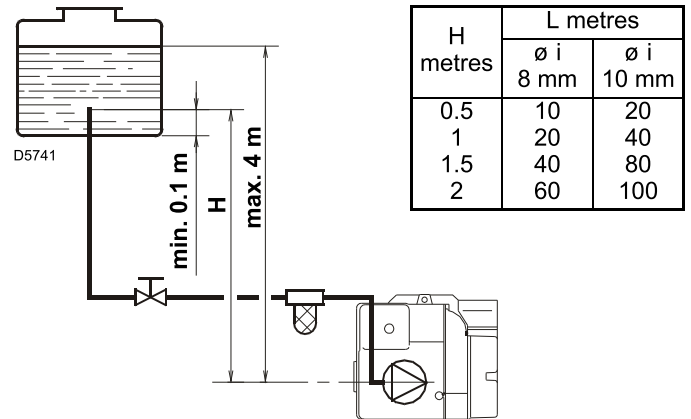


Fig. 2

- In the systems of Fig. 3 and Fig. 4, the air is expelled automatically following burner start-up.

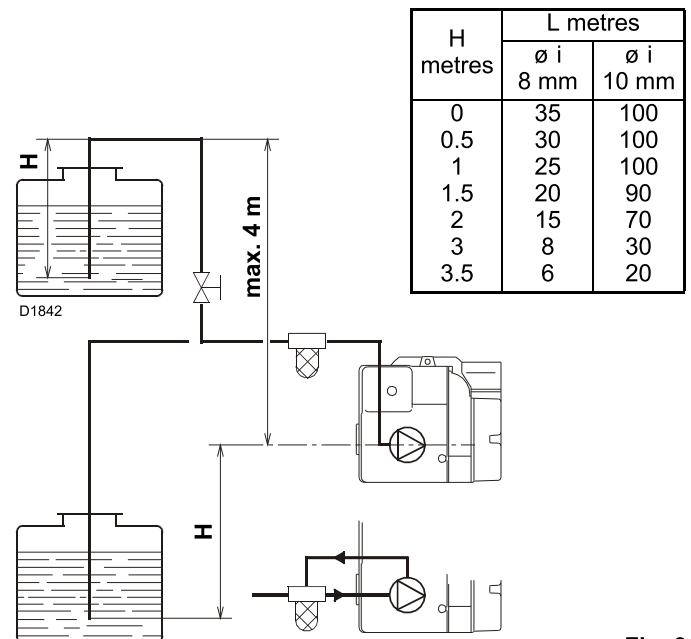


Fig. 3

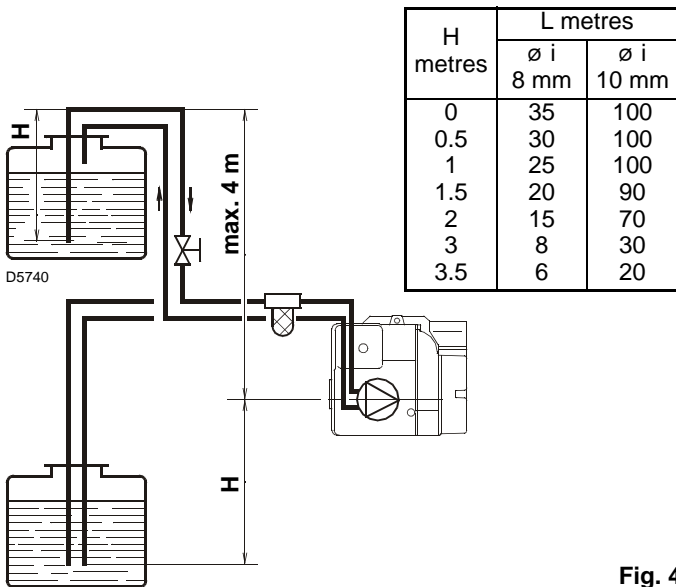


Fig. 4

Key (Fig. 2, Fig. 3 and Fig. 4)

H - Difference of level

ø i - Internal pipe diameter

L - Max. length of the suction line

**OPERATION**

The pump (Fig. 5) is suitable for two-pipe operation, except for the pump code 20034559.

For one-pipe operation, you must:

- loosen the plug 2), tighten the bypass screw 3) (supplied) and retighten the steel plug 2) with a tightening torque of 15 Nm ± 1 Nm.
- Set the pump pressure as described in the burner manual.

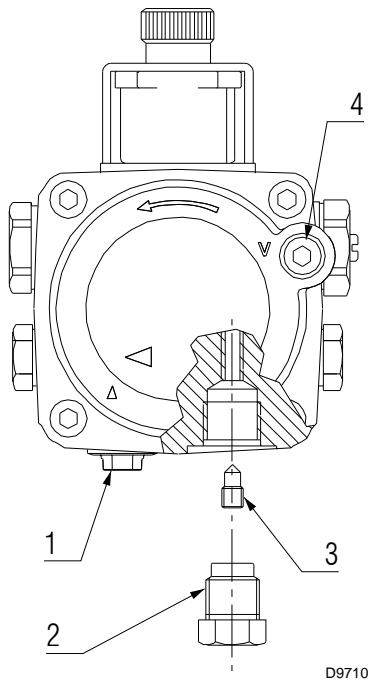


Fig. 5

Key (Fig. 5)

1 Plug

2 Plug

3 Bypass screw

4 Vacuum connection

**INSTALLATION**



DANGER

Power must be cut off before carrying out any installation, maintenance or removal operation.



WARNING

The oil supply (Suction 1) (Fig. 5) blanking plug is made from plastic material. Once removed this should be discarded and not reused under any circumstances.

In single pipe installations the plug supplied in the return line 2) of the pump is made from steel.

**IT IS VERY IMPORTANT that ONLY the steel plug is used for this purpose.**

To replace it:

- replace the connection 3) supplied as standard equipment;
- block the pump by uniformly tightening the 3 screws 1) (Fig. 6) - recommended tightening torque 3 ± 0.3 Nm.



WARNING

Before beginning to use the new RIELLO pump: check the disassembled pump for any dirt.

Proceed as follows:

- loosen and remove the 4 fixing screws 2) (Fig. 6) of the cover 4) and check the condition of the fuel filter. If there is dirt on the inner surface of the pump body, cover or filter, then the fuel tank and relative piping are probably contaminated. Corrective action (cleaning) is therefore necessary
- you are advised to use an additional, good quality filter (with a filtering capacity of max. 15 micron), to be installed on the power supply line.

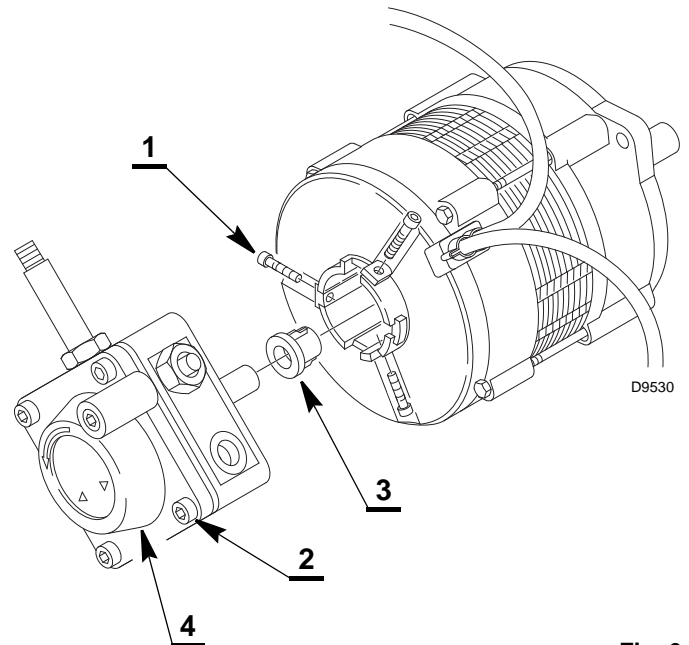


Fig. 6

**NOTE:**

**Contaminated or damaged oil pumps are not covered under the terms and conditions of RIELLO warranty!**

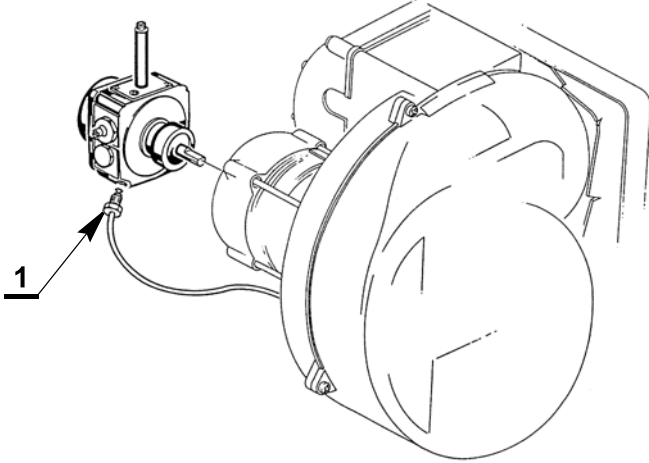
# Pump

## Tightening the pipe coupling



- Tighten the coupling 1) (Fig. 7) with a tightening torque of  $15 \text{ Nm} \pm 1 \text{ Nm}$ .
- Check for any fuel leaks during the first 5 minutes of operation of the burner. If there are any leaks, the pipe must be replaced.

### OLD PUMP



### NEW PUMP

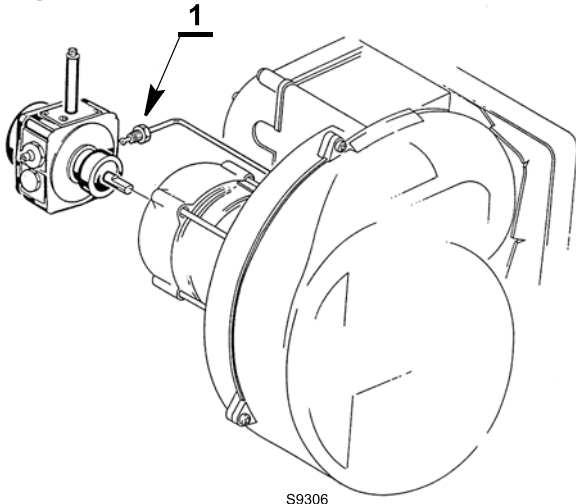


Fig. 7

## MAINTENANCE



**Power must be cut off before carrying out any installation, maintenance or removal operation.**

### Replacing the filter

- Use a hexagonal wrench to loosen by 4mm the screws 1) (Fig. 8) fixing the cover 2).
- Take out the filter 3). Throw away the used filter and assemble a new one.



When replacing the filter, check the old one for impurities and/or residue sucked in by the system. If the old filter is full of such impurities, you are advised to clean the system before assembling the new filter.

- Reassemble the cover 2), paying attention to the positioning of the gasket 4).
- Tighten the screws 1) with a tightening torque of 3.5 Nm.

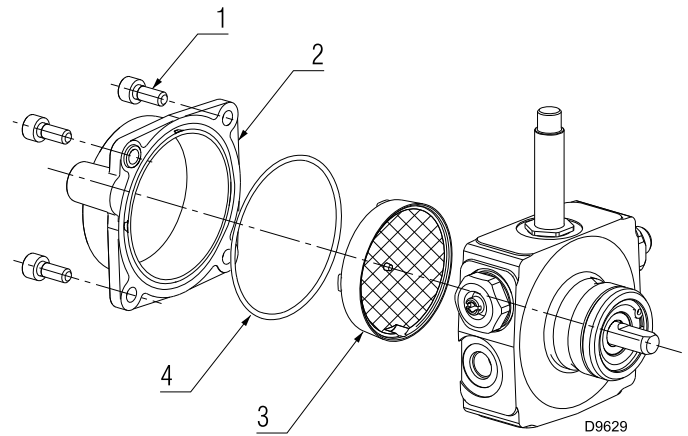


Fig. 8