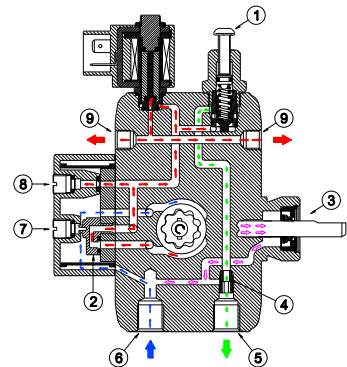




Universal oil pump for oil burners

Type VU



1- Applications

The DELTA *Universal* fuel unit is an efficient and modern oil burner pump. Since its mounting flange, hub and shaft sizes are manufactured to international standards (EN 225), it can be fitted to every type of high pressure oil burner or transfer pump applications. Its features allow an easy pump replacement with every other type of oil pump. The same unit is provided with bilateral nozzle ports and is suitable for both clockwise and counter clockwise rotation.

⚠ WARNING

For the use with low viscosity fuel (lower than 2.5cSt, i.e. Kerosene) standard pump can be used without exceeding 12 bar.

To pump biodiesel or fuel containing it in any percentage, it is necessary the “B” version with special seals. On request the pump can be provided free of nonferrous metals.

This unit must not be used to pump water or acid.

2- Technical specifications

Oil viscosity	1,2 ÷ 12 cSt
Oil temperature	60°C max.
Power consumption	See graphs
Nozzle capacity	See graphs
Pressure range	6 ÷ 18 bar
Suction line vacuum	0,5 bar
Suction line pressure	2 bar
Return line pressure	2 bar
Starting torque	0,1 Nm max.
Rotation speed	3500 rpm max.

Standard strainer
Dimensions (EN 225)
Connections (ISO 228/1)

Nylon mesh 150µ, 20cm²
 Hub Ø32, shaft Ø8
 Inlet – Return : G1/4
 Nozzle port : G1/8
 Pressure – vacuum gauge : G1/

Weight
Standard factory settings

1050 g
 Pressure setting: 10 ±0,3 bar
 Standard coil: 230 VAC 50/60Hz
 Standard cable set: 3 cores, 700 mm

3- Solenoid specifications

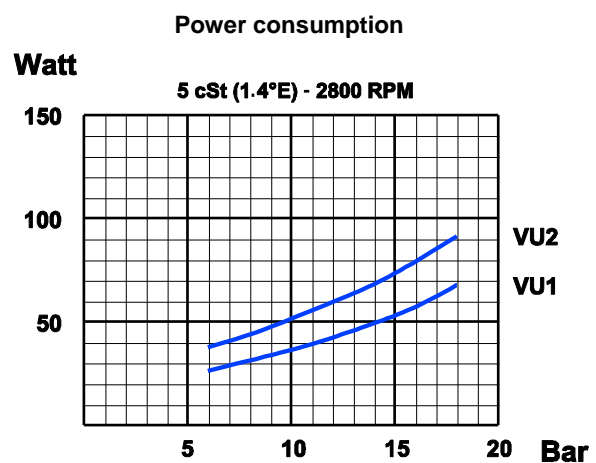
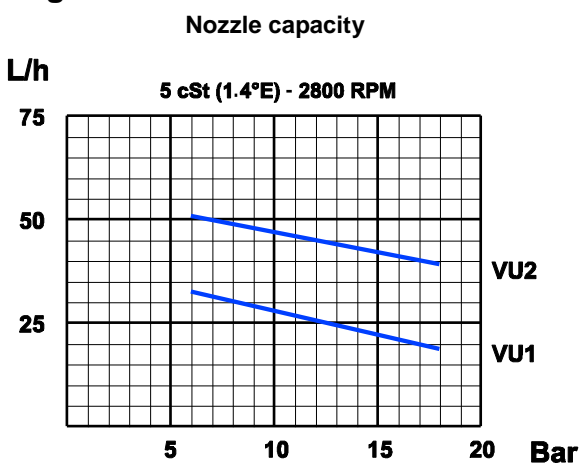
Power absorbed	9 W
Voltage tolerance	-15% / +10%
Ambient temperature	0°C / 60°C
Flow factor (VDI/VDE 2173)	0,059 m ³ /h

Operating pressure
Cut-off pressure
Approval (EN 264)

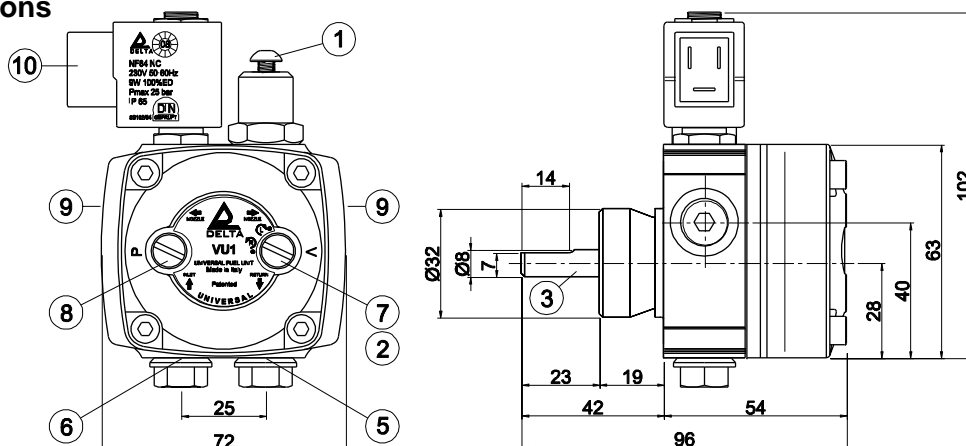
25 bar max.
 6 bar
 TÜV No. 5S102/04



4- Diagrams



5- Overall dimensions



- | | |
|-----------------------|-------------------|
| 1 Pressure regulation | 6 Suction |
| 2 Rotation selector | 7 Vacuum gauge |
| 3 Shaft sealing | 8 Pressure gauge |
| 4 By pass | 9 Nozzle ports |
| 5 Return | 10 Solenoid valve |

6- Bypass installation

To convert the DELTA fuel unit from the two pipe version to the single pipe version, do the following:

- Using a 4 mm Allen key, unscrew the bypass plug from the return port (Fig. 1).
- Fit a 1/4" plug into the return port (Fig. 2).

⚠ WARNING
 In the two pipe version the air is bled through the return port. After conversion, the air must be bled manually, through the pressure gauge port.
 Make sure that the by-pass plug is not used in a single pipe installation, because the fuel unit will not function properly and damage to the pump and burner motor could result.

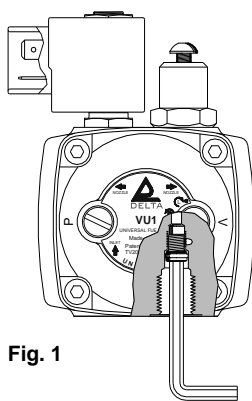


Fig. 1

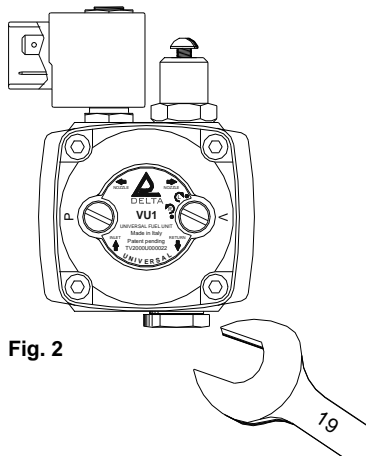


Fig. 2

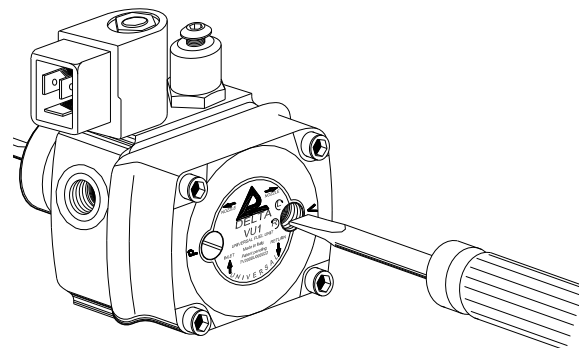


Fig. 3

7- Selection of rotation

The VU unit is provided with a screw for the selection of rotation, located under the vacuum gauge plug (V).

To change the direction of rotation do the following:

- Using a screw driver, remove the 1/8" plug from vacuum gauge port. Under the plug, inside the pump, is the selector screw.
- Turn it 90° up to the stop, to change the rotation (Fig. 3).

After conversion, check the O-ring is located on the bottom of the vacuum port and replace the 1/8" plug.

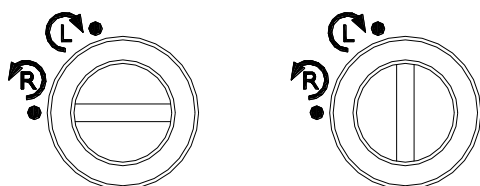


Fig. 4

Clockwise
(seen from shaft end)

Counter Clockwise
(seen from shaft end)

⚠ WARNING
 The selection screw must be oriented with the groove vertical (L) or horizontal (R), otherwise the fuel unit will not function properly and damage could result (Fig.4)