

Burner fuel oil pump and motor

1 Fuel oil pump

The fuel oil pump is a gear-wheel pump which provides an operating pressure up to 30 bar. The fuel oil pump is equipped with a built-in pressure regulator with a fast working valve to keep a constant pressure. An illustration of the burner fuel oil pump is shown in Figure 1.

Attention: Please note that the pump is not of the self-priming type. During commissioning the fuel oil pump and oil lines must be filled with oil and properly vented before the burner motor is started. Failure to comply may cause cavitation damage to the fuel oil pump.

Illustration of the burner fuel oil pump

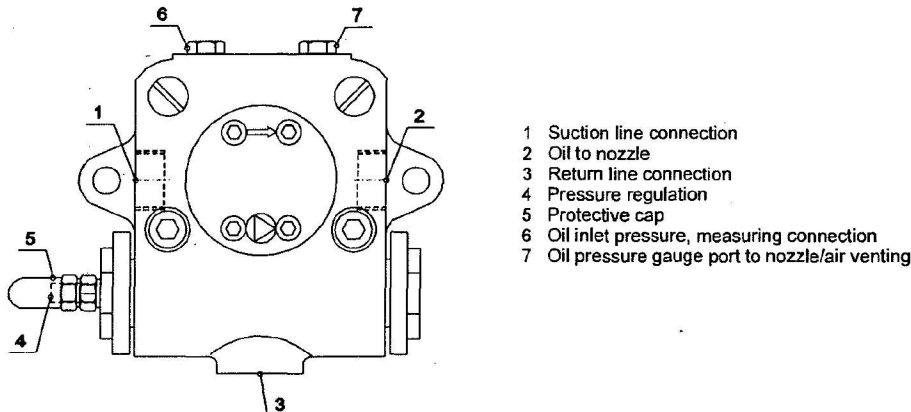


Figure 1

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1.1 Commissioning of the fuel oil pump

The oil line on the suction side of the pump must be primed and the pump vented before commissioning, otherwise the pump will be damaged due to cavitation. For oil pump venting, loosen the gauge connection/venting plug (7) after which the burner should operate for a while. Air comes out of the hole in bubbles. Retighten the plug carefully when there are no more bubbles (do not remove the plug from the hole).

The viscosity of the oil to the pump should be between 4 – 70 cSt. The diagram in Figure 2 shows the required oil inlet pressure and temperature to the pump.