The **AUR** oil pump has a built-in solenoid valve which controls the regulator cut-off valve giving fast cut-off and cut-on function independent of the rotational speed.

APPLICATIONS

- Kerosene, light oil, B10 heating oil/biofuel blend(as defined in DIN V51603-6).
- Two-pipe system.
- Compatible with solenoid coil ref. 3002279

PUMP OPERATING PRINCIPLE

The gear set draws oil from the tank through the built-in filter and transfers it to the valve that regulates the oil pressure to the nozzle line. All oil that does not go through the nozzle line will be by-passed through the valve back to the return line in two pipe installation or, if it is a one-pipe installation, back to suction port in the gear set . In that case, the by-pass plug must be removed from the return port, and the return port sealed by steel plug and washer.

The solenoid valve of the AUR pump is of the "normally opened" type.

When the solenoid valve is non-activated, the by-pass channel between the pressure and return sides of the valve is open. No pressure will then be built up to open the valve; it does not matter which speed the gear set has.

When the solenoid is activated, this by-pass channel is closed and because of the full speed of the gear set, the pressure necessary to open the valve will be built up very rapidly, which gives a very sharp cut-on function.

Cut-off :

When the burner stops, the solenoid opens the by-pass at the same moment, which drains all the oil down to the return, and the nozzle valve closes immediately. This gives a very sharp cut-off function.
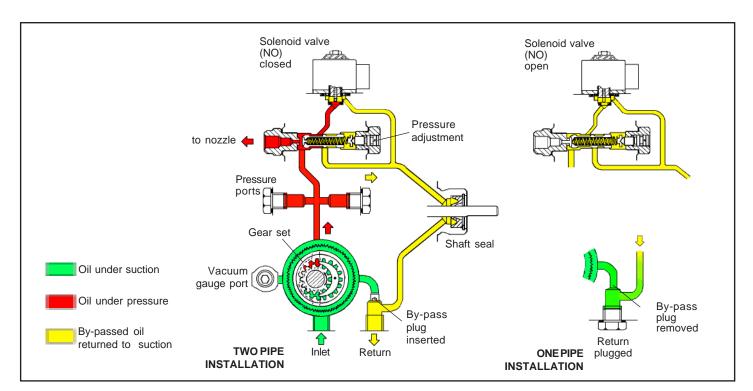
The cut-on and cut-off can be actuated regardless of motor speed and have an extremely fast response.

When the solenoid is not activated, the torque requirement is low up to full motor speed.

Bleed :

Bleeding in two pipe operation is automatic, but it may be accelerated by opening a pressure port.

In one pipe operation, a pressure port must be opened to bleed the system.

TECHNICAL DATA

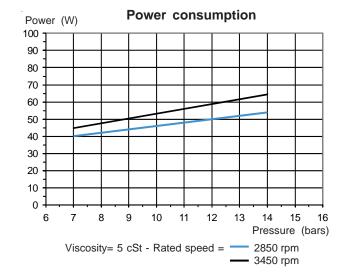### General

Mounting	Hub mounting according to EN 225
Connection threads	Cylindrical according to ISO 228/1
Inlet and return	G 1/4
Nozzle outlet	G 1/8
Pressure ports	G 1/8 and M8x1
Vacuum gauge port	G 1/8
Valve function	Pressure regulating and cut-off* *(*cut-off function only assured for specified pressure range)*
Strainer	Open area : 6 cm² - Opening size: 150 µm
Shaft	Ø 8 mm
By-pass plug	inserted in return port for two-pipe system ; to be removed with a 4 mm Allen key for one pipe system.
Shaft rotation and nozzle location	Clockwise rotation / right hand nozzle (seen from shaft end)
Weight	1 kg

Pump capacity

Capacity (l/h)

Viscosity= 5 cSt - Rated speed = ▬ 2850 rpm
▬ 3450 rpm

Data shown take into account a wear margin.
Do not oversize the pump when selecting the gear capacity.

Hydraulic Data

Nozzle pressure range	7 - 14 bars
Delivery pressure setting	12 bars
Viscosity range	1,8 - 12 mm²/s (cSt)
Oil temperature	0 - 60°C in the pump
Inlet pressure	2 bars max.
Return pressure	2 bars max.
Suction height	0,45 bars max. vacuum to prevent air separation from oil
Rated speed	3600 rpm max.
Torque (@ 45 rpm)	0,10 m.N

Power consumption

Power (W)

Viscosity= 5 cSt - Rated speed = ▬ 2850 rpm
▬ 3450 rpm

DIMENSIONS

Inlet ❶ and Return ❷ with direct sealing (sealing washers can be used too)

G1/8

M8x1

❶ Suction ❷ Return and internal by-pass plug ❸ Nozzle outlet ❹ Pressure port ❺ Vacuum gauge port ❻ Pressure adjustment