

Transfer Oil Pump Type RSAM Size 28, 40, 60, 95, 125



General Data Sheet

For specific information on this product, please contact Danfoss Burner Components

RSAM transfer oil pumps are designed for feed and transport applications in oil burner heating systems and are available in 5 sizes up to 255 l/h.

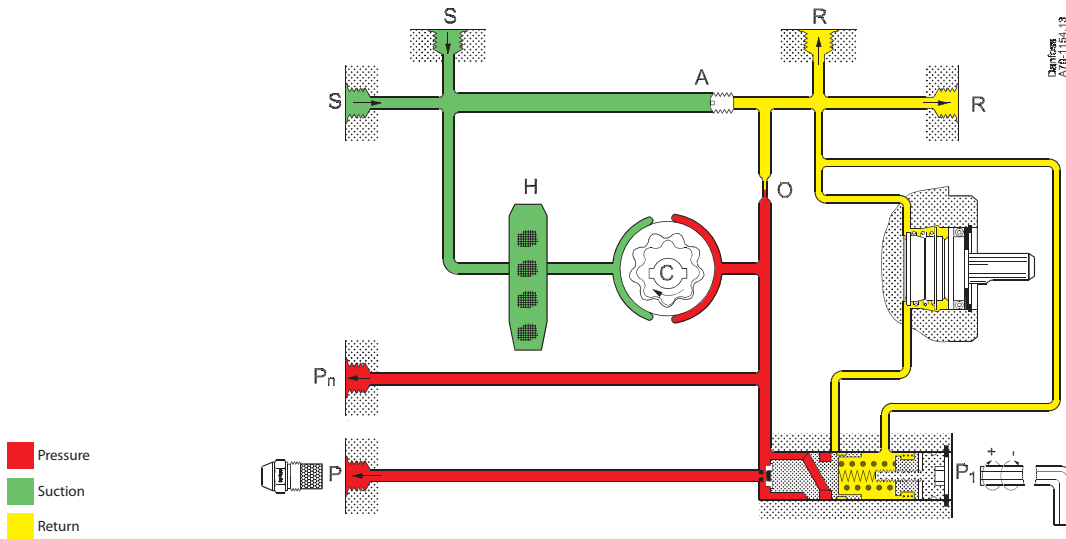
The pumps have a built-in pressure regulator with shut-off function.

Typical RSAM-application areas

- Suction line too long
- Suction high between tank and burner pump too large
- Suction pressure too high
- Several burners on the same feed line
- Transportation of fuel between tanks

Pump Application and Features

- Light oil and Kerosene
- 1- or 2-pipe operation
- 1-stage
- Built-in pressure regulator with shut-off
- Ring filter



Function

From the suction inlet (S) oil is drawn through the gear set, where the pressure is increased. By means of the piston and the spring in the pressure regulator the pressure is kept constant at the value set on adjustment screw (P₁).

In 2-pipe systems the excess oil is led back to the return outlet (R). In 1-pipe systems with plugged return outlet (R) and removed by-pass screw (A), the oil is returned internally to the gear set (see details in below figure).

When the pump is stopped the pressure drops and the spring force in the pressure regulator will move the piston until it seats and the oil flow is shut off effectively.

Bleeding

In 2-pipe systems the pumps are self-priming, i.e. bleeding is performed via the constriction (O) to the return outlet (R).

In 1-pipe systems with plugged return outlet (R) and by-pass screw (A) removed, bleeding must be performed through the pressure gauge port (P_n).

Installation

It is important that the pump is installed in a way that the suction pressure does not exceed the permissible value, see Technical Data.

Electrical installation

It is recommended that the motor is protected by a line circuit breaker.

Warranty

For pumps used outside the stated technical data and used with oil containing abrasive particles Danfoss cannot give any warranty.

Pump connections

Example shows L-rotation pump.

P₁ Pressure adjustment
S Suction inlet G 1/4
R Return outlet G 1/4
P Pressure outlet G 1/8
P_n Pressure gauge port G 1/8
H Filter

Changeover between 1- and 2-pipe operation.

2-pipe: Screw (A) fitted
 1-pipe: Screw (A) removed

Technical Data

RSAM	Size	28	40	60	95	125
Viscosity range (measured in suction inlet)	cSt. (mm ² /s)	1.3 - 75				
Filter area/mesh	cm ² /mm	75/150			170/150	
Pressure range	bar	1-5				
Factory setting	bar	min.				
Max. pressure in suction inlet/return outlet	bar	4				
Max. power consumption at 5 bar	W	66	71	94	96	156
Speed	min ⁻¹	max. 2800				
Capacity at 5 bar, 4.5 cSt., 20°C	l/h	55	85	125	200	280
Power supply		230 V 50 Hz				
Ambient temperature	°C	-20 to +70				
Storage temperature	°C	-25 to +70				
Temperature of medium	°C	-10 to +70				
Weight	kg	8.0			8.4	

Dimensions and Electrical connection

