Anglo Nordic
Burner & Boiler Products

Technical Data

OIL TRANSFER PUMP SETS

Please read carefully

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PRODUCT DESCRIPTION

These self-contained units offer a simple method of transferring oil for many applications:

(a) Providing a constant pressurized supply of oil to a ring main, which is serving several oil burning appliances. (b) Filling daily service tanks from main storage tanks. (c) Delivering fuel to high-level burner installations.

The pump sets are supplied completely assembled (the ANTP12, 22, 40 and 60 models are supplied on drip trays suitable for floor or wall mounting and incorporate an in line filter) and are fitted with either Suntec or Delta gear pumps giving quiet reliable operation.

All models, except T series units, have a pressure-regulating valve incorporated in the pump. On the T series a separate TV valve is required. The low capacity pump sets are supplied as standard for a delivery pressure range between 0.5 - 3 Bar (Suntec pump) or 1 - 4bar (Delta pump). The medium capacity pumps supplied as standard for delivery pressure range 2.8 – 5.6 Bar whilst the high capacity transfer pump units are supplied for a delivery pressure between 6.8 – 39.5 Bar. Higher or lower pressure ranges are available to special order. The minimum obtainable pressure is approximately 8 psi (0.5 bar using a Suntec pump) with all transfer pump units a pressure-reducing valve must be fitted (1 per appliance). According to the unit model type all grades of fuel from light distillate to heavy residual oils can be handled by the units. On residual oil models a positive head of oil must be on the pump at all times. The maximum oil temperature on light oils is 70°C and 90°C on heavy oil. However, to special order some models can be supplied suitable for oil up to 120°C.

On the light oil pump sets suction lifts of up to 20 feet can be obtained as long as a non-return valve is fitted at the foot of the suction line and the suction line is fully primed prior to starting the unit which is supplied separately with each Under no circumstances must the by-pass plug be fitted in the unit when used on a single pipe system otherwise damage to the oil seat will occur.

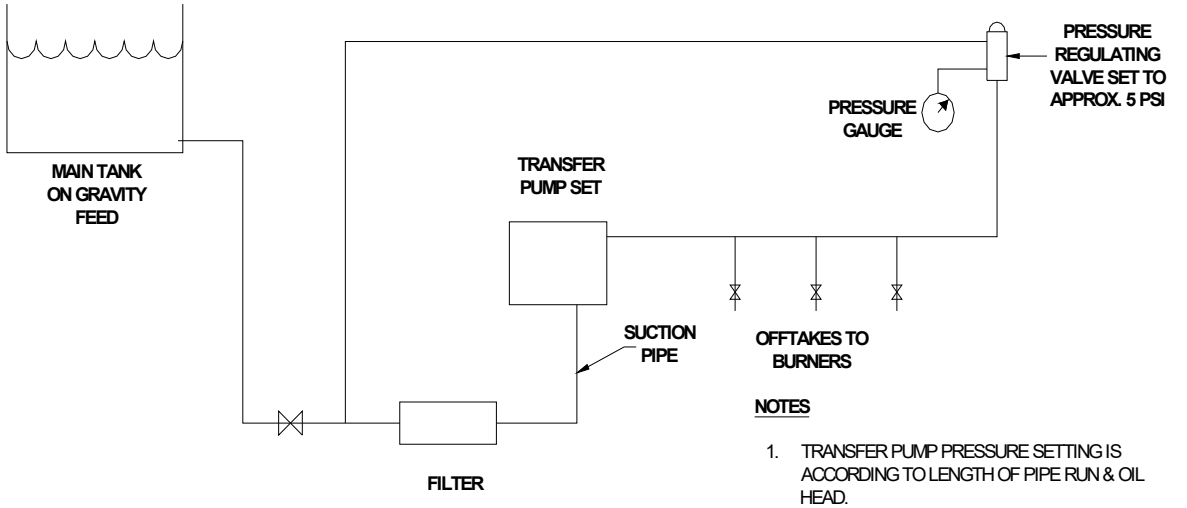
The units are not supplied with switchgear, starters, pressure reducing valves or non-return valves the equipment is not weatherproof; therefore, if the unit is installed in the open it must be suitably protected.

Two useful rules of thumb to assist in pump sizing:

(a) On a ring main system, the pump should be sized to pump 25% in excess of the total swept volume of all burner pumps drawing from the ring main.

(b) On the discharge side of the unit 1 psi on the pump set will push light oil up approximately 1.5 feet (450mm)

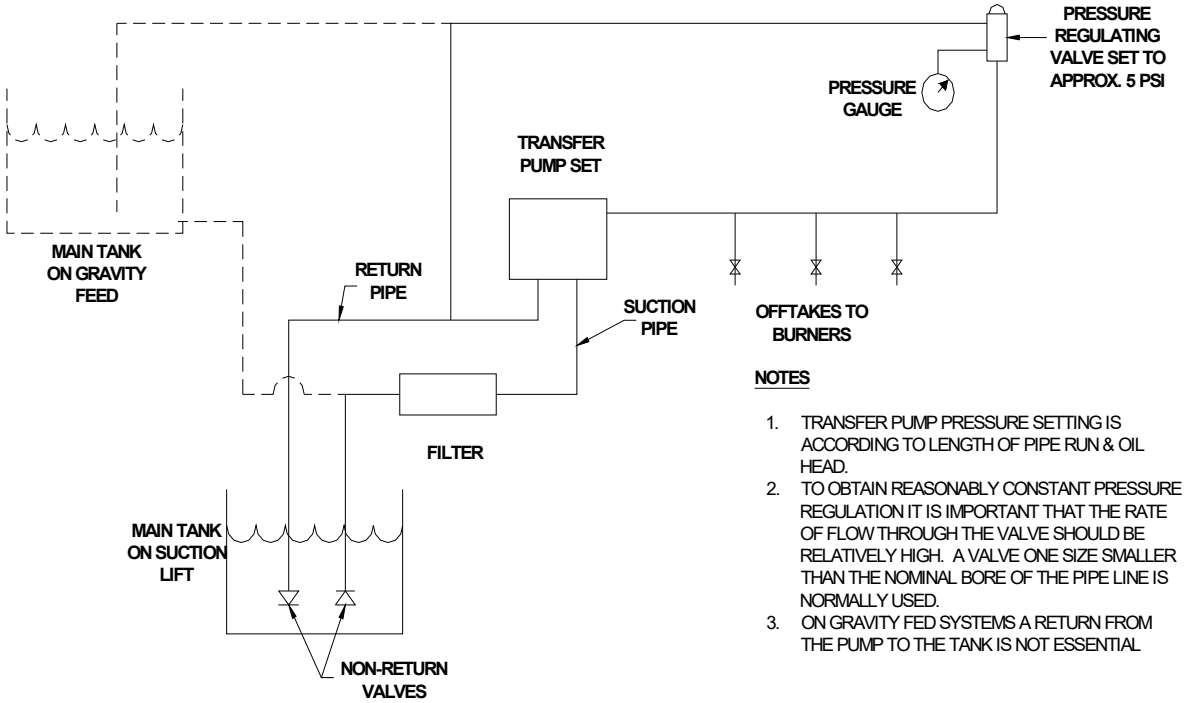
LOW PRESSURE MAIN SCHEMATIC



NOTES

1. TRANSFER PUMP PRESSURE SETTING IS ACCORDING TO LENGTH OF PIPE RUN & OIL HEAD.
2. TO OBTAIN REASONABLY CONSTANT PRESSURE REGULATION IT IS IMPORTANT THAT THE RATE OF FLOW THROUGH THE VALVE SHOULD BE RELATIVELY HIGH. A VALVE ONE SIZE SMALLER THAN THE NOMINAL BORE OF THE PIPE LINE IS NORMALLY USED.
3. ON GRAVITY FED SYSTEMS A RETURN FROM THE PUMP TO THE TANK IS NOT ESSENTIAL

LOW PRESSURE RING MAIN SCHEMATIC



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ORDERING

When ordering please give the following information to enable us to supply the correct unit:

(1) Grade of oil

(2) Temperature of oil

(3) Delivery side oil output in US Gallons per hour or litres per hour.

(4) Electrical supply

(5) Position of fuel tank in relation to unit (vertical distance only) above or below pump set.

(6) Total length of pipe on suction side

(7) Diameter of pipe on suction side

(8) Diameter of pipe on delivery side

IMPORTANT INSTALLATION DETAILS

1. The pump unit is suitable for a single pipe system with gravity feed to the pump.

2. If the pump unit is situated above the supply tank, then the pump unit must be converted to a two-pipe system. This is achieved by removing the return port plug and inserting the by-pass plug in the appropriate place.

3. The maximum lift from the lowest point in the tank is 3 metres (on a two-pipe system)

4. If the by-pass plug is not inserted on a two-pipe system then the pump will not operate.

5. Once oil is in the pump there should be no problems with any delivery length or height.

6. The pump unit can operate intermittently or continuously.

7. The motor is fan-cooled – ensure that the rear of the pump is completely clear.

PRESSURE REDUCING VALVE

TYPE ODRE-M

For use with oil transfer pumps. The oil pressure regulator keeps the specified outlet pressure constant within defined limits regardless of fluctuations in the inlet pressure and in changes in flow and temperature

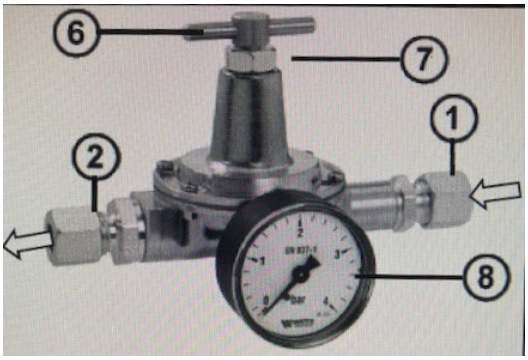
BACK PRESSURE RELEIF VALVE

TYPE MC

The back-pressure relief valve type MC is intended to maintain a constant pressure on the inlet side. It has been designed with a metal to metal seat and although not suitable for installations where a drip tight shut off is required. It is suitable for use with oil, water and some gases.
This unit can be used to maintain a constant pressure in an oil ring main or for by-pass protection on pumps as used in domestic water systems.
With a body constructed of bronze, 1t has a stainless steel ball seat and rust proof Monel spring with adjusting screw and lock nut. It 1s suitable for inlet pressure of 15 lb/in2 to 125 lb/in2

Technical Information

Pressure Reducing Valve
ODRE-M



KEY

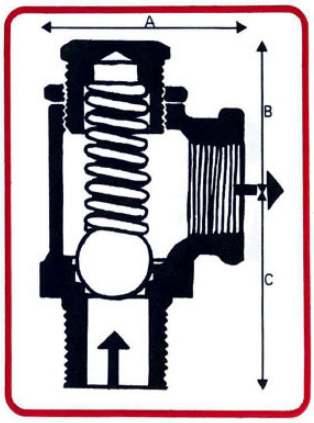
1) Inlet
2) Outlet
6) Set Screw
7) Locknut
8) Pressure Gauge

Inlet Pressure	0.5 to 10bar
Outlet Pressure Pd	0.2 to 5bar (Adjustable)
Nominal Flow Rate	2 to 180L/H
Ambient Temperature	0°C - + 60°C
10mm connections	
(Other sizes and flow rates available)	

Back Pressure Relief Valve
Type MC Specification

Dimensions						Pipe Size	Weight	
A		B		C				
in	mm	in	mm	in	mm	in	lb	kg
1 5/8	41	1 3/4	44	1 1/2	38	1/2	1/2	0.34
2	51	2	51	2	51	3/4	1	0.45
2.25	57	2 3/8	60	2 1/4	57	1	1 1/2	0.68

Pressure range 15 to 125 lb/in2



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