

**This is a general specification leaflet ; for specific applications not covered herein, contact Suntec.**

The SUNTEC T oil pump is specially designed for industrial heating applications using light or heavy oils with high capacity. It is fitted with a preheater location to render cold starting easier.

**APPLICATIONS**

- Light oil, B10 heating oil/biofuel blend (as defined in DIN V51603-6) and kerosene.
- SUNTEC recommend the use of a SUNTEC TV valve to regulate the pump pressure.

**PUMP OPERATING PRINCIPLE**

The gear set draws oil from the tank and transfers it to an external valve that regulates the oil pressure.

**Bleed :**

The plug of the pressure gauge port must be loosened until the air is evacuated from the system.

**Note :**

The bypass plug inserted between high pressure and shaft seal is only intended to change the pump rotation, check the presence of this plug with a 4 mm Allen key in the pressure outlet of the pump.

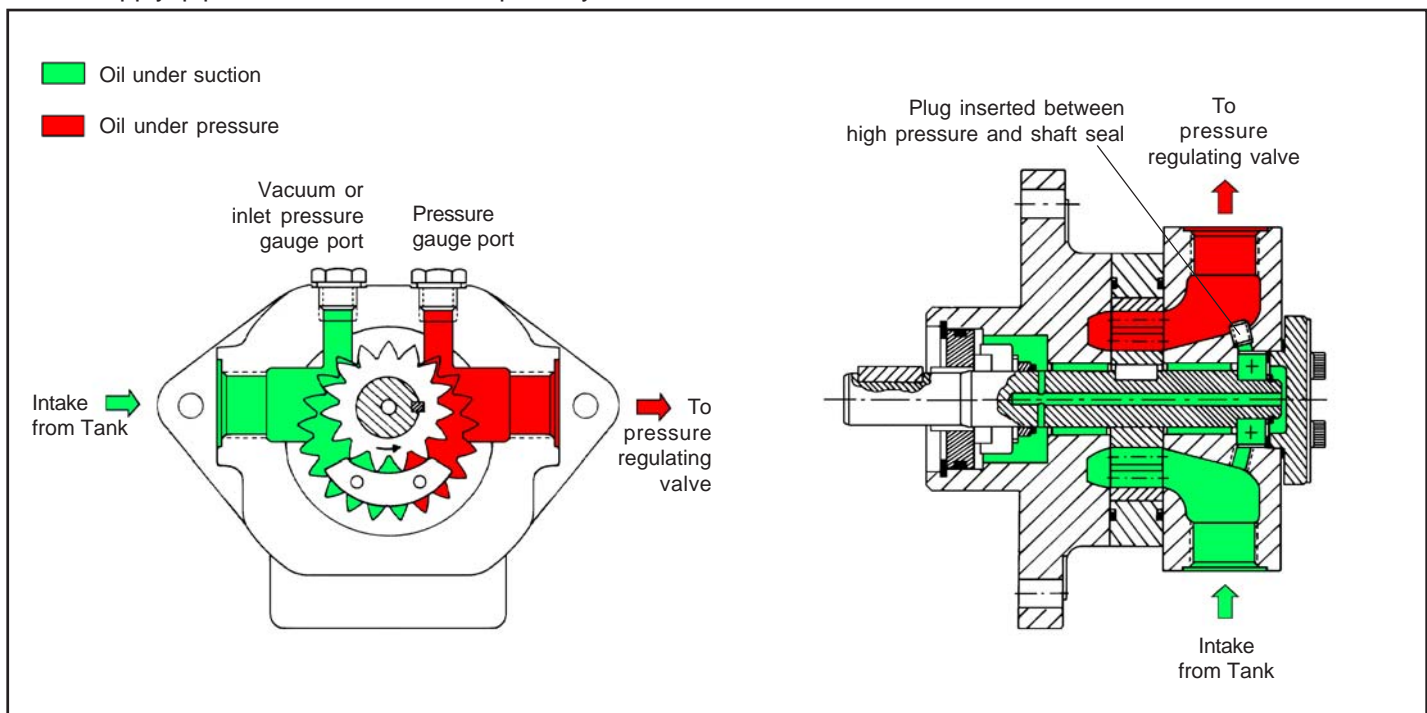
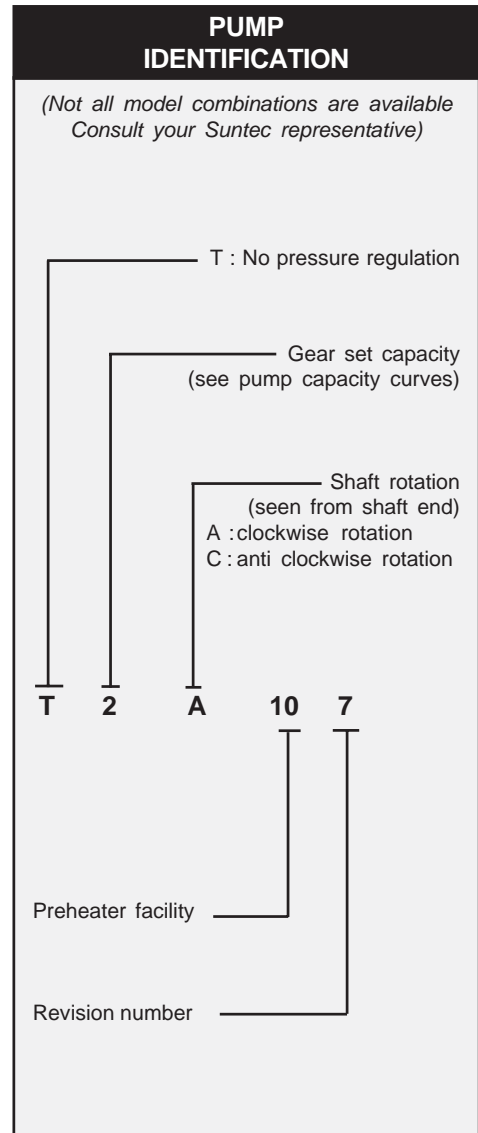
*Caution : changing the direction of pump rotation involves changing all pump connections.*

**PREHEATING FACILITY**

Care should be taken to avoid starting pump with high viscosity cold oil leading to pump and coupling damage. For this reason, the T pump body includes a cavity to accept an electric preheater. This cavity has been located to give maximum heat transfer from the heater to the oil in the pump without direct contact between the heater cartridge and the oil.

Heaters should be connected for a period of time prior to starting the pump. When the right temperature is reached, they can be switched off or left permanently switched on to maintain fluid oil in the pump during the periodic burner shut-downs.

The oil supply, pipes and filters must be separately heated.



## TECHNICAL DATA

### General

|                     |                                    |   |             |
|---------------------|------------------------------------|---|-------------|
| Mounting            | Flange mounting                    |   |             |
| Connection threads  | Cylindrical according to ISO 228/1 |   |             |
| Inlet               | G 3/4                              |   |             |
| Pressure outlet     | G 3/4                              |   |             |
| Pressure gauge port | G 1/4                              |   |             |
| Vacuum Gauge port   | G 1/4                              |   |             |
| Shaft               | Ø 20 mm                            |   |             |
| Weight              | 7,8 kg (T2)                        | - | 8,1 kg (T3) |
|                     | 8,7 kg (T4)                        | - | 9,4 kg (T5) |

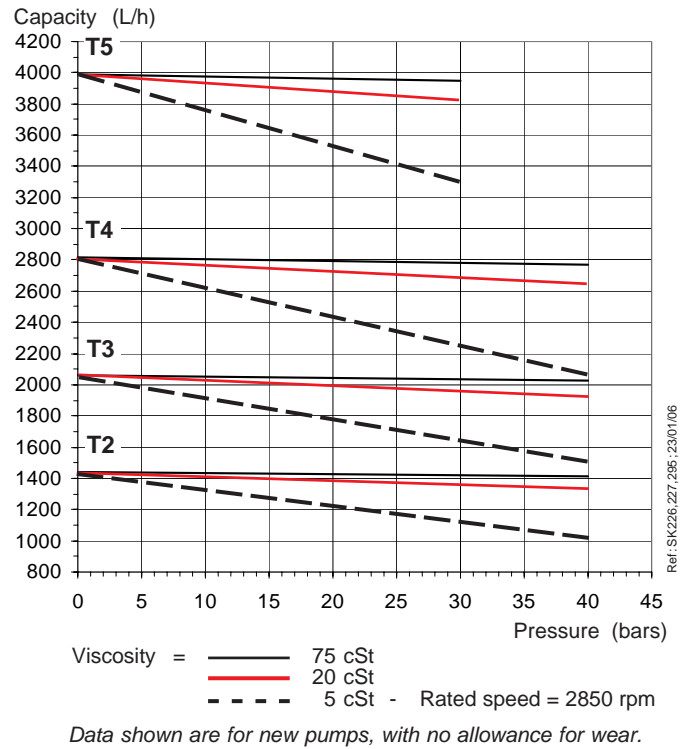
### Hydraulic data

|                       |                                                                                                                                                                     |                                                          |  |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|--|
| Nozzle pressure range | 40 bars max. (T2, T3, T4)                                                                                                                                           |                                                          |  |
|                       | 30 bars max. (T5)                                                                                                                                                   |                                                          |  |
| Operating viscosity   | 2 - 75 mm <sup>2</sup> /s (cSt)                                                                                                                                     |                                                          |  |
|                       | <i>(Higher viscosity oil can be used by feeding the pump and by heating the oil to lower its viscosity under 75 cSt. For kerosene applications, contact SUNTEC)</i> |                                                          |  |
| Oil temperature       | 0 - 150°C in the pump                                                                                                                                               |                                                          |  |
| Inlet pressure        | light oil :                                                                                                                                                         | 0,45 bars max. vacuum to prevent air separation from oil |  |
|                       | heavy oil :                                                                                                                                                         | 5 bars max.                                              |  |
| Rated speed           | 3600 rpm max.                                                                                                                                                       |                                                          |  |
| Torque (@ 40 rpm)     | 0,4 N.m                                                                                                                                                             |                                                          |  |

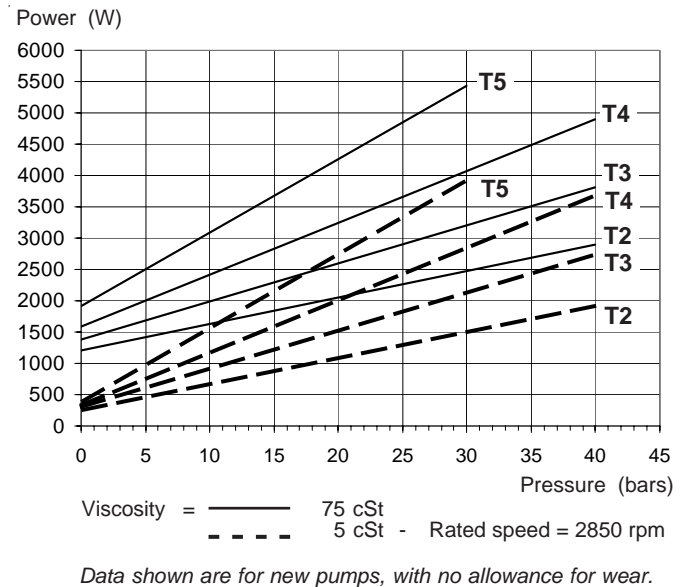
### Choice of heater

|           |                       |
|-----------|-----------------------|
| Cartridge | Ø 12 mm               |
| Fitting   | according to EN 50262 |
| Rating    | 80-100 W              |

## Pump capacity



## Power consumption



## PUMP DIMENSIONS

Example shows pump with "A" rotation and serial number <sup>3</sup> 50 000. - Reverse all pump connections for "C" rotation.

