

## **PUMP TYPE T**

# T

T - 11 - Ed 20 - January 2025

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.

# COMPATIBILITY

- Domestic oil, HVO, B100.
- 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.

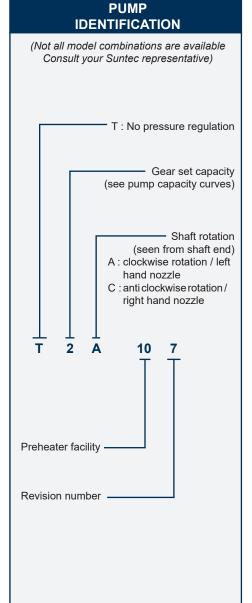
Caution : changing the direction of pump rotation involves changing all pump connections.

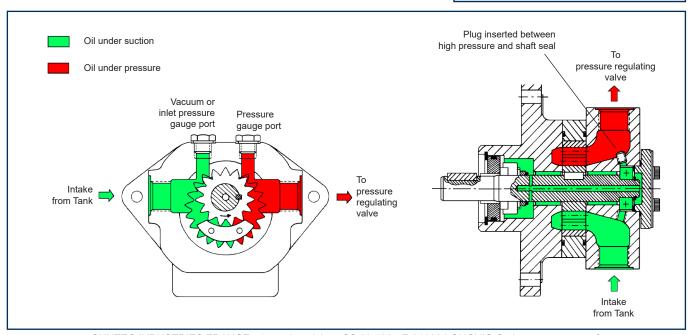
## PREHEATING FACILITY

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.





## **Pump capacity**

### 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 mm²/s (cSt)	

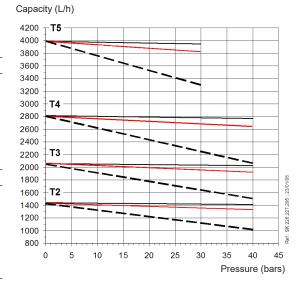
(Higher viscosity oil can be used by feeding the pump and by heating the oil to lower its viscosity under 75 cSt. For kerosene applications, contact SUNTEC).

Oil temperature	0 - 150°C	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	ı max.		
Torque (@ 40 rpm)	0,4 N.m			

### Choice of heater

Suction

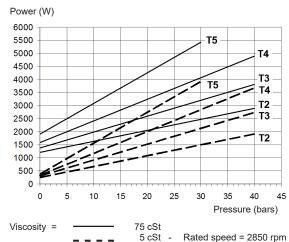
Cartridge	Ø 12 mm	
Fitting	according to EN 50262	
Rating	80-100 W	





Data shown are for new pumps, with no allowance for wear.

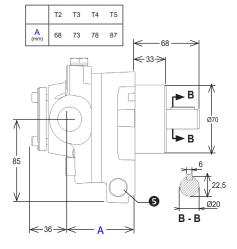
## **Power consumption**



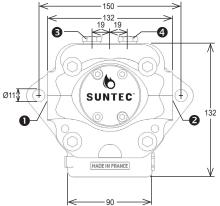
Data shown are for new pumps, with no allowance for wear.

# PUMP DIMENSIONS (in mm)

Example shows pump with "A" rotation and serial number  $\geq$  50 000. - Reverse all pump connections for "C" rotation.



Pressure outlet and internal by-pass plug



Wacuum or inlet pressure gauge port

Ø19 min
M16x1,5

1.5 max
8 min
12 min
71,5 min

71,5 min

Pressure gauge port

Preheater cavity