



OIL PUMP TYPE TA GEAR SIZES 2-3-4-5

TA

TA - 11 - Ed 7 - May 2007

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

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

APPLICATIONS

- Light and heavy oil (for kerosene applications, contact SUNTEC).
- One or two-pipe system.

PUMP OPERATING PRINCIPLE

The gear set draws oil from the tank and transfers it to the valve that regulates the oil pressure to the nozzle line. All oil which does not go through the nozzle line will be dumped through the valve back to the return line in two pipe installation or, if it is a one-pipe installation, back to the gear-set.

Bleed :

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

Note :

All TA models are delivered for two-pipe system (by-pass plug fitted in vacuum gauge port).

For one-pipe system, the by-pass plug must be removed and the return port sealed by steel plug and washer.

PREHEATING FACILITY

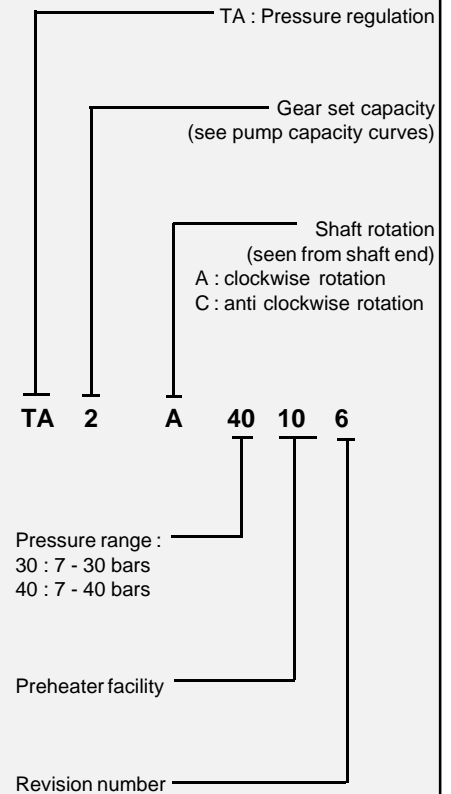
Care should be taken to avoid starting pump with high viscosity cold oil leading to pump and coupling damage. For this reason, the TA pump body includes a drilling to accept an electric preheater. This drilling has been located to give maximum heat transfer from the heater to the oil in the pump without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

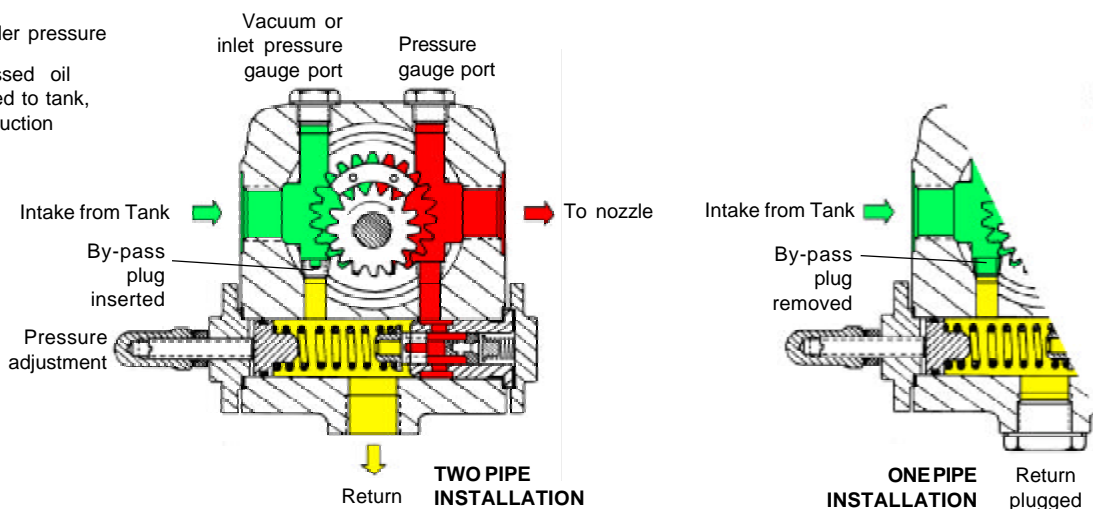
The oil supply, pipes and filters must be separately heated.

PUMP IDENTIFICATION

(Not all model combinations are available
Consult your Suntec representative)



- Oil under suction
- Oil under pressure
- By-passed oil returned to tank, or to suction



TECHNICAL DATA

General

Mounting	Flange mounting		
Connection threads	Cylindrical according to ISO 228/1		
Inlet and return	G 1/2		
Nozzle outlet	G 1/2		
Pressure gauge port	G 1/4		
Vacuum gauge port	G 1/4		
Shaft	Ø 12 mm		
By-pass plug	Inserted in vacuum gauge port for 2 pipe system; to be removed with a 3/16" Allen key for 1 pipe system		
Weight	5,4 kg (TA2)	-	5,7 kg (TA3)
	6 kg (TA4)	-	6,4 kg (TA5)

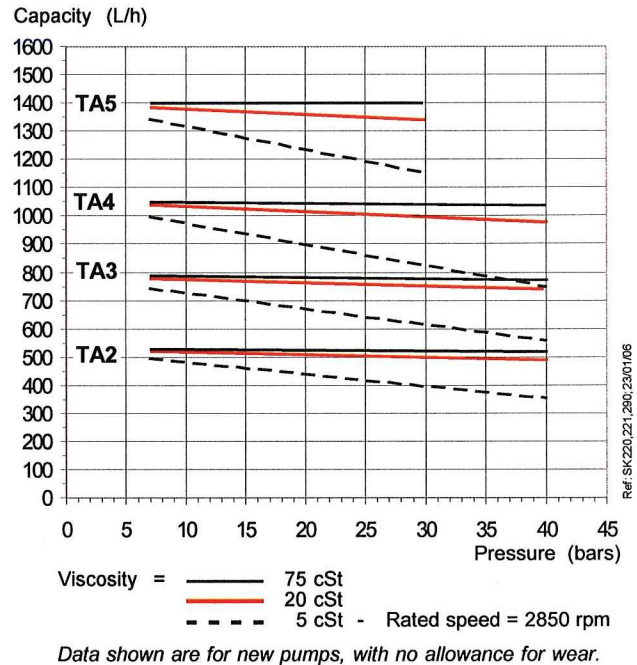
Hydraulic data

Nozzle pressure ranges	30 : 7 - 30 bars		
	40 : 7 - 40 bars		
Delivery pressure setting	30 bars		
Operating viscosity	3 - 75 mm ² /s (cSt)		
	<i>(Higher viscosity oil can be used by feeding the pump or 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.	
Return pressure	light oil :	5 bars max.	
	heavy oil :	5 bars max.	
Rated speed	3600 rpm max.		
Torque (@ 40 rpm)	0,3 N.m		

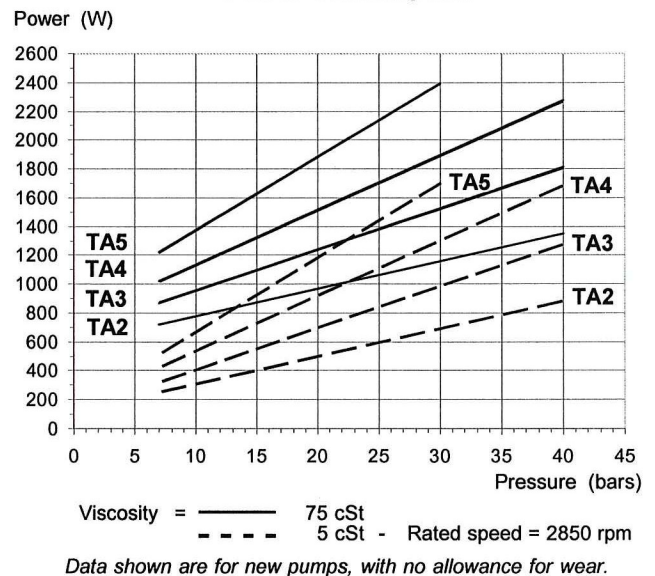
Choice of heater

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

Pump capacity



Power consumption



PUMP DIMENSIONS

Example shows "C" rotation - Reverse all pump connections for "A" rotation.

