



SC1 PUMP TYPE ONE STEP

This is a general specification leaflet; for specific applications not covered herein, contact SUNTEC. All information and data given on this specification are for information only.

This SUNTEC **SC1** combustible pump has a reduced gearset which allows the pump to consume less power. Its modular and compact design allows to fit easily into any environment. It has an integrated solenoid valve that controls the built-in pressure regulator, which allows a speed and independent shutdown and opening.

COMPATIBILITY

- Domestic oil, HVO, B100 (biofuel blend with the addition up to 100% FAME, as defined in DIN SPEC 51603-6 and EN 14214)
- One or two-pipe system

PUMP OPERATING PRINCIPLE

The gear set draws oil from the tank through the built-in filter and transfers it to the regulator which allows to regulate the pressure to the nozzle line.

Cut-off:

The solenoid valve of this pump is of the "normally closed" type. This design ensures an extremely fast response, in accordance with the different operating phases of the burner, and does not depend on the motor speed.

When the solenoid is non-activated, and all oil pressurized by the gear set passes through the regulator to the suction or return line, depending upon pipe arrangement.

As soon as the solenoid is activated, oil passes to the nozzle line at the pressure set by the pressure regulating valve.

Bleed:

Bleeding in two and one pipe operation is carried out by unscrewing the pressure port.

Installation : Note that configuration is not reversible.

- Two pipe installation:

All oil that does not go through the nozzle line will be dumped through the valve back to the return line.

- One pipe installation:

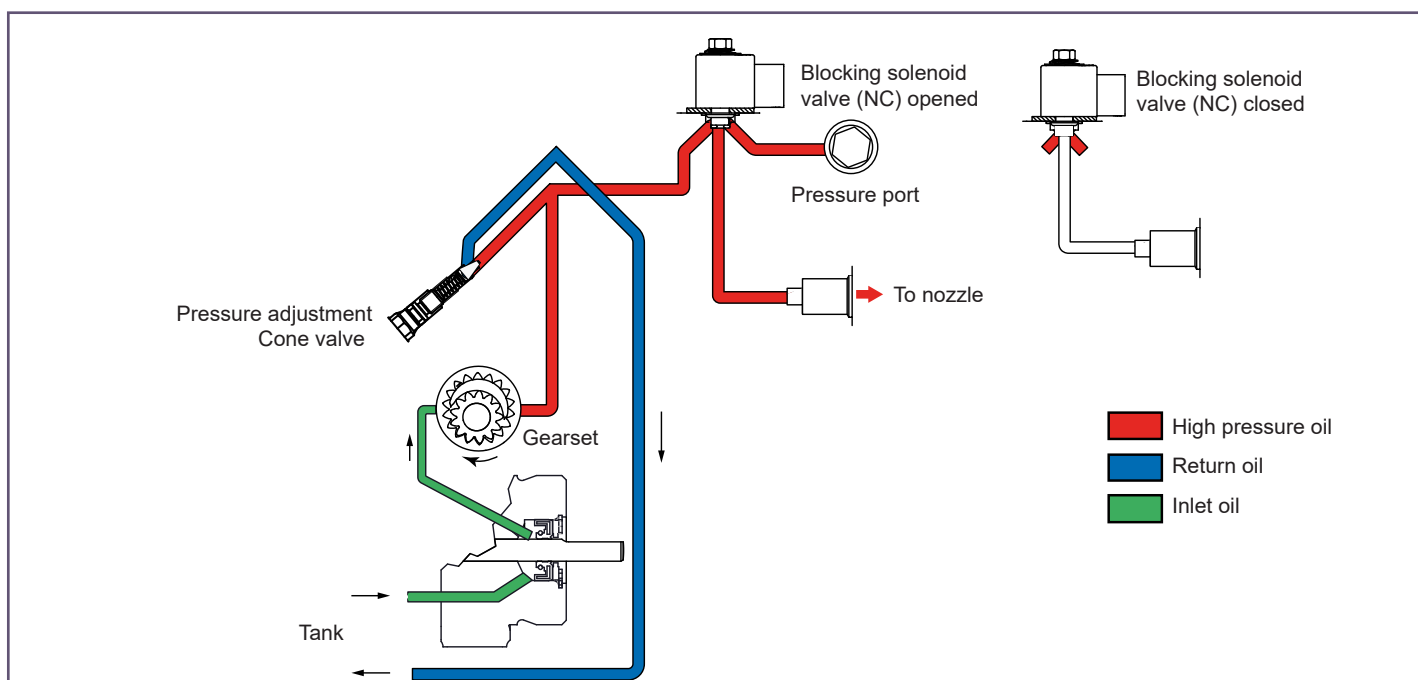
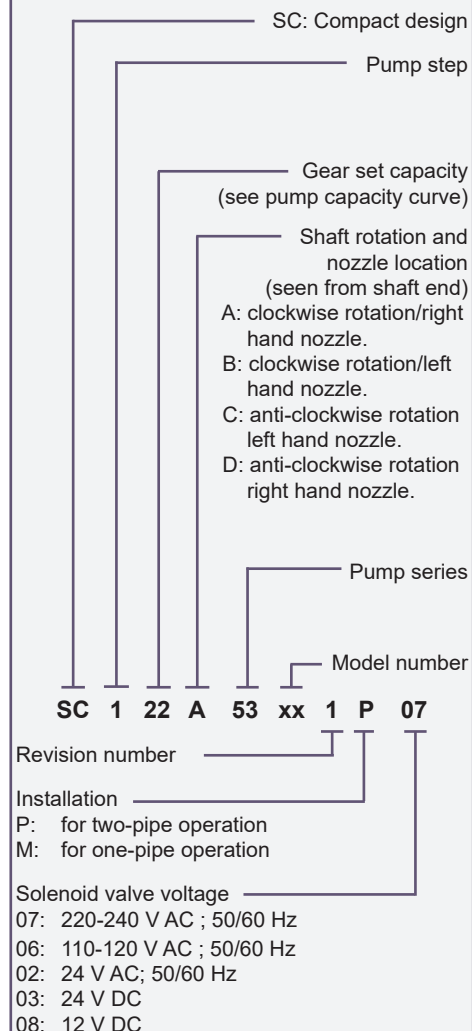
The excess oil is directly returned to the gear set at the suction point; the suction flow rate is then equal to the flow rate provided by the pump to the nozzle.

SC1

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PUMP IDENTIFICATION

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



TECHNICAL DATA

General

Mounting	Ø25 hub	In option : Plastic adaptor Ø32 according to EN 225
Connection threads	Cylindrical according to ISO 228/1	
Inlet and return	G1/8	G1/4
Nozzle outlet	G1/8	
Shaft	Ø6 mm, 1 flat	
Strainer	Open area : 33mm ² Opening size : 150µm	
Weight	450g	
Certification	CE	

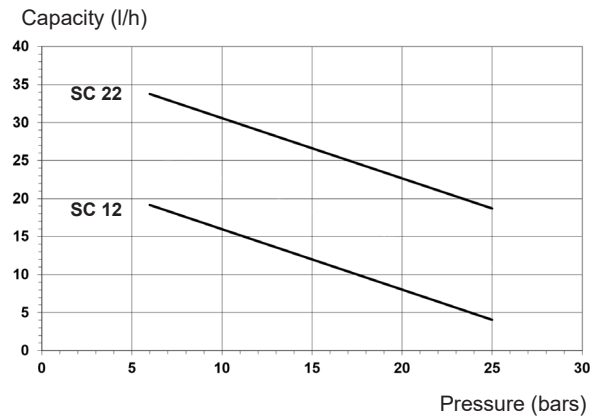
Hydraulic Data

Nozzle pressure range	7 - 15 or 7-25 bars @5cSt
Delivery pressure	12 bars
Operating viscosity	2 - 12 mm ² /s (cSt) for kerosene applications contact SUNTEC
Oil temperature	0 - 60°C in the pump
Inlet pressure	2 bars max.
Return pressure	2 bars max.
Rated speed	3600 rpm max.
Torque (@ 45 rpm)	0.09 N.m

Solenoid valve characteristics

Consumption	9W max.
Coil Code*	Ambient temperature
06/02/03/08	0 - 60°C
07	0 - 80°C
* Refer to "Pump identification - solenoid coil voltage".	
Maximum pressure	25 bars
Certified	TÜV Nr on pump.
Protection class	IP 54 according to EN 60529, when used with SUNTEC connector cable.

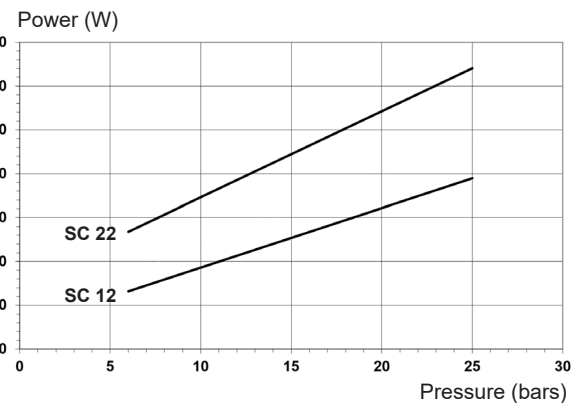
Pump capacity



Viscosity: — 5 cSt – Rated speed = 2850 rpm

Data shown take into account a wear margin.
Do not oversize the pump when selecting the gear capacity

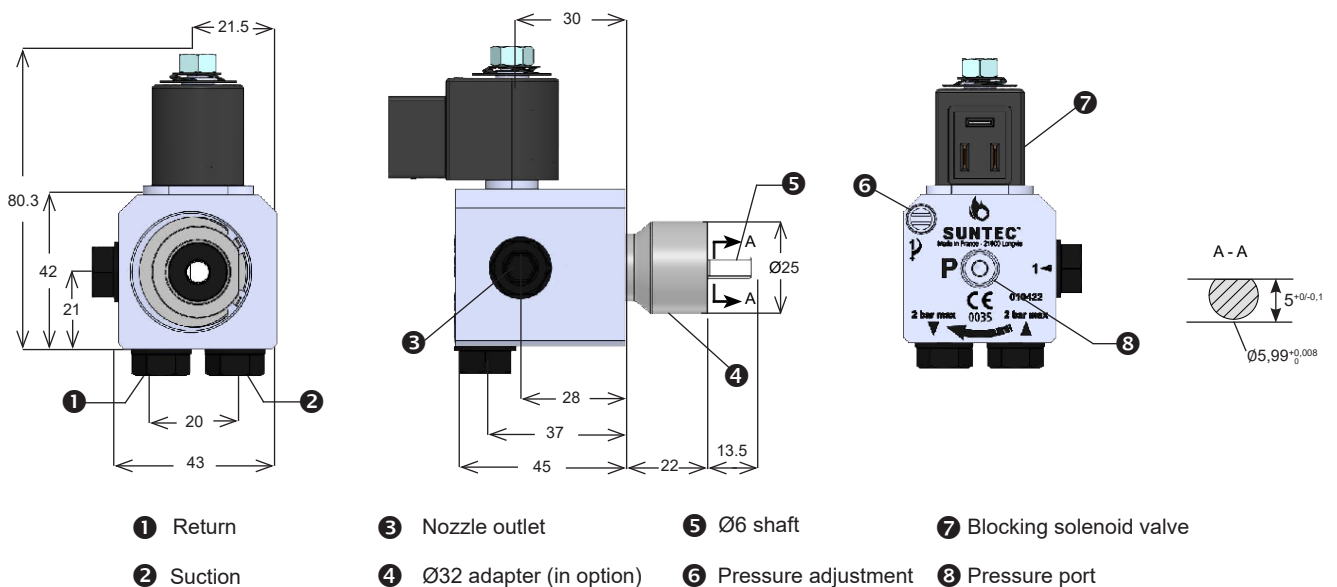
Power consumption



Viscosity : 5 cSt – Rated speed = 2850 rpm

DIMENSIONS (in mm)

Example show "C" rotation and nozzle outlet.



Additional information given on side notes.