

OIL PUMP TYPE D GEAR SIZES 45-47-55-57-67



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

The SUNTEC **D** oil pump is specially adapted for heavy oil (up to 75 cSt) and high working temperature (up to 90°C).

APPLICATIONS

- Medium and heavy oils.
- One-pipe or two-pipe system.
- System with in-line solenoid valve for cut-off.

PUMP OPERATING PRINCIPLE

The gear set draws oil from the tank through the built-in filter 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 a two-pipe installation or, if installation is one-pipe, back to the suction port in the gear set. In that case the by-pass plug must be removed from the return port and the return port sealed by steel plug and washer.

Bleed:

Bleeding in two pipe operation is automatic.

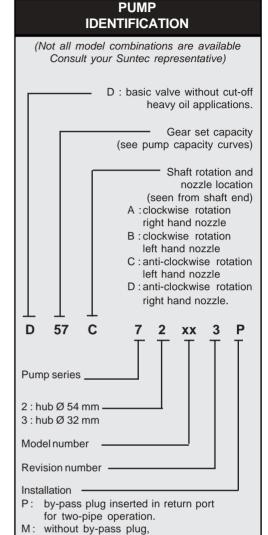
In one pipe operation, during the starting period, air is purged through the nozzle line: the by-pass hole of the nozzle plug allows air to pass to the nozzle line without opening of the regulator valve.

For the first start up, bleeding can be accelerated by loosening the plug in a pressure gauge port.

Note:

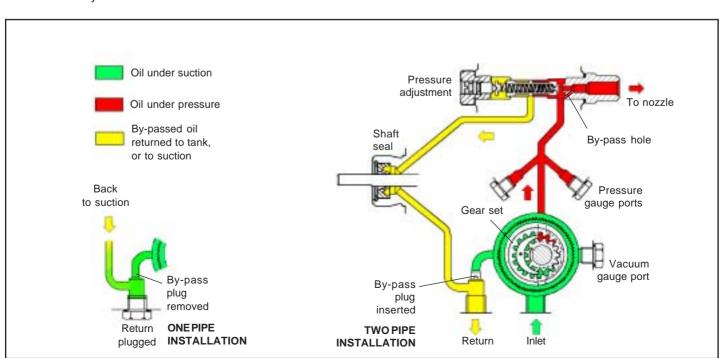
Owing to the presence of the nozzle by-pass hole, the pump has no cut-off function. Cut-off must be provided by an external solenoid valve.

Models gear sizes "45" and "55" have a piston with a bleed slot to avoid build up of pressure in the nozzle and suction lines during shut down due to the expansion of oil caused by nozzle line heaters.



return port sealed by steel plug

for one-pipe operation.



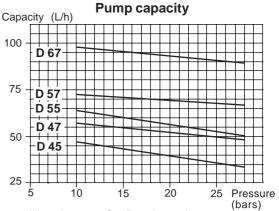
TECHNICAL DATA

General

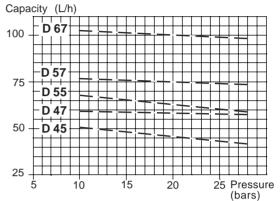
Flange or hub according to EN 225
Cylindrical according to ISO 228/1
G 1/4
G 1/8
G 1/8
G 1/4 or G 1/8
Pressure regulating without cut-off
Open area : 12 cm ²
Opening size : 530 μm
Ø 8 mm according to EN 225
Inserted in return port for two-pipe system;
to be removed with a 4 mm Allen key
for one-pipe system
1,8 - 1,9 kg (depending on the model)

Hydraulic data

Nozzle pressure range	10 - 28 bars (other ranges available on request, refer to the specified
	range of the particular fuel unit)
Factory setting	14 bars
Operating viscosity	2 - 75 mm²/s (cSt)
	(Higher viscosity oil can be used by feeding the pump or by
	heating the oil to lower its viscosity under 75 cSt)
Oil temperature	0 - 90°C in the pump
Inlet pressure	2 bars max.
Return pressure	2 bars max.
Suction height	0,45 bars max. vacuum to prevent air separation from oil
Rated speed	3600 rpm max.
Torque (@ 45 rpm)	0,10 N.m (D 45/47/55/57)
	0,12 N.m (D 67)

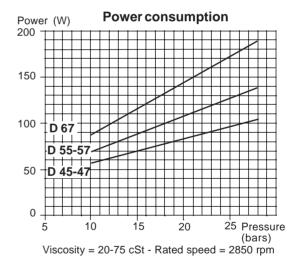


Viscosity = 20 cSt - Rated speed = 2850 rpm



Viscosity = 75 cSt - Rated speed = 2850 rpm

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



PUMP DIMENSIONS (Examples show "C" rotation and nozzle outlet)

