

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

The SUNTEC **AJ** oil pump is the basic model incorporating a pressure regulating valve with cut-off*.

COMPATIBILITY

- Domestic oil, HVO, B100 (biofuel blend with the addition of 100% FAME, as defined in DIN SPEC 51603-6), kerosene.
- One or two-pipe system.
- Normally associated with in-line solenoid valve.

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 that does not go through the nozzle line will be by-passed through the valve back to the return line in two pipe installation or, if it is a one-pipe installation, back to the suction port in the gear-set; in that case, the by-pass plug must be removed from the vacuum gauge port and the return port sealed by steel plug and washer.

The valve also has a cut-off function* as follows :

During starting period when the gear-set speed is increasing, all the oil passes through a bleed slot in the piston, back to the return. Once the speed reaches a certain value and the flow can no longer pass through this bleed slot, then the pressure increases rapidly overcoming the valve spring force and opens the valve. During the stop sequence, the gear-set speed slows down and the valve closes when the gear-set capacity is lower than the bleed slot flow.

The cut-on and cut-off speeds depend on the gear-set size and set pressure.

Bleed

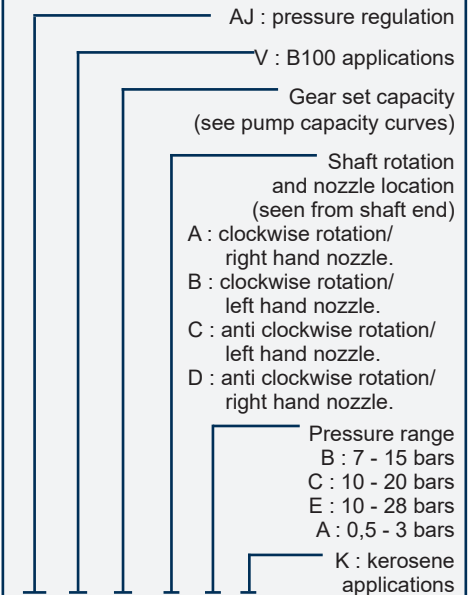
Bleeding in two pipe operation is automatic, but it may be accelerated by loosening the plug in a pressure gauge port.

In one pipe operation, a pressure port must be opened to bleed the system.

*Owing to the presence of the nozzle by-pass hole, AJ 1002 models have no cut-off function. Cut-off must be provided by an external solenoid valve.

PUMP IDENTIFICATION

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

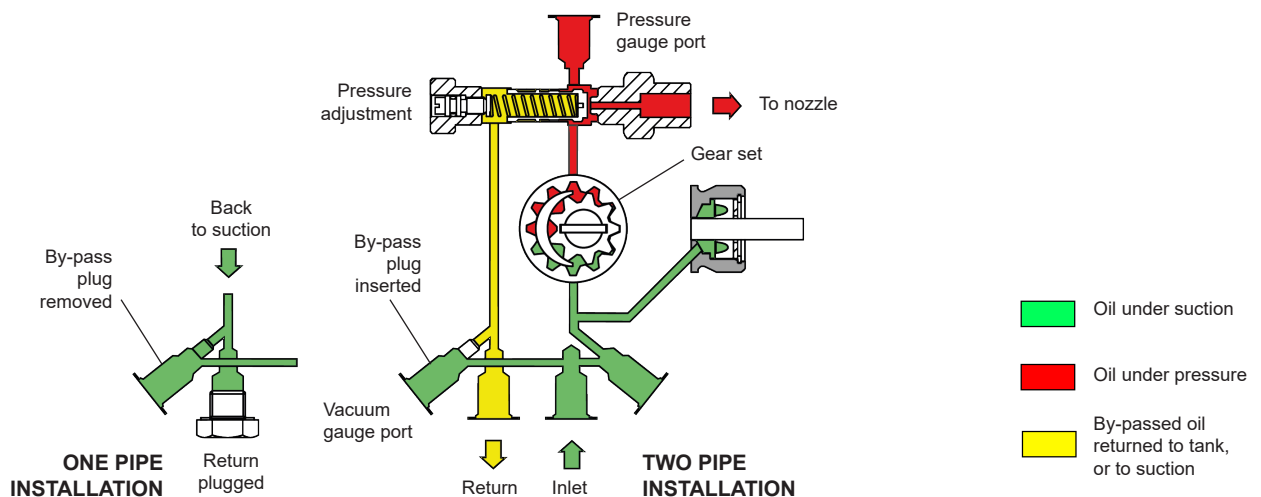


AJ V 4 C B K 1000 4 P

- 1000 : standard model with cut-off function
Ø 11 mm shaft
- 1002 : by-pass nozzle, no cut-off function
Ø 11 mm shaft
- 1003 : standard model with cut-off function
Ø 8 mm shaft

Revision number

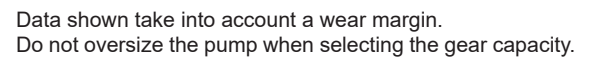
Installation
P : by-pass plug installed in vacuum gauge port for two-pipe operation



General

Hydraulic data

Pump capacity



Power (W)

600
500
400
300
200
100

AJ6
AJ4
AJV6K
AJV4K

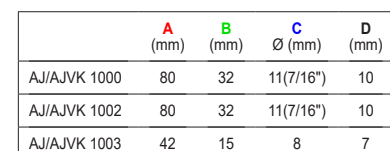
5 10 15 20 25 30 35

Pressure (bars)

Viscosity = — 5 cSt - Rated speed = 2850 rpm
- - 1.8 cSt

Ref: SK272-24/1199, SK320-28/02/08

Example shows "C" rotation and nozzle outlet.



- We reserve the right to change specifications without prior notice.