

# **PumpSets**



# **Pump Sets**

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All Piovan pump sets are supplied with stainless steel pipework and flanged connections. Wetted parts on pumps are constructed in 304 stainless steel.

Bases are fabricated in mild steel with a galvanized finish.

Sets are supplied with 4 off lifting eyes.

All pump sets are supplied with flanged connections.

Although designed and constructed to complement Piovan's range of high performance cooling systems, installations from many other manufacturers can also benefit from significant energy and maintenance cost savings from these high duty units.

Retro-fitting Piovan pump sets are typically straightforward and highly recommended.

Piovan pump sets for water/glycol systems are available in the following formats:

- a. Open Circuit (stainless steel tank up to 1000 litres capacity) with single pump
- b. Open Circuit (stainless steel tank up to 1000 litres capacity) with run and standby pumps
- c. Closed Circuit (Diaphragm type expansion vessel) with single pump
- d. Closed Circuit (Diaphragm type expansion vessel) with run and standby pumps



# Sealed Systems



#### Single - Sealed

- Inlet and outlet pressure gauges
- Auto air vent
- Pressure relief valve
- Inlet and outlet butterfly valves
- Y-Strainer.



#### Run & Standby - Sealed

- Inlet and outlet pressure gauges
- Auto air vent
- Pressure relief valve
- Inlet and outlet butterfly valve 2 per pump
- Y-Strainer 1 per pump
- Non-return valve 1 per pump.

# Open Systems

Open systems are supplied with a 360 litre tank.

#### Tanks include:

- Lid with handles
- Sight glass
- Drain
- Overflow
- Low level switch.

### Single - Open

- Inlet and outlet pressure gauges
- Inlet and outlet butterfly valves
- Y-Strainer.



#### Run & Standby - Open

- Inlet and outlet pressure gauges
- Inlet and outlet butterfly valve -2 per pump - Y-Strainer – 1 per pump
- Non-return valve 1 per pump.





#### **Controls**

All panels are supplied as follows:

- IP55
- Door interlocked isolator.
- As standard, panels are mounted to pump set (as shown left) and wired to pumps.

For the same price, controls can be incorporated into the cooler panel.

- Trip lamp per pump.
- Volt free for trip per pump.
- Single pump set 'On/Off' switch.
- Run and standby pump set 'Off/Auto' and 'Pump1/Auto/Pump2' switches.
- Run and standby pump sets changeover on trip, as standard.

Run and standby sets can be supplied with changeover on loss of pressure. At this point Piovan also include timed changeover to give even running of pumps. The changeover interval can be specified by the customer.

Piovan can supply inverter control for all pump sizes. Control pressure can be specified by the customer.



#### **Extras**

#### **Expansion Vessel**

Sealed systems can be supplied with a 100 litre expansion vessel fitted to the pump set.

This will increase the base size. See drawings on pages 10-11.

The expansion vessel will be plumbed into the pump inlet line.

#### Pump Isolators

Isolators can be supplied for Piovan pumps.

These are mounted on the base, local to each pump.

#### **Painting**

Pump sets can be painted to customer requirements (RAL or BS). If needed, pipework and base can be painted different colours.

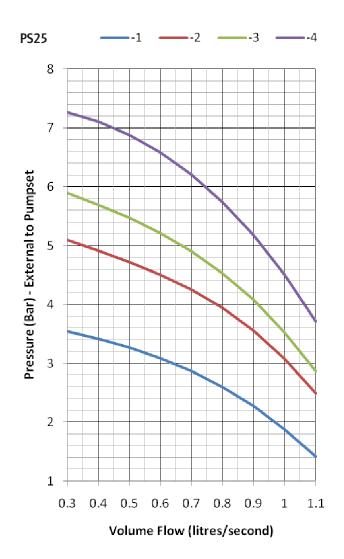
## Packaged Flatbed Cooler and Pump Set Arrangement

Piovan offer the option to mount their range of flatbed coolers and pump sets on a common base with interconnecting pipe work and controls giving single inlet and outlet water connections and a single power supply requirement where cooler and pump set controls are housed in a common control panel.

This unique packaged option gives Piovan customers the potential for reduced site work costs and a single point of responsibility, further enhancing the company's ability to offer 'fit and forget' solutions.

As standard the pump set is mounted at the connection end of the cooler but, where space is at a premium, there is also the option to mount the pump set underneath the cooler with the use of extended cooler legs and bracing.





# Flow Pressure Graphs

#### Model Breakdown

#### PS**80**-3-SS

Pump set connection sizes, ranging from DN25 to DN125

#### PS80-3-SS

Pump selection based on flow and pressure requirements. See graphs

#### PS80-3-**S**S

Pump set type:

S = sealed

E = sealed with expansion vessel

0 = open, with tank

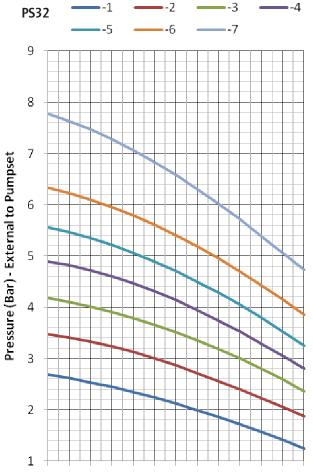
#### PS80-3-S**S**

S = single pump set

D = double (run-and-standby) pump set.

Note: pump performance is based on 100% water.

Please contact us for selections which include glycol.



0.7

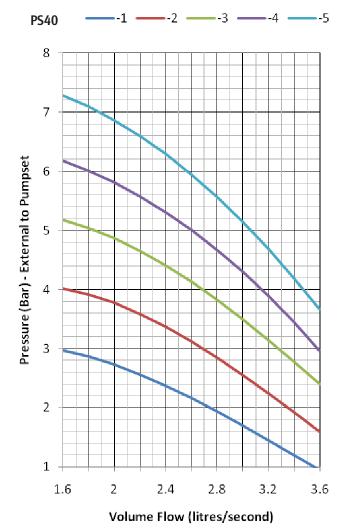
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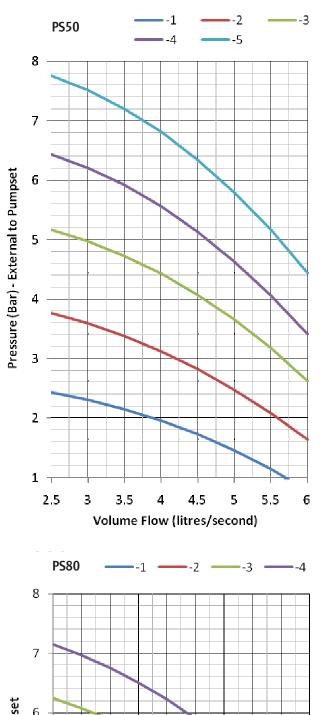
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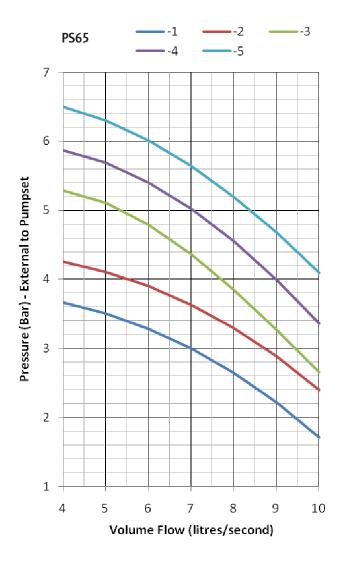
Volume Flow (litres/second)

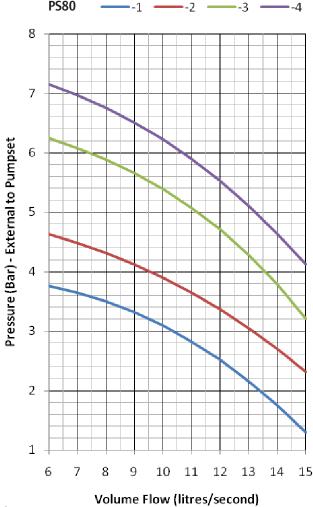
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1.9

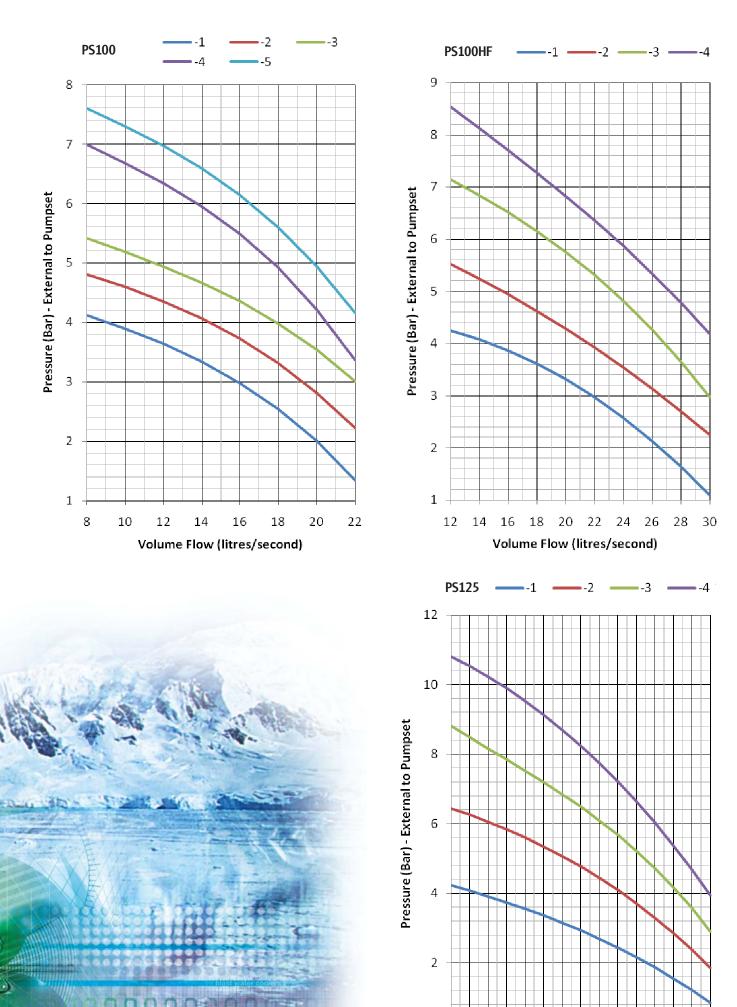








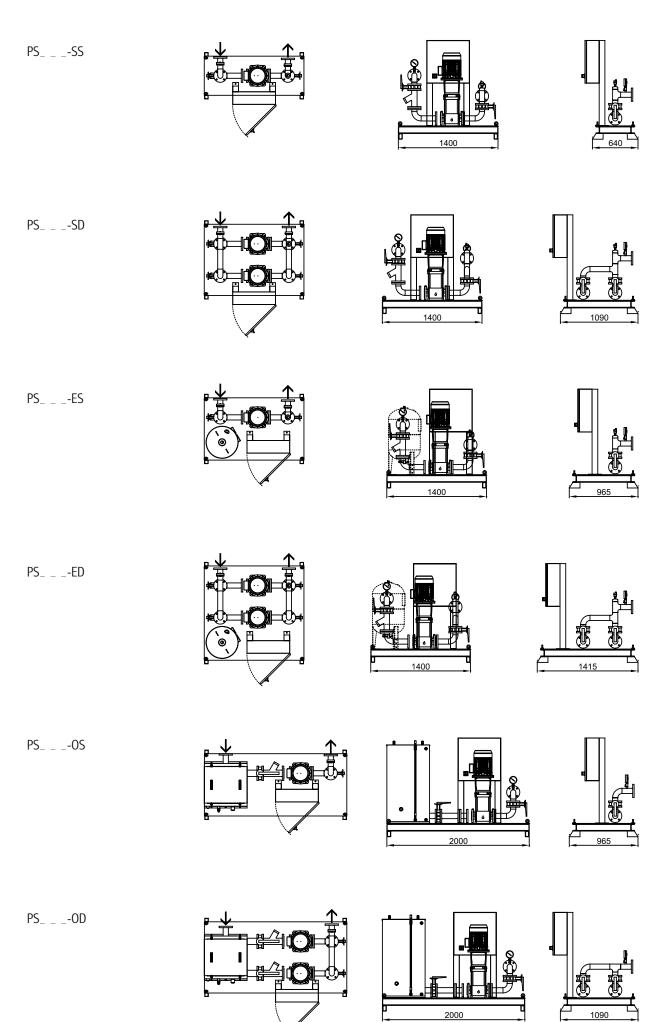




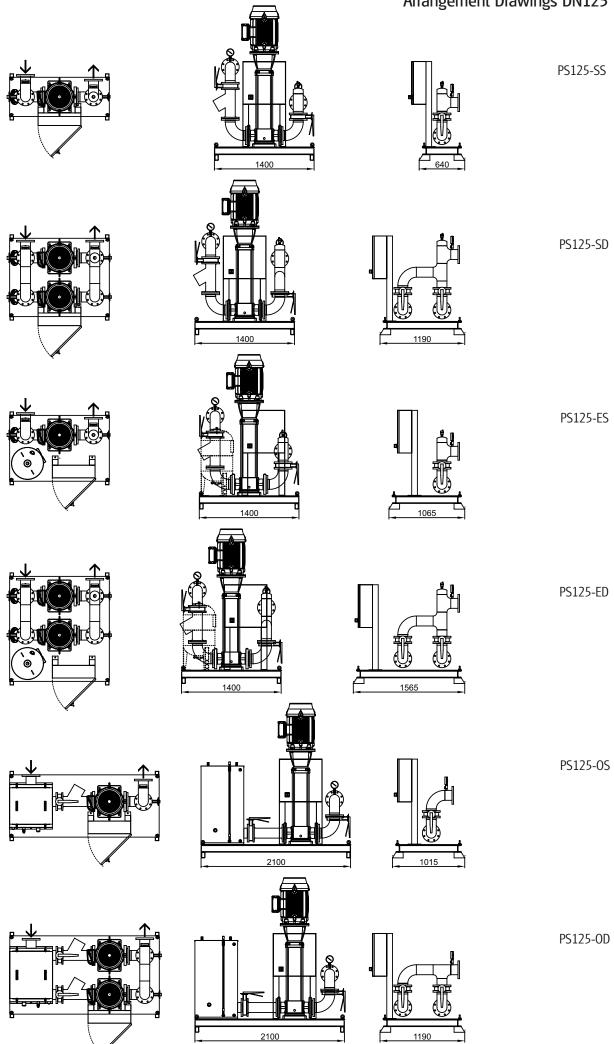
0

16 18 20 22 24 26 28 30 32 34 36 38 40 42 44

Volume Flow (litres/second)



# Arrangement Drawings DN125



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