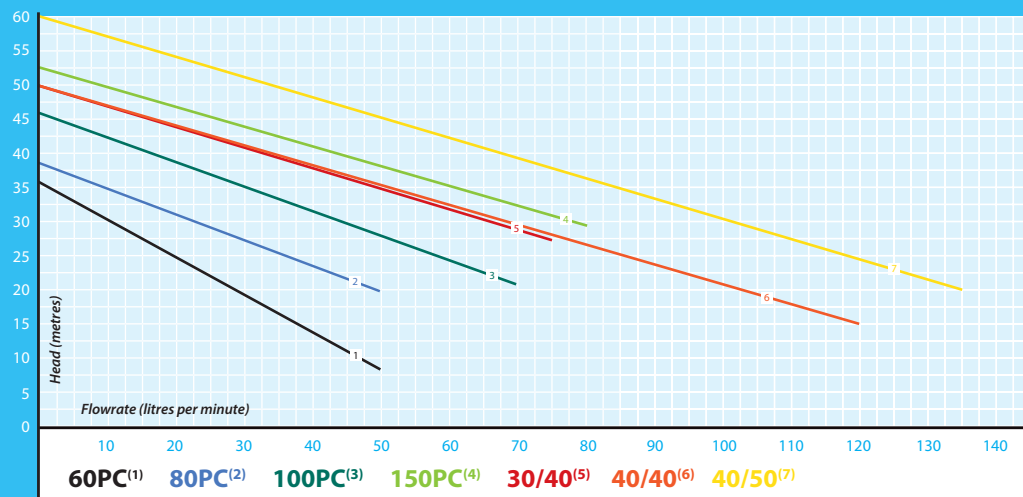


## Pump performance



## Talk to Orion.

There are important factors to consider when choosing and installing your pump. The team at Orion have the knowledge and expertise to guide you to the right choice. Get it right the first time, talk to us first.

## Tips

- Pressure tanks are better for power saving and more effective running. The larger the pressure tank size, the better the pump system will perform.
- Electronic press controls only recommended for flooded suction or suction lift maximum of 3 metres.
- If the pump starts and runs without reason, look for a leak
- The suction line should be as short as possible with a minimum of fittings
- The suction line should be as straight as possible, avoiding the use of bends and elbows
- All fittings must be completely air tight to avoid cavitation (*the noise caused by air being drawn through the fittings on the suction line*)
- When setting up pressure tanks in a mechanical pressure switch system, the air charge needs to be set at 20kPa or 3psi below the pump switch-on pressure.
- In an electronic system, the air charge should be set at 70% of the maximum pressure.

## Before installing the pump, TAKE NOTE

- The suction line must not be smaller in diameter than the suction connection to the pump (*if smaller the warranty will be invalidated*)

**WARRANTY** –all pumps are covered by a 2 year warranty. Conditions apply.

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# PRESSURE PUMPS PRESSURE TANKS



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**The Orion range includes jet and multistage pumps available in stainless steel.**

## Jet pumps

*Generate good pressures and flowrates. They are able to operate well even in difficult applications with aerated water.*

- Suitable for use in almost all installations.
- Good with suction lifts and with flooded suction.
- Preferred choice over a multistage pump when the water source is below the pump.

## Multistage pumps

*These pumps have multiple impellers able to develop high pressures and flowrates, with comparatively low power consumption.*

- Best suited to flooded suction applications with a pressure switch and pressure tank as flow rate and performance increase.
- Quieter and more efficient than a jet pump.

## Pressure tanks

*Save water - save power. Use with your pump if you have a low pressure hot water cylinder or a fire sprinkler system.*

- Reliable: time-proven system.
- Durable: fewer pump starts lengthens life of the pump.
- Economical: saves power through fewer pump starts.
- Versatile: water available if power shuts down.

<b>60PC Inox</b> (Jet Pump)	<b>Small House or Bach</b>
	Max Head: <b>36m</b>
	Max Flow: <b>50 l/min</b>
	Max Suction: <b>8m</b>
	.37Kw 0.5 Hp 5 Taps
<b>80PC Inox</b> (Jet Pump)	<b>Small to Medium House</b>
	Max Head: <b>38m</b>
	Max Flow: <b>60 l/min</b>
	Max Suction: <b>8m</b>
	.55Kw 0.75 Hp 6 Taps
<b>100PC Inox</b> (Jet Pump)	<b>Medium House</b>
	Max Head: <b>46m</b>
	Max Flow: <b>65 l/min</b>
	Max Suction: <b>8m</b>
	.75Kw 1.0 Hp 7 Taps
<b>150PC Inox</b> (Jet Pump)	<b>Large House</b>
	Max Head: <b>52m</b>
	Max Flow: <b>80 l/min</b>
	Max Suction: <b>8m</b>
	1Kw 1.2 Hp 8 Taps
<b>30/40PC Inox</b> (Multistage Pump)	<b>Medium to Large House</b>
	Max Head: <b>50m</b>
	Max Flow: <b>73 l/min</b>
	Max Suction: <b>3m</b>
	.75Kw 1.0 Hp 10 Taps
<b>40/40PC Inox</b> (Multistage Pump)	Max Head: <b>50m</b>
	Max Flow: <b>120 l/min</b>
	Max Suction: <b>3m</b>
	.75Kw 1.0 Hp
	12 Taps
<b>40/50 MP Inox</b> (Multistage Pump)	Max Head: <b>60m</b>
	Max Flow: <b>140 l/min</b>
	Max Suction: <b>3m</b>
	1.1Kw 1.5Hp
	12 Taps

## What is the best pump for the job?

### Electronic Systems

- Run-dry protection.
- Constant running.
- Best suited to flooded suctions or limited suction lifts.
- Pressure tanks are often used in conjunction with electronic pump controls as small leaks can cause an electronic pump to switch on and off.

### Run-dry protection options

- Electronic press controls – constant running.
- Loss of prime pressure switch.
- Floatswitch in water tank that interrupts power supply.
- Flow switch.

### High flowrates fire sprinkler systems

- Pumps being used to operate large homes and sprinkler systems should use an 80 litre pressure tank or bigger. This will minimise frictional pressure loss at high flowrates.
- Multistage pumps are often the preferred choice for high flowrates.