

## SHOWER PUMPS

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### GUIDE TO BUYING THE RIGHT SHOWER PUMP FOR YOUR HOME

There are several types of shower pump. Choosing one that is compatible with your water system can seem daunting but, in simple terms, the choice is between positive and negative head shower pumps. These are then split into twin or single impeller shower pump versions and specific type i.e. regenerative or centrifugal pumps.

See below for a brief summary of how each pump type works:

#### Positive Head Shower Pumps

Several different plumbing systems are used in homes across the UK, the most common of which are gravity-fed systems. These normally feature a cold water cistern in the loft and hot water tank in an airing cupboard. If your shower is not forceful enough due to insufficient water pressure, it can be easily boosted by installing a pump. In a positive head system, (more common) the tank is positioned higher than the shower so water flows downwards via gravity. However, if the distance between the cold water tank outlet and the shower head is not great then a pump is required. These pumps incorporate a flow switch enabling them to start automatically when water begins to flow.



#### Negative Head Shower Pumps

The term 'negative head' means the cold water tank outlet is below or near-level with the shower head. Negative head pumps have a pressure switch to recognise when the shower is turned on even when water is not flowing. If the cold water tank is less than 600mm above the shower head, or natural water flow is less than 2 litres per minute, a negative head pump should be considered.



#### Single Impeller Shower Pumps

These take a single water source; be it hot, cold or blended in a mixer valve, and boost the pressure. They may be used to increase the cold water pressure to an electric shower.



#### Twin Impeller Shower Pumps

These are effectively two pumps joined on a common shaft and run by a single motor. Hot and cold water enter their respective inlets at similar pressures and are boosted equally before exiting.



#### Centrifugal Pumps

In centrifugal pumps the water enters a chamber via the centre of the impeller and is flung outwards by the rotation of the impeller. This means water exits with greater pressure than when it entered the pump.



#### Regenerative Pumps

With regenerative pumps, water enters the side of a pump chamber and is pushed around by the impeller before exiting at a higher pressure.

For most homeowners the difference between centrifugal and regenerative pumps is academic. The main choice comes down to negative or positive head pump, then single or twin impeller.



**N.B. Shower pumps normally need a 3 or 5 amp fused supply, and require mounting as close as possible to the hot water tank.**