

Salamander Pumps 

# CT range



A range of regenerative shower, bathroom and whole house pumps, suitable for boosting water performance in a gravity fed system.

**Smarter Water Performance**



# Salamander Pumps is one of the UK's leading manufacturers of shower and domestic water pumps.

Innovation is used throughout the organisation to create higher quality products and offer outstanding customer service at every step of the journey.

Over the last 5 years we have completely overhauled our product range, taking feedback from installers and householders and using some cutting edge technologies to make Salamander pumps some of the quietest, most compact and reliable pumps on the market.

Whether you need to power just one shower or your whole house, there is a CT Pump to help.

**Contact Pumpwise** for help before, during and after installation on 0191 516 2002 or email [tech@salamanderpumps.co.uk](mailto:tech@salamanderpumps.co.uk)



Excludes CT Bathroom



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### CT FORCE

The high-quality and robust brass pump range is available as twin or single ended, positive head or universal models. Solid brass impellers and ends, and crossover technology underpins the reliability, quality and performance of this range of pumps.

### CT BATHROOM

With crossover technology allowing for individual outlet operation, a universal option for negative head installations and reduced noise CT Bathroom is the pump of choice for all bathroom applications.

### CT XTRA

The CT Xtra range raises the bar for all other 'entry level' shower pumps to follow. This range of single and twin ended shower pumps will quietly and efficiently boost hot and cold water supplies.

### TECHNICAL

Range comparison, dimensions, flow curves, specification and typical installation diagrams.

# SHOWER PUMPS EXPLAINED

## CONTINUOUS RATING

All Salamander pumps are continuously rated. A pump that is continuously rated, can effectively run for as long as the user chooses, without the need for the pump to shut down, to allow the pump to cool. With a large family in a household this is particularly important, many competitor pumps are not continuously rated, and will automatically shut off for 20 to 45 minutes to allow the pump to cool.

## TWIN ENDED

These pumps pump both hot and cold water supplies with one end for hot water and the other for cold. Each end then goes on to supply the outlet, which is most commonly a shower valve.

## SINGLE ENDED

These pumps operate with a single impeller to pump either cold or hot water.

Typically, single ended pumps can be used to supply electric showers, taps, combination boilers, unvented cylinders or washing machines, but all of which must be supplied via a header tank to the pump.

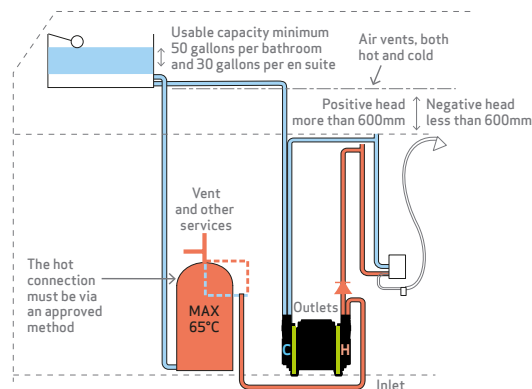
## WARRANTIES

The CT Xtra and CT Bathroom ranges come with a 3 year warranty. The CT Force range comes with a 5 year warranty.

The standard warranty period of the CT Xtra and CT Bathroom ranges can be extended by a further 2 years at an additional charge. Contact Salamander Pumps on 0191 516 2002 for further information.

## GRAVITY FED SYSTEMS

Several different plumbing systems are used in UK homes, the most common of which is a gravity-fed system as shown in the diagram below. In these types of systems there is usually a cold water cistern in the loft with a hot water tank below it, probably in an airing cupboard. If your shower or outlets are not forceful enough due to insufficient water pressure, this can be easily remedied with the installation of a pump.



### Negative head

When the distance between the cold water storage tank and the shower tank and the shower head (or the highest point in the system after the pump) is 600 mm or less then the system is negative head. Also if the natural flow is poor or less than 4 litres per minute of combined hot and cold it is possible a universal pump may be required.

## POSITIVE AND NEGATIVE HEAD SYSTEMS

If any point in the system after the pump goes within 600mm of the base of the cold water tank or above it, including pipework, this can cause a negative head system, as there would be poor natural flow to the outlets.

Negative head pumps may also be required where pumped hot meets mains cold water, where two pumps are fitted individually on hot and cold sides of the system, electric showers, washing machines and dishwashers. Some restrictive outlets such as body jets may also require a negative head pump.

# TECH<sub>2</sub>OLOGY INSIDE

We continually strive to improve our pumps and have introduced some clever technology to do this. (CT) indicates the technology in the CT ranges.



## CROSSOVER™ (CT Force and Bathroom)

An innovatively designed bypass tube found in CT Force and CT Bathroom pumps. This diverts water from the end of the pump that isn't pumping water. Typically this happens when the user switches off one tap when filling a bath or basin. The Crossover stops the overheating/expansion of the side of the pump that isn't seeing water.



## SOLID STATE SWITCHING™ (CT)

An electronic switch which activates the pump. The switch has no moving parts, so this improves reliability, sensitivity, and extends product life.



## DYNAMIC RESPONSE SYSTEM™ (DRS)

DRS is the pumps ability to react to a variation in pressure or flow. E.g. if the flow increases then the DRS will send a message to the motor to slow down, meaning that the pump maintains a consistent water output.



## INTERROGAIT™

Technology within the pump that monitors usage e.g. how many times it has been switched on/off or how long it has been running for. It aids in the diagnosis of issues.



## DYNAMIC PUMP CONTROL™

The intelligent electronics that run the motor at a given speed. This makes the pump more energy efficient, responsive and longer lasting.



## NOISE/VIBRATION REDUCTION™ (CT)

Product design innovation has been used to reduce the noise and vibrations in a shower pump, including noise reducing feet and specially selected materials which dampen the vibration of the motor.



## BRUSHLESS MOTORS™

These motors allow for variable speed control, intelligently using the correct amount of electricity required to drive the pump. They have NO contacting parts which make them less likely to wear out and this combined with tighter tolerances also reduces friction and noise.



## ADVANCED MOTOR DRIVE™

Used with brushless motors, this technology controls the spinning and speed of the motor using feedback from other parts of the pump. This allows for an instant reaction, seamless performance and energy efficiency.



## MOTOR PUMP INTEGRATION™ (CT)

The innovative product design building the motor into the pump impeller housing to allow for an extremely compact product. The design also means that the cold waterway helps cool the motor, thereby improving efficiency and product life.



## ANTI STICTION PROTECTION (ASP)™

A film of water across the seals acts a lubricant and prevents them from sticking, however if a pump is not operated for a length of time (a week or so or more) the film of water dries out and this can mean the pump fails to start. Our pumps have electronics which detect when a pump hasn't been used for 48 hours which turn the pump on momentarily to refresh the film of water and prevent the pump from sticking.

# CT FORCE (UNIVERSAL)



Universal (negative head) brass regenerative pumps, ideal for delivering a real boost to low water pressure systems.



Twin ended only



Efficient water way design, solid brass impellers and robust brass ends make this range of pumps powerful and robust. Crossover technology, which is in all of the CT Force twin ended pumps, means they can be used for multiple or single outlet use.

Innovative engineering of the product has led to the range being awarded the Quiet Mark, and independent testing has shown the CT Force 15PT/TU to be the quietest twin ended brass pump on the market.\*

### Quiet. Powerful. Patented technology.

Pump	Application	Bar	dBA
CT Force 15TU	Twin end, universal shower and house pump	1.5	48
CT Force 20TU	Twin end, universal shower and house pump	2.0	54
CT Force 30TU	Twin end, universal shower and house pump	3.0	52.5
CT Force 20SU	Single end, universal shower and house pump	2.0	49
CT Force 30SU	Single end, universal shower and house pump	3.0	42

\*Independently tested, contact us for details.