

# Making Water perform



**Salamander Pumps**   
Quality | Technology | Service | Value

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# Making **Water** perform

Choose a Salamander pump and enjoy stimulating power from your shower. Our comprehensive range of pumps brings you the latest technology and an assurance of quality and reliability – all at exceptional value for money.

Salamander pumps are manufactured in the UK from top quality components, the majority of which are sourced from the EU.

Each component is extensively tested for long life and every pump is subject to strict quality controls before it leaves our factory in Sunderland.

Our sophisticated use of technology, which incorporates micro electronics and sensors in the ESP range, delivers unrivalled performance that retains pressure even under high flow rate conditions.

All pumps come with installation guidelines and access to our free technical helpline.

When installed in accordance with those guidelines we are confident that you will enjoy trouble free ownership of your Salamander pump for many years to come.

## **Salamander Pumps**



Quality | Technology | Service | Value

### **Quality**

Achievement of ISO9000 compliance reflects our commitment to deliver high quality in all facets of our business. All of our pumps are tested to ensure they are leak free and in full working order before leaving the factory.

### **Technology**

We have pioneered the use of centrifugal technology to deliver some of the quietest and most flow efficient shower pumps in the market. Technology is particularly evident in the innovative ESP range. It utilises electronic sensors to activate and protect the pump whatever the consumer's household plumbing situation is, enabling the shower pump to identify whether the consumer has a positive or negative head situation.

### **Service**

With over 70 years of plumbing experience on our technical advice lines and a team that is highly responsive to all customer service needs, our service provision is second to none.

### **Value**

Our competitive pricing has helped drive our accelerated sales growth over the last decade to get Salamander to its position as one of the leading shower pump manufacturers in the UK today. We believe our pumps deliver outstanding value for money.





# Know H<sub>2</sub>Ow

## Shower pumps explained

### Positive head systems (Gravity-fed)

Several different plumbing systems are used in UK homes, the most common of which is a gravity-fed system detailed in the schematic diagram.

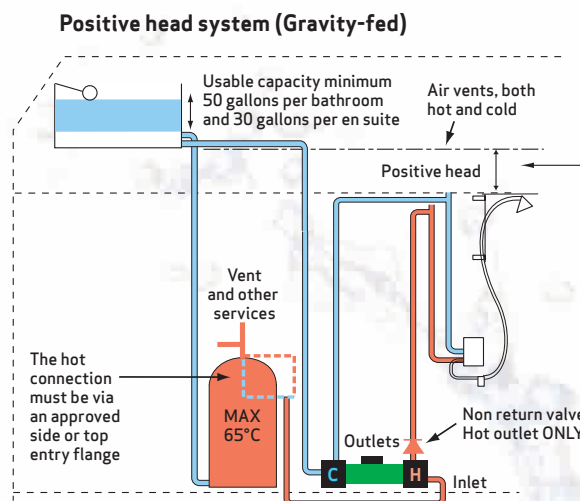
In these types of systems there is usually a cold water cistern in the loft with a hot water tank below it, probably in an airing cupboard. If your shower is not forceful enough due to insufficient water pressure, this can be easily boosted by the installation of a pump.

The diagram shows where the pump should be situated for gravity-fed systems.

### Negative head systems (Gravity-fed)

Negative head systems are where poor natural flow of water goes to the shower head because it is above the height of the base of the cold water tank or there is limited height between the base of the cold water tank and the shower head. Most instances of negative head systems occur in loft conversions or where the cold water tank sits on the joists in the loft.

See page 12 for our range of negative head pumps.



### Negative head

When the distance between the cold water storage cistern and the shower head is 600 mm or less, or when the natural flow is poor or less than 2 litres per minute of combined hot and cold it is possible a negative head pump may be required.

### Twin Impeller

Twin impeller pumps pump both hot and cold water supplies, one impeller on the cold inlet and one impeller on the hot inlet. Each impeller on the pump then goes on to supply the outlet, which is commonly a shower valve.

### Single Impeller

Single impeller pumps simply take one inlet, and that can be cold or hot water, or blended water after a shower or mixing valve. Typically single impeller pumps can be used to supply single hot or cold taps, electric showers, combination boilers and washing machines. Electric showers and combination boilers need to be fed via a header tank.

See pages 4 and 5 for where these pumps could be used in a property.

### Continuous Rating

Continuous rating determines how long the pump can run for before the motor begins to overheat. For family showering, pumps can run for a long time, particularly in the morning. All Salamander pumps with the exception of RSP, RHP, ESP CPV 140 are continuously rated.

### Training

Whether you need merchant trade counter training, showroom staff training, or you are at college requiring training, our dedicated training manager, Malcolm Campbell, can come to you and deliver training bespoke to your needs.

Call 0191 516 2002 for more information on how this training might benefit you.

For installers check out Malcolm's (AKA Big Malc) blog at: <http://askbigmalc.wordpress.com/about>.

# Customer service

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## Sales

Our experienced team of internal sales operators are on hand to advise on all enquiries relating to sales orders and to advise on which pump best fits your application.

### For sales help

Tel: 0191 516 2002

Fax: 0191 548 4445

Email: [sales@salamanderpumps.co.uk](mailto:sales@salamanderpumps.co.uk)

Mon - Thu 08:30 - 17:30

Fri 08:30 - 17:00

On average, we receive **350** calls per day in excess of

We answer **90%** of incoming calls in less than a minute



## Technical advice

Our knowledgeable team of technical advisers are at the end of the phone to answer any queries of a technical nature whether pre or post installation.

With over 70 years combined plumbing experience, they are well equipped to handle any technical enquiry from householders and installers alike.

### For technical help

Tel: 0191 516 2002

Email: [tech@salamanderpumps.co.uk](mailto:tech@salamanderpumps.co.uk)

Mon - Thu 08:30 - 17:30

Fri 08:30 - 17:00

## Training

We offer dedicated training with our Training Manager for Installers, Merchants, Showroom Staff and Colleges which can be arranged by calling 0191 516 2002.



Do you need help selecting the right pump for your application? Then either call PumpWise on 0191 516 2002 and they will walk you through a pump selection process or visit our pump selector at [www.salamanderpumps.co.uk/pumps](http://www.salamanderpumps.co.uk/pumps).



# Identify your household plumbing system and where pumps can be used in the home

## Baths and handbasins

Pumps can be used in a variety of locations in the home. Generally they can be used to give enhanced shower performance or simply to ensure household appliances or washbasins/baths have continuity of supply and pressure.



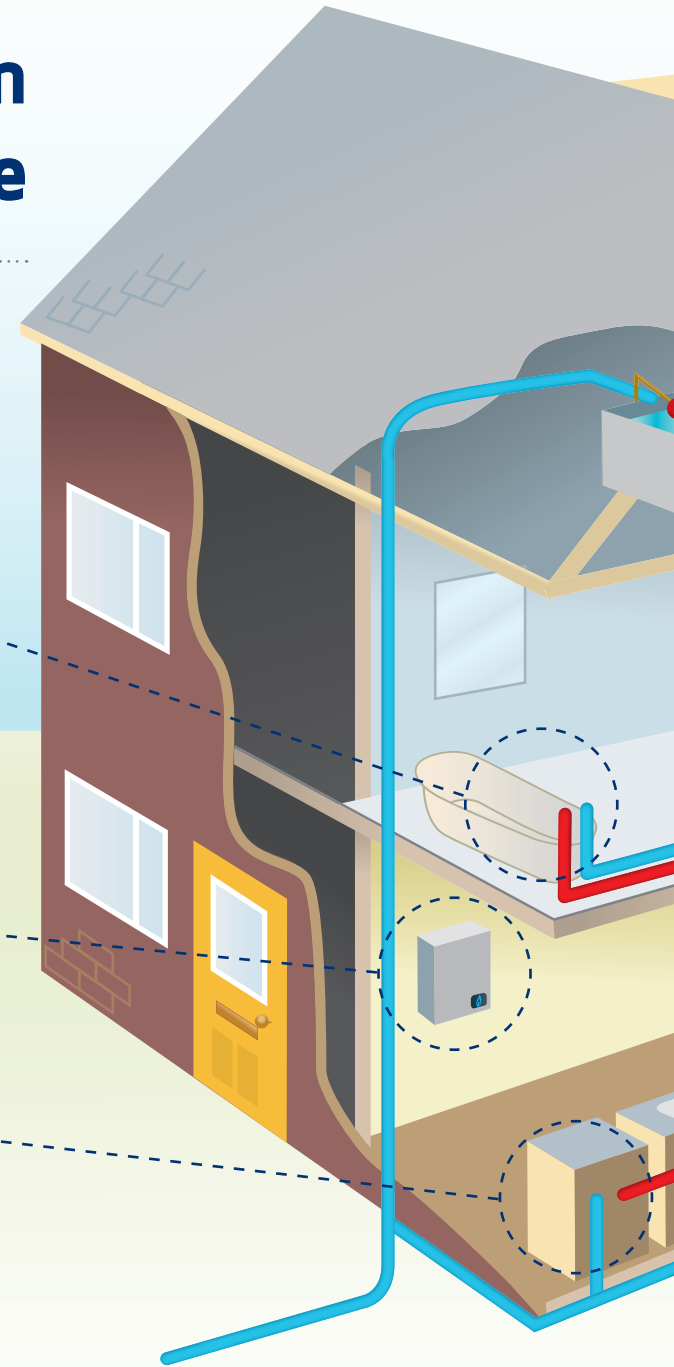
## Combination boilers

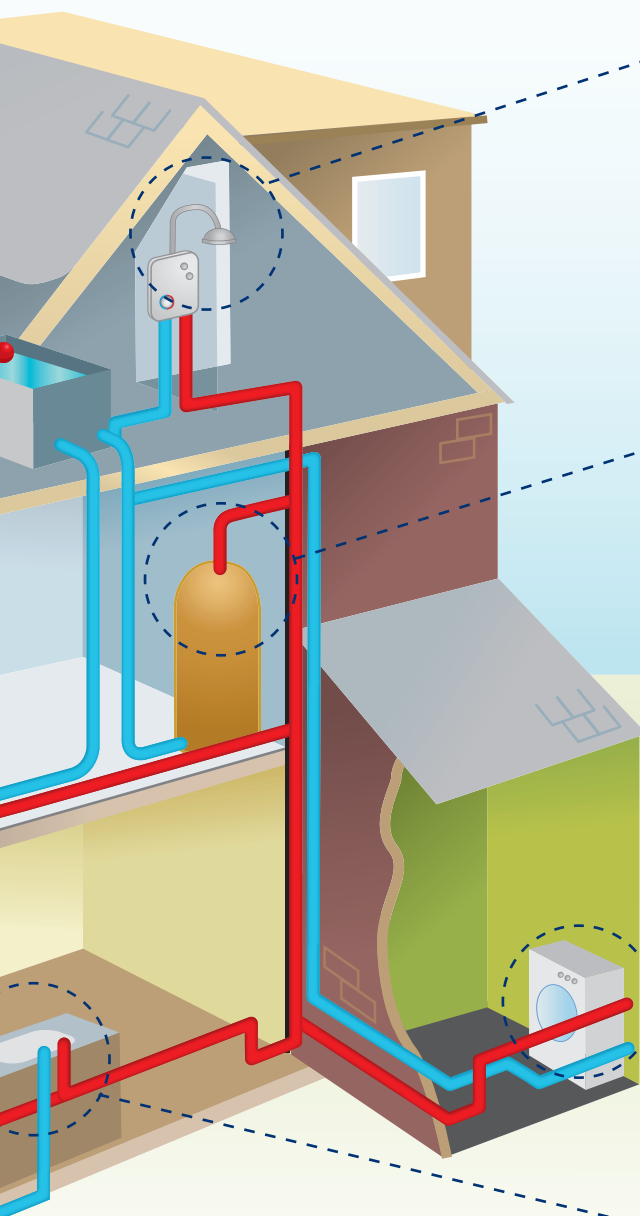
Where incoming mains cold pressure is insufficient to operate the combination boiler effectively, a cold water 'break' tank can be installed. A single impeller pump can be installed with the supply from the header tank and then into the combination boiler.



## Dishwashers

Quite often, because of low water pressure in the home a single impeller pump can be used to supply the dishwasher to ensure consistency of supply and pressure.





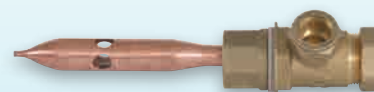
## Appliances in loft conversions - Negative head

Negative head generally occurs where no natural flow of water can get to the shower head or outlet. Loft conversions are commonly in negative head mode. A negative head pump needs to be used, where the pump starts automatically when the outlet is opened. The outlet can be a tap, shower or bath fill application.



## Reducing air in the system

Air is an enemy of all shower pumps and we recommend the use of an 'S' type Salamander flange. The flange is installed on top of the hot water cylinder and reduces air ingress from the hot water storage where, typically, air is prevalent.



## Washing machines

Quite often, because of low water pressure in the home, a twin impeller pump can be used to supply the washing machine to ensure consistency of supply and pressure.



## Taps and basins

Where water pressure is low in a property, the restriction from hot and cold water taps can mean that no flow is forthcoming. The fitting of whole house pumps can be used to boost the supply of hot and cold water to taps and basins.



If in doubt as to which Pump to use please call

**Pumpwise**

on 0191 516 2002





# Right pumps

Reliable and smooth running centrifugal shower pumps

A range of premium pumps designed for smooth running with high levels of flow to boost pressures to appliances throughout the home. They can boost supplies to washbasins, baths and showers, whether the requirement is for multi-function, conventional or Victorian 'can style' shower heads. The centrifugal impeller gives them quiet running with sustained pressure and flow relative to other shower pump types.

Available in twin or single impeller variants, performances range from 1.5 to 3.6 bar pressure.

Push fit anti-vibration couplers (AV) with isolating valves are supplied with all Right and ESP pumps



Push fit anti-vibration couplers help make pump installation easier. See page 21 for more details.

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The RSP 50 is the quietest 1.5 bar shower pump available in the UK and Ireland at

## 54dB

which is quieter than the average household kettle.



General household item decibel ratings:

Normal breathing 10dB

Whisper 30dB

Running stream/refrigerator humming 40dB

Normal conversation 50 - 65dB

Laughter 60 - 65dB

Vacuum cleaner 70dB

Washing machine 78dB





# Right shower pumps

## Positive head

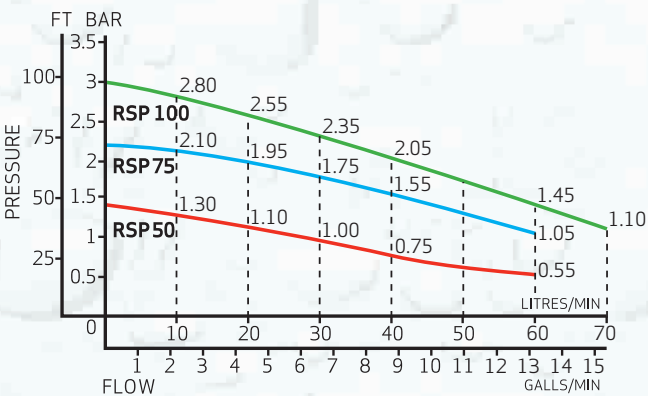
Designed purely for showers, these premium twin ended pumps boost the hot and cold supplies to thermostatic or manual mixer valves in positive head systems.

These pumps are capable of feeding multi-outlet applications and are supplied with anti-vibration couplers complete with isolating valves.

The Right shower pump range achieve their quietness of operation as they use centrifugal type impellers. Utilising centrifugal force they are generally quieter and more flow efficient than regenerative shower pumps.



RSP 50



Right pump	RSP 50 twin	RSP 75 twin	RSP 100 twin
<b>Applications</b> Quiet running pumps for showers. Not suitable to boost toilets, washing machines or individual hot and cold taps.	Purpose made for one or more conventional shower heads and multi-function showers.	As the RSP 50 twin plus showers with a massage function or champagne spray.	As RSP 50 and RSP 75 plus up to four body jets. Definitely the Right choice for 3.0 bar shower heads.
<b>Performance</b> Closed head pressure Max amps/watts Typical Decibel Rating Rating	<b>Quieter*</b> 50ft head (1.5 bar) 1.8 amps/430 watts 54dB Continuous	<b>Quieter*</b> 75ft head (2.2 bar) 3.2 amps/720 watts 55.4dB Continuous	<b>Quieter*</b> 100 ft head (3.0 bar) 4.0 amps/960 watts 57.6dB Continuous
Shower head			

\* We state 'quieter' on our centrifugal range of pumps as they are quiet in operation relative to other shower pumps available. Pumps are mechanical in operation and the need to move water in volume or at high pressure will generate some background noise.



# Right whole house pumps

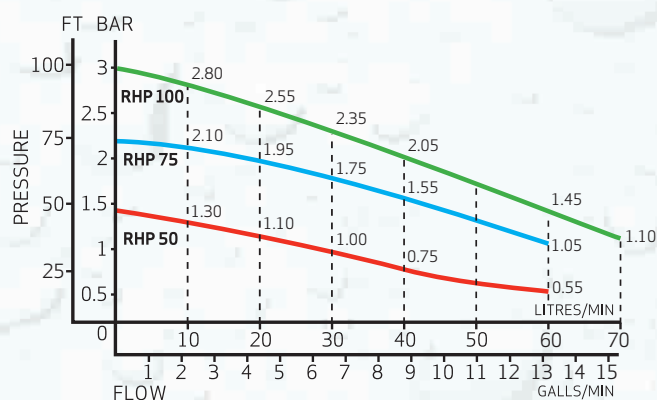
## Positive head

Designed specifically for whole house systems, or just the bathroom, these twin-ended premium pumps are uniquely equipped to handle single or multi-outlet use, i.e. the hot or cold taps being used individually or both at the same time.

These pumps are supplied with isolating valve anti-vibration couplers.



RHP 75



### Right pump

### RHP 50 twin

### RHP 75 twin

### RHP 100 twin

#### Applications

Quiet running, high performance pumps for the whole house including toilets, washbasins or individual hot and cold taps.

Houses and flats with low resistance outlets. Conventional showers, whole house showers, toilets, washbasins, baths, individual hot and cold taps.

As the RHP 50 whole house pump for houses and flats but also suitable for high resistance outlets such as multi-function showers and showers with a massage function or champagne spray.

The RHP 100 has the same application specifications as the RHP 50 and RHP 75 but can also power showers with up to four body jets.

#### Performance

Closed head pressure  
Max amps/watts  
Typical Decibel rating  
Rating

#### Quieter\*

50ft head (1.5 bar)  
1.8 amps/430 watts  
54dB  
Continuous

#### Quieter\*

75ft head (2.2 bar)  
3.2 amps/720 watts  
55.4dB  
Continuous

#### Quieter\*

100 ft head (3.0 bar)  
4.0 amps/960 watts  
57.6dB  
Continuous

#### Shower head



\* We state 'quieter' on our centrifugal range of pumps as they are quiet in operation relative to other shower pumps available. Pumps are mechanical in operation and the need to move water in volume or at high pressure will generate some background noise.

# Right single pumps

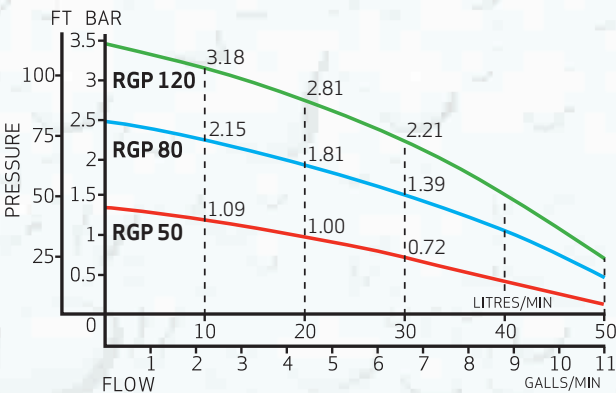
## Positive head

An innovative range of premium single outlet pumps. They are compact and smooth running with sustained flow and come supplied with isolating valves on the anti-vibration couplers.

“Excellent product which produces a really good surge for a gravity fed shower. Amazingly cheap for such good quality and also very easy to fit. The pump is also very compact so excellent for confined spaces and transforms a poor or average flow shower into an exceptionally powerful one. The pump can also be fitted several metres from the shower and still be extremely efficient.”



RGP 80



Right pump	RGP 50 single	RGP 80 single	RGP 120 single
<b>Applications</b> The right single pump to boost supplies to a variety of appliances.	The ideal pump for a washing machine, dishwasher or a conventional shower.	As the RGP50 and will also power Victorian can shower heads, multifunction showers, massage functions and champagne sprays.	As the RGP50 and RGP80 and will power up to four body jets.
<b>Performance</b> Closed head pressure Max amps/watts Typical Decibel rating Rating	<b>Quieter*</b> 43ft head (1.3 bar) 2.0 amps/480 watts 55dB Continuous	<b>Quieter*</b> 80ft head (2.4 bar) 2.4 amps/580 watts 58dB Continuous	<b>Quieter*</b> 115ft head (3.6 bar) 2.7 amps/650 watts 62.6dB Continuous
Shower head			

\* We state 'quieter' on our centrifugal range of pumps as they are quiet in operation relative to other shower pumps available. Pumps are mechanical in operation and the need to move water in volume or at high pressure will generate some background noise.



# ESP CPV pumps

Reliable and smooth running centrifugal pumps that can operate in positive or negative head installations

Salamander's electronic range of premium shower and whole house pumps, take away the confusion of which pump to buy for the respective plumbing system as they are capable of working in positive and negative head installations. The ESP CPV pumps are a result of extensive research to develop these advanced pumps that incorporate micro-electronic technology and sensors. Quiet running relative to other shower pump types, they are reliable and high in quality.

The first intelligent shower pump with electronic system protection (ESP), can be used for appliances throughout the home, boosting supply to washbasins, baths and showers. The high pressure variants can also be used to boost supplies to body jets and steam cabinets. Available in twin or single impeller variants, performances range from 1.5 to 3.6 bar pressure.

## Automatic pump protection and simple LED indication

Clear indicators on the top of the pump show the electronic system protection is working correctly.

<b>N</b>		Negative head operation
<b>P</b>		Positive head operation
<b>1</b>		System hunting protection
<b>2</b>		Dry run protection
<b>3</b>		Supply water temperature protection

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## ESP 50 CPV and ESP 75 CPV twin

Positive and/or negative head systems

Designed specifically for one or two bathroom systems where there is a need to boost baths, basins or showers which may be above and/or below the cold water storage tank(s), typically flats, loft and barn conversions.

These pumps are supplied with isolating valve anti-vibration couplers.



ESP 50 CPV twin

## ESP 100 CPV

Positive and/or negative head systems

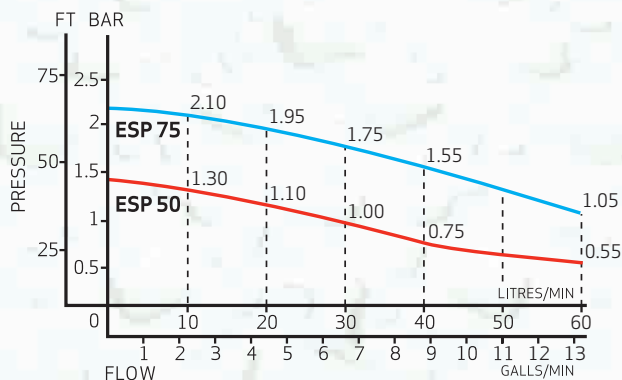
As ESP 50 CPV and ESP 75 CPV twin above, but also suitable for systems where there is a need for greater performance or flow, e.g. shower columns, steam cubicles and multiple body sprays.

These pumps are supplied with isolating valve anti-vibration couplers.



ESP 100CPV twin





## ESP CPV twin

### Applications

For flats and houses where the requirement is for a positive and/or negative head pump.

### Performance

Closed head pressure  
Max amps/watts  
Typical Decibel rating  
Rating

Shower head

## ESP 50 CPV twin

For tank-fed shower and/or whole house systems in flats and houses where the pressure requirement is up to 1.5 bar (30-42ft head). For conventional showers, multi-function showers, whole house showers, toilets, washbasins and individual hot/cold taps/bath.

### Quieter\*

50ft head (1.5 bar)  
1.8 amps/430 watts  
54dB  
Continuous



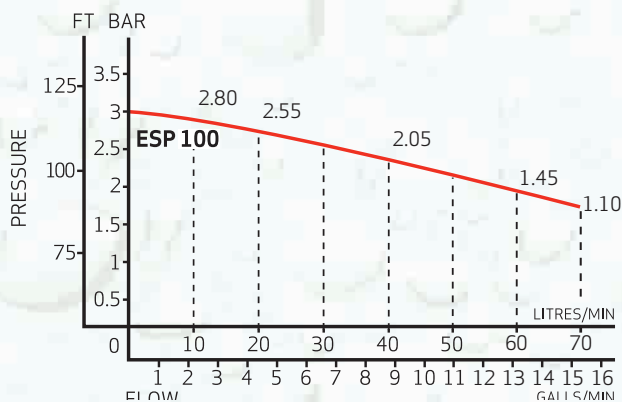
## ESP 75 CPV twin

As the ESP 50 CPV plus multiple shower systems where the pressure requirement is up to 2.2 bar (65-75ft head).

Also suitable for showers with a massage function or champagne spray.

### Quieter\*

75ft head (2.2 bar)  
3.2 amps/720 watts  
55.4dB  
Continuous



## ESP CPV twin

### Applications

As ESP 50/75 CPV above but where there may also be shower columns, steam cubicles or body jets/sprays.

### Performance

Closed head pressure  
Max amps/watts  
Typical Decibel rating  
Rating

Shower head

## ESP 100 CPV twin

As ESP 75 CPV above but also where there may be up to four body jets in the system where the pressure requirements is up to 3.0 bar (100ft head).

### Quieter\*

100ft head (3.0 bar)  
4 amps/960 watts  
57.6dB  
Continuous



\* We state 'quieter' on our centrifugal range of pumps as they are quiet in operation relative to other shower pumps available. Pumps are mechanical in operation and the need to move water in volume or at high pressure will generate some background noise.



# ESP pumps continued

**“Excellent value for money.  
Terrific power from this size of pump.  
Fitting made easy due to push fit  
connections. As a 3 point plug is already  
fitted there are no wiring difficulties.  
As a plumber I have fitted several of  
these and will be back for more.”**

**“Nice solid feel to it and works  
beautifully. It is so quiet when running,  
I thought it hadn’t switched on!!  
The old pump used to wake everyone up  
if used early but this really is great.”**

## ESP 55/80/120 CPV single

Positive and/or negative head systems

These single pumps boost supplies to a variety of appliances from tank-fed systems, and are suitable for both positive and negative head systems.

Selection should be based on pressure requirements.

These pumps are supplied with isolating valve anti-vibration couplers.



ESP 80 CPV single

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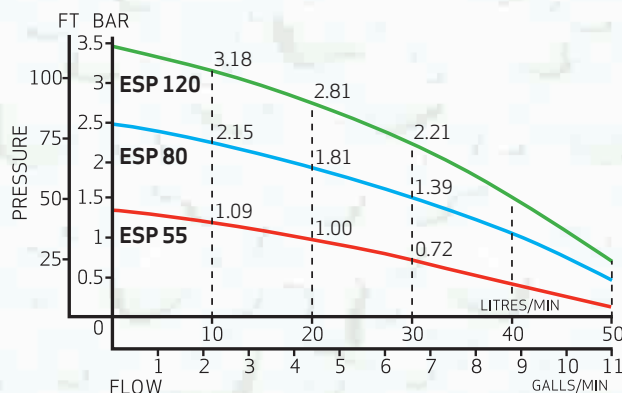
## ESP CPV super boosters

Positive and/or negative head systems

The choice of super booster is determined by establishing the pressure required at the outlets. These boosters are suitable for both positive and negative head systems and these pumps are supplied with isolating valve anti-vibration couplers.



ESP 120CPV super booster



## ESP CPV single

### Applications

To boost tank-fed supplies to combination boilers, instantaneous electric showers, instantaneous electric water heaters, and washing machines/dishwashers – according to inlet pressure requirements.

### Performance

Closed head pressure  
Max amps/watts  
Typical Decibel rating  
Rating

## ESP 55 CPV single

These pumps will also power conventional showers, Victorian shower heads, multi-function showers, showers with massage functions or champagne spray. The ESP 120 CPV and ESP 150 CPV will also power up to four body jets. Consult PumpWise for help selecting the correct pump, see page 14.

### Quieter\*

50ft head (1.5 bar)  
1.8 amps/430 watts  
58dB  
Continuous

## ESP 80 CPV single

### Quieter\*

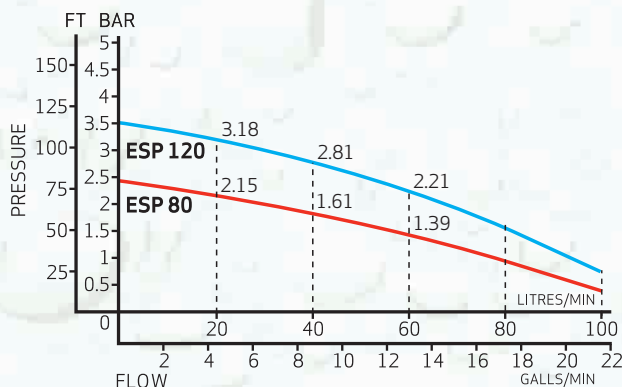
80ft head (2.4 bar)  
2.4 amps/580 watts  
58dB  
Continuous

## ESP 120 CPV single

### Quieter\*

120ft head (3.6 bar)  
2.7 amps/650 watts  
60.4dB  
Continuous

Shower head



## ESP CPVSB

### Applications

Created to meet the requirements of those who live in larger houses or whose idea of a really good shower is a total deluge.

### Performance

Closed head pressure  
Max amps/watts  
Typical Decibel rating  
Rating

## ESP 80 CPVSB

Each Super Booster comprises two single pumps, one each to independently boost tank-fed hot and cold water services. These pumps can be positioned together or remotely one from the other. Application specification is the same as single versions above.

### Quieter\*

80ft head (2.4 bar)  
1.8 amps/430 watts  
58dB  
Continuous

## ESP 120 CPVSB

### Quieter\*

120ft head (3.6 bar)  
3.2 amps/720 watts  
60.4dB  
Continuous

Shower head



\* We state 'quieter' on our centrifugal range of pumps as they are quiet in operation relative to other shower pumps available. Pumps are mechanical in operation and the need to move water in volume or at high pressure will generate some background noise.



# PumpWise

An initiative to help customers

PumpWise is the cornerstone of Salamander's support service to customers and the means by which our customers are guaranteed:

- Selection of the right pump for the job
- The avoidance of installation pitfalls
- A third year's warranty FREE on RSP, RGP, RHP & ESP pumps

## ✓ Selecting the right pump for the job

We offer technical assistance, guidance or advice to anyone who asks. Contact our PumpWise team.

## ✓ Eliminate the risk of an incorrect installation

If your installation is not straightforward or if you have any reservations or doubts, contact our PumpWise team.

## ✓ Extend your warranties free of charge

On the RSP, RGP, RHP & ESP ranges get your warranty extended to 3 years free of charge. On the Force brass range get your warranty extended to 5 years free of charge. All you have to do is contact our PumpWise team, register and follow our engineer's installation advice.

## ✓ On-site nationwide support

To resolve any on-site technical issues contact us. A Salamander engineer will endeavour to resolve your problem quickly over the phone, or if that's not possible, arrange an on-site visit from one of our Salamander service engineers.

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# PumpWise

For PumpWise help, guidance or advice simply call

## 0191 516 2002

(08.30-17.30 Mon - Thurs, 08.30-17.00 Fri)

Sales & Technical: 0191 516 2002

Fax: 0191 548 4445

Email: [sales@salamanderpumps.co.uk](mailto:sales@salamanderpumps.co.uk)  
[tech@salamanderpumps.co.uk](mailto:tech@salamanderpumps.co.uk)





# Warranty

## Two years warranty

Salamander customers benefit from a two year warranty on the RSP, RGP, RHP and ESP ranges. This warranty will operate from date of purchase and is subject to the installation guidelines being followed correctly.\*

## The Extended Warranty Scheme

Your pump warranty can be extended for an additional three years on the RSP, RHP, RGP & ESP ranges only.

The Extended Warranty Scheme exists to protect customers from unexpected or unforeseen pump breakdown.

Under the Extended Warranty Scheme we guarantee to repair or replace your pump FREE\* for a further three years on top of your existing warranty.

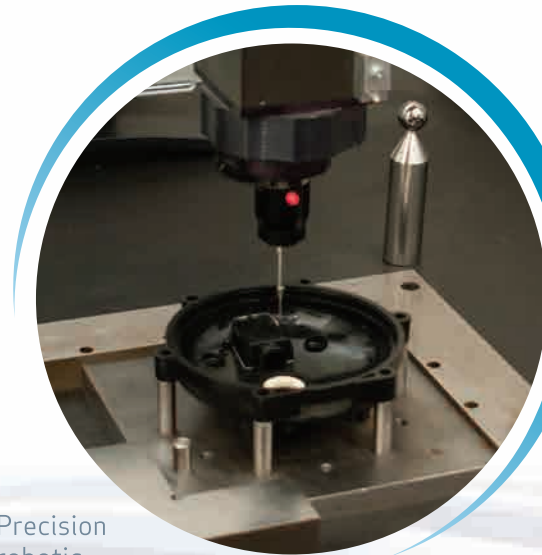
Participation in the Extended Warranty Scheme is activated on completion of a direct debit mandate for payment of a nominal designated amount. Call sales on 0191 516 2002 and ask for details.

\*Due to the technical nature of our pumps, please ensure that you follow our fitting guidelines carefully as failure to do so could invalidate the pump's warranty.



## Third, fourth & fifth year warranty FREE

Under the PumpWise Scheme customers who consult Salamander and register the pump by phone immediately after installation, and who implement our recommendations, will benefit from a third year warranty FREE on the RSP, RHP, RGP & ESP ranges.



Precision robotic measuring tools are used to ensure consistency of pump housing diameters.



**100%**  
of our products are tested prior to leaving the factory.



# Find the right pump for your application



1

## To a combi boiler

Where mains pressure is low, the supply to the combi boiler can be boosted via a header tank and single impeller pump.



2

## Instant electric shower

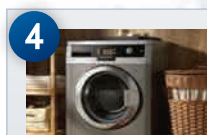
Where mains pressure is low the supply to an electric shower can be boosted via a header tank and single impeller pump.



3

## Instant electric water heater

Where mains pressure is low the supply to an electric shower or water heater can be boosted via a header tank and single impeller pump.



4

## Washing machine or dishwasher

Boost supply of hot or cold water or both, to ensure continuing pressure of supply.



5

## Conventional shower

A conventional shower can be boosted depending on the needs of the consumer from 1.5 to 3.0 bar.



6

## Victorian can shower head

Victorian can shower heads can be boosted by 2.0 bar shower pumps. Large shower heads may need larger pumps - consult PumpWise if unsure.



7

## Multi-function shower

We recommend a minimum 1.5 bar pump to ensure good performance through the shower head.<sup>1</sup>



8

## Massage function

We recommend a minimum 1.5 bar pump to ensure good performance through the shower head.



9

## Champagne spray

We recommend a minimum 1.5 bar pump to ensure good performance through the shower head.



10

## Body jets (4 max)

We recommend a minimum 3.0 bar pump to ensure good performance through the shower head.<sup>1</sup>



11

## Whole house showers

We have a range of house pumps for all household needs such as showers, taps, bath fill and en suite shower rooms.



12

## Toilets

We recommend 1.5 or 2.0 bar single impeller pumps to boost toilet flush.



13

## Washbasins

We recommend twin impeller pumps for monobloc mixer taps or single impeller pumps for single tap supply.



14

## Individual hot/cold taps or bath

Depending on need, we recommend single impeller pumps from 1.5 bar for basin fill or 3.0 bar plus for bath fill applications.

Model	Performance	
	Bar Rating Closed Head	Bar Rating @ 9ltr/min
RGP 50	1.5	1.4
RGP 80	2.4	2.2
RGP 120	3.6	3.3
RSP 50	1.5	1.4
RSP 75	2.2	2.0
RSP 100	3.0	2.8
RHP 50	1.5	1.4
RHP 75	2.2	2.0
RHP 100	3.0	2.8
ESP 55 CPV	1.5	1.4
ESP 80 CPV	2.4	2.2
ESP 120 CPV	3.6	3.3
ESP 50 CPV	1.5	1.4
ESP 75 CPV	2.2	2.0
ESP 100 CPV	3.0	2.8
ESP 80 CPV SB	2.4	2.2
ESP 120 CPV SB	3.6	3.2

If in doubt as to which Pump to use please call

**PumpWise**

on 0191 516 2002

## Application notes

<sup>1</sup> May require RCM control modules when using positive head pumps.

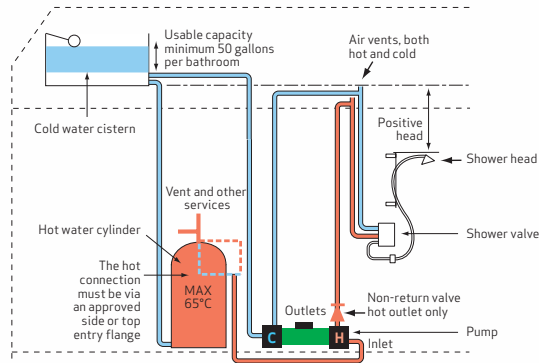
# Right Shower / Whole House / ESP CPV Pumps - Applications / General Specification

Application														Pump Type				Input Parameters		Specification						Connection Size / Type										
Combi Boiler	Instant Electric Shower	Instant Electric Water Heater	Washing Machine / Dishwasher	Conventional Shower	Victorian Can Shower Head	Multi Function Shower	Massage Function	Champagne Spray	Body Jets (4 max)	Whole House	Toilets	Washbasins	Individual Hot/Cold Taps or Both	Single Impellor	Twin Impellor	Positive Head	Universal	Max Input Pressure (Bar)	Max Input Temperature (°C)	Motor		Impellor		Seal		Pump	Hose		Isolators							
																				Type	Continuously Rated	Composite	Centrifugal	PTFE Carbon	Ceramic		Pushfit	Diameter	Inlet	Outlet						
				●							●	●	●	●		●		1.0 Bar	65°C	220-240v 50Hz Single Phase. Induction Motor. (complies with BS5000 part 11)	●	●	●	●	●	G3/4 (M)	15mm	10mm	●	●						
				●	●	●	●	●			●	●	●	●		●					●	●	●	●	●		●	●	22mm	15mm	●	●				
				●	●	●	●	●	●		●	●	●	●		●					●	●	●	●	●		●	●	22mm	15mm	●	●				
				●		●									●	●					●	●	●	●	●		●	●	15mm	10mm	●	●				
				●	●	●	●	●							●	●	●				●	●	●	●	●		●	●	22mm	15mm	●	●				
				●	●	●	●	●	●		●	●	●		●	●	●				●	●	●	●	●		●	●			●	●	●			
				●						●	●	●	●		●	●	●				●	●	●	●	●		●	●			●	●	●			
				●	●	●	●	●			●	●	●		●	●	●				●	●	●	●	●		●	●			●	●	●	●		
●	●	●	●	●		●	●	●			●	●	●	●			●				0.5	●	●	●	●		●	●			●	●	●	●	●	●
●	●	●	●	●	●	●	●	●			●	●	●	●			●				1.0	●	●	●	●		●	●			●	●	●	●	●	●
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				●		●	●	●		●	●	●	●	●	●		●				0.5	●	●	●	●		●	●			●	●	●	●	●	●
				●	●	●	●	●		●	●	●	●		●		●				1.0 Bar	●	●	●	●		●	●			●	●	●	●	●	●
●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●					●	●	●	●		●	●			●	●	●	●	●	●
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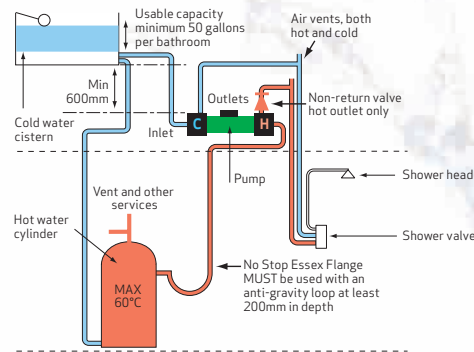
# Typical Right Pump and ESP CPV Pump applications

## Positive head system



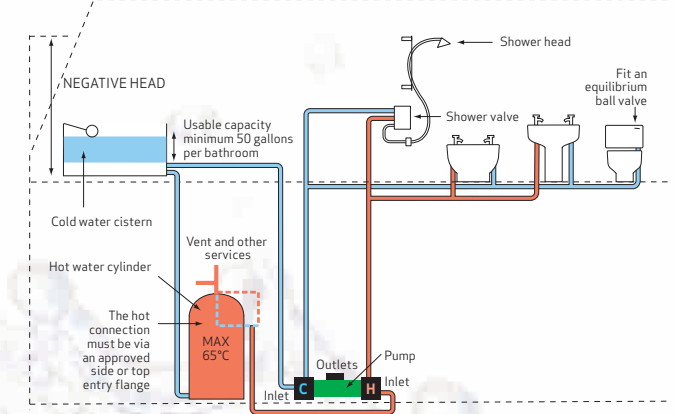
RSP Twin Pump with up and over pipework and natural flow of 1 litre/min per side.

## Pump fitted above cylinder



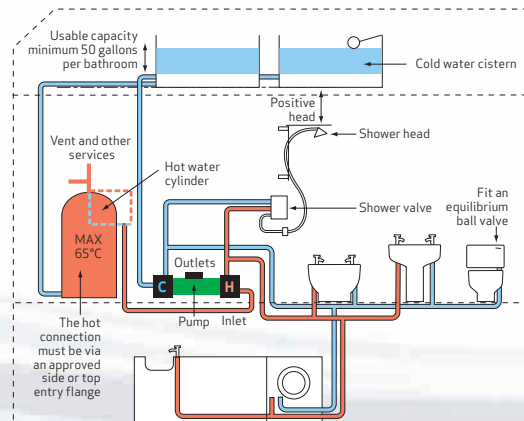
Pump fitted in loft above cylinder. Must use no stop Essex flange and anti-gravity loop.

## Negative head system



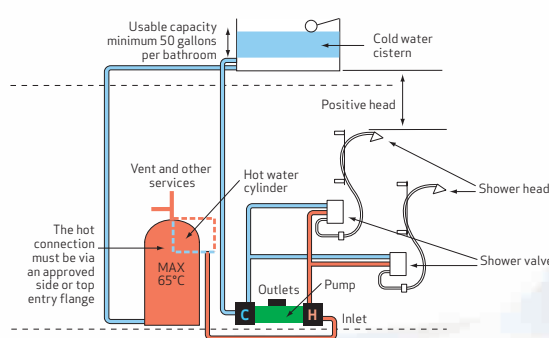
ESP CPV Twin Pump to a bathroom in a loft conversion.

## Whole house system



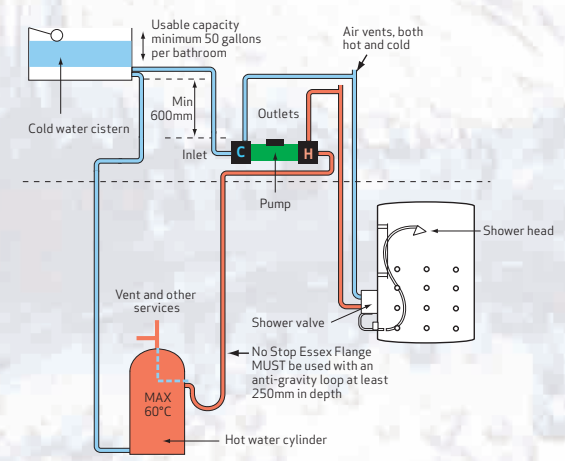
RHP Twirl Pump on a whole house system.

## Pump feeding two showers



RSP Twin Pump feeding two showers.

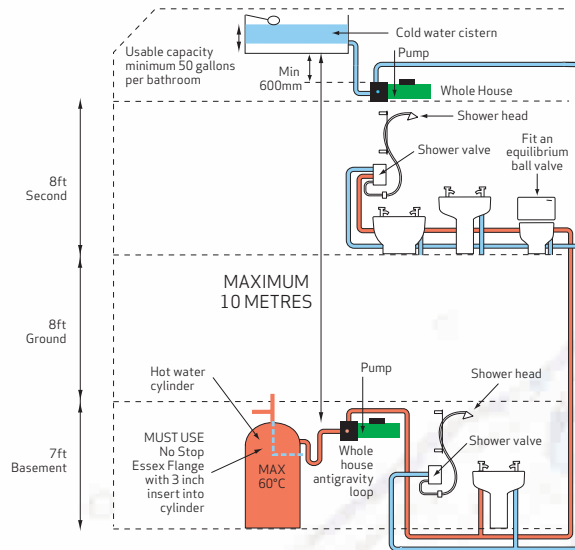
## Pump on steam cabinet



ESP CPV Pump fitted above cylinder on a steam shower cabinet.

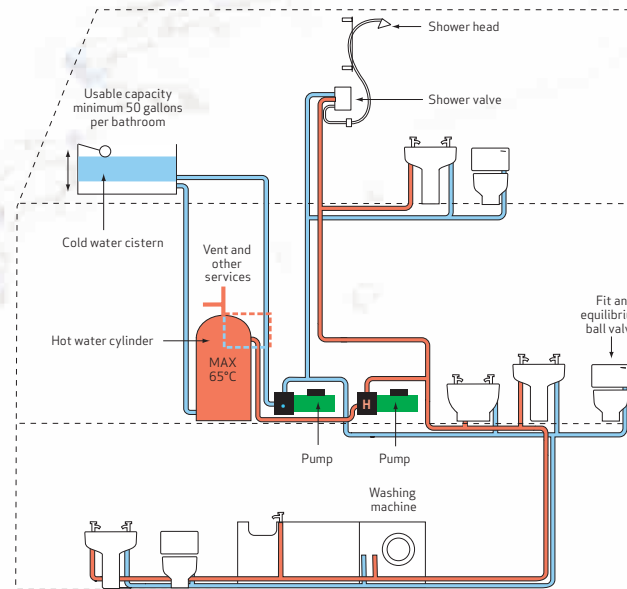


## Large whole house system



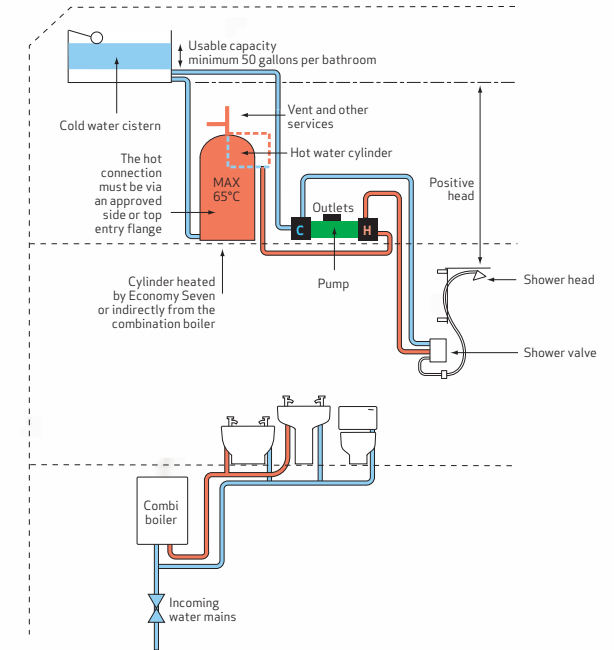
Large whole house system with the ESP CPV SB hot and cold pumps independently mounted with hot pump above cylinder.

## Large whole house system



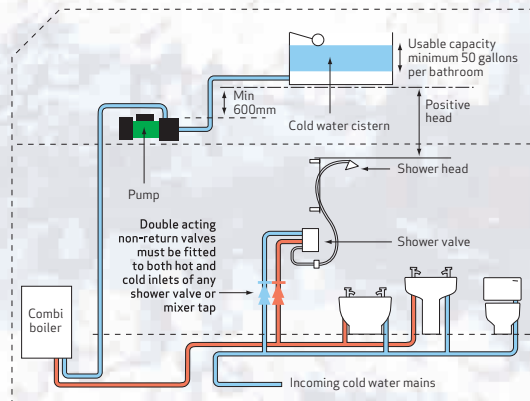
Large whole house system with the ESP CPV SB hot and cold pumps mounted in the airing cupboard.

## Combi with CWS tanks and cylinder



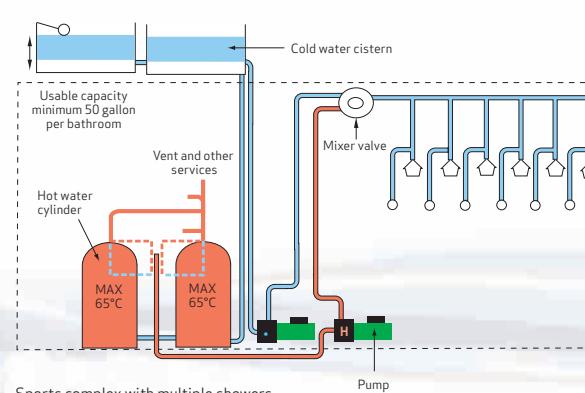
Combi boiler system with RSP twin pump to boost the shower from a CWS tank and a direct cylinder.

## Pumped tank supplies to combi or pressurised cylinder



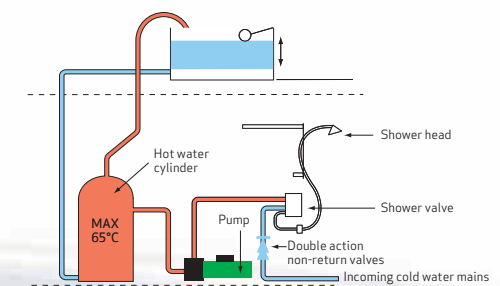
Tank-fed, pressurised cylinder or combi boiler system with ESP CPV single to boost the hot supply water pressure and cold water mains supplies "cold" to shower, bath, basin and toilet.

## Multiple showers



Sports complex with multiple showers.

## Pumping hot water only



Tank-fed (hot) with cw mains cold systems MUST USE Right ESP CPV.



# S flange

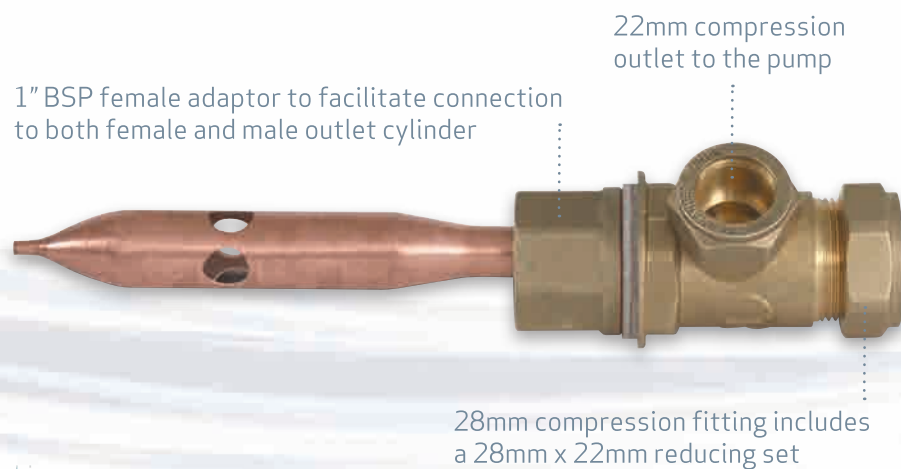
## Salamander's uniquely different top entry DZR cylinder flange

- Plumbing is not an exact science and aeration of the supply water to showers and other outlets is a common problem.
- When a pump is fitted to boost the supplies from the cold water storage tank and from the cylinder to showers, baths and basins the risk of aeration is increased many times.

Aerated supply water to pumps and to showers and other outlets means an increased risk of:

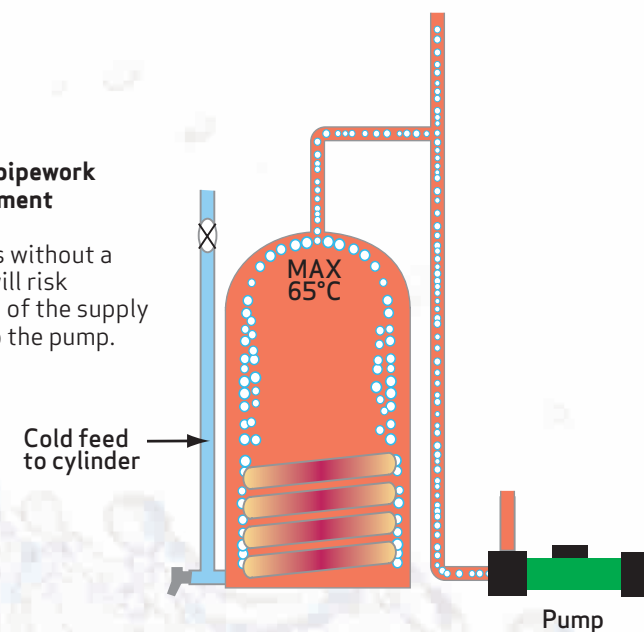
- Unnecessary, perhaps sudden temperature fluctuation at the shower or other outlets.
- A noisy pump.
- Premature pump breakdown.

A correctly fitted approved cylinder flange will mitigate if not prevent these risks.



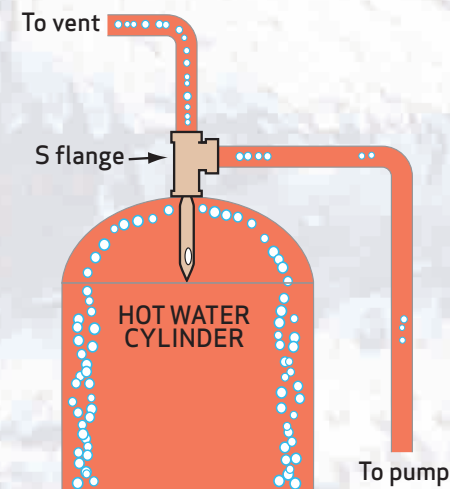
### Typical pipework arrangement

Systems without a flange will risk aeration of the supply water to the pump.



### S flange

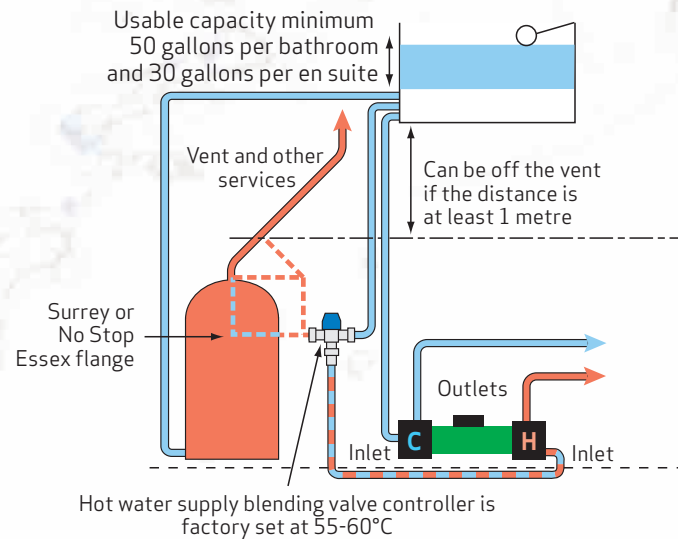
The S flange will encourage aeration to follow a natural path to vent and prevents aerated supply water being drawn into the pump.



# Hot water supply blending valve

The hot water supply blending valve is designed to protect booster pumps fitted to systems where the stored domestic hot water temperature is uncontrolled e.g. Aga, solid fuel appliances or automatic boilers very crudely controlled by the boiler thermostat.

Example shows a centrifugal twin pump with hot water supply blending valve protection.



# Anti-vibration couplers

All Salamander pumps are supplied with anti-vibration (AV) couplers in order to limit the transfer of pump vibration to the associated pipe work.

The beneficial effect of anti-vibration (AV) couplers is lost if they are bent or twisted on installation.

Each pump whether a single or twin pump is supplied with one or two straight and angled anti-vibration (AV) couplers. This arrangement of couplers facilitates the connection of the supply pipework from any direction.

RSP 50 and RGP 50 are supplied with 15mm hoses with isolating valves on the inlets and outlets. All remaining pumps are supplied with 22mm hoses with isolating valves on the inlets and outlets.



[www.salamanderpumps.co.uk](http://www.salamanderpumps.co.uk)

## **Salamander Pumps**



Quality | Technology | Service | Value

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