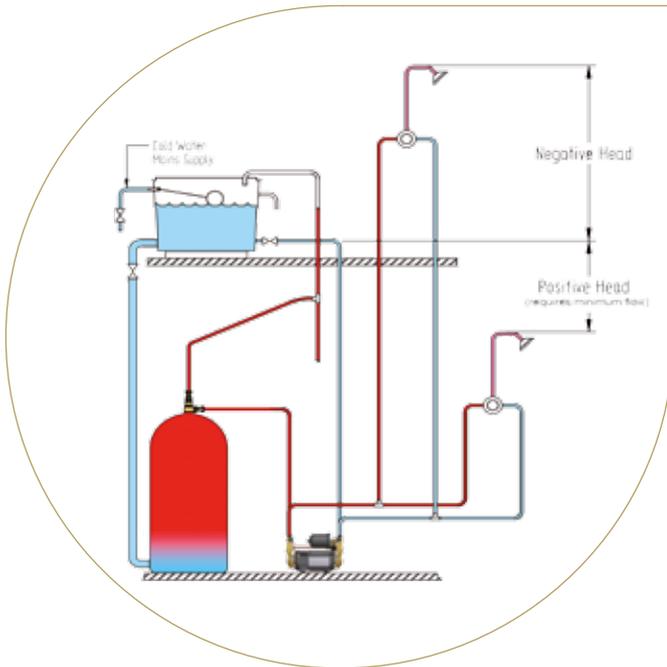


# Vented systems explained

## Vented System (Gravity Fed)

Typically used in older properties, this indirect system uses the mains water supply to feed a cold water storage tank, usually located in the roof space, which in turn feeds a hot water cylinder and cold outlets. The system relies on gravity to provide the pressure and flow.



## Positive Head Systems

A positive head system exists when sufficient pressure is available under gravity to provide a flow at the outlet. Typically a positive head condition exists where the flow from the outlet is more than 1 litre/min.

## Negative Head Systems

A negative head system exists when there is inadequate pressure or head of water under gravity to provide sufficient flow at the outlet. Typically a negative head condition exists where the flow from the outlet is less than 1 litre/min.

## Pressures

Pumps for vented (gravity) systems are rated in bar, which is a measure of how much pressure they generate but it helps to know the height of the cold water cistern above an outlet as this dictates the static water pressure. For example, 1 bar pressure is equal to 10 metres static head of water. Generally the higher the bar rating the higher the performance. However it is important to match the correct size of pump with the application to ensure optimum performance.

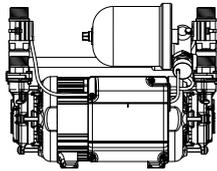
### The following can be used as a guide:

- 1.0 bar pressure = Low boost
- 1.5 – 3.0 bar pressure = Medium boost
- 3.0 bar pressure + = High boost

**Properties within the UK generally use two types of plumbing systems, understanding these is the first step to ensuring you select the correct pump solution for your property.**

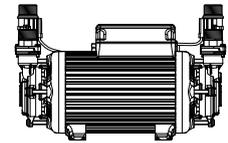
### **Universal Pumps**

Operate in positive or negative head conditions and do not require a gravity flow to start, incorporating both a pressure and flow switch. The pump starts automatically when the pressure switch detects a drop in pressure when an outlet opens. The flow switch keeps the pump running whilst there is sufficient flow of water. When the flow stops, the pump continues to run for 3 seconds allowing the system to re-pressurise.



### **Standard Pumps**

Standard pumps operate under positive head conditions only. A standard pump is operated by a flow switch, automatically starting when a gravity flow of water greater than 0.6 - 1.0 ltrs/min (depending on the pump model) through the outlet is detected. The pump will automatically stop when the outlet is closed and the flow ceases.

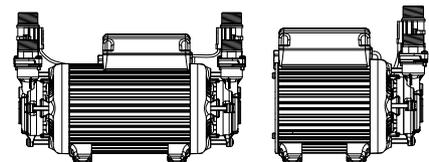


### **Peripheral Pumps**

In a peripheral pump water is circulated and gains pressure around the periphery of the pump head. Peripheral pumps are compact and system friendly as they tolerate high hot water temperatures and air within the system to a greater extent than an equivalent centrifugal pump. They are ideal for applications where higher pressures with nominal flows are required.

### **Twin and Single pumps**

Twin pumps are designed to boost both hot and cold water supplies equally. Single pumps are designed to boost single water supplies; hot, cold or pre-mixed.



For further advice on selecting the correct pump call:

**pumpassist**  
HELPLINE +44 (0) 800 31 969 80

# monsoon

**Monsoon offers the most comprehensive range of premium quality brass peripheral pumps available on the market.**

Its wide range means that it is capable of boosting water pressure for a host of domestic and light commercial applications from a single tap or shower, to a complete bathroom or the whole property.

Monsoon is the benchmark for performance, quality and reliability and is supported with an industry leading 5 year guarantee across the range.



Disconnect supply before opening  
Monsoon Universal 2.0 bar Twin  
2.0 bar max @ closed valve  
1.5 bar @ 9 l/min  
Serial No: 1321015-034 Part No: 46480  
230V 50Hz 1.9kW 50 ENCL: UPE4  
110V 50Hz 1.9kW 50 ENCL: UPE4  
WATER

Every component within the Monsoon range has been designed to enhance the high levels of performance, quality and reliability.

Monsoon's brass bodied construction is suitable for a wide range of applications.

Whole house  
Complete bathroom  
Shower  
Mixer tap  
Tap

## Performance without compromise

# Features and benefits

## Performance

- 1.5 to 4.5 bar performance options
- Positive or negative head options
- Twin or single
- Quiet operation\*
- System friendly peripheral design
- Fully automatic switching
- Dry run protection
- Continuously rated

## Quality

- Built-in safety – low voltage controls
- WRAS Approved
- ISO 9001:2015
- BS EN 60335 compliant
- CE compliant

## Reliability

- 5 year guarantee
- Robust brass construction
- Extended life seal
- Integral strainer
- Service kit available

Monsoon pumps are supplied with 300 mm anti-vibration flexible hoses with integral isolation valves, G $\frac{3}{4}$  threaded connections to the pump, 22 mm push-fit to pipework,\*\* anti-vibration feet and pre-wired for ease of installation.



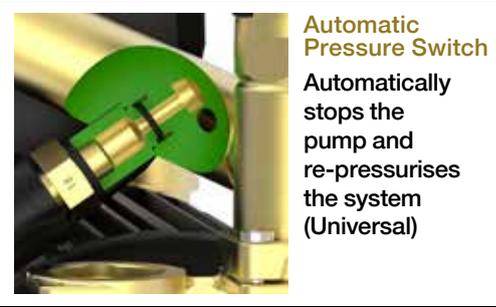
**Peripheral Design**  
 Pressure efficient  
 Compact size  
 System friendly,  
 reduces potential  
 to airlock



**Automatic Flow Switch**  
 Automatically starts the pump when flow exceeds 0.6 litres/min (Standard & Universal)



**Integral Strainer**  
 High capacity strainer  
 Prevents debris from entering the pump, for an extended life



**Automatic Pressure Switch**  
 Automatically stops the pump and re-pressurises the system (Universal)



**Mechanical Seal**  
 EPDM/PTFE/  
 Al.Oxide seal  
 Extended life



**Flexible Hoses**  
 300 mm anti-vibration flexible hoses with integral isolating valves G $\frac{3}{4}$  threaded connections to pump 22 mm push fit to pipework. \*\*

monsoon



\* Independently tested - 3.0 bar Monsoon Standard Twin rated quieter than competitor's equivalent models.

\*\* Hose connections may vary according to country. For further information please see the technical data sheet available to view on our website: [www.stuart-turner.co.uk/downloads](http://www.stuart-turner.co.uk/downloads)

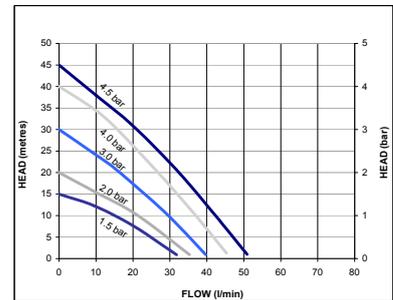
Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)



## Monsoon **Universal Twin**

Universal Twin pumps are designed for installation into vented systems to pump both the hot and cold water supplies boosting both equally. Suitable for both positive and negative head applications.

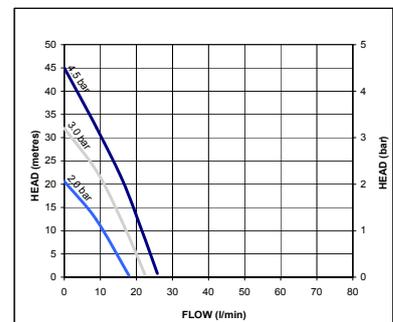
Part No	Model
46505	U1.5 bar Twin
46480	U2.0 bar Twin
46410	U3.0 bar Twin
46411	U4.0 bar Twin
46412	U4.5 bar Twin



## Monsoon **Universal Single**

Universal Single pumps can be used in pairs to boost vented systems to pump hot and cold water supplies independently, or as a single pump to boost a water supply as required. Suitable for both positive and negative head applications.

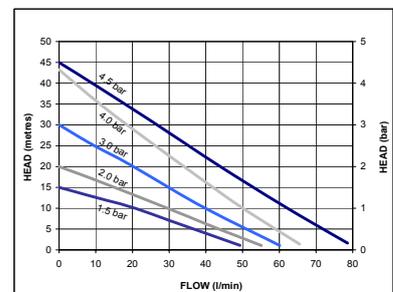
Part No	Model
46498	U2.0 bar Single
46413	U3.0 bar Single
46414	U4.5 bar Single



## Monsoon **Standard Twin**

Standard Twin pumps are designed for installation into vented systems to pump both the hot and cold water supplies - boosting both equally. Suitable for positive head applications only.

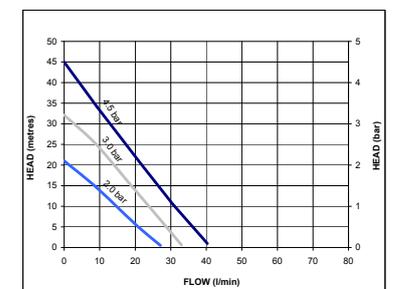
Part No	Model
46506	S1.5 bar Twin
46415	S2.0 bar Twin
46416	S3.0 bar Twin
46417	S4.0 bar Twin
46418	S4.5 bar Twin



## Monsoon **Standard Single**

Standard Single pumps are ideal for boosting a water supply in vented systems. Suitable for positive head applications only.

Part No	Model
46497	S2.0 bar Single
46419	S3.0 bar Single
46420	S4.5 bar Single



# whole house, bathroom, shower

For application guidance  
see pages 18-19

monsoon



Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

For further advice on selecting  
the correct pump call:

**pumpassist**

HELPLINE +44 (0) 800 31 969 80

mainsboost

aquaboost

stuart

# showermate

**Showermate provides a range of high quality, high performing, water boosting pumps suitable for multiple applications within a bathroom.**

Designed to boost the performance of shower and tap outlets within a bathroom. The range is suitable for positive and negative head applications and all Showermate pumps are simple to install and are very quiet in operation.



Every component of the high quality, plastic **Showermate range** has been designed to provide quality and reliability at a competitive price.

The high quality Showermate range of pumps are suitable for many bathroom applications.

Complete bathroom  
Shower  
Mixer tap  
Tap

**Economy without compromise**

## Features and benefits

### Performance

- 1.5 to 2.6 bar performance options
- Positive or negative head options
- Twin or single
- Quiet operation
- System friendly peripheral design
- Automatic switching
- Dry run protection
- Continuously rated

### Quality

- WRAS Approved
- ISO 9001:2015
- BS EN 60335 compliant
- CE compliant

### Reliability

- 3 year guarantee
- Durable plastic construction
- Extended life mechanical seal

Showermate pumps are supplied with 200 mm anti-vibration flexible hoses with integral isolation valves, G $\frac{3}{4}$  threaded connections to the pump, 15 mm push-fit to pipework, anti-vibration feet and pre-wired for ease of installation.



#### Peripheral Design

Pressure efficient  
Compact size  
System friendly,  
reduces potential  
to airlock



#### Mechanical Seal

EPDM/PTFE/  
Al.Oxide seal  
Extended life



#### Automatic Flow Switch

Automatically  
starts the pump  
when flow  
exceeds  
0.8 litres/min  
(Standard &  
Universal)



#### Automatic Pressure Switch

Automatically  
stops the  
pump and  
re-pressurises  
the system  
(Universal)



#### Flexible Hoses

200 mm anti-  
vibration hoses  
with integral  
isolating valves  
G $\frac{3}{4}$  threaded  
connections to  
pump, 15 mm  
push-fit to  
pipework

Showermate eco provides  
a compact entry level pump  
suitable for single application  
use.

\* Independently tested - 1.5 and 2.0 bar Showermate eco Twin rated quieter than competitor's equivalent models.

Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)



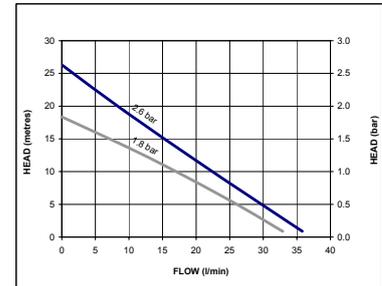
# showermate bathroom, shower, tap



## Showermate **Universal Twin**

Universal Twin pumps are designed for installation into vented systems to pump both the hot and cold water supplies boosting both equally. Suitable for both positive and negative head applications.

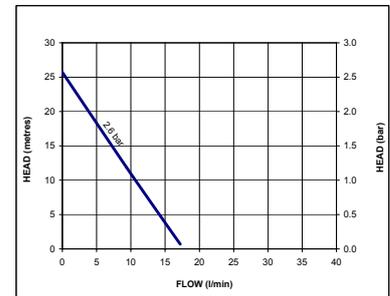
Part No	Model
46532	U1.8 bar Twin
46533	U2.6 bar Twin



## Showermate **Universal Single**

Universal Single pumps can be used in pairs to boost vented systems to pump hot and cold water supplies independently, or as a single pump to boost a water supply as required. Suitable for both positive and negative head applications.

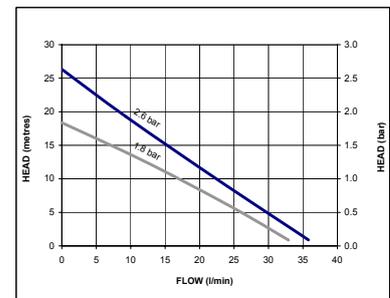
Part No	Model
46534	U2.6 bar Single



## Showermate **Standard Twin**

Standard Twin pumps are designed for installation into vented systems to pump both the hot and cold water supplies - boosting both equally. Suitable for positive head applications only.

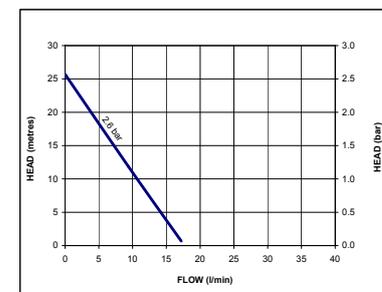
Part No	Model
46407	S1.8 bar Twin
46431	S2.6 bar Twin



## Showermate **Standard Single**

Standard Single pumps are ideal for boosting a water supply in vented systems. Suitable for positive head applications only.

Part No	Model
46429	S2.6 bar Single



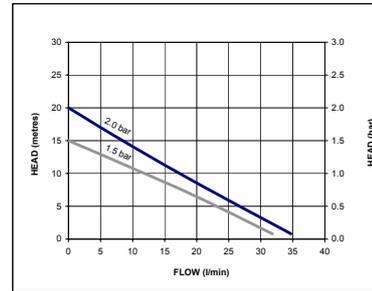
# showermate eco shower and tap



## Showermate eco Standard Twin

Standard Twin pumps are designed to boost the incoming hot and cold water supply to an individual shower, bath, shower mixer or mixer tap. Suitable for positive head applications only.

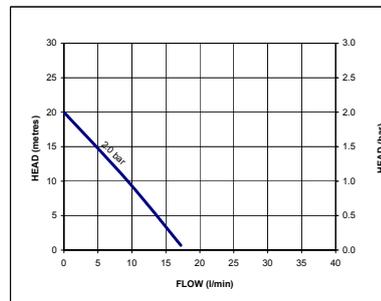
Part No	Model
46502	S1.5 bar Twin
46500	S2.0 bar Twin



## Showermate eco Standard Single

Standard Single pumps are designed to improve water supplies to single taps or to pump blended water from a shower mixer. Suitable for positive head applications only.

Part No	Model
46503	S2.0 bar Single



"Showermate eco delivers economy and efficiency; it has fewer components and a neat compact design, delivering cost effective high performance with all the features of quality and reliability associated with the Showermate brand. At 30% smaller than the standard Showermate pump, and available in 3 options - 1.5 or 2.0 bar for the Twin and 2.0 bar for the Single - bathroom designers and installers can specify the 'eco' model in a wide range of situations, including small and confined spaces which are often difficult with larger pump models."

Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

For further advice on selecting the correct pump call:

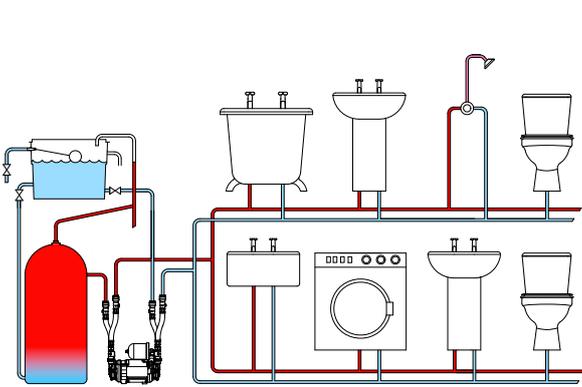
**pumpassist**  
 HELPLINE +44 (0) 800 31 969 80

# Application guide - vented system

The following diagrams show where Monsoon, Showermate and Showermate eco water boosting pumps would be typically located within the most commonly used plumbing systems.

## Whole House Vented System Negative Head

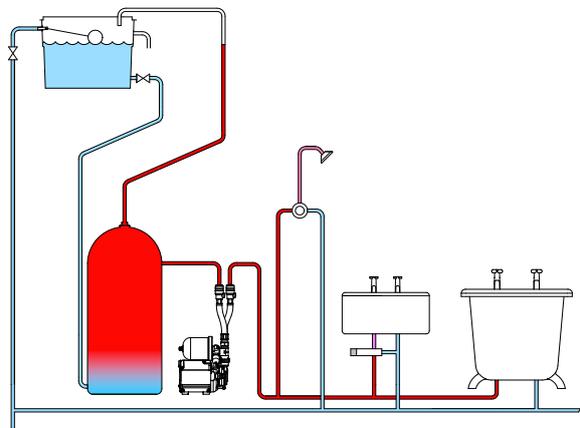
Typical application: Monsoon Universal Twin



## Boost Gravity Hot Supply (mains cold)

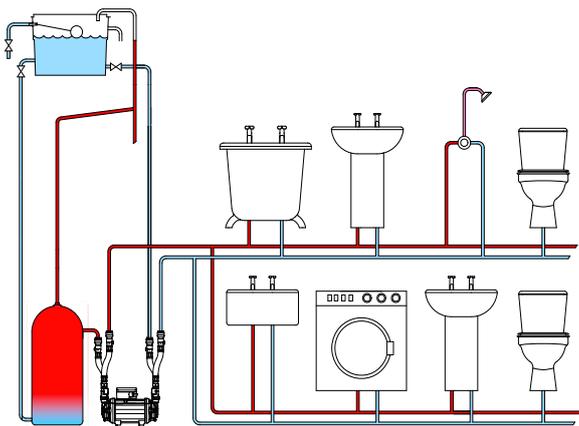
Typical application: Monsoon Universal Single

Showermate Universal Single



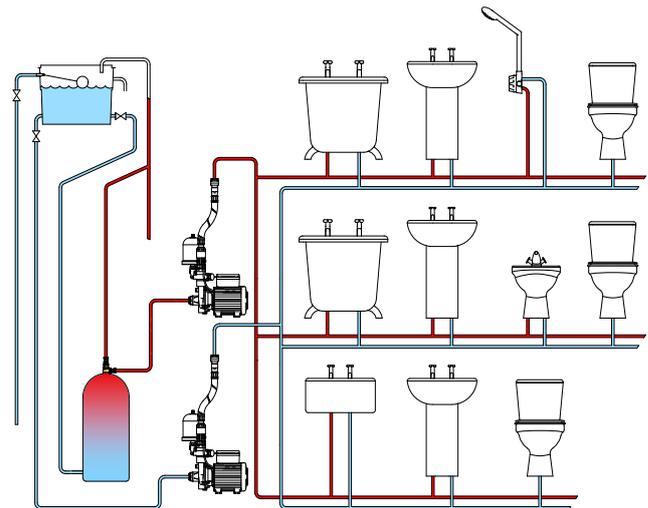
## Whole House Vented System Positive Head

Typical application: Monsoon Standard Twin



## Large House Vented System Negative Head

Typical application: Monsoon Universal Single

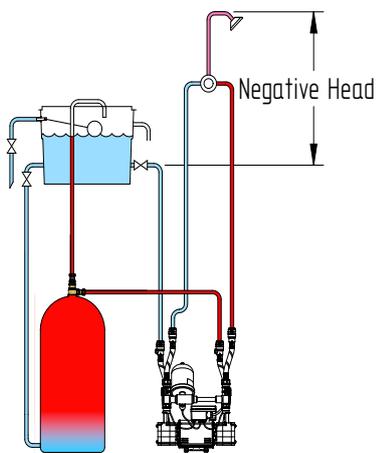


[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

**These illustrations are for general guidance only. For further advice or technical assistance please contact our PumpAssist team.**

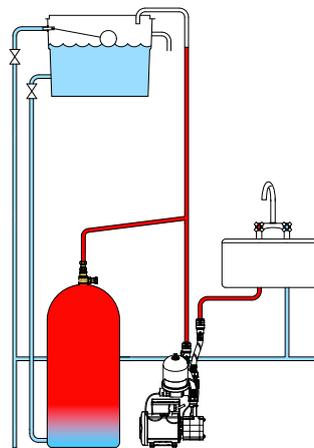
### Shower Outlet Negative Head

Typical application: Monsoon Universal Twin, Showermate Universal Twin



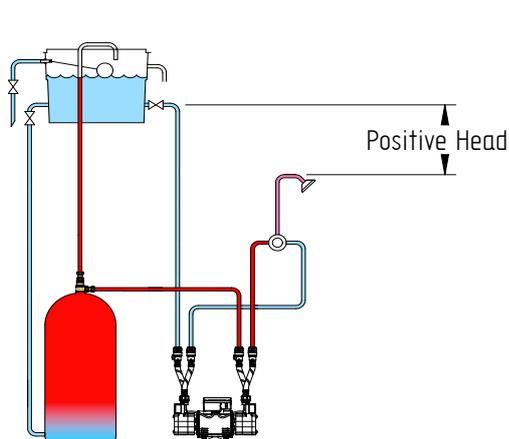
### Boost Gravity Hot Supply to High Pressure Kitchen Tap

Typical application: Monsoon Universal Single, Showermate Universal Single



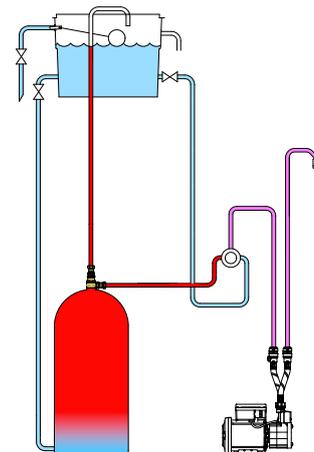
### Shower Outlet Positive Head

Typical application: Monsoon Standard Twin, Showermate Standard Twin, Showermate eco Twin



### Shower Outlet Blended Supply Positive Head

Typical application: Monsoon Standard Single, Showermate Standard Single, Showermate eco Single



monsoon

showermate

Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

For further advice on selecting the correct pump call:

**pumpassist**  
HELPLINE +44 (0) 800 31 969 80

# Pump applications

<p><b>Please note: This is a general guide only and individual site conditions will vary.</b></p> <p><b>For advice or technical assistance please contact PumpAssist on 0800 31 969 80</b></p>	Monsoon									
	TWIN									
	1.5		2.0		3.0		4.0		4.5	
	Uni	Std	Uni	Std	Uni	Std	Uni	Std	Uni	Std
Pressure Bands	Medium				High					
Boost hot or cold water to individual taps										
Bath or basin mixer	●	●	●	●	●	●	●	●	●	●
Boost hot water pressure to blend with mains cold water (mixer taps or shower)										
Shower only	●	●	●	●	●	●	●	●	●	●
Blended shower water										
Multi-function shower with body jets					●	●	●	●	●	●
Boost tank fed cold water supply to electric shower										
Standard bath-shower/shower	●	●	●	●	●	●	●	●	●	●
Bathroom only	●	●	●	●	●	●	●	●	●	●
Supply to combination boiler from a break tank										
Apartments	●		●		●		●			
Whole house - up to 2 bathrooms	●	●	●	●	●	●	●	●	●	●
Whole house - up to 3 bathrooms					●	●	●	●	●	●

[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

Monsoon					
SINGLE					
2.0		3.0		4.5	
Uni	Std	Uni	Std	Uni	Std
Med		High			
●	●	●	●	●	●
●		●		●	
●		●		●	
×2		×2		×2	
	●		●		●
		●		●	
●		●		●	
●		●		●	
×2		×2		×2	
●		●		●	
●		●		●	
×2		×2		×2	
●		●		●	
●		●		●	
×2		×2		×2	
		●		●	
		×2		×2	

Showermate				Showermate eco				
TWIN		SINGLE		TWIN	TWIN	SINGLE		
1.8		2.6		2.6		1.5	2.0	2.0
Uni	Std	Uni	Std	Uni	Std	Std	Std	Std
Medium						Medium		
				●	●			●
●	●	●	●			●	●	
				●				
●	●	●	●			●	●	
					●			●
				●				
●	●	●	●			●	●	
●	●	●	●	●				
				×2				

monsoon

showermate

Full technical data sheets are available to download:  
[www.stuart-turner.co.uk](http://www.stuart-turner.co.uk)

For further advice on selecting the correct pump call:

**pumpassist**  
 HELPLINE +44 (0) 800 31 969 80