

**STUART  
TURNER**  
ENGINEERED TO EXCEL



**STUART**  
Digital  
Pressurisation  
Units



## A name you can trust

When you choose Stuart Turner, you are investing in a name you can trust to deliver quality, design innovation, value for money and industry leading service,

### POWERING WATER FOR EVERY APPLICATION

Stuart Turner design and manufacture solutions to eliminate water pressure and flow problems in any application.  
Engineered to Excel

# Stuart Digital Pressurisation Units

Offering an unique monocoque design and advanced digital controls, the Stuart range of digital pressurisation units represent the next generation of automatic filling and pressure maintenance solutions for sealed heating and chiller systems.

Capable of filling a system from empty and then monitoring and maintaining the design fill pressure in sealed systems, Stuart Digital Pressurisation Units are easy to install and commission and are housed in compact and robust enclosures suitable for either floor or wall mounting.

Units are available with one (duty), or two (duty-standby) premium quality, continuously rated pumps featuring brass pump heads and impellers.

Utilising an unique microprocessor controller, pressure transducer monitoring and water level sensing, these systems feature intuitive, easy to use controls, self diagnostic functions, configurable volt-free contact alarm outputs and a BMS Modbus interface.

Stuart pressurisation units offer the next generation of digital systems at mechanical system prices engineered and manufactured by Stuart Turner.



# Stuart Pressurisation Features and benefits

Stuart Pressurisation Units offer the next generation of automatic filling units for sealed systems. They are extremely compact and feature a unique patented monocoque design, high quality Stuart brass pumps and an advanced digital control system.



## Performance

- Duty or Duty-Standby options
- Up to 8.0 bar pressure options
- 2 – 18 litre tank capacity options
- High flow fill valve
- Quiet operation

## Quality

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

## Reliability

- 2 year guarantee
- Robust construction
- Continuously rated pumps
- Dry run protection




**Unique monocoque design**  
Offers a compact unit that can be wall or floor mounted. Along with flexible hose connections easily configured to be left or right handed.

**Simple & convenient to install**



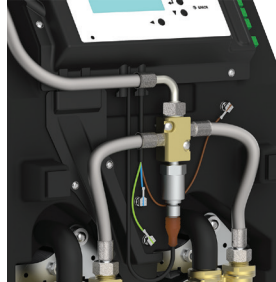
**Advanced digital controls**  
Featuring intuitive, easy to use menu system and backlit LCD matrix display.

**Easy & quick commissioning**




**Premium quality pumps**  
Available in single (duty) or twin (duty-standby) continuously rated pump options. Duty-standby models provide balanced usage based on pump run time, making them highly reliable.

**High reliability**




**Precise pressure transducer**  
Closed loop control featuring precise system pressure monitoring and top up. System pressure control operates in 0.1 bar increments.

**Monitoring and control**



**Robust break tank**  
Up to 18 litres capacity and with a WRAS approved fill valve offering high flow rates of 12 litres/minute. Features include type AB air gap and weir overflow.

**Category 5 compatible**



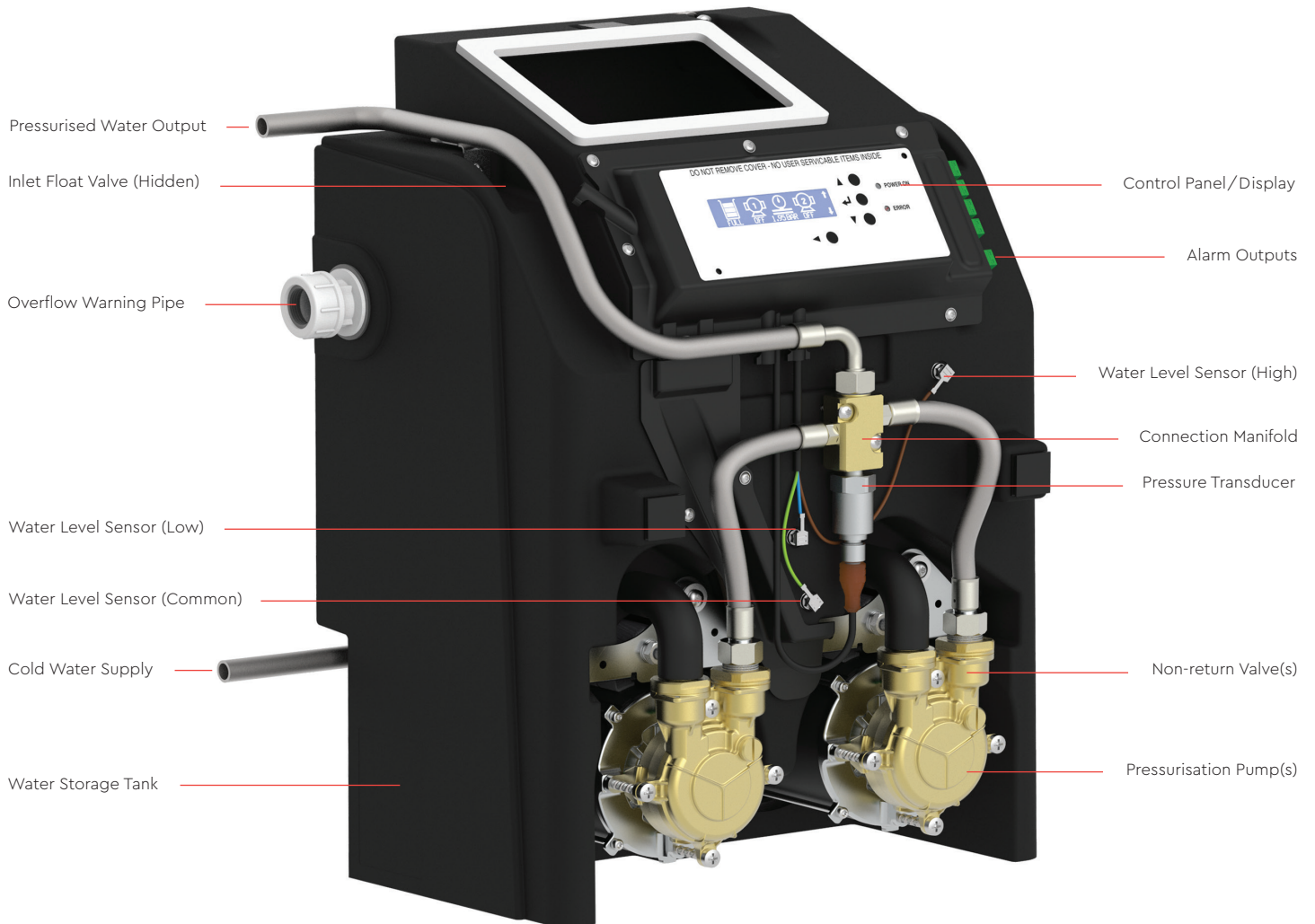
**External alarm**  
Multiple volt-free contacts and BMS connectivity to external alarms and systems.

**System connectivity**

# Stuart Pressurisation Range

Capable of filling a system from empty and then monitoring and maintaining the design fill pressure in sealed systems, Stuart Digital Pressurisation Units are easy to install and commission and are housed in compact and robust enclosures suitable for either floor or wall mounting.

Utilising an unique microprocessor controller, pressure transducer monitoring and water level sensing, these systems feature intuitive, easy to use controls, self diagnostic functions, configurable volt-free contact alarm outputs and a BMS Modbus interface.



# Stuart Mini digital pressurisation unit

**2 YEAR**  
GUARANTEE

From **60dB(A)**  
Quiet Operation

**PATENT**  
PROTECTED



## Stuart Mini digital pressurisation unit

Suitable for maintaining pressure in large domestic and small commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Stuart SPU Mini units are exceptionally easy to install and commission and are housed in a compact and robust enclosure suitable for wall mounting.

- Duty or Duty-Standby options
- Up to 3.0 bar pressure
- 2 litre tank capacity
- Compact, wall mounted
- Outlet configurable left or right
- Digital control system and LED display
- Suitable for system top-up only
- High recovery fill valve – 12 litres/minute @ 1 bar

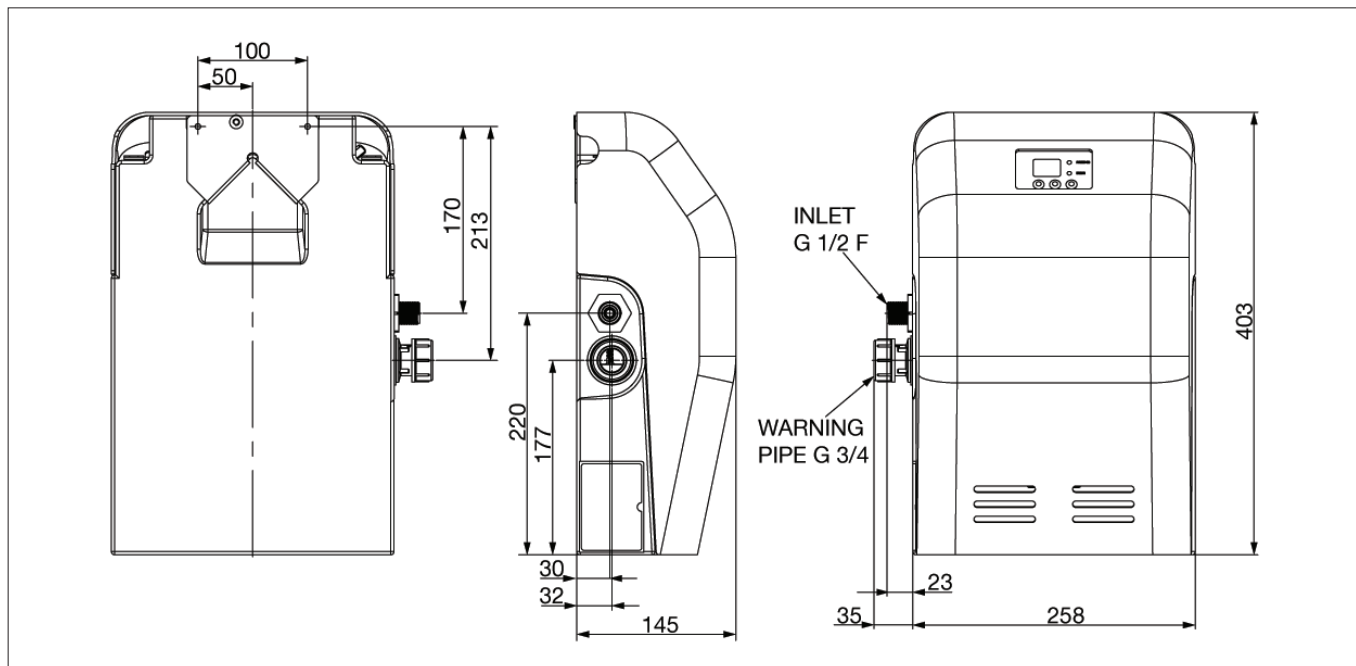
### Good to know

Flexible hose outlet connections can be configured to be left or right handed for ease of installation. Stuart Pressurisation units are WRAS compliant and provide category 5 backflow protection, with type AB air gap, weir overflow and warning pipe.

### Brief technical specification

Part No	Model	Pumps	Capacity (litres)	Pressure (Bar)	Width (mm)	Depth (mm)	Height (mm)	Weight Empty/Max (kg)
46719	SPU 130 MINI	1	2	3.0	293	145	403	3.6/6.6
46720	SPU 230 MINI	2	2	3.0	293	145	403	4.2/7.2

### Dimensions



## Full technical specification

		SPU 130 Mini 46719	SPU 230 Mini 46720
General	Guarantee	2 years	
	System capacity	Up to 6,000 litres	
	System fill mode	-	
	Mounting	Wall mount	
Performance	Maximum cold fill pressure	3.0 bar	
	Maximum inlet pressure	6.0 bar	
Pump	Number	1	2
	Type	Solenoid-piston	
	Duty Rating	Intermittent (S3)	Continuous (S1)
Break tank	Capacity	2 litres	
	Inlet valve	Torbeck (Side entry)	
	Fluid category protection	CAT 5	
Connections	Cold water inlet	G ½ M	
	Cold water outlet	15 mm compression	
	Overflow	G ¾ (19/23 mm pipe connection)	
	Flexible hose – outlet	15 mm x 600 mm	
Construction/Materials	Front Cover	Acrylic capped ABS	
	Break tank	Polyethylene	
	IP rating	IPX4	
Control system	Pressure monitoring	Pressure transducer	
Environmental	Ambient temperature	4 °C – 40 °C	
	Relative humidity	95% non-condensing	
	Noise rating	60 dB(A)	
Electrical	Power supply/phase/frequency	230 V a.c. / 1 / 50 Hz	
	Power consumption	100 Watts	
	Full load current	0.5 Amps	
Physical	Depth	145 mm	
	Width	293 mm	
	Height	403 mm	
	Empty weight	3.6 Kg	4.2 Kg
	Filled weight	6.6 Kg	7.2 Kg
Approvals		CE	

# Stuart Midi digital pressurisation unit

**2 YEAR**  
GUARANTEE

From **60dB(A)**  
Quiet Operation

**PATENT**  
PROTECTED



## Stuart Midi digital pressurisation unit

Suitable for maintaining pressure in large domestic and commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Stuart SPU Midi units feature continuously rated brass peripheral pumps, are exceptionally easy to install and commission and are suitable for either floor or wall mounting.

- Duty or Duty-Standby options
- Up to 4.1 bar pressure options
- 8 litre tank capacity
- Compact, wall or floor mounted
- Inlet and outlet configurable left or right
- Digital control system and LCD graphic display
- Suitable for system fill and top-up
- High recovery fill valve – 12 litres/minute @ 1 bar

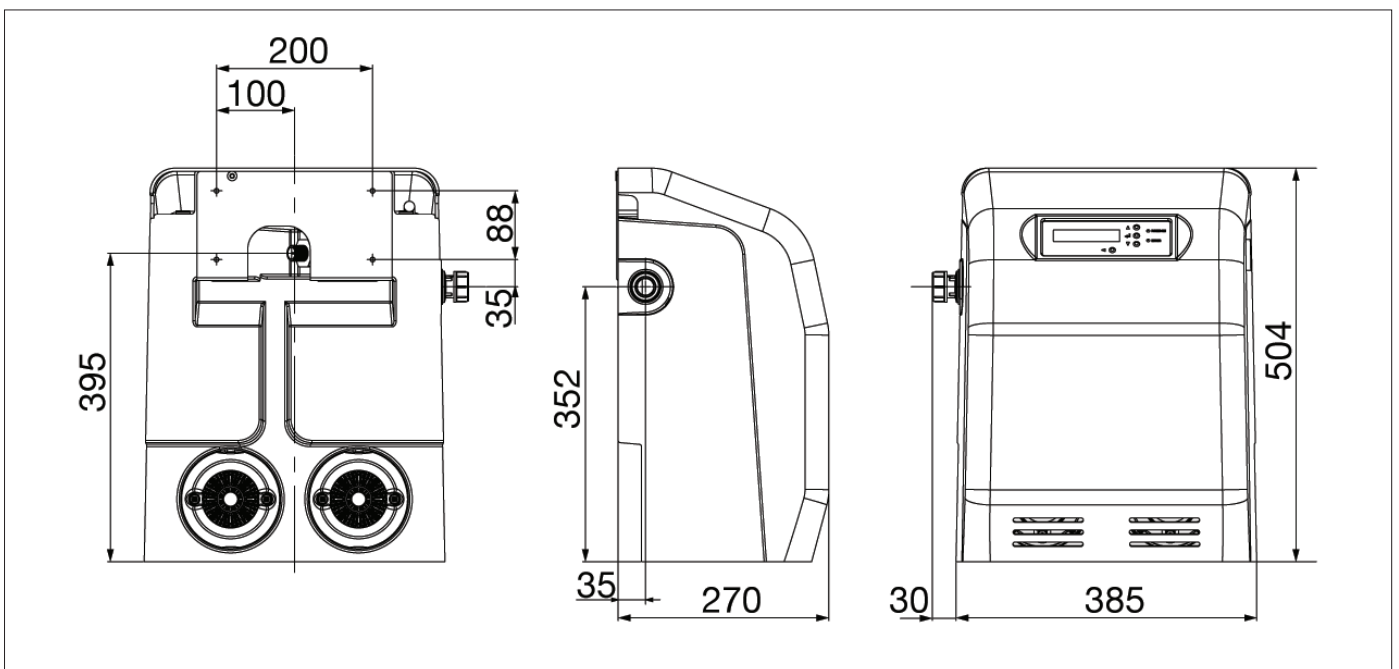
### Good to know

Flexible hose inlet and outlet connections can be configured to be left or right handed for ease of installation. Stuart Pressurisation units are WRAS compliant and provide category 5 backflow protection, with type AB air gap, weir overflow and warning pipe.

### Brief technical specification

Part No	Model	Pumps	Capacity (litres)	Pressure (Bar)	Width (mm)	Depth (mm)	Height (mm)	Weight Empty/Max (kg)
46721	SPU 135 MIDI	1	8	3.5	415	270	504	13.4/23.4
46722	SPU 235 MIDI	2	8	3.5	415	270	504	19.4/29.4
46723	SPU 150 MIDI	1	8	4.1	415	270	504	13.4/23.4
46724	SPU 250 MIDI	2	8	4.1	415	270	504	19.4/29.4

### Dimensions





# Full technical specification

		SPU 135 Midi 46721	SPU 235 Midi 46722	SPU 150 Midi 46723	SPU 250 Midi 46724
General	Guarantee	2 years			
	System capacity	Up to 300,000 litres			
	System fill capacity	✓			
	Mounting	Wall or Floor mount			
Performance	Maximum cold fill pressure	3.5 bar		4.1 bar	
	Maximum inlet pressure	7.0 bar			
Pump	Number	1	2	1	2
	Type	Peripheral (brass pump head and impeller)			
	Motor type	Induction (thermal trip, auto reset)			
	Duty Rating	Continuous (S1)			
Break tank	Capacity	8 litres			
	Inlet valve	Torbeck (Side entry)			
	Fluid category protection	CAT5			
Connections	Cold water inlet	15 mm compression			
	Cold water outlet	15 mm compression			
	Overflow	G ¾ (19/23 mm pipe connection)			
	Flexible hose - inlet & outlet	15 mm x 600 mm			
Construction/Materials	Front Cover	Acrylic capped ABS			
	Break tank	Polyethylene			
	IP rating	IPX4			
Control system	Pressure monitoring	Pressure transducer			
Environmental	Ambient temperature	4 °C – 40 °C			
	Relative humidity	95% non-condensing			
	Noise rating	62 dB(A)			
Electrical	Power supply/phase/frequency	230 V a.c. / 1 / 50 Hz			
	Power consumption	380 Watts		545 Watts	
	Full load current	1.7 Amps		2.4 Amps	
Physical	Depth	270 mm			
	Width	415 mm			
	Height	504 mm			
	Empty weight	13.4Kg	19.4Kg	13.4Kg	19.4 Kg
	Filled weight	23.4Kg	29.4Kg	23.4Kg	29.4 Kg
Approvals	CE				

# Stuart Maxi digital pressurisation unit

**2 YEAR**  
GUARANTEE

From **60dB(A)**  
Quiet Operation

**PATENT**  
PROTECTED



## Stuart Maxi pressurisation unit

Suitable for maintaining pressure in large domestic and commercial sealed heating systems, chilled water systems, refrigeration units and industrial cooling systems. Stuart SPU Maxi units are exceptionally easy to install and commission and are housed in a compact and robust enclosure suitable for floor mounting.

- Duty or Duty-Standby options
- Up to 8.0 bar pressure
- 18 litre tank capacity
- Compact, floor mounted
- Digital control system and LCD graphic display
- Suitable for system fill and top-up
- High recovery fill valve – 12 litres/minute @ 1 bar

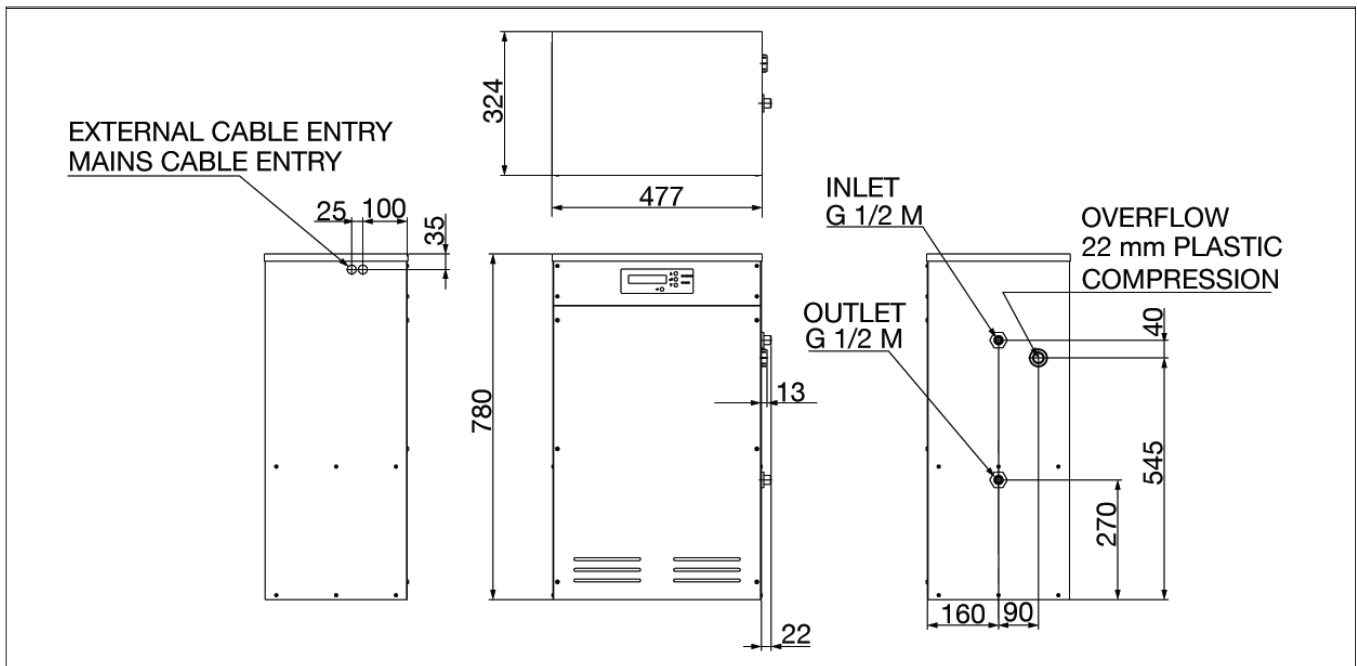
### Good to know

Stuart Pressurisation units are WRAS compliant and provide category 5 backflow protection, with type AB air gap, weir overflow and warning pipe.

### Brief technical specification

Part No	Model	Pumps	Capacity (litres)	Pressure (bar)	Width (mm)	Depth (mm)	Height (mm)	Weight Empty/Max (Kg)
46725	SPU 180 MAXI	1	18	8.0	477	324	780	34/52
46726	SPU 280 MAXI	2	18	8.0	477	324	780	45/63

### Dimensions



# Full technical specification

		SPU 180 Maxi 46725	SPU 280 Maxi 46726
General	Guarantee	2 years	
	System capacity	Up to 300,000 litres	
	System fill mode	✓	
	Mounting	Floor mount	
Performance	Maximum cold fill pressure	8.0 bar	
	Maximum inlet pressure	7.0 bar	
Pump	Number	1	2
	Type	Peripheral (brass pump head and impeller)	
	Motor type	Induction (thermal trip, auto reset)	
	Duty Rating	Continuous (S1)	
Break tank	Capacity	18 litres	
	Inlet valve	Float valve	
	Fluid category protection	CAT 5	
Connections	Cold water inlet	G ½ M	
	Cold water outlet	G ½ M	
	Overflow	G ¾ (19/23 mm pipe connection)	
Construction/Materials	Front Cover	Powder coated steel	
	Break tank	Polyethylene	
	IP rating	IPX2	
Control system	Pressure monitoring	Pressure transducer	
Environmental	Ambient temperature	4 °C – 40 °C	
	Relative humidity	95% non-condensing	
	Noise rating	70 dB(A)	
Electrical	Power supply/phase/frequency	230 V a.c. / 1 / 50 Hz	
	Power Consumption	545 Watts	
	Full load current	3.4 Amps	
Physical	Depth	324 mm	
	Width	477 mm	
	Height	780 mm	
	Empty weight	34.0 Kg	45.0 Kg
	Filled weight	52.0 Kg	63.0 Kg
Approvals		CE	

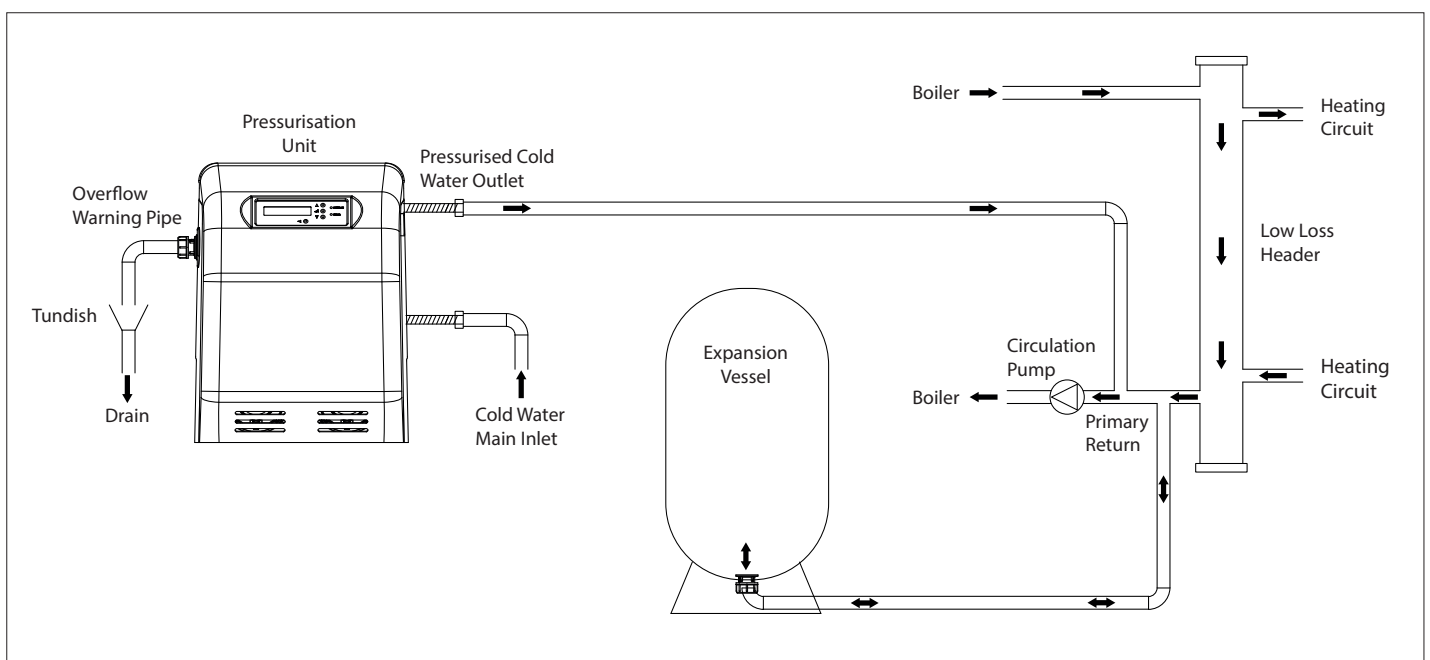
## Stuart Pressurisation Range Comparison

	SPU 130/230 Mini	SPU 135/235/150/250 Midi	SPU 180/280 Maxi
Key Features			
System Capacity	Up to 6,000 litres	Up to 300,000 litres	Up to 300,000 litres
System Fill/Pressure Top up	Top up only	Fill & Top up	Fill & Top up
Cold Fill Pressure	3.0 bar	3.5/4.1 bar	8.0 bar
Pump Options	Single & Twin	Single & Twin	Single & Twin
Pump Type	Plastic Solenoid-Piston	Brass Peripheral	Brass Peripheral
Pump Duty Rating	Single - Intermittent (S3) Twin - Continuous (S1)	Continuous (S1)	Continuous (S1)
Water Tank Capacity	2 litres	8 litres	18 litres
Mounting	Wall	Wall or Floor	Floor
Fluid Category	Cat 5 (A-B air gap)	Cat 5 (A-B air gap)	Cat 5 (A-B air gap)
Anti Seize Pump Function	Not Required	●	●
Settings Password Protection		●	●
Low Water Alarm		●	●
Pump Failure Alarm		●	●
Excessive Pump Start Alarm		●	●
Excessive Pump Run Time Alarm		●	●
Transducer Failure Alarm		●	●
Event Logging		●	●
Boiler Interlock (Alarm v/f Contact 1)	●	●	●
High Pressure (Alarm v/f Contact 2)		●	●
Low Pressure (Alarm v/f Contact 3)		●	●
Configurable (Alarm v/f Contact 4)		●	●

Part Number	Model	Number of Pumps	Maximum Delivery Pressure
46719	SPU 130 MINI	1	3.0 bar
46720	SPU 230 MINI	2	3.0 bar
46721	SPU 135 MIDI	1	3.5 bar
46722	SPU 235 MIDI	2	3.5 bar
46723	SPU 150 MIDI	1	4.1 bar
46724	SPU 250 MIDI	2	4.1 bar
46725	SPU 180 MAXI	1	8.0 bar
46726	SPU 280 MAXI	2	8.0 bar

## Typical Installation

The following illustration is for technical guidance only.



# Unrivalled support For consultants and installers

We are specialists in our field, with a dedicated team able to offer help at every stage.

## Design expertise

Our expert team can conduct a detailed analysis of the performance requirements of the intended project to produce a fully costed proposal. All our systems are custom designed in-house using the latest CAD software to develop, evaluate and aid the design of the most efficient solution for your specific needs.



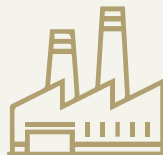
## Commissioning

We provide a full commissioning service on all our systems and are available to advise on the installation of your system should you require our technical help or practical expertise.



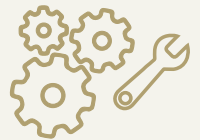
## Manufacturing excellence

We have invested in the latest production and manufacturing technologies to ensure we work to the highest quality standards. This guarantees our system reliability whilst at the same time minimising costs, improving efficiency and delivering on time and in full.



## Maintenance

Ongoing maintenance is a cost-effective solution to prolonging the life of your system and maximising its operational efficiency. To ensure the system continues to operate effectively and reliably we can also offer a comprehensive maintenance and service contract.



## Technical training

We offer a range of CPD courses aimed at building service engineers and accredited by CIBSE – Chartered Institution of Building Service Engineers. CIBSE is an internationally recognised professional association that supports construction and engineering industries by delivering up-to-date knowledge of the built environment to its membership through training and education.

Visit the **CIBSE** website for further details.



## On-going support

The quality and reliability of our products and services are second to none, allowing you peace of mind when you specify Stuart Turner. However, should you experience any issues we have a dedicated team of technical experts available to help. The TechAssist team are available to offer technical advice or guidance on any aspect of product selection.

Technical helpline:

**TechAssist 0800 31 969 80**



## Our brands Powering water for all applications

Stuart Turner offer a comprehensive range of solutions, specifically designed to suit a variety of applications in both domestic and commercial markets.

Invest in a name you can trust – quality, reliability, innovation and customer service.

### AQUABOOST

#### Standard and bespoke booster sets

##### Why Aquaboost?

Aquaboost offers a comprehensive range of integrated pump and water storage solutions designed to optimise space. Supplied as a ready to install packaged product, they deliver improved performance from unvented water cylinders and combination boilers. Ideal for larger domestic, and commercial applications. The possibilities are endless.



### MAINSBOOST

#### Mains water pressure boosting solutions

##### Why Mainsboost?

Mainsboost Water Performance Systems are specifically designed to stabilise water pressure and dramatically improve water flow rates to all direct on mains appliances. They deliver improved performance from unvented water cylinders, combination boilers and high performance shower heads, allowing multiple outlets to run simultaneously.



### MONSOON

#### Whole house, bathroom and shower pumps

##### Why Monsoon?

Monsoon is the benchmark for high performing, quality brass pumps available on the market. This comprehensive range is specifically designed to meet the demands of a host of domestic and light commercial applications in vented systems, from a single tap and shower to a complete bathroom or the whole property.



### SHOWERMATE

##### Why Showermate?

Showermate offers a range of high quality plastic pumps providing a cost effective solution to boost the performance of a single tap, shower or complete bathroom. Showermate pumps are suitable for water pressure and flow boosting applications within properties featuring a vented plumbing system.



### WASTEFLU

#### Waste water removal

##### Why Wasteflo?

Wasteflo offers a variety of products to simply and efficiently remove waste water from your home or commercial building, allowing you to create a bathroom, wet room, kitchen or utility room anywhere a connection using gravity to the main soil/waste pipe is not possible.



### STUART

#### Pressurisation units, heating products, water conditioners and pumps

##### Why Stuart?

The Stuart brand consists of a range of pressurisation units, heating related products, water conditioners and a diverse range of water pumps, along with associated accessories and controls. Every product has been designed to provide high levels of performance and reliability.



# POWERING WATER FOR EVERY APPLICATION

Stuart Turner Ltd  
Market Place  
Henley-on-Thames  
Oxfordshire  
RG9 2AD  
England

Telephone +44 (0) 1491 572655  
Fax +44 (0) 1491 573704  
E-mail [info@stuart-turner.co.uk](mailto:info@stuart-turner.co.uk)

VAT Reg No. 193 7627 68. Registered in England No. 88368  
Registered Office: Market Place, Henley-on-Thames  
Stuart Turner Ltd reserves the right to alter or change  
specification without notice.

Part No: 20884  
Issue No: 2419/2-02

Follow us on Facebook, Twitter, Instagram and LinkedIn

