

### Description:

Compact, totally enclosed digital pressurisation unit with electronic pressure transducer and user-friendly microprocessor for use on sealed systems in order to provide a minimum system pressure requirement.



### Features

- MODBUS Communication output
- System quick-fill mode
- Password protection for parameter entry
- Pressure settings in 0.1 bar increments
- Service reminder option (12 months).
- Pump pulse option (2 second pulse if inactive for 60 days)
- Flood protection options
- High Flow applications (<18.0 l/min)
- Event logging for pump start, individual pump run hour's counter, electrical interruption and common alarm.
- Volt free contacts for common fault, high pressure, low pressure, pump fault, pressure transducer fault.
- 18 Litre break tank with type AB Air Gap Fluid Cat 5

### Application of Use:

- Commercial, industrial, residential (flats)

**System Volume (Guide): < 60000 Litres**

### Certifications and Standards Applied:

- PED 97/23/EC Sound Engineering Practice
- IEE - Electrical Safety Guidance
- EMC 2004/108/EC
- BS7074 Parts 1 to 3
- Machine Directive 95/16/EC
- Electronic Components have been tested and comply with the EMC Directives
- EN61000-6-2: Generic Standards – Immunity standard for industrial environments
- EN61000-6-3: Generic Standards – Emission standard for residential, Commercial and light industrial environment
- CE marked components, where applicable
- WRAS approved float valve to BS1212 part 2
- IP54 (BS EN60529) Rated Controller
- IPX5 (BS EN60529) Rated Pump / Insulation: Class F

### Maximum Operating Conditions:

- Maximum system temperature 85°C
- Ambient temperature up to 40°C
- Relative humidity 95% non-condensing

### Selection Details: As per BS7074 Parts 1 to 3

- Static Height of the building above the pressurisation unit (meters)
- Systems content (litres) If unknown provide the boiler power (kW) which can be used to estimate the systems content
- Flow and return temperatures
- Glycol content (%) if required
- Final working pressure

### Water Regulations:

- Complies with water regulations 1999 when installed and used correctly.
- Type AB air gap Fluid Category 5 backflow protection.
- Calculation of air gap based on Weir airflow
- Complies to EN13077:2008

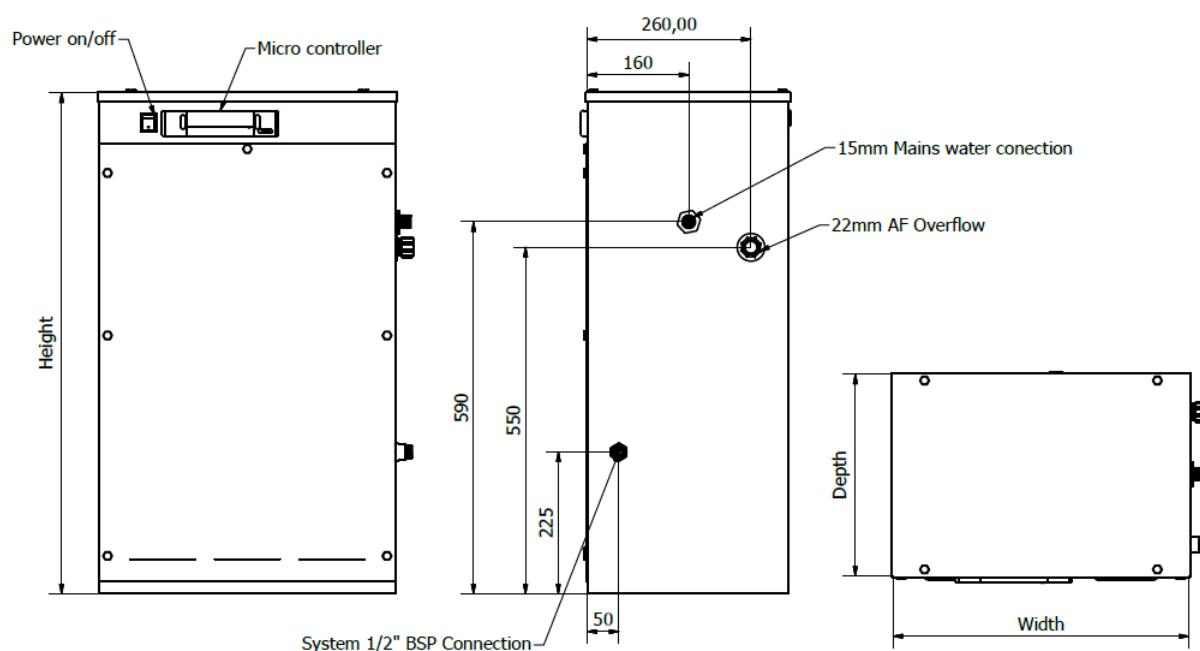
### Material of Construction:

- Cabinet: Mild steel CR4
- Float: WRAS Approved Beta Side Entry
- Break tank: Stainless Steel 304
- Pump: Cast Iron volute & Brass impeller
- Pump: WRAS Approved
- Connection: Brass / Polypropylene
- Pipework: Braided flexihose
- Colour: Powder Coated – Red (RAL 3002)

**Note: Any questions please contact your local representative**

### Specification:

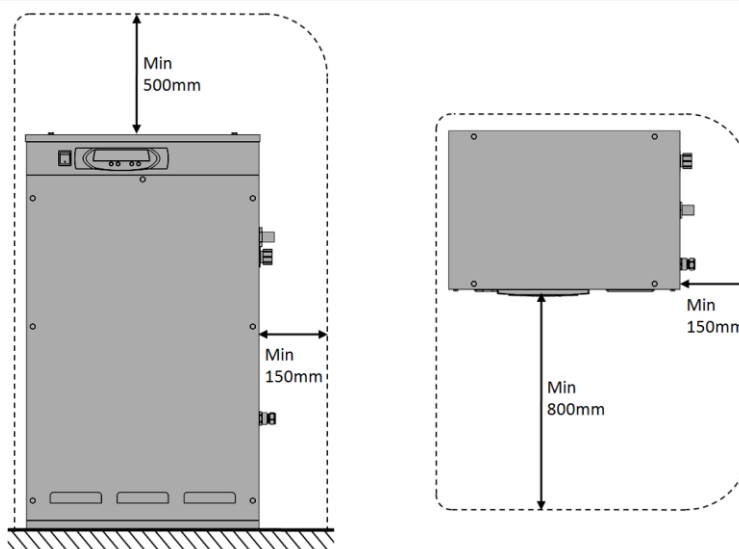
Product Name	Dimensions (mm)			Connections (mm)			Dry Weight (Kg)	Order Code
	Width	Depth	Height	System	Mains Supply	Overflow		
PF1-2.5E	470	320	800	15 (1/2")	15 (1/2")	22	29	03510371
PF2-2.5E	470	320	800	15 (1/2")	15 (1/2")	22	35	03510382
PF1-5E	470	320	800	15 (1/2")	15 (1/2")	22	31	03510083
PF2-5E	470	320	800	15 (1/2")	15 (1/2")	22	39	03510094
PF1-8E	470	320	800	15 (1/2")	15 (1/2")	22	34	TBA
PF2-8E	470	320	800	15 (1/2")	15 (1/2")	22	45	03510338



### Installation & Placement:

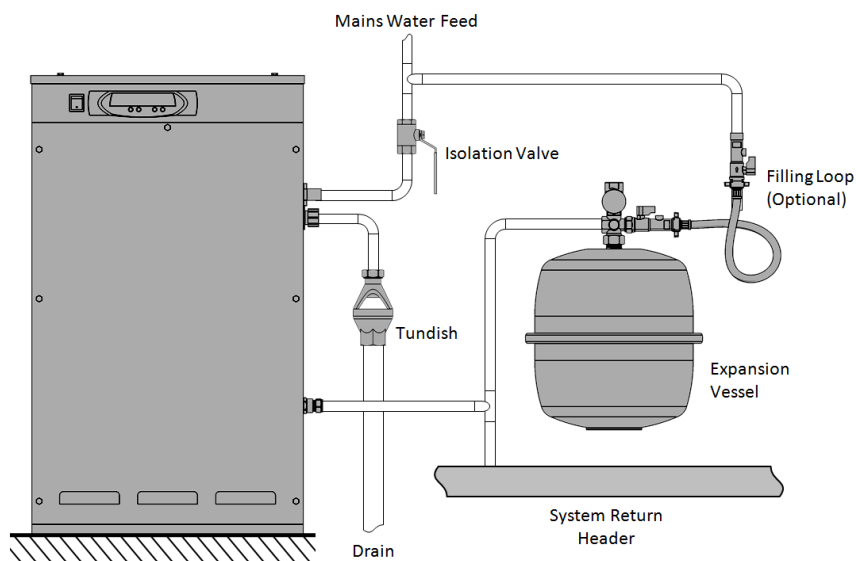
The BOSS PF pressurisation unit should be installed in a frost-free and humidity free area. Connected to the system return pipe, at the same point as the expansion vessel to provide a neutral pressure reading where the temperature of fluid does not exceed 70°C.

### Clearance and connection requirements:

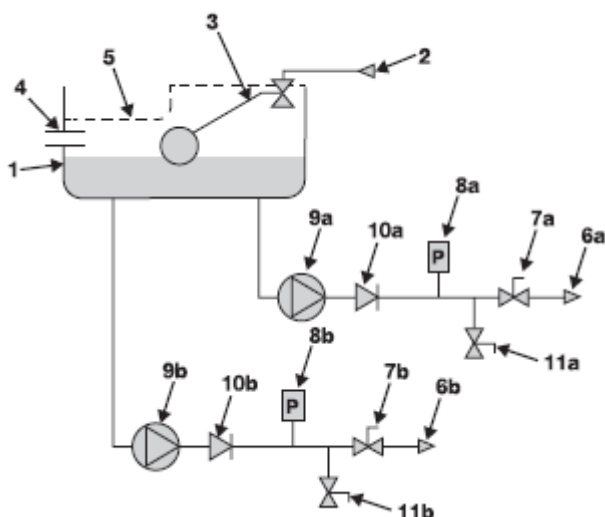


Product Name	Required Supply Voltage	Pump Quantity	Maximum Delivery Pressure (bar)	Power Consumption (KW)	Full Load Current (amps)	Noise Rating (dBA)	Pressure Rating (bar)
PF1-2.5E	230V 1 Phase 50 Hz	1	2.5	0.37	2.6	<75	PN10
PF2-2.5E	230V 1 Phase 50Hz	2	2.5	0.37	2.6	<75	PN10
PF1-5E	230V 1 Phase 50 Hz	1	5	0.5	3.4	<75	PN10
PF2-5E	230V 1 Phase 50 Hz	2	5	0.5	3.4	<75	PN10
PF1-8E	230V 1 Phase 50 Hz	1	8	0.75	5.6	<75	PN10
PF2-8E	230V 1 Phase 50 Hz	2	8	0.75	5.6	<75	PN10

**Typical Installation Diagram:** (Image for illustration purposes only) (Example: floor standing model)



**Schematic layout:**



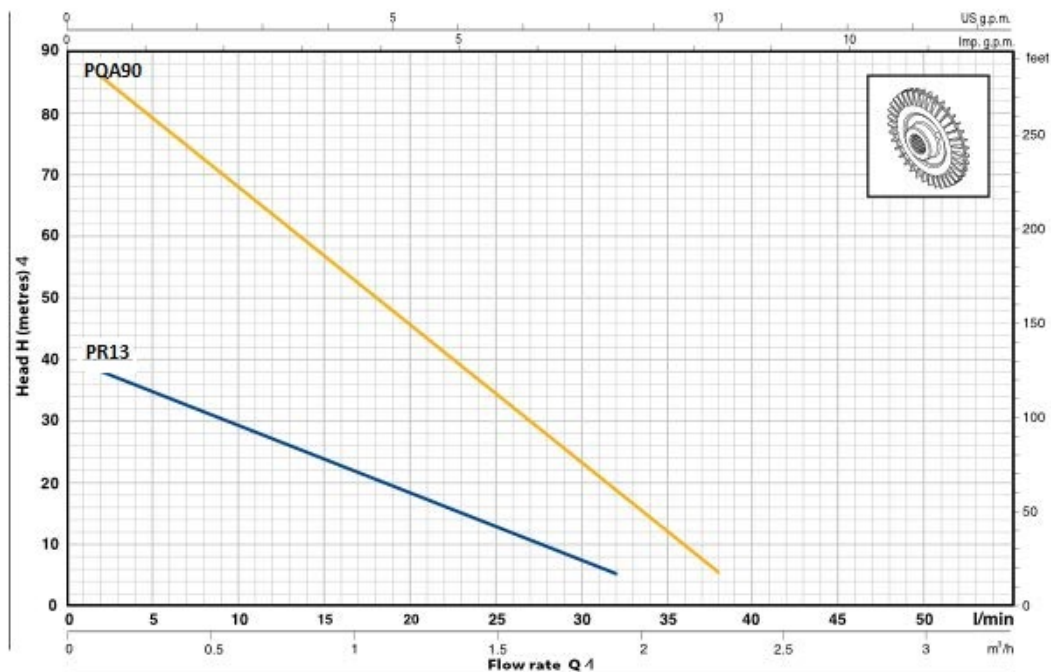
### KEY

- 1 Break Tank
- 2 Mains Water Inlet
- 3 Float Operated Valve
- 4 Overflow Connection
- 5 AB Air Gap Backflow Protection
- 6a / 6b Supply To Sealed System
- 7a / 7b Isolation Valve
- 8a / 8b Pressure Transmitter
- 9a / 9b Pump(s)
- 10a / 10b Non Return Valve
- 11a / 11b Drain Valve

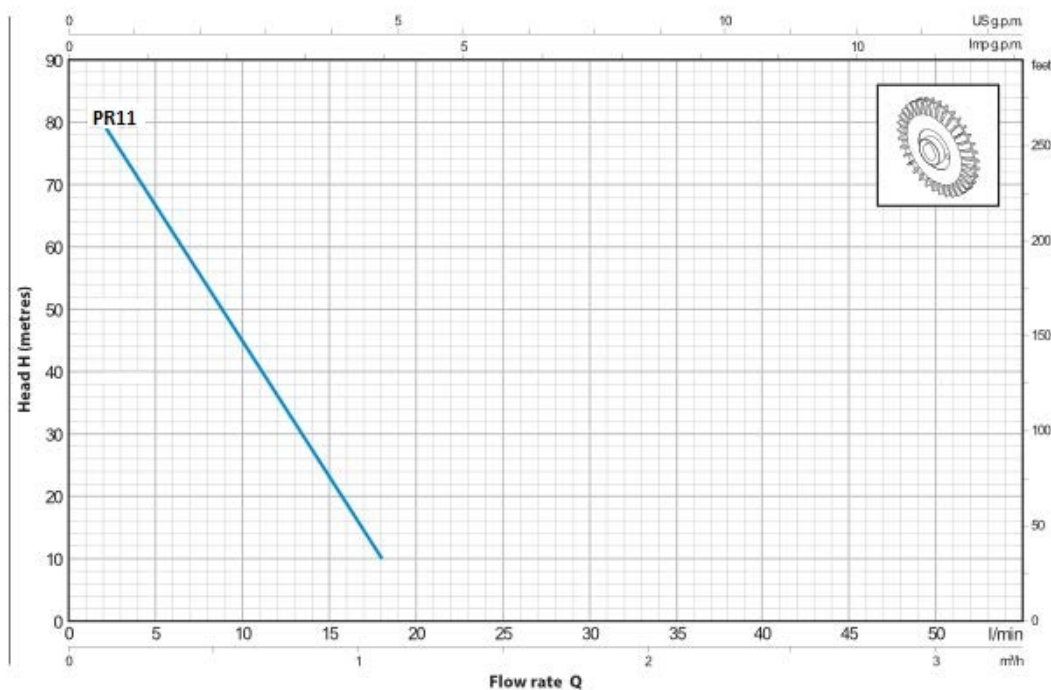
### Pump curve:

CHARACTERISTIC CURVES AND PERFORMANCE DATA

50 Hz n= 2900 1/min HS= 0 m



TYPE	PUMP USED
PF1-2.5E	PR13
PF2-2.5E	PR13
PF1-5E	PR11
PF2-5E	PR11
PF1-8E	Pedrollo PQA90
PF2-8E	Pedrollo PQA90



**Disclaimer:** We reserve the right to change designs and technical specification of our products