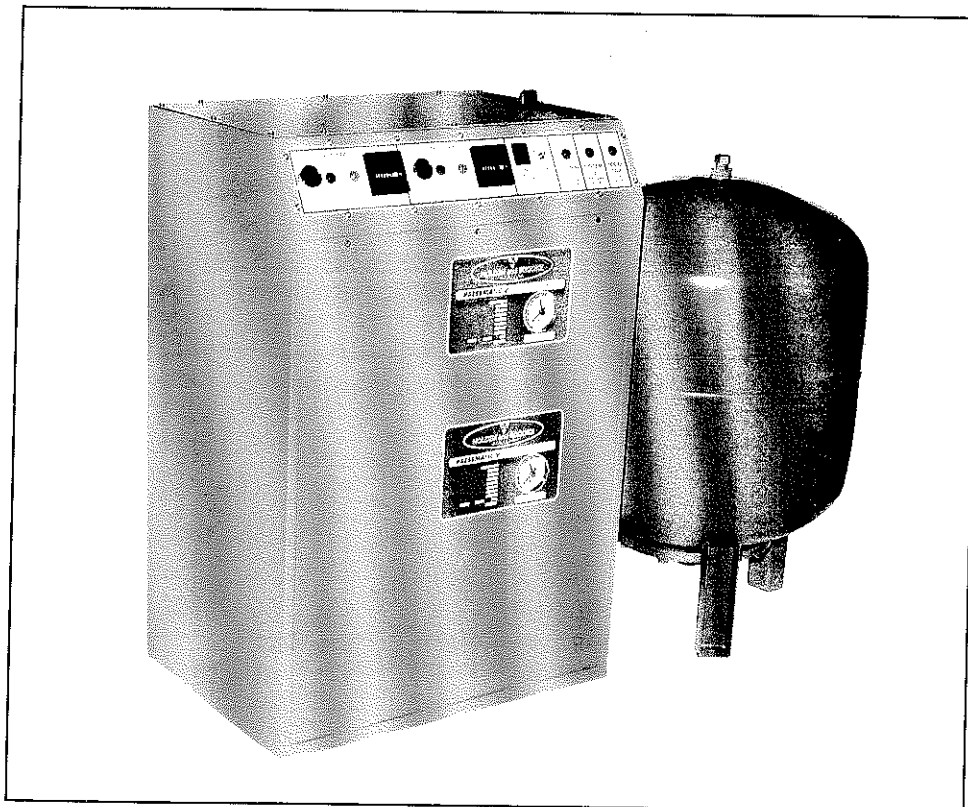




*A wealth of experience*

## **Pressmatic V Sealed System Pressurisation Units**



- Easy Installation and Access
- Single and Dual Systems
- BMS Compatible
- IP55 Enclosure
- Replaceable Membrane Expansion Vessels as Standard
- Enhanced Versions
- Factory Preset
- Simple Maintenance



Certificate No. 930846

# Pressmatic V

Sealed System Pressurisation Sets

## Introduction

The new Pressmatic V is designed to provide a flexible solution to sealed system requirements. With a wide choice of options and features, Holden and Brooke have developed a product that, with high quality, provides an economical answer.

## Compliance to Specifications

- BS 7074
- PM5 Category C
- Type A air gap
- BS 4814

## Applications

- LTHW, MTHW, Chilled water, closed condenser water circuits, heat recovery circuits.
- Fill pressures of 3.0 bar and 5.5 bar.
- Maximum working pressures up to 10 bar.

## BMS Compatibility

Basic version has separate high and low pressure volt free contacts as standard on all models.

Popular version adds pump running and tripped volt free contacts.

Enhanced version adds high/low break tank water level alarm and power on volt free contacts.

## Special Features and Benefits

- All bronze cage motor fill pump - reliability with low maintenance.
- Short deliveries - all versions available in two weeks with many ex stock.
- Expansion vessels have replaceable membrane as standard.
- Each set is supplied pre-set to customer specified site conditions.
- Standby pump automatically enabled.
- Two system version. It allows different fill pressures.
- Wall or floor mounting.

- IP55 enclosure, suitable for outdoor location with anti-frost heater.
- Access from front and left side only required.
- Easy access to internals.
- Powder coated enclosure, with no sharp edges.
- Isolating valves on pumps, allowing maintenance with minimum disruption.
- Isolating valve on outlet, allowing easy commissioning
- Inlet strainers on pumps, ensuring longest pump and regulating valve life.
- 18 litre break tank, WRC approved, with type A air gap.

## Expansion Vessels

Holden and Brooke are committed to the concept of the replaceable bag type expansion vessel.

The replaceable membrane vessel permits easy repair in cramped plant rooms. A defective fixed diaphragm unit would need to be removed completely.

From 50 litres and upwards, Pressmatic V units are supplied with DE or ST replaceable membrane expansion vessels. These are supplied loose complete with a connection kit (up to four vessels). This allows for installation flexibility.

As an option, Pressmatic V and vessel are mounted and piped up on a common baseplate, ready for connection to mains water, system, boiler controls and electric power.

## Vessel Sizing and BS 7074

Holden and Brooke size expansion vessel sizes in accordance with BS 7074. Our calculation makes the assumption that the lowest working pressure component is located close to the expansion vessel/fill set where residual circulating pump head is negligible. Please advise when this is otherwise not the case.

## MTHW

For return temperatures above 100°C, we can supply buffer vessels, specified to protect the expansion vessel.

## Specification

### Standard Version

- Heavy gauge robust sheet steel enclosure, powder coated, with quick opening access hatches and IP55 protection.
- Fill pump with bronze case and impeller and continuously rated cage motor.
- Pumps protected by inlet strainer and fitted with inlet and outlet isolating valves.
- 18 litre polypropylene break tank with type A air gap, weir type overflow and approved by WRC.
- Isolating valve fitted on outlet to set. Permits easy commissioning and maintenance.
- Motors protected by miniature circuit breakers.
- Standby pump reliably enabled on fall in pressure.
- Power on and high/low pressure alarm lights.
- Pump duty selector switch on two pump sets.
- Two pairs of volt free contacts fitted. One for the BMS, one for boiler interlocked.
- System pressure gauge.

### Popular Version

As above but with:

- Pump running and tripped lights.
- Volt free contacts for pump running and tripped.

### Enhanced Version

As above but with:

- Break tank low/high water level alarm with indicator, volt free contacts and alarm indicator light.
- On low level, fill pumps are disabled.
- Hours run meters.
- Pump test button, spring loaded.

### Two System Version Adds To Any Of The Above

- 2 litre buffer vessel mounted internally.
- One pressure regulating valve for each system, enabling pressure to be set individually.

- Non return valves to prevent system cross connection.
- Pressure gauge for each system

### Optional Extras

- Anti frost heater.
- Quick fill connection.
- Common baseplate for Pressmatic V and expansion vessel.

### Options

- Single pump.
- Duty/standby pumps.
- Single system unit.
- Dual system unit.
- 3.0 bar fill pressure pumps.
- 5.5 bar fill pressure pumps.

### Commissioning

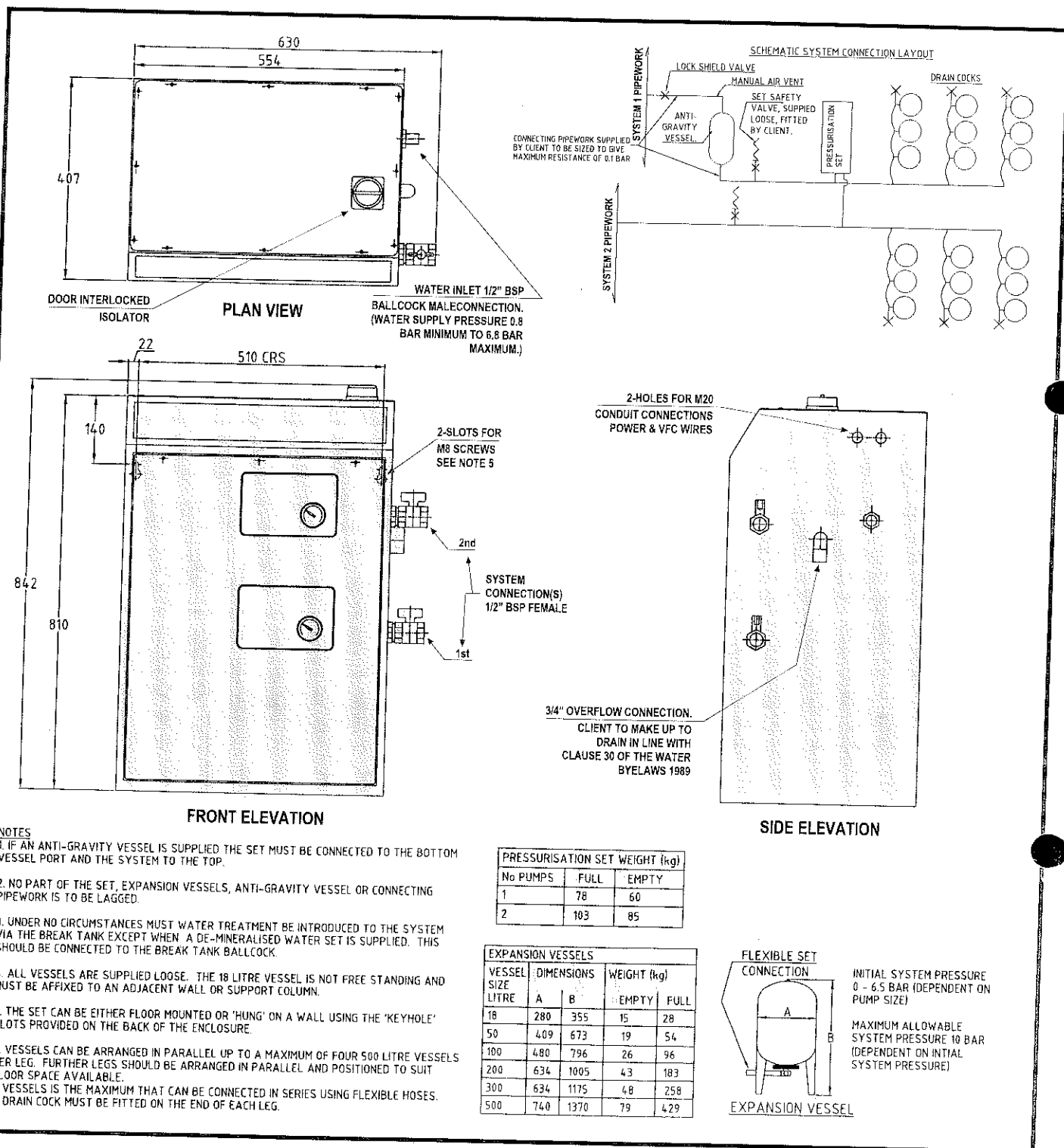
We recommend that Pressmatic V be checked on site by a Holden and Brooke service engineer. This will guarantee suitability for the installed site and correct running.

### Installation Notes

1. Ensure that the connection line to the system is fitted with an automatic air vent at its highest point. This applies to systems working below 100°C.
2. Do not lag any part of the set or its connecting pipework.
3. Ensure that the connecting pipe to the system is adequately sized to suit the boiler power and subsequent expansion rate of the system.
4. Locate the connecting pipe to the system on the inlet side of the circulating pump, preferably on the header. Do not connect to the discharge side of the pump.

# HOLDEN and BROOKE LIMITED

*A wealth of experience*



Certified drawings supplied on request

Note: Improvements in general design and modifications in detail will be embodied for the benefit of clients as and when introduced, consequently this specification is subject to alteration, as may be necessary, without notice.

**Manufacturers of : • Centrifugal Pumps • Pressurisation Units • Packaged Pump Sets • High Pressure Pumps  
For Pump Spares, Service and Maintenance Contracts  
Telephone: 0161-223-2223**

Manchester

Wenlock Way  
West Gorton  
MANCHESTER M12 5JL  
Tel: ++44(0) 161-223-2223  
Fax: ++44(0) 161-220-9660

London

Unit 2, Princess Mews  
Horace Road  
KINGSTON-U-THAMES KT1 2SZ  
Tel: 0181-547-0411  
Fax: 0181-547-0838

Glasgow

Tel: 0141-943-1252

Northern Ireland

C&F Quadrant (NI) Ltd  
Unit 9, Abbey Trading Estate  
Langwood Road, Newton Abbey  
Belfast BT37 9UQ  
Tel: 01232-365555  
Fax: 01232-365565