LOWARA
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Presfix Fill Set

Operating and Maintenance Instructions

EC Declaration of conformity

Xylem Water Solutions UK Limited declare that the Presfix pressurisation set conforms to the requirements of the Machinery Safety Directive 2006/42/EC.

Conforming to the UK Health & Safety Requirements	2008 No.1597
Water supply (Water fittings) regulations	1999
Code of practice for heating and chilled water systems	BS7074 (parts 1, 2 & 3)

Signed: C Willmott **Position:** Engineering manager **Date:** 20-04-2016 Revision B

Clive Willmott

Introduction

This leaflet contains information to enable the safe installation and operation of the products mentioned above. The following instructions must be read and understood by all persons responsible for the installation, operation and maintenance of this product.

Warning Symbols

Safety instructions where noncompliance would affect safety.

Safety instruction where electrical hazard is involved.

Safety instruction where noncompliance could cause damage to the equipment.

Instruction for safe use

This product has been designed for the pressurisation of sealed heating, chilled water and closed-condenser water systems to the operating conditions shown.
This product should not be installed until this leaflet has been studied carefully.
Handling, transportation and installation of this equipment should only take place with the proper use of lifting equipment.
This product must be stored in a frost-free dry environment.

Noise Emissions

This equipment operates at a noise level lower than	70dBA.
Protection degree	IP2X

Installation

The Presfix Fill unit is despatched mounted on a wooden pallet and covered in a protective film, it is recommended that the unit be retained in the protective packaging until the product is to be installed.
The unit will arrive pre-packaged and wired ready for installation.
This product has been fully run tested at our works under simulated site conditions.
The unit should be sited in a dry clean well-ventilated area with good all round access.

Electrical connections

The input supply to the switched spur is fed from the main pressurisation unit output terminals 1,2&3. This output is only active when the main pressurisation unit is calling for water top up.
The low water cut out float switch is wired back to the main pressurisation unit terminals 43&45 Drawing M10127-1 attached gives connection details. The cable must be of adequate size to carry the motor full load current. This is shown on the duty plate. All non power caballing should be limited to 2.5mm².
All connections must be made using the appropriate wiring drawings for the equipment being installed, with particular attention being paid to the supply voltages.
The supply voltage is shown on the set duty plate.
Never operate this product with the control panel or switched spur lid removed.
It is essential that this equipment is earthed to the building earth system.

The base frame must be earth bonded directly to the building earth system.
All wiring should be arranged such that it enters the control boxes through the appropriate cable glands.

Water supply and system connection

Connect the Presfix Fill set ½"BSP ball valve (left side of break tank) to a suitable water supply, incorporating an approved stop cock.
If the pressure available at the ball valve is below 0.3 bar, a low pressure orifice must be obtained and fitted.
Extend the ¾" plastic overflow pipe from the Presfix break tank to a position where an overflow will be noticed and rectified. Ensure the warning pipe is able to handle the incoming water volume, if this is not the case then a reducing valve should be fitted to the incoming water supply.
Connect the pressurisation port ½" BSP (right hand side of unit) to the main system expansion vessel Fill point , details of connection point will be found in the main pressurisation unit O&Ms

Note: This product has a type AB air gap and contains a weir which is intended to spill over if a catastrophic failure occurred, If it is not acceptable to spill water directly to the floor then this product should be mounted on a try which should then have a discharge connection to drain.

Commissioning

1. Commissioning should be carried out in conjunction with the main pressurisation set commissioning details. Fill the main system with water via the quick fill filling loop to the system fill pressure, this filling loop must comply with local water authority bylaws and contain double check valves. The filling loop must be completely removed after the system has been filled.
   The pressurisation unit/Fill set must never be used to fill the system.
   The maximum running time for pumps fitted to the Fill set must not exceed 4 hours in any 24 hour period.

2. Turn on the water supply feeding the Fill set break tank.
   Water treatment crystals/chemicals must never be introduced to the system via the break tank.
3. Check that the pump has been fully evacuated of all air by removing the bleed screw from pump and allow water to escape until no air is present. Replace bleed screw.

Operation

Switch the main power supply to the pressurisation system to the on position. Turn the switched spur situated at the front of the Fill unit to the on position.
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When the main pressurisation unit senses that the system is low on water it will give a 230v supply to the Fill set and start the Fill set pump, this will pump water into the pressurisation set vessel which will be sitting at atmospheric pressure, when the main vessel senses that it now has the correct water content it will switch off the supply to the Fill set pump. The Fill set will remain inactive until another signal is given from the main pressure set to call for more water.

Flow regulating valve
The Fill set has a flow regulating valve which should be set to approximately 5l/m this is to ensure that the break tank inlet water supply can keep up with demand. This can be adjusted to give a larger volume provided the main water supply can keep up.

Low level float switch
The low level float switch in the Fill unit will monitor the break tank water level and signal the main pressurisation to switch off the power to the Fill unit preventing the pump from running dry.

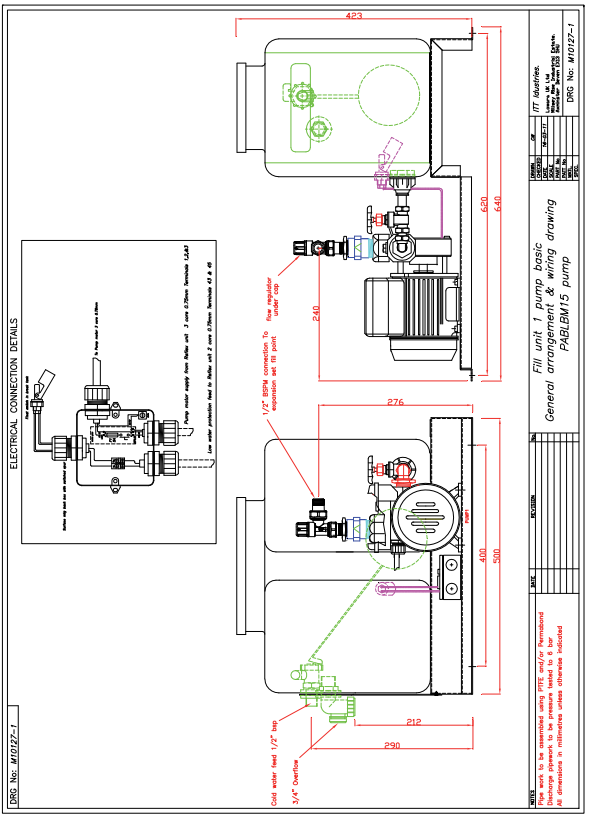
Maintenance

Routine check (3 monthly intervals)

1. Check that the pump seal is not leaking.
2. Check the pump is not seized and develops the correct pressure.
3. Check that the pump operates without undue noise or vibration.
4. Check that the motor runs without overheating.

Routine check (6 monthly intervals)

1. Check the break tank is clean and that the correct water level has been maintained.
2. Check that all screws are tight on electrical components.
3. Check that the earth connections are tight and making good contact.



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