VEXO X-POT 6
OPERATION & MAINTENANCE INSTRUCTIONS

WARNING!

DO NOT OPEN WHILST FLUID IS HOT AND/OR UNDER PRESSURE!

PLEASE USE SAFETY GOGGLES, GLOVES & AN N95 FACE MASK WHEN WORKING ON THIS VESSEL / MAGNETIC FIELD.

VEXO X-POT 6 ISOLATION

To isolate the unit to the main primary system, please follow the below steps:
(**Note:** Part numbers are relevant to the image on the right side of this document.)

1) Close Entry/Supply IV (**7**) and the Exit/Return Valve (**9** or **10**) – This will isolate the system.

VEXO X-POT 6 DOSING

To dose with the system with additives, please follow the steps below:
(**Note:** You will need to isolate the system prior to these steps and the Part Numbers are relevant to the image on the right side of this document.)

1) Open the Drain IV (**9** or **10**), then open the manual vent (**11**). This will drain the vessel. If water continues to pour from the manual vent (**11**) the unit is not isolated from the system.

2) When the vessel is depressurised carefully loosen the 8 No. locking units on the top works flange lid in an opposite order, for example – loosen the nuts at the back of the X-POT against the wall, then the side nuts and then the front.

3) Swing the arms of the bolts down with the nuts attached to the side of the vessel.

4) The top flange lid can now be carefully removed and placed on its side.

5) Remove (**4** – Magnet Grate), (**5** – Baffle Plate), and (**6** - Cartridge Filter). If the filter is blocked or slow to drain, use a leverage tool (screwdriver etc.) to lever the side of the internals and dislodge the filter from its seal. We would recommend wiping the internal walls and base with a cloth.

6) Close the Drain IV (**9** or **10**) ready for pouring of additives.

7) Pour the additive/s into Vessel Body (**8**) (Note: Ensure this is done in accordance with manufacturer's instructions/advice)

8) After the additive/s have been added, the top flange lid can be re-assembled. (**Note:** Follow steps **1** to **5** in reverse to perform this.) (Ensure that components (**4** – Magnet Grate), (**5** – Baffle Plate), and (**6** - Cartridge Filter) are not re-assembled into the vessel)

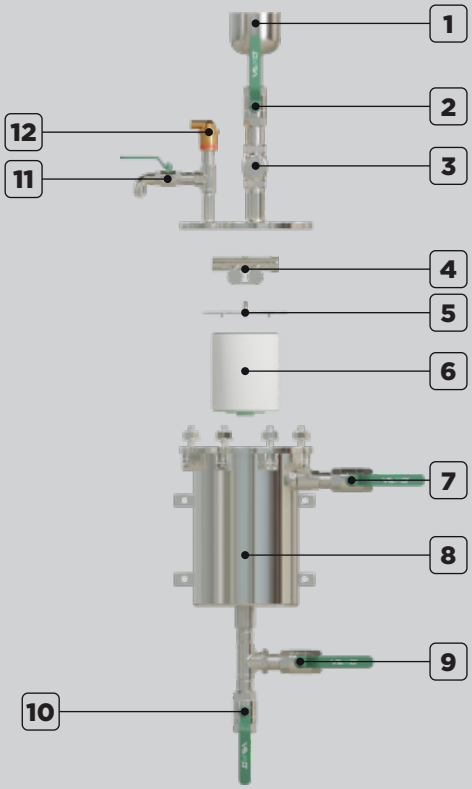
9) Re-pressurise the X-POT by opening Entry/Supply Valve (**7**) slightly and check for leaks. If OK, open Entry/Supply Valve (**7**) fully.

10) Open the X-POT fully to the system via opening Exit/Return Valve (**9** or **10**), this will allow the flow through the unit and dose the system water.

11) After 2 minutes, the system would have dosed the additive/s through the system, follow steps **1** to **5** to isolate the system and remove the top flange lid to enable you to re-assemble the (**4** – Magnet Grate), (**5** – Baffle Plate), and (**6** - Cartridge Filter) in the Vessel Body (**8**).

Operative Advice:
After dosing with additives, wash through the Tundish (**1**) with water.

VEXO X-POT 6 UNIT PARTS



Part No.	Description	Part No.	Description
1	304 Stainless Steel Dosing Tundish	7	1" Isolation Valve (Entry/Supply)
2	1" Isolation Valve (Dosing shut off)	8	304 Stainless Steel Vessel Body
3	304 Stainless Non-Return Valve	9	1" Isolation Valve (Exit/Return)
4	316 Stainless Steel Magnetic Grate	10	1" Isolation Valve (Drain Valve)
5	316 Stainless Steel Baffle Plate	11	1/2" Isolation Valve (Manual Vent)
6	Polypropylene Spun Bonded Fibre Cartridge Filter	12	Brass Automatic Air Vent

VEXO X-POT 6 FILTER CLEAN/CHANGE

1) Carry out the steps **1** to **6** as above.

2) Cleaning the Magnet Grate (**4**); unscrew the end caps of each of the sections on the Magnet Grate (**4**) and remove the magnets one by one using grips on the end of the magnet screws. Wash the Magnet Grate (**4**) under cold water tap or bucket of water and wipe down until all the magnetic debris has been washed off. (Note: Place each magnet a minimum of 150mm apart to prevent attraction) Then insert the magnets back into the Magnet Grate (**4**) and ensure that the end caps are tightened sufficiently.

3) Replacing the Cartridge Filter (**6**); fix the Cartridge Filter (**6**) locating holes on the top works with the locating pegs/spigots on the underside of the Baffle Plate (**5**).

4) Re-assemble the X-POT internal components (**4** – Magnet Grate), (**5** – Baffle Plate), and (**6** - Cartridge Filter) in the Vessel Body (**8**). (Note: Ensure that the EPDM flat faced washer is located around the bottom connection of the cartridge filter, providing a secure seal on the cartridge insert hole/flow channel at the bottom of the Vessel Body (**8**)).

5) Re-pressurise the X-POT and open it fully to the system. (**Note:** Follow steps **10** and **11** above making sure to close the Manual Vent (**11**) and make sure that all air is vented through the Automatic Air Vent (**12**).)

VEXO X-POT 6
INSTALLATION & COMMISSIONING INSTRUCTIONS

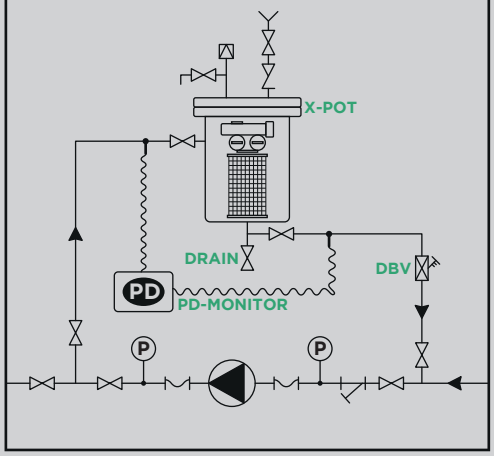
VEXO X-POT INSTALLATION

1) X-POT assembly as per the drawing/image (figure.1) on page 1 of this document whilst using a suitable jointing compound i.e., PTFE/Teflon tape on threads. Note: Parts 9 + 10 have interchangeable uses.

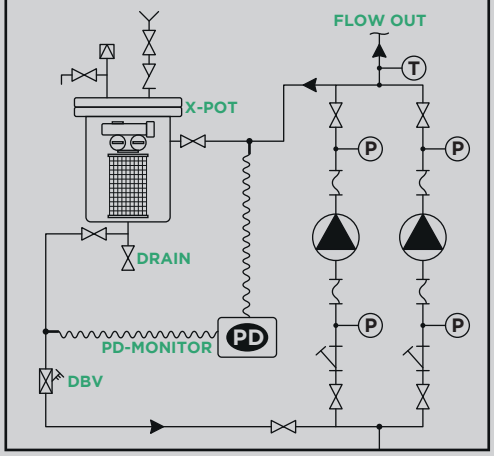
2) X-POT should be installed around a system pump or pump set to ensure that there is sufficient head pressure to overcome differential pressure caused by a blocked filter.

Examples below:

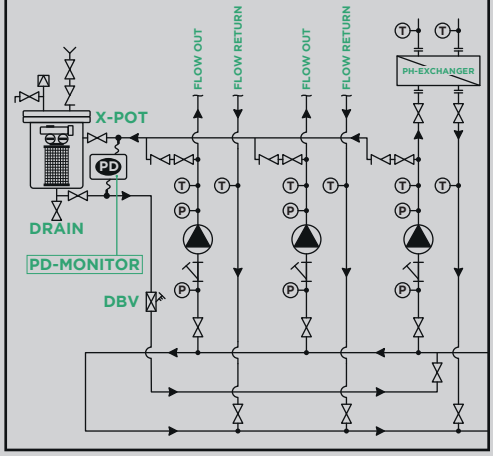
SINGLE PUMP CONFIGURATION



TWIN PUMP CONFIGURATION



ZONE/MULTIPLE PUMP CONFIGURATION



ISOLATION VALVE | STRAINER | PRESSURE GAUGE | FLEX CONNECTION | VEXO® PD-MONITOR

NON RETURN VALVE | AUTO AIR VENT | TEMPERATURE GAUGE | PUMP | DYNAMIC BALANCING VALVE

3) The X-POT inlet pipework must be piped from the system pump(s) discharge to X-POT, Entry/Supply Valve (7) and return to pump suction side or a common return line in the system. The maximum pipe run lengths from the system pipework to the X-POT is to be <5m. In the event of multiple zone/pump configurations, a isolation valve and double check valve should be installed on each of the individual pipe runs from the circulating pumps.

4) <u>Critical Installation Requirements:</u>

- In a frost-free area (>5°C) and must also be protected from adverse environmental conditions.
- In a well-lit area to allow for safe changing of the filter media and chemical dosing.
- On a flat, vertical, level wall with good access to the X-POT itself.

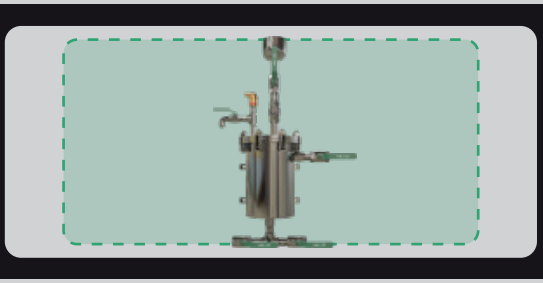
5) X-POT requires a minimum clearance at the top of the unit of 500mm for servicing and maintenance purposes.

6) X-POT is to be installed alongside a Dynamic Balancing Valve and Pressure Monitoring Device in compliance with BSRIA BG29/21 & BG50/2021 ensuring effective maintenance.

VEXO X-POT COMMISSIONING

- Ensure that all components connected to the X-POT vessel have been leak tested prior to commissioning.
- Depending on the results of the system water quality tests, you may either commission the X-POT with either 1) Magnets Only or 2) Cartridge Filter and Magnets.
- Ensure that all the top flange securing nuts and bolts are adequately fastened to ensure leak tightness.
- Ensure that the following isolation valves are fully closed at time of commissioning: Dosing Shut Off Valve (**2**), Manual Vent Valve (**11**), and Drain Valve (**10** or **9**).
- Ensure that you fill the pressure vessel with opening the entry/supply isolation valve (**7**).
- Ensure that the AAV is removing the remaining air held in the X-POT body.
- Ensure that the insulation jacket has been installed around the X-POT vessel body.
- Ensure that the direction of operation for the Dynamic Balancing Valve is in the correct direction with the flow.
- Ensure that the Dynamic Balancing Valve's flowrate has been correctly set for the system requirements. To calculate the flowrate required for the X-POT the following calculation will need to be completed:
- Total System Volume / 86,400 seconds = l/s - This provides a litres per second flowrate for the Dynamic Balancing Valve.
- If installed, ensure that the differential setpoint alarm has been set for the pressure monitoring device.

PLEASE ENSURE THAT THESE INSTALLATION & O&M INSTRUCTIONS ARE FIXED/PLACED ADJACENT TO THE X-POT FOR OPERATIVE USE



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