

X-POT™

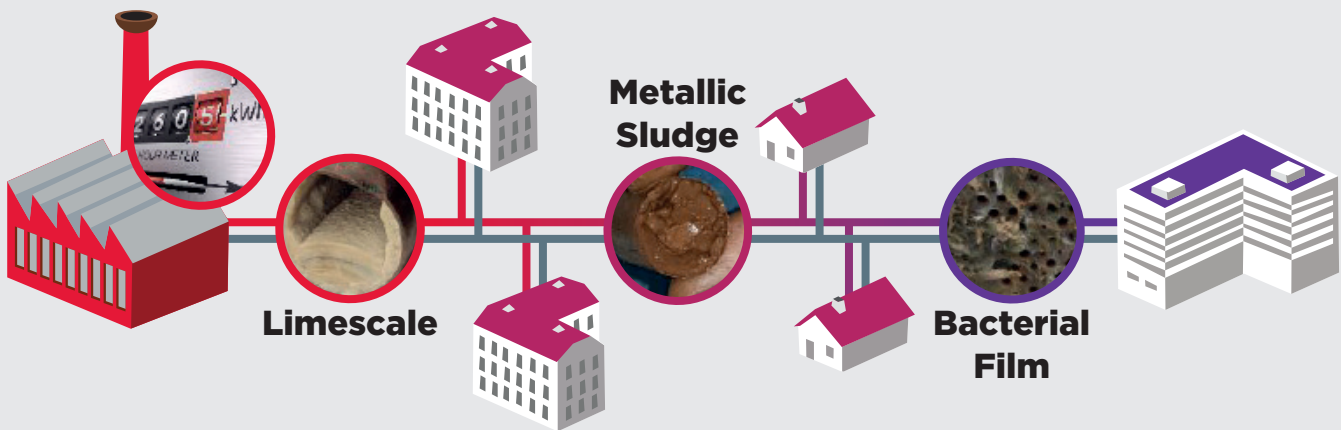
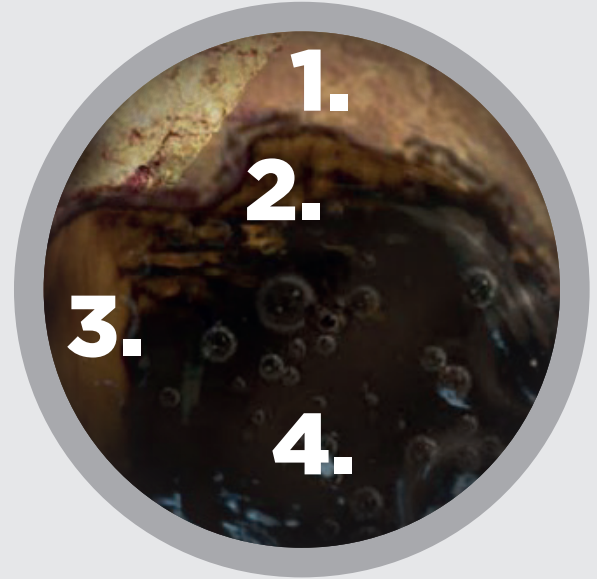
ALL-IN-ONE AIR & DIRT SEPARATOR



Why X-POT™?

Water is the main means of closed system temperature distribution. It affects every single piece of equipment and every person that occupies the spaces that you manage. Wherever there is a closed water system loop, there are **four** problems that will occur:

1. **Scale formation**
2. **Corrosion**
3. **Fouling**
4. **Microbial growth.**



Limescale deposits can clog up your heating or cooling system. Metallic sludge or bacterial film can also cause blockages and cold spots in pipes and radiators. All of this leads to reduced efficiency and high fuel bills. It also means extra stress on pumps, heat exchangers, radiators and sensors causing the risk of breakdown and inevitable expensive repairs.

VEVO X-POT has peer reviewed proven energy conservation benefits to support 'ANSI/ASHRAE/IES Standard 100'

As featured at the ASHRAE Summer conference 2023

1000's of installations worldwide and 100% customer satisfaction

Why the VEXO™ X-POT™?

The patented award winning VEXO™ X-POT™ is the preferred choice, due to it being an **ALL-IN-ONE** solution, lowering embodied carbon, in both new and retrofit applications.



The X-POT combines multiple conventional products into one easy-install, easy-service, internationally acknowledged water conditioning product for hydronic closed loop systems.

- CAPEX savings and increased water quality performance.
- Safeguards system design efficiency & performance gap for new installations.
- Retrofit solution to problematic systems.
- USA and Canada Patented Multi-Functional Solution.
- Protects system components life cycle, reliability and reduced costly reactive maintenance, providing, OPEX, CAPEX, Energy and CO₂ benefits.

Does the VEXO™ X-POT™ really work?

Absolutely.

“The X-POT™ Side Stream Filtration system reduced pump energy consumption by an average of 19% in multiple system pressure scenarios.”

Suliman, Amr; Wilkinson, Darren; Eftekhari, Mahroo; Dimitriou, Vanda (2023)
Investigating the efficiency of mechanical filtration in restoring the efficiency of a corroded closed looped heating and cooling system.
Loughborough University



The results speak for themselves, there are thousands of X-POTs installed, all with 100% positive client feedback.

Below are examples of what the X-POT™ range is capable of removing from your system!





Side Stream Filtration for small to medium commercial systems

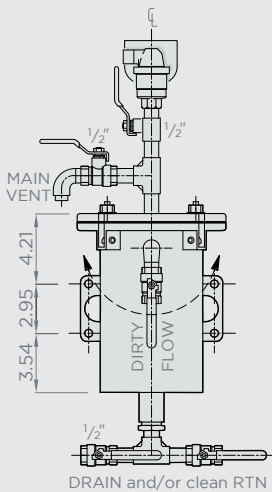


Product Code - V-XPOTCOMPACTNAM

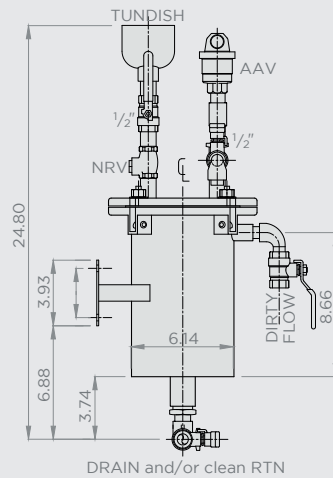


Side stream filtration including a magnetic filter, cartridge filter, air and dirt separator & dosing unit.

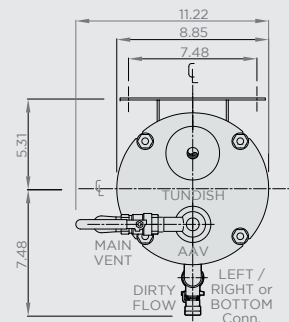
- **Max working pressure:** 150 PSI
- **Max System Volume:** 9,130 US gal
- **Max System BTU:** 9.84MM
- **Max System HP:** 294 HP
- **Max Flow Rate:** Up to 6.34 GPM
- **Pipe Connection:** 1/2" NPT
- **Filtration Rate:** Down to 0.5 micron
- **Magnetic Gauss:** 4No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 1.18 US gal



Front View



Side View



Plan View



Side Stream Filtration for small to medium commercial systems

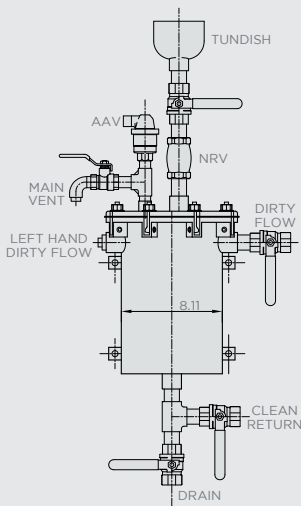


Product Code - V-XPOTXPOT6NAM

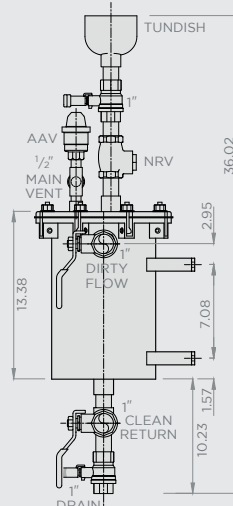


Side stream filtration including a magnetic filter, cartridge filter, air and dirt separator & dosing unit.

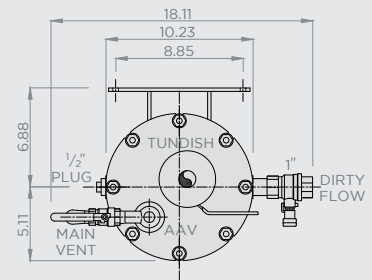
- **Max working pressure:** 150 PSI
- **Max System Volume:** 22,824 US gal
- **Max System BTU:** 24.6MM
- **Max System HP:** 735 HP
- **Max Flow Rate:** Up to 15.85 GPM
- **Pipe Connection:** 1" NPT
- **Filtration Rate:** Down to 0.5 micron
- **Magnetic Gauss:** 6No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 2.6 US gal



Front View



Side View



Plan View



Side Stream Filtration for large to district commercial systems

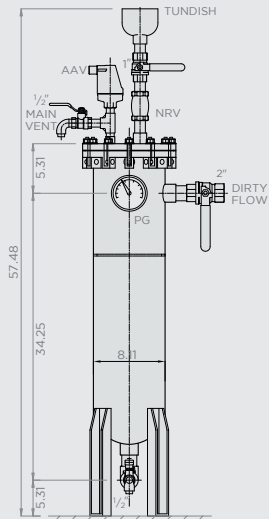


Product Code - V-XPOTXPNAM

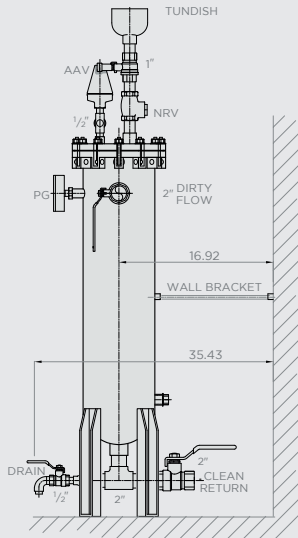


Side stream filtration including a magnetic filter, bag filter, air and dirt separator & dosing unit.

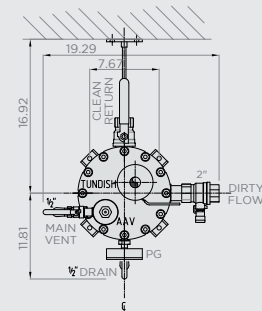
- **Max working pressure:** 232 PSI
- **Max System Volume:** 79,876 US gal
- **Max System BTU:** 86.12MM
- **Max System HP:** 2,572 HP
- **Max Flow Rate:** Up to 55.47 GPM
- **Pipe Connection:** 2" NPT
- **Filtration Rate:** Down to 1 micron
- **Magnetic Gauss:** 13No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 6.6 US gal



Front View



Side View



Plan View



Side Stream Filtration for extremely high pressure/flow



Product Code - V-XPOTXXPNAM



MADE TO ORDER



ALL 316 S/S COMPONENTS

Side stream filtration including a magnetic filter, bag filter, air and dirt separator & dosing unit.

- **Max working pressure:** 435 PSI
- **Max System Volume:** 79,876 US gal
- **Max Flow Rate:** Up to 55.45 GPM
- **Pipe Connection:** 2" NPT
- **Filtration Rate:** Down to 1 micron
- **Magnetic Gauss:** 13No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 6.6 US gal



Product Code - V-XPOTHFHPNAM



MADE TO ORDER



ALL 316 S/S COMPONENTS

Side stream filtration including a magnetic filter, bag filter, air and dirt separator & dosing unit.

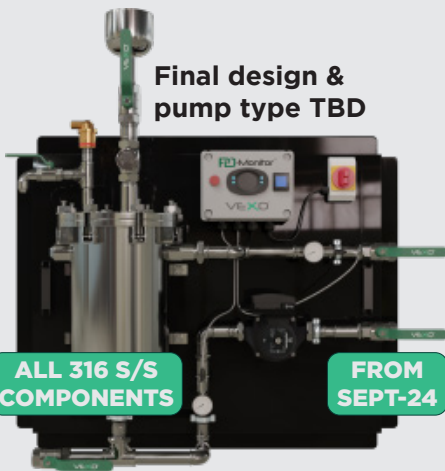
- **Max working pressure:** 145 or 435 PSI Options
- **Max System Volume:** 684,734 US gal
- **Max Flow Rate:** Up to 475.51 GPM
- **Pipe Connection:** 6" Flange
- **Filtration Rate:** Down to 1 micron
- **Magnetic Gauss:** 52No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 55.4 US gal



Side Stream Filtration with integrated pump, alarm & BMS capable

X-POT6⁺

Product Code - V-XPOT6+NAM



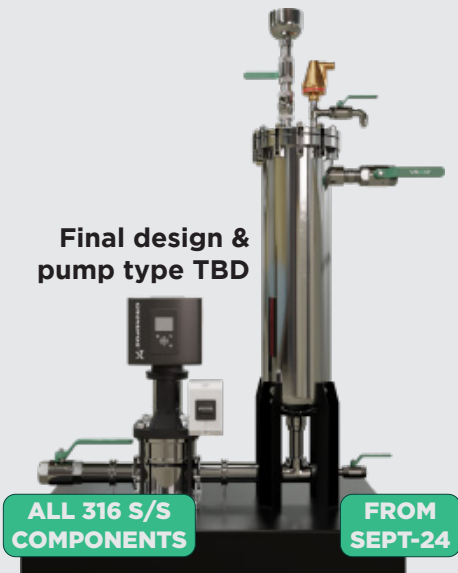
Standard X-POT 6™ unit features plus an integrated pump, fault alarm and BMS compatibility.



- **Max working pressure:** 145 PSI
- **Max System Volume:** 22,824 US gal
- **Max Flow Rate:** Up to 15.85 GPM
- **Pipe Connection:** 1" NPT
- **Filtration Rate:** Down to 0.5 micron
- **Magnetic Gauss:** 6No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 2.6 US gal

X-POTXP⁺

Product Code - V-XPOTXP-PLUSNAM

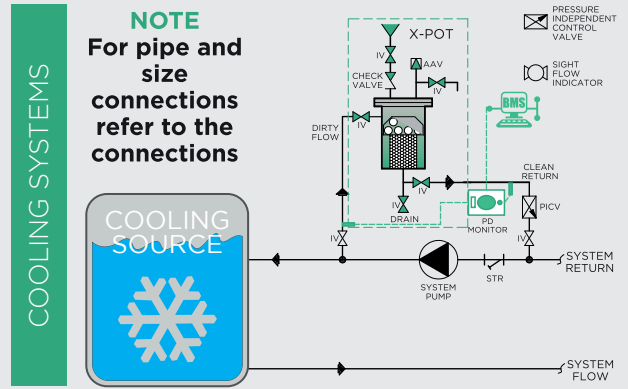
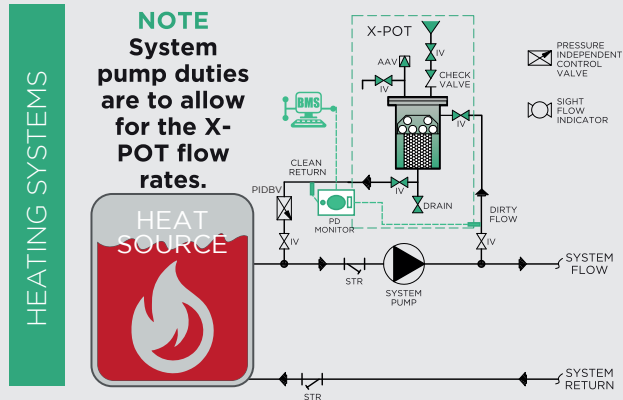


Standard X-POT XP™ unit features plus an integrated pump and BMS compatibility.

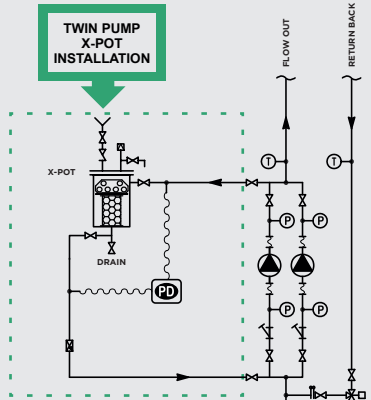
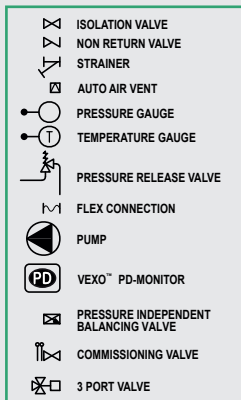


- **Max working pressure:** 232 PSI
- **Max System Volume:** 79,885 US gal
- **Max Flow Rate:** Up to 55.5 GPM
- **Pipe Connection:** 2" NPT
- **Filtration Rate:** Down to 1 micron
- **Magnetic Gauss:** 13No. 8000 Gauss Neodymium Magnets
- **Volume in Vessel:** 6.6 US gal

Indicative X-POT™ Side Stream Filtration Installations



The X-POT™ provides a number of installation solutions. These examples are **indicative only**. If your system cannot accommodate any of these scenarios due to complexity, please contact the VEXO™ Technical Team: technical@VEXOint.com



1 PIBV (Not Supplied)



2

Packaged Differential Pressure Monitor



THE X-POT SHOULD BE FIT ON THE SECONDARY HEATING CIRCUIT TO ENSURE BULK WATER SYSTEM PROTECTION

Flow rate set point & pipe connection calculations

The size of the pipe connections and flow rate set point to the X-POT is determined by the total system volume - circulated through the X-POT in a 24-hour period.

$$\frac{\text{SYSTEM VOLUME}}{1,400} = \text{Gal/min}$$

- 1.3 - 6.3 Gal/min = 1/2" Conn.
- 6.3 - 9.5 Gal/min = 3/4" Conn.
- 9.5 - 15.8 Gal/min = 1" Conn.
- 15.8 - 19 Gal/min = 1 1/4" Conn.
- 19 - 33.2 Gal/min = 1 1/2" Conn.
- 33.2 - 55.4 Gal/min = 2" Conn.

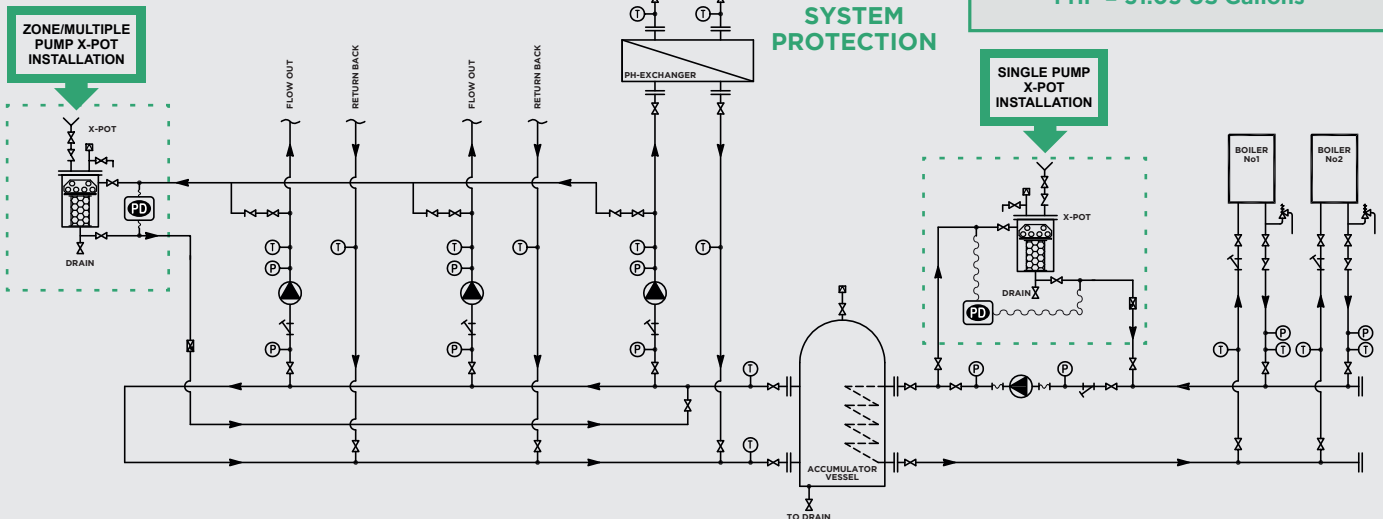
ESTIMATION THE SYSTEM VOLUME

If you don't know the system volume, here is a rough 'rule of thumb' guide:

$$1 \text{ Million BTU's} = 927.6 \text{ US Gallons}$$

OR

$$1 \text{ HP} = 31.05 \text{ US Gallons}$$



Upgrade your X-POT™ with a PD-Monitor™ for system flow issues

PD-Monitor™

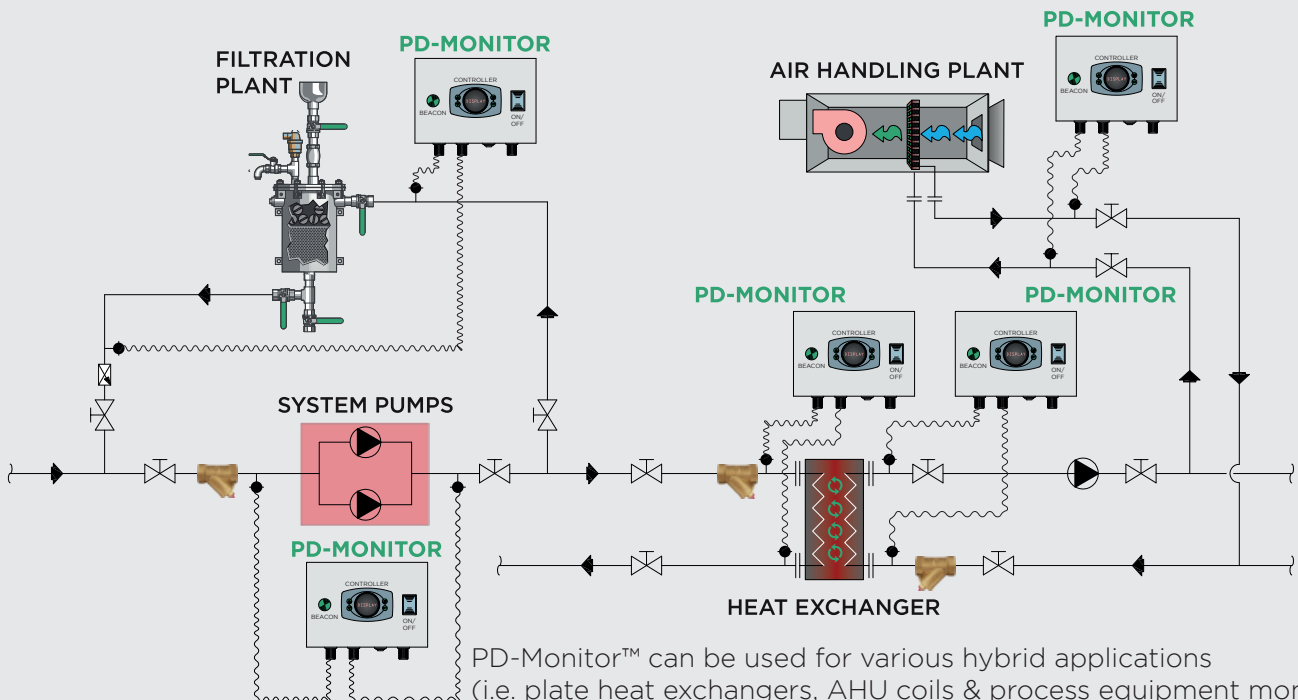
Product Code - PD-MON-NAM-110V



A packaged, wall mounted & IP54 factory tested differential pressure monitoring unit, incorporating controller, two pressure transducers, 115V power cord & BMS capability.

- Remote alarm for blocked X-POT™ filters
- Dry Contact Relay
- 435 PSI Max. Working Pressure
- Can be linked to BMS
- Audible alarm & flashing beacon
- Simple, adaptive monitor for flow issues

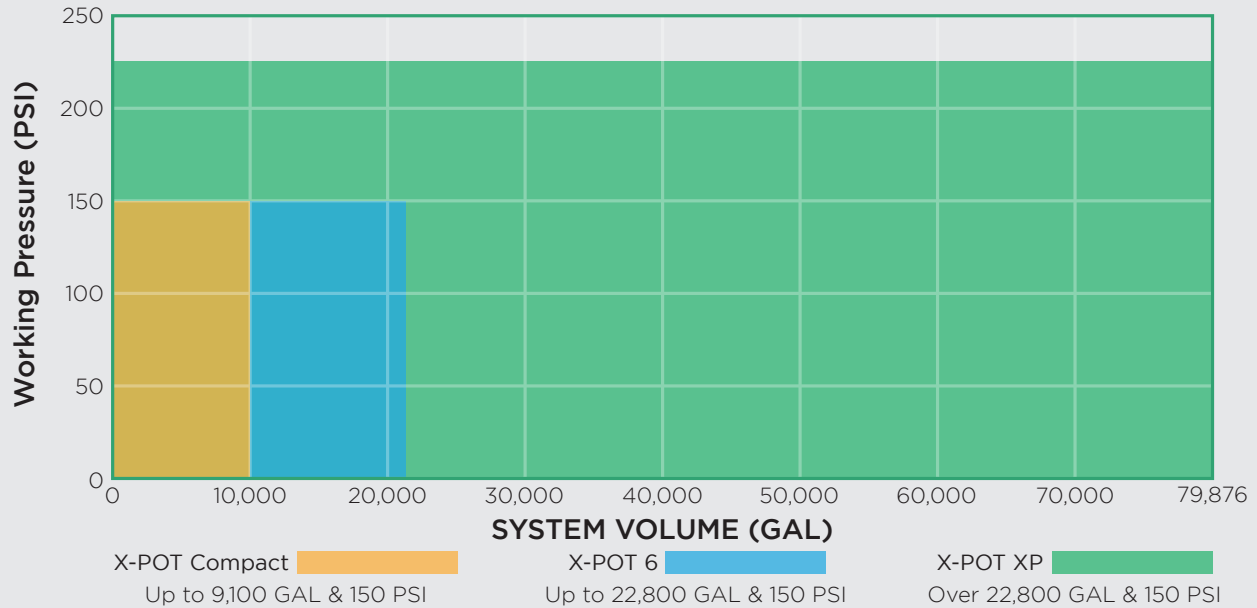
Compatible with all PD applications.



X-POT™ Sizing & Heat Loss Mitigation

Quick Sizing Chart

The system volume & working pressure determine which X-POT™ unit.



Controlling heat losses and heat gains within a building is fundamental to its design for efficiency. It is recommended each X-POT™ purchase should include the respective insulation jacket and lid to optimize energy performance in accordance with ASHRAE 90.1.



X-POT Compact™
2-Piece Jacket

Product Code - INSJKT12



X-POT 6™
2-Piece Jacket

Product Code - INSJKT13



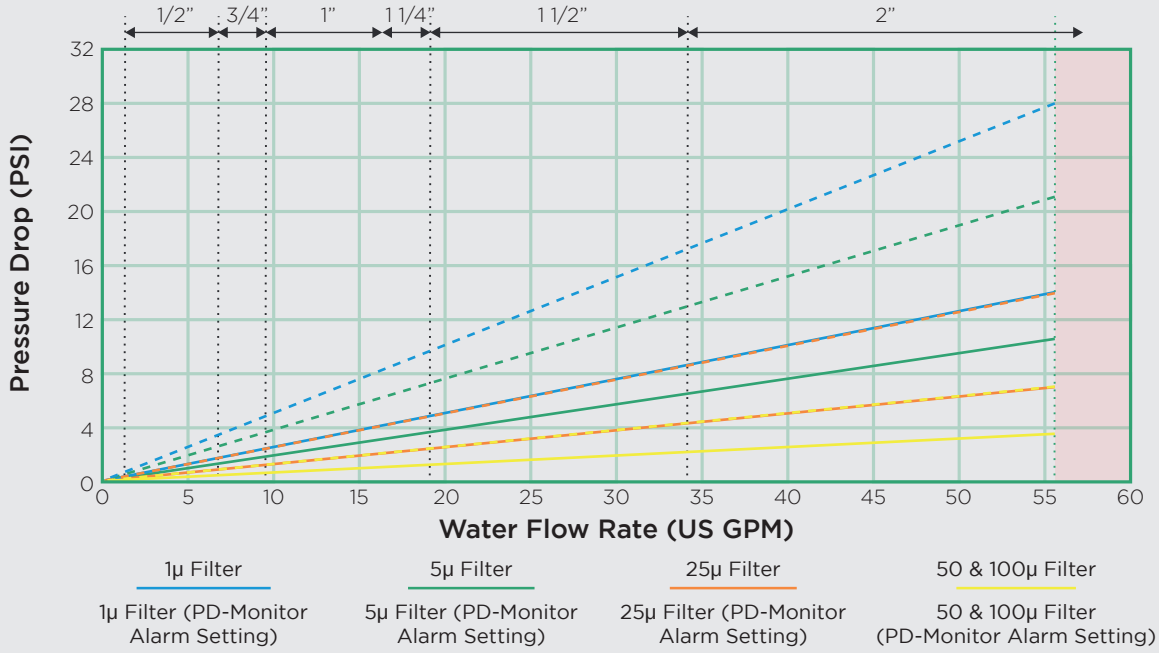
X-POT XP™
3-Piece Jacket

Product Code - INSJKT14



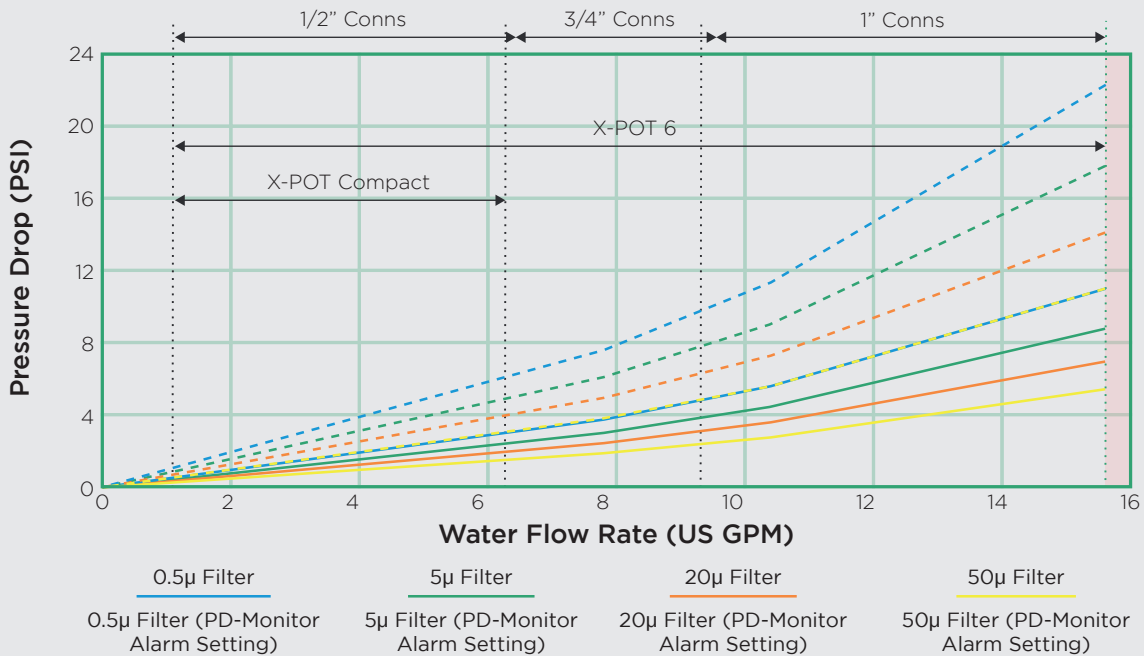
X-POT™ Fine Filtration Filter Performance

Flow DP of X-POT XP™ Bag Filters Including Magnet Grate
CONNECTION SIZES



NOTE - Choice of X-POT™ is dependent upon system working pressure and system volume.
Dirty filter state can be estimated by multiplying the clean filter state by a factor of 2.

Flow DP of X-POT Compact & 6 Cartridge Filters Including Magnet Grate
CONNECTION SIZES



NOTE - Choice of X-POT™ is dependent upon system working pressure and system volume.
Dirty filter state can be estimated by multiplying the clean filter state by a factor of 2.



X-POT™ Fine Filtration

Our range of superior quality filters provides top class filtration, surpassing US and international industry standards.

BSRIA BG29/21 '6th Edition' Pre-commission 'Cleaning of Pipe Work Systems' recommends a 5 micron filtration rate. The X-POT™ utilizes industry leading 0.5 micron Cartridge Filters (10x Finer) and 1 micron Bag Filters (5x Finer), capturing more debris resulting in greater energy savings and prolonged life cycle realisation.



CARTRIDGE FILTERS X-POT COMPACT, 6, 6+

- 50µ VX-CFILTERS(20)50MIC
- 20µ VX-CFILTERS(20)20MIC
- 5µ VX-CFILTERS(20)5MIC
- 0.5µ VX-CFILTERS(20)0.5MIC



BAG FILTERS X-POT XP, XXP, XP+, HFHP

- 100µ V-XBFILTERS(40)100MIC
- 50µ V-XBFILTERS(40)50MIC
- 25µ V-XBFILTERS(40)25MIC
- 5µ V-XBFILTERS(40)5MIC
- 1µ V-XBFILTERS(40)1MIC

SYSTEM WATER CLARITY GUIDE



Replace with finer grade X-POT™ filter as soon as previous grade filter maintains continuous through-flow without becoming blocked.

Check additive levels every time a filter is replaced.





Y-MAG MAGNETIC FILTER. Available from Q4, 2024, through distribution and/or via your manufacturer's representative



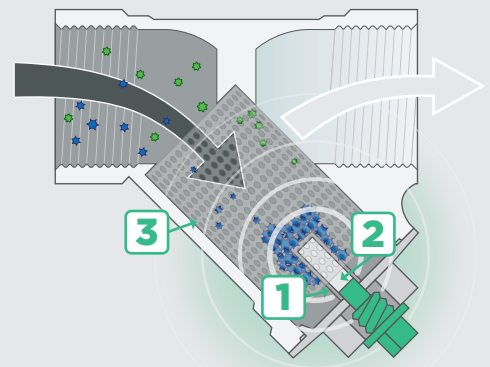
Our innovative VEXO™ Y-MAG™ combines the most current DZR Brass strainer technology with patented dry pocket magnetic filtration technology, into one easy-install magnetic filter.

Conventional strainers can become fouled under poor water quality conditions, adding resistance to system pumps, requiring additional electrical load to meet the same demand for flow. On the other hand, the powerful rare earth magnet on the Y-MAG™, saves energy by retaining the magnetite around the dry pocket of the strainer, keeping the mesh clear and helping with flow and efficiency.

Powerful magnetic field captures fine and heavy magnetic particles - protecting pump design efficiency

TECHNICAL SPECIFICATION				
Working Temperature	-4°F	32°F	32 to 122°F	203°F
Working Pressure	290 PSI	580 PSI	580 PSI	464 PSI
Connections	NPT Thread			
Filter Mesh	30 Mesh - 550 micron			
Approvals	LF BRASS: ASME B1.20.1 & CW717R Type Pb free			
Installation	Horizontal and Vertical			
Servicing	Fully Serviceable			

MATERIALS OF CONSTRUCTION	
Strainer Body	LF DZR Brass
Strainer Cap	LF DZR Brass
Strainer Basket	304 Stainless Steel
Gasket	PTFE
Rare Earth Magnet	N35SH
Magnet Cap	PPS



Applications

Suitable for use in Domestic, Commercial and Industrial Heating, Cooling Systems and Condenser Water Systems.



NON-POTABLE USE ONLY

VEXO™

vexoint.com/us/how-to-buy/

Distributed in the U.S.A by Skidmore Pump



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Benton Harbor, MI 49022

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