

X-POT™

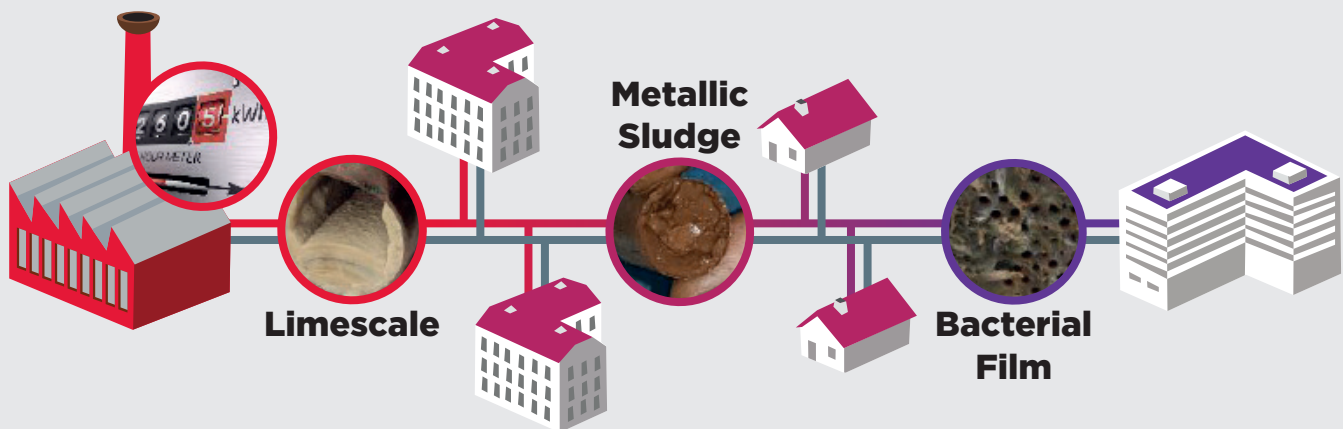
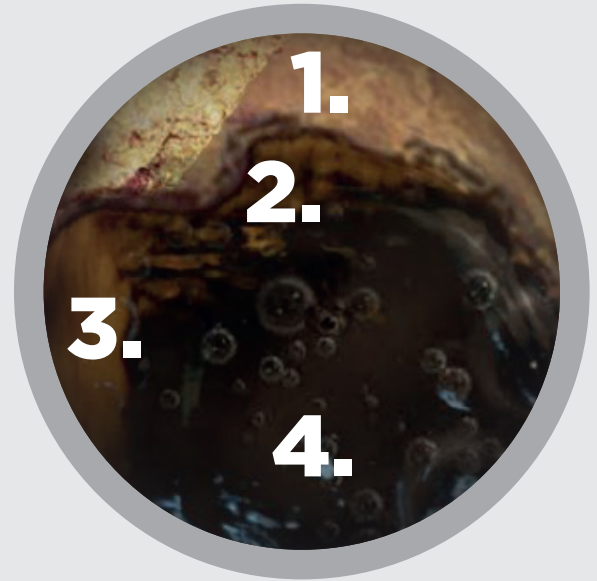
ALL-IN-ONE AIR & DIRT SEPARATOR



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.**

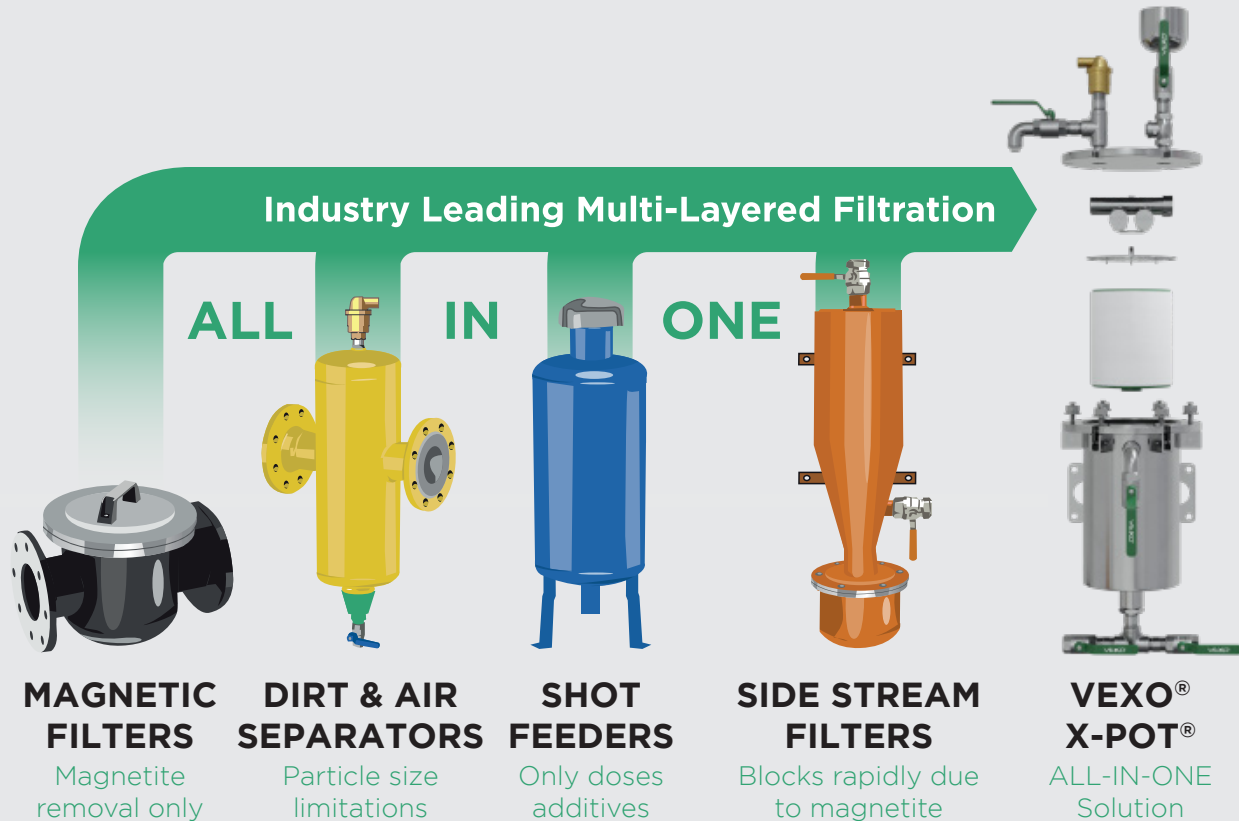


Limescale deposits can clog up your heating or cooling system. Metallic sludge or bacterial film can also cause blockages and cold spots in pipes and radiators. All of this leads to reduced efficiency and high fuel bills. It also means extra stress on pumps, heat exchangers, radiators and sensors causing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

X-POT Side Stream Filtration units can prevent all these issues with proven energy savings and thousands of installations worldwide with 100% client 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 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.
- Retro-fit 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.



Can the VEXO™ X-POT™ really perform as an All-In-One?

Absolutely.

“The X-POT™ Side Stream Filtration system reduced energy consumption by 3.5% within the first 7 days of use.”

Jonathan Cripps, MSc Dissertation:
Low Energy Building Services Engineering
(Effects of Corrosion on Heat Transfer Efficiency within a heating system)
Loughborough University



“Results suggest gas bill reductions of up to 10% are possible whilst prolonging the life cycle of existing heating systems.”

Dr Rayner Mayer
Trials of VEXO X-PO10 Inhibitor
Sciotech Projects
University of Reading, UK



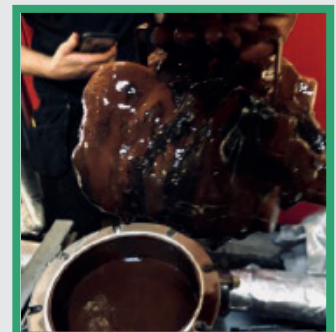
“Various costly MRI failures & warranty voids caused by blocked plate heat exchangers cleared up immediately upon installing an X-POT™.”

Maine General Hospital, USA



“One of the beauties of the X-POT™ is being able to install it at an easily worked on height with very little tools needed to take it apart and maintain it. A guy can come in, isolate it from the system, take it apart and clean it out in a matter of 10 minutes. This is a huge benefit over some of the other competitive products which are the main in-line products.”

Andy Hickey
Emerson Swan, USA



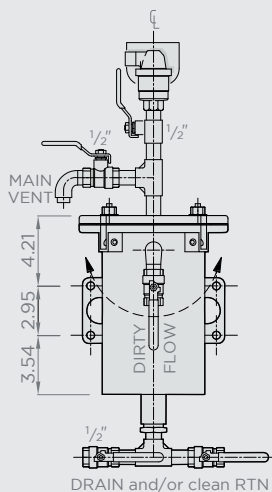


Side Stream Filtration for small to medium commercial systems

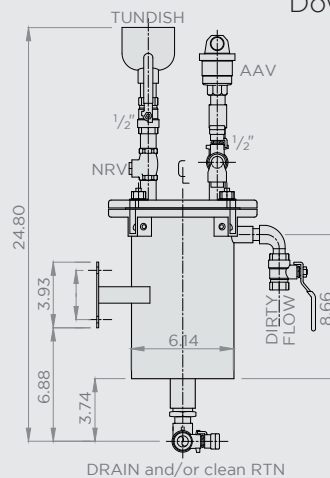


Side stream filtration including a magnetic filter, cartridge filter, air and dirt separator & dosing unit.

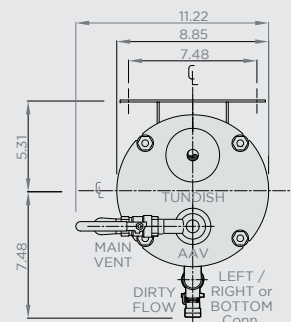
- **Max working pressure:**
150 PSI
- **Max System Volume:**
9,130 US gal
- **Max System BTU:**
9.84MM
- **Max System HP:**
294 HP
- **Flow Rate:**
Up to 6.34 GPM
- **Pipe Connection:**
1/2" NPT
- **Filtration Rate:**
Down to 0.5 micron



Front View



Side View



Plan View



Side Stream Filtration for small to medium commercial systems

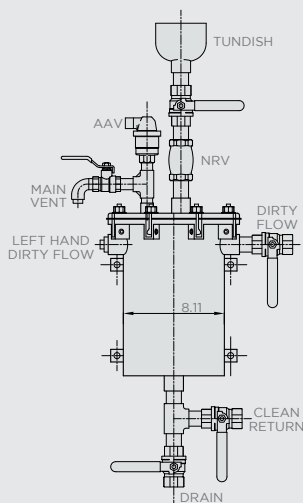


Product Code - 58761-1-1

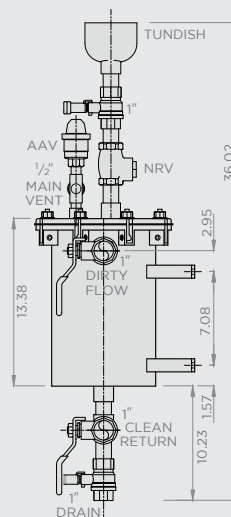


Side stream filtration including a magnetic filter, cartridge filter, air and dirt separator & dosing unit.

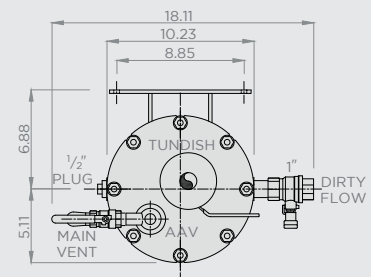
- **Max working pressure:**
150 PSI
- **Max System Volume:**
22,824 US gal
- **Max System BTU:**
24.6MM
- **Max System HP:**
735 HP
- **Flow Rate:**
Up to 15.85 GPM
- **Pipe Connection:**
1" NPT
- **Filtration Rate:**
Down to 0.5 micron



Front View



Side View



Plan View



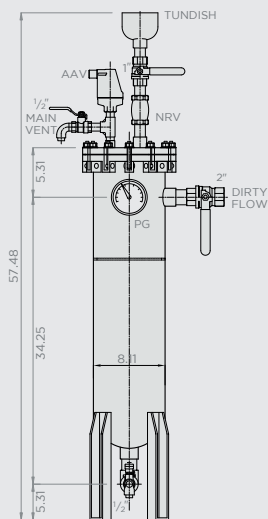
Side Stream Filtration for large to district commercial systems

X-POT XP™
Product Code - 58762-1-1

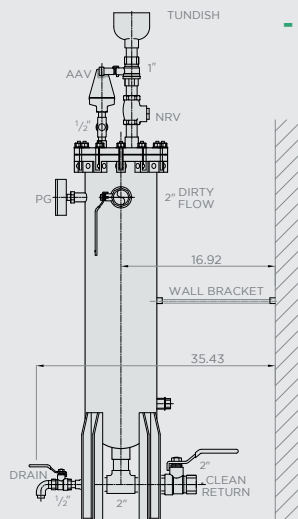


Side stream filtration including a magnetic filter, bag filter, air and dirt separator & dosing unit.

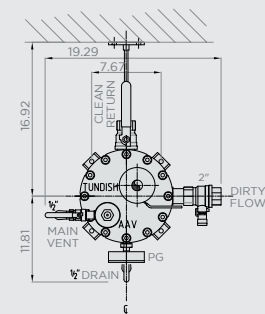
- **Max working pressure:**
232 PSI
- **Max System Volume:**
79,885 US gal
- **Max System BTU:**
86.12MM
- **Max System HP:**
2,572 HP
- **Flow Rate:**
Up to 55.47 GPM
- **Pipe Connection:**
2" NPT
- **Filtration Rate:**
Down to 1 micron



Front View



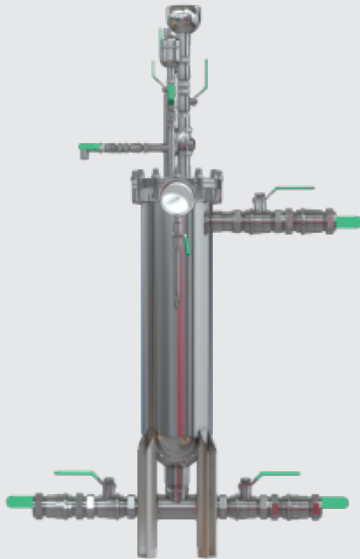
Side View



Plan View



Side Stream Filtration for extremely high pressure/flow



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

MADE TO
ORDER

- **Max working pressure:** 435 PSI
- **Max System Volume:** 79,885 US gal
- **Flow Rate:** Up to 55.45 GPM
- **Pipe Connection:** 2" NPT
- **Filtration Rate:** Down to 1 micron



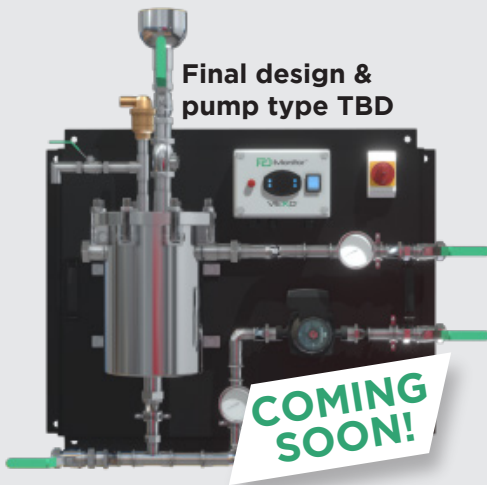
Side stream filtration including a magnetic filter, bag filter, air and dirt separator & dosing unit.

MADE TO
ORDER

- **Max working pressure:** 145 or 435 PSI Options
- **Max System Volume:** 684,734 US gal
- **Flow Rate:** Up to 475.51 GPM
- **Pipe Connection:** 6" PN 10 or 6" PN 30
- **Filtration Rate:** Down to 1 micron



Side Stream Filtration with integrated pump, alarm & BMS capable



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



- **Max working pressure:** 145 PSI
- **Max System Volume:** 22,824 US gal
- **Flow Rate:** Up to 15.85 GPM
- **Pipe Connection:** 1" NPT
- **Filtration Rate:** Down to 0.5 micron

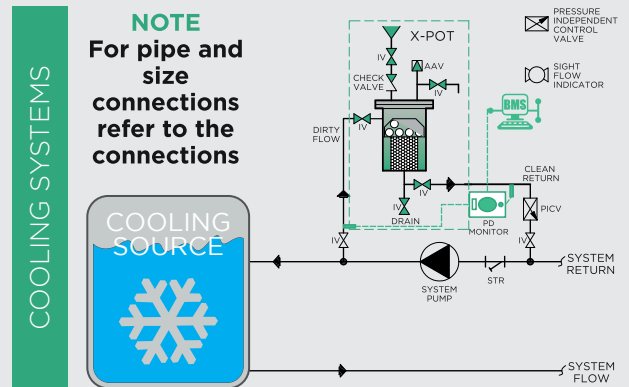
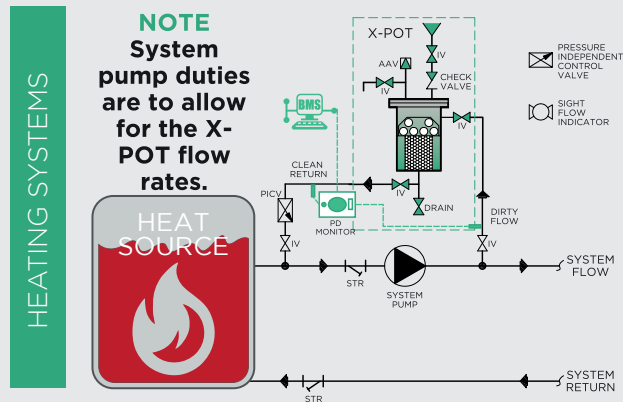


Standard X-POT XP™ unit features plus an integrated pump and BMS compatibility.



- **Max working pressure:** 87 PSI
- **Max System Volume:** 79,885 US gal
- **Flow Rate:** 15.85 - 55.5 GPM
- **Pipe Connection:** 2" NPT
- **Filtration Rate:** Down to 1 micron

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
PICV (Not Supplied)



2

Packaged Differential Pressure Monitor



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

Which connections and X-POT?

The size of the connections to the X-POT™ is determined by the total system volume being circulated through the X-POT™ in a 24 hour period.

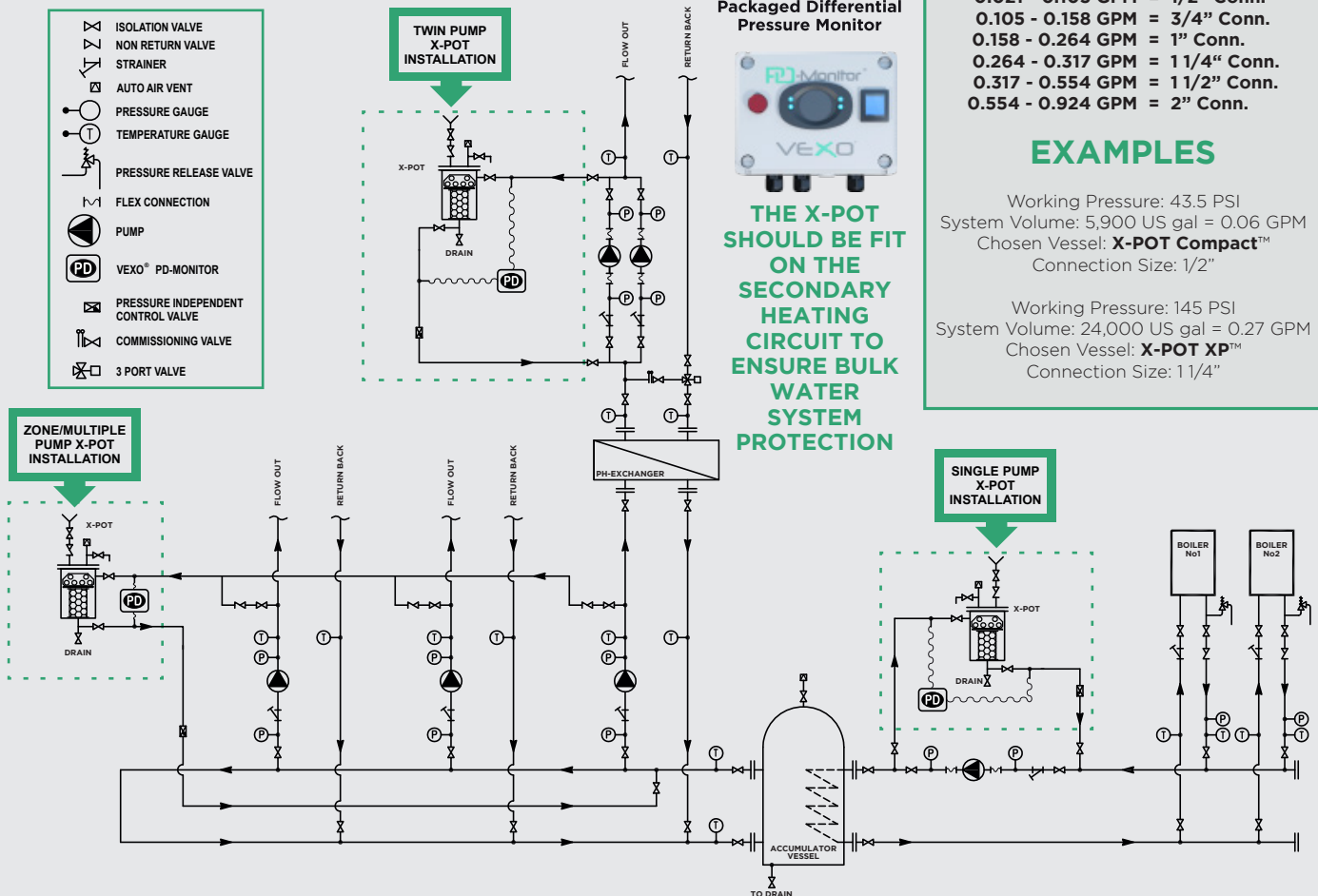
$$\frac{\text{SYSTEM VOLUME}}{86,400\text{sec}} = \text{GPM}$$

0.021 - 0.105 GPM = 1/2" Conn.
0.105 - 0.158 GPM = 3/4" Conn.
0.158 - 0.264 GPM = 1" Conn.
0.264 - 0.317 GPM = 1 1/4" Conn.
0.317 - 0.554 GPM = 1 1/2" Conn.
0.554 - 0.924 GPM = 2" Conn.

EXAMPLES

Working Pressure: 43.5 PSI
System Volume: 5,900 US gal = 0.06 GPM
Chosen Vessel: **X-POT Compact™**
Connection Size: 1/2"

Working Pressure: 145 PSI
System Volume: 24,000 US gal = 0.27 GPM
Chosen Vessel: **X-POT XP™**
Connection Size: 1 1/4"



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

PD-Monitor™

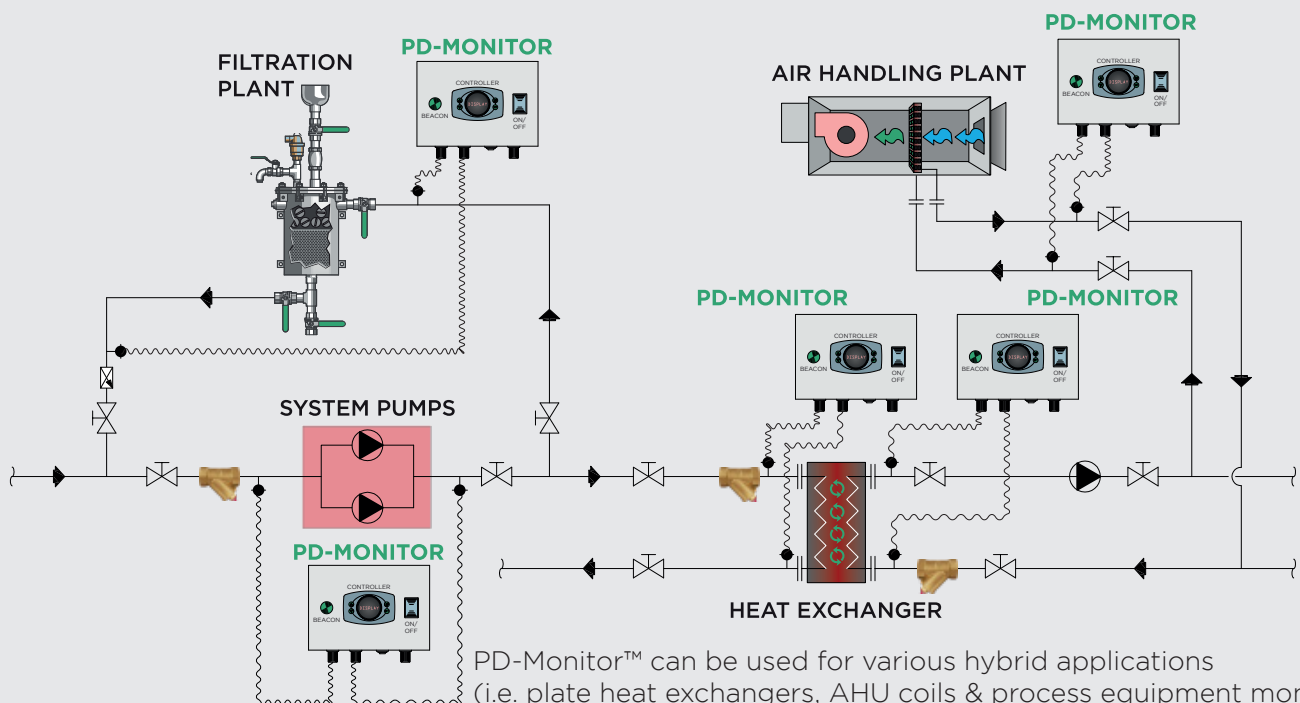
Product Code - 58760-PD



A packaged, wall mounted & IP54 factory tested differential pressure monitoring unit, incorporating controller, two pressure transducers, 240V ac mains cable & BMS capability.

- Remote alarm for blocked X-POT™ filters
- Modbus RS485
- 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.

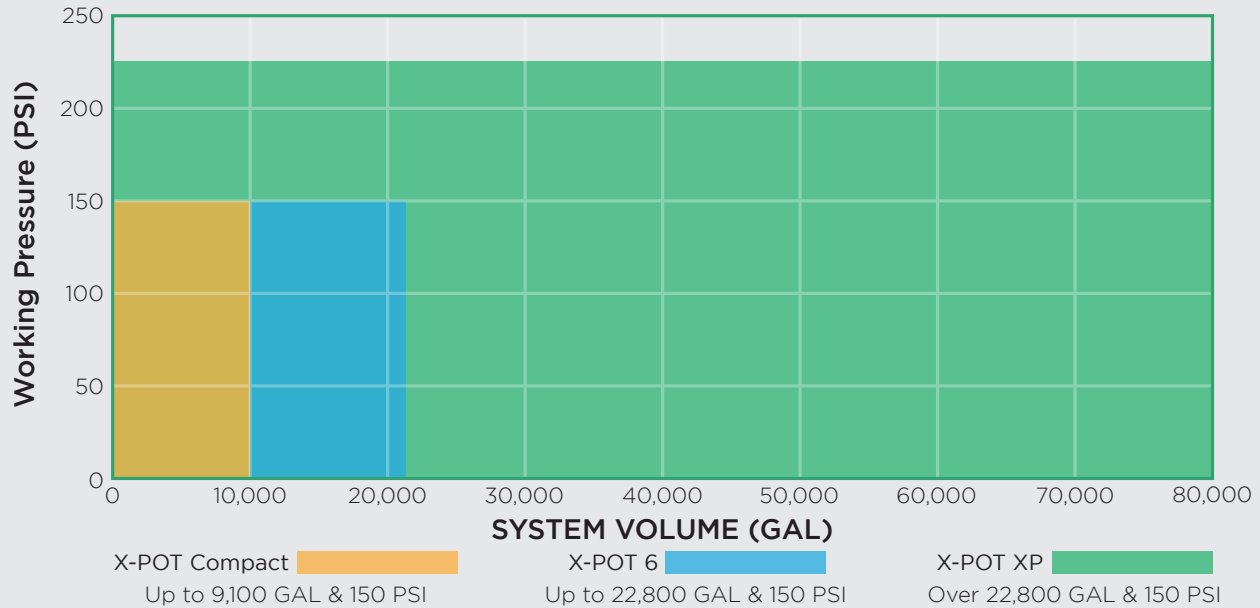


PD-Monitor™ can be used for various hybrid applications (i.e. plate heat exchangers, AHU coils & process equipment monitoring).

X-POT™ Sizing & Heat Loss Information

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.



**X-POT Compact™
2-Piece Jacket**

Product Code - 58760-Insul



**X-POT 6™
2-Piece Jacket**

Product Code - 58761-Insul

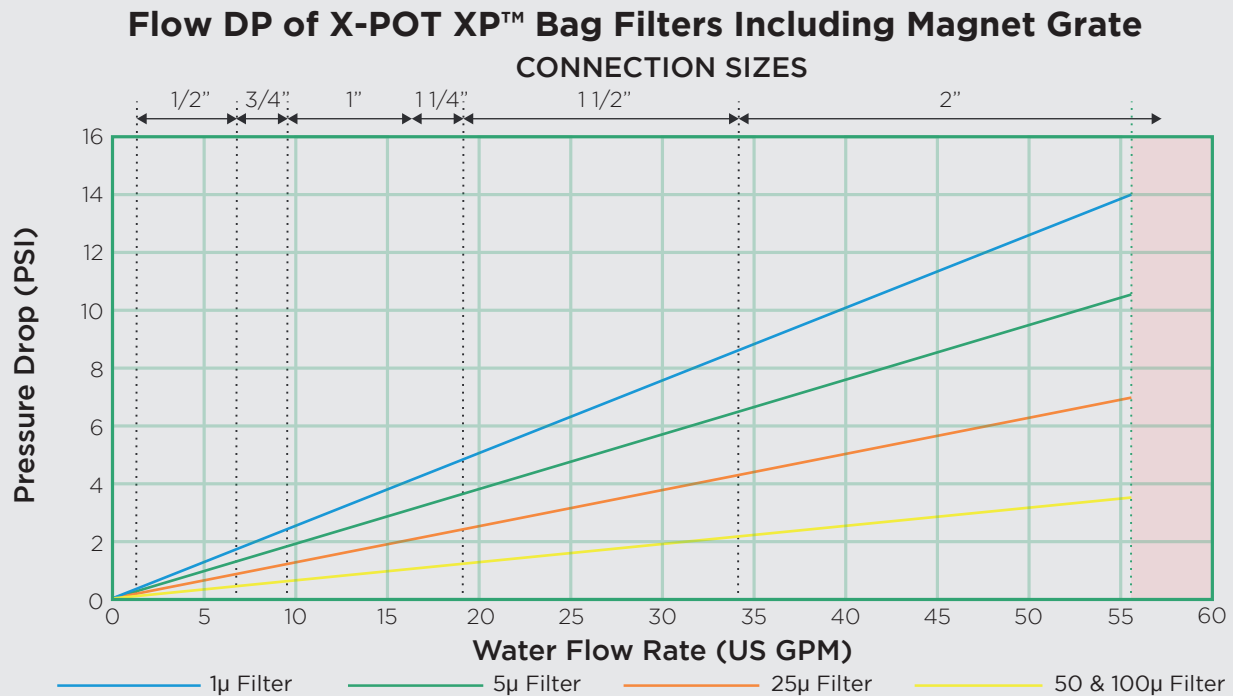


**X-POT XP™
3-Piece Jacket**

Product Code - 58762-Insul

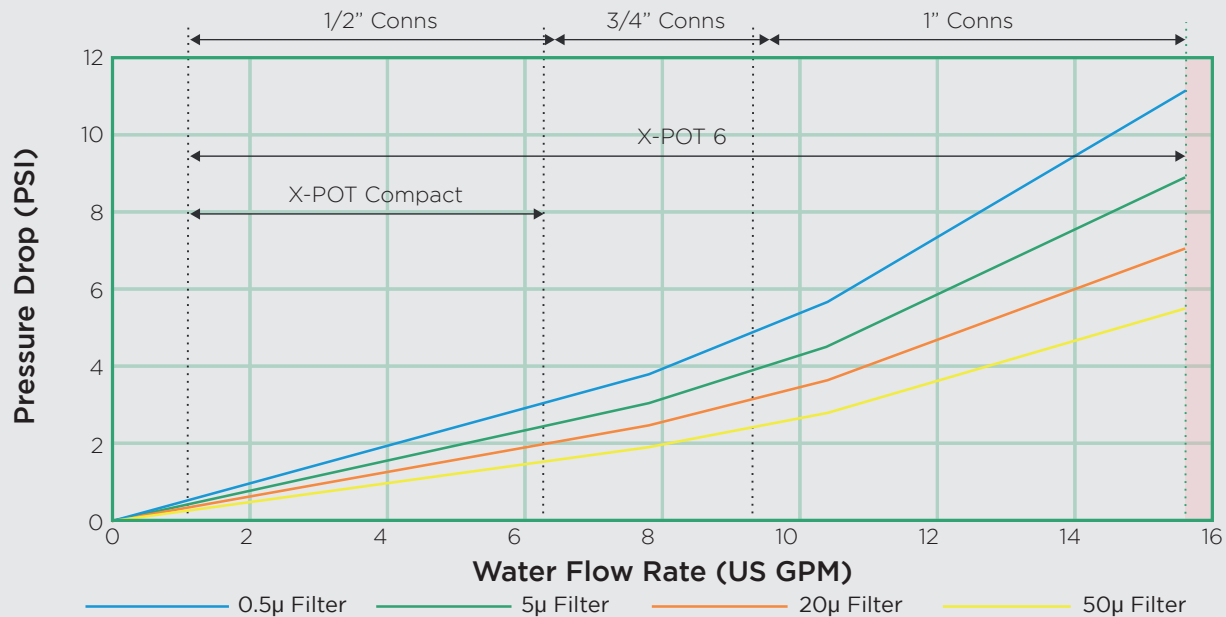


X-POT™ Fine Filtration Filter Performance



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



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 58760-F50
20µ 58760-F20
5µ 58760-F5
0.5µ 58760-F0.5



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

100µ 58762-F100
50µ 58762-F50
25µ 58762-F25
5µ 58762-F5
1µ 58762-F1



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.



X-PO™ Additives

X-PO10™ Commercial Inhibitor



Superior all-round system protection

- Super concentrate - dilutes further than other leading brands.
- Increased system performance and lifespan.
- Neutral pH formula.

Product Codes:

X-PO10 Inhibitor (1.25 Gal) - 58760-P010
 X-PO10 Inhibitor (5 Gal) - 58760-P010-5
 X-PO10 Test Kit (10 Pack) - 58760-Test

X-PO35™ Non-Flush Cleanser



Formulated for use only with an X-POT

- Strips biofilms & gently cleanses system materials for up to 48 hours.
- Suspended deposits are captured within the X-POT™ before dosing X-PO10™ Inhibitor.
- Ideal pre-clean for new plant room installations.

Product Codes:

X-PO35 Flush (1.25 Gal) - 58760-P035
 X-PO35 Flush (5 Gal) - 58760-P035-5
 X-PO35 Test Kit (10 Pack) - 58761-Test

With the correct additives, X-POTs provide full, non-flush cleansing for old systems



Exclusively available from

Skidmore®

A Swan Group Company

1875 Dewey Avenue Benton Harbor, MI 49022
Rep Sales and Support: (269) 925-8812

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