

VEXO X-POT Titan Specification Sheet

Product / Model

X-POT Series/Titan

Description

Side Stream Filtration and Dosing Unit

Art. Code Date

Customer

Project

Reference

Design Criteria

Medium: Water/Glycol (Max 50%)
Max. System Volume: 1,711,834 US Gal

Max. Pressure: 435 PSI Max. Flow Rate: 1,188 Gal/M

Max. Temp: 32°F - 203°F (0°C - 95°C)

Filtration Rate: Filtration down to 1 Micron (Bag Filter)

ΔP - Pressure Drop: See below graph

Dirty linter state can be estimated by multiplying the clean litter state by a

Mounting: Floor Standing **Dosing Capacity:** 132 US Gal

Design Standard: ASME BPVC VIII Div.1

Testing and Quality Assurance

Test Pressure: 652.5 PSI
Test Medium: Air
Test Certificate: Yes

Drawing: Yes

Design Compliance: ASME BPVC U-Stamp

Notified Body Inspection: Yes

Warranty: 10 Years

Industry Peer Reviewed Energy Savings: Yes

Construction Materials

Vessel Body/Lid: SS 316 Baffle Plate: SS 316 Magnet Grate: SS 316

Magnets (91no.): Neodymium Rare Earth (Encased in SS 304)

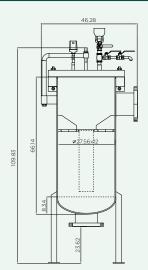
Bag Filter: Polypropylene Needlefelt Type 19-2G

Isolation Valves: SS 316

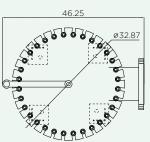
AAV: SS 316 **NRV:** SS 316 **Fittings:** SS 316

Drawing

Front & Side:



Top:



Dimensions

Overall Height: 72.69" Overall Depth: 35.00" Overall Width: 32.87"

Connections

Flange Connections: 10" PN40 Flanged

AAV: 3/4" NPTF
Dosing Funnel: 1"

Volume & Weight

Volume: 132 US Gal

Dry Weight: 2,535 Pounds

Operational Weight: 3,858 Pounds

Accessories

Pressure Differential Monitoring: PD-Monitor (Optional)





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General Description

A - The VEXO™ X-POT Titan™ assists in the restoration of water quality and flow rates within Hydronic Heating and Cooling Systems to remain reliable and run at their intended design capabilities, by keeping the thermal fluid within the system filtered, clean and free from suspended particulates and micro-bubbles. This also allows Chemical Inhibitor's and Biocides to remain effective, thus reducing the accumulation of Corrosion, Scale and Bio-film deposits which would otherwise cause flow loss, degradation of plant and pipeline material, as well as reduced system reliability, increased running and reactive maintenance costs, water losses and reduced lifespan of system components. Recent research presented at the CIBSE Technical Symposium in the UK in April 2023 and at the ASHRAE Summer Conference in the US in June 2023 has shed light on the significant energy savings that can be achieved by improving water quality and removing corrosion residuals with X-POT. The results were compelling, showing that poor water quality not only leads to plant failure but also significantly increases pump energy consumption. The X-POT reduced pump energy consumption by an average of 19% in multiple system pressure scenarios.

This is achieved by a combination of functions, as the X-POT™ acts as an all-in-one:

- Dirt & Air Separator
- Magnetic Filter
- Side Stream Filter (down to 1 micron)
- Shot Feeder (For adding Water Treatment Chemicals)
- **B** This section specifies cleaning and treatment of circulating HVAC water systems, including the following:
 - I. Closed Loop Cooling Systems
 - II.Closed Loop Heating Systems

Product Description - Side Stream Water Filtration and Treatment Device

- A The Contractor shall furnish and install a full side stream filtration device that incorporates an industry peer reviewed 'all-in-one', shot feeder, magnetic filter and air and dirt separation device as shown and detailed on the contract documents. The product provided shall be the VEXO™ X-POT Titan™ manufactured by VEXO International (<u>www.vexoint.com/us</u>) and exclusively supplied by Skidmore of Benton Harbor, MI or an approved substitution.
- ${\bf B}$ The product shall be all stainless steel construction including all valves and fittings. Maximum working pressure shall be 435 PSI with flow rates up to 1,188 GPM with a temperature range of 32°F to 200°F. Dosing capacity shall be a minimum of 132 US Gal and Bag Filtration range to be no less than 50 μ to 1 μ (cartridge filters are not acceptable). Magnetic filtration shall consist of no less than ninety-one (91) rare earth magnets fifty-six (56) with a minimum of 26.5 lbs pull force each, and thirty-five (35) with a minimum of 35 lbs pull force each designed for easy removal and cleaning. Air separation efficiency to be 100% removal to micro-bubble level and incorporate an automatic air vent.

