

VE XO X-POT Titan 150 PSI and 435 PSI Specification Sheet

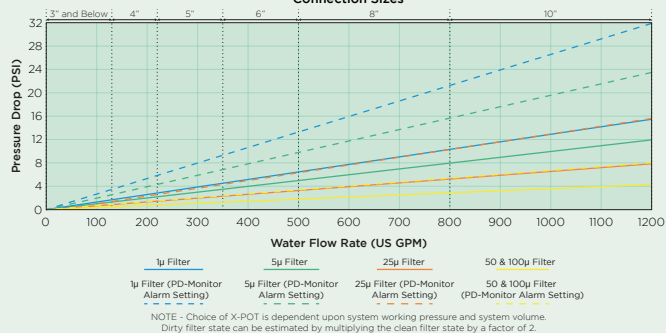
Product / Model	X-POT Series/Titan	Art. Code	
Description	Side Stream Filtration and Dosing Unit	Date	
Customer			
Project			
Reference			

Design Criteria

- Medium:** Water/Glycol (Max 50%)
- Max. System Volume (24/12hrs):** 1,711,834/855,917 US gal
- Max. System Btu/h (24/12hrs):** 1,426.53/713.26 MMBtu/h
- Max. System HP (24/12hrs):** 42,583/21,291 HP
- Max. Cooling TONS (24/12hrs):** 114,122/57,061 TONS
- Max. Pressure:** 150 or 435 PSI Option
- Min. Flow Rate:** 1.31 GPM
- Max. Flow Rate:** 1,188 GPM
- 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

Flow DP of X-POT HFHP & Titan Bag Filters Including Magnet Grates
Connection Sizes



- Mounting:** Floor Standing
- Dosing Capacity:** 132 US Gal
- Design Standard:** ASME BPVC VIII Div.1

Testing and Quality Assurance

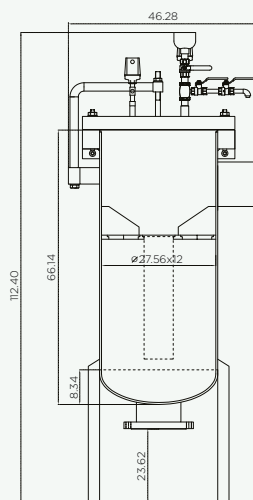
- Test Pressure:** 225 PSI (150 Unit) 652.5 PSI (435 Unit)
- Test Medium:** Air
- Test Certificate:** Yes
- Drawing:** Yes
- Design Compliance:** ASME BPVC U-Stamp
- Notified Body Inspection:** Yes
- Warranty:** 10 Years
- Industry Peer Reviewed Energy Savings:** Yes

Construction Materials

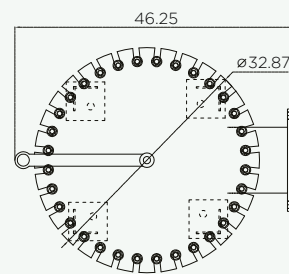
- Vessel Body/Lid:** SS 316
- Baffle Plate:** SS 316
- Magnet Grate:** SS 316
- Magnets (91In.):** Neodymium Rare Earth (Encased in SS 304)
- Bag Filter:** Polypropylene Needlefelt Type 19-2G
- Isolation Valves:** SS 316
- AAV:** SS 316
- NRV:** SS 316
- Fittings:** SS 316

Drawing

Front & Side:



Top:



Dimensions

- Overall Height:** 112.40"
- Overall Depth:** 32.87"
- Overall Width:** 46.25"

Connections

- Flange Connections:** 10" ANSI Class 600 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)

VEXO X-POT Titan Specification Sheet

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 (www.vexoint.com/us) and exclusively supplied by Skidmore of Benton Harbor, MI or an approved substitution.

B - The product shall be all stainless steel construction including all valves and fittings. Maximum working pressure shall be 150 PSI (150 Unit) or 435 PSI (435 Unit) 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 50µ to 1µ (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.