

Tank venting

SCANVENT P/V VALVE

Introduction

The SCANVENT high velocity p/v valve is the result of extensive research aimed at achieving the optimal balance between minimizing tank vapor loss and providing non-oscillating behavior.

Application

Packaged in a straightforward design that caters to low maintenance needs, this valve incorporates a distinctive combination of magnet power and air brakes, which is both unique and patented. It stands out as a genuinely non-oscillating solution, aligning with the two-second, no-metal-to-metal contact definition outlined in ISO 15364:2021.

When maintenance is necessary, the entire inside trim can be lifted out in one lot, re-placed, and the crew can easily remove seats and discs for repair or replacement. There is no need to involve the factory or to use expensive service engineers.

Working principle

During loading, the SCANVENT valve is a full-lifting valve with immediate high capacity upon reaching the opening setting, thanks to its magnet/weight/booster combination. The opening settings are adjustable for both pressure and vacuum units. During voyage, a small VOC dedicated valve handles the small thermal venting volumes necessary for the integrity of the tanks. This valve re-seats at its opening setting. Put differently, ullage space pressure, be it VOC or inert gas, is never lost below the VOC valve's opening pressure. This will be the Target Pressure according to IMO MSC/Circ. 680. The VOC handling simply cannot be further improved.

The result of this simple but efficient design is optimum VOC handling and minimum use of the inert gas plant.



Benefits

- Simple rigid design
- Seat/disc easy to clean
- Plug & Play module system
- Large inside clearance
- Lowest possible leakage rate

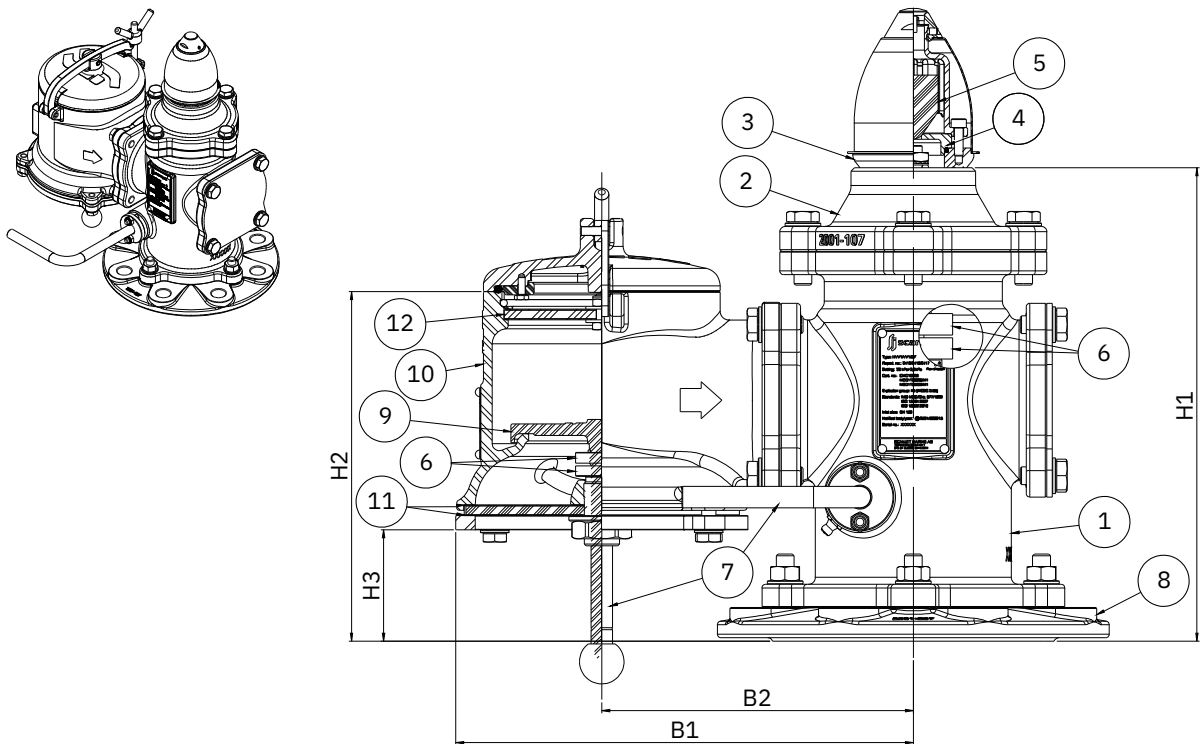
Accessories

The valve comes with a wide range of accessories:

- Electric heat tracing
- Steam/thermal oil heat tracing
- Resilient seal for zero leakage and repairs



Drawing



Item and Description

Item	Description
1	Valve Housing
2	Pressure Seat
3	Pressure Disc
4	Secondary Valve Seat
5	Secondary Valve Disc
6	Magnet

Item	Description
7	Check Lift
8	Connection Flange
9	Valve Housing with Seat
10	Vacuum Disc
11	Flame Screen
12	Gas-Freeing Cover

Measurements and Weights

Measurements and Weights ¹						
Valve Type	H1 (mm)	H2 (mm)	H3 (mm)	B1 (mm)	B2 (mm)	Weight (kg)
HVV-1/VV-1.5M	296	226	92	257	175	19.8
HVV-1.5/VV-1.5M	266	196	62	257	175	20.2
HVV-2/VV-1.5M	358	260	126	257	175	25.8
HVV-2.5/VV-1.5M	319	221	87	257	175	26
HVV-3/VV-3.5M	458	343	81	398	276	52.2
HVV-3.5/VV-3.5M	458	343	81	398	276	51.7
HVV-4/VV-3.5M	446	371	149	448	304	68.9
HVV-4.5/VV-4.5M	382	295	59	512	352	82.1
HVV-5/VV-4.5M	593	323	87	568	416	124
HVV-7/VV-4.5M	593	323	87	568	416	124

¹ Variations can occur depending on the final configuration.

Issue: Scanjet-SCANVENT_PV_VALVE-datasheet_v20241017

This document and its contents are subject to copyrights and other intellectual property rights owned by Scanjet Marine & Systems AB or any of its affiliates (jointly "Scanjet"). No part of this document may be copied, re-produced or transmitted in any form or by any means, or for any purpose, without Scanjet's prior express written permission. Information and services provided in this document are made as a benefit and service to the user, and no representations or warranties are made about the accuracy or suitability of this information and these services for any purpose.

© Scanjet Marine & Systems AB. All rights are reserved.