S-050 PN 16

WATER SUPPLY

S-050-C PN 16

S-052 PN 25

AUTOMATIC AIR RELEASE VALVE "SEGEV" PATE.PEND

Description

The Automatic Continuous Acting Air Release valve ("High pressure") discharges accumulated air from the system while it is under pressure. This revolutionary valve is the result of development based on many years of experience.
The Automatic Continuous Acting Air Release valve is the first of its kind in the world. In spite of its compact and light weight structure, it has a 12mm^2 orifice that enables it to discharge air at high flow rates and is not exposed to obstruction by debris.

Operation

The Automatic Continuous Acting Air Release valve, releases entrapped air from pressurized systems.
Pockets of accumulated air may cause the following destructive phenomena:

- Impediment of effective flow and hydraulic conductivity of the system along with a throttling effect as would a partially closed valve. In extreme cases this will cause complete flow stoppage.
- Accelerate cavitation damages.
- High pressure surges.
- Accelerate corrosion of metal parts.
- Danger of a high-energy burst of compressed air.
- Inaccuracies in flow metering.

The valve functions while the system is under pressure, according to the following stages:
1. Liquid fills the system and enters the valve.
2. The float rises and rolls the rubber sealing band to its sealing position.
3. Entrapped air, which accumulates at peaks along the system, rises to the top of the valve, which in turn
displaces the liquid in the valve's body.
4. The float descends, peeling the rolling seal the orifice opens, and the accumulated air is released.
5. Liquid reenters the valve and the float rises, rolling the rubber sealing band to its sealing position.

Note: Automatic Continuous Acting Air Release valves are designed to release air as it accumulates at peaks of pressurized systems. They are not normally recommended for vacuum protection to valve large volumes of air, because of the inherently small orifices. For this purpose kinetic air valves have much larger orifices.
However Automatic Continuous Acting valves will permit air to re-enter under vacuum conditions. If this is not desirable specify Vacuum check valves.

Main Features

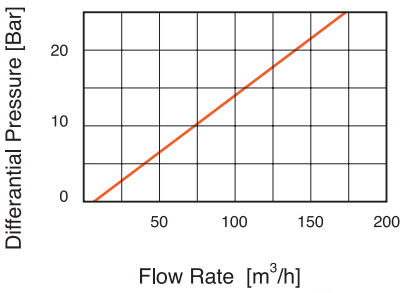
- Working pressure range: 0.2-16 bar. Testing pressure: 25 bar
- Maximum working temperature 90^o C.
- The larger than usual orifice enables it to discharge air at higher flow rates than other Automatic Continuous Acting Air Release valves of its kind.
- The enlarged orifice is not exposed to obstruction by debris.
- The valve's design Rolling Seal Mechanism, is less sensitive to pressure differentials than a direct float seal. It accomplishes a comparably large, orifice for a wide pressure range (up to 16 bar).
- Light weight, simple and reliable structure.
- The body is made of high strength plastic, and all operating parts are made of specially selected corrosion resistant materials.
- A drainage outlet enables removal of excess fluids.

Valve Selection

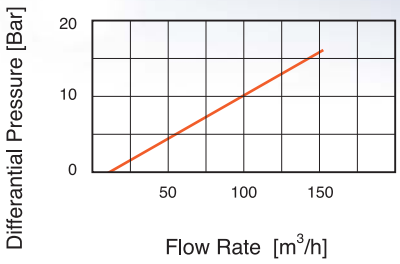
- Available in male threaded sizes: 1/2", 3/4", 1" - BSP / NPT
- Vacuum check valve - The valve is available as a valve that will only release air from the system and will not admit air to the system when negative pressure conditions occur. This characteristic is obtained by adding a check valve to the air outlet.

AIR AND VACUUM FLOW RATE

S-052



S-050, S-050-C



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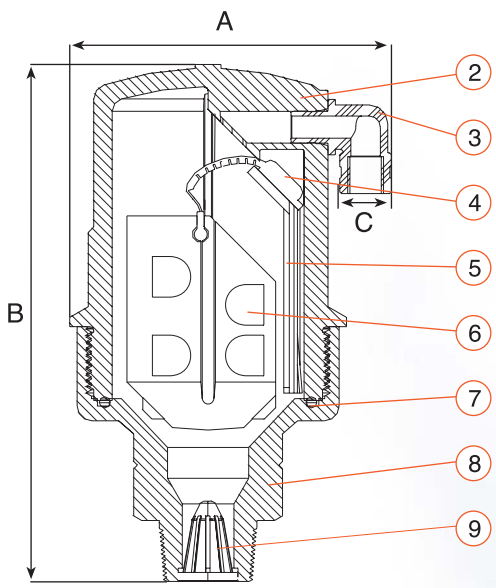
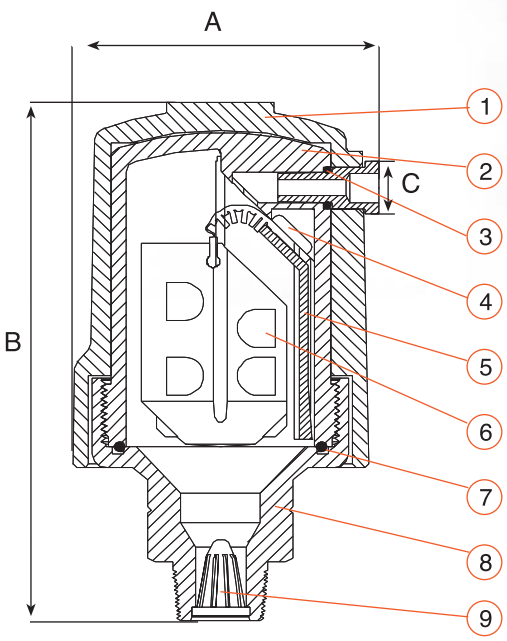


DIMENSIONS AND WEIGHT

Model	Dimensions mm A	B	internal C	externa	Weight Kg.	Orifice Are mm²
S-050 P	87	140	1/8"	18	0.3	12
S-050 B	87	140	1/8"	18	0.65	12
S-050-C	85	148	1/8"	15	1.65	12
S-052	85	148	1/8"	15	1.65	9

S-050-C, S-052



PARTS LIST AND SPECIFICATION

No.	Part		Material
1.	Cover	16 bar	Cast Steel ASTM A-48 CL35B
		25 bar	Sphero Nodular ASTM A-536-60-40-18
2.	Body		Reinforts Nylon
3.	Drainage Outlet	S-050	Polypropylene
		S-050-C/S-052	Brass ASTM B-124
4.	Rolling Seal		E.P.D.M.
5.	Clamping Stem		Reinforts Nylon
6.	Float		Foamed Polypropylene
7.	O-Ring		BUNA-N
8.	Base	S-050	Reinforts Nylon / Brass ASTM B-124
		S-050-C/S-052	Brass ASTM B-124
9.	Strainer		Nylon