



# SG-10 PN 10

# S-050 PN 16



## Automatic Air Release Valve "Segev"

### Description

The automatic air release valve releases 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 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<sup>2</sup> orifice that enables it to discharge air at high flow rates and is not exposed to obstruction by debris.

### Applications

- On most types of pumps.
- After filters, pressure reducers and fertilizer injection systems.

### Operation

The automatic 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 flexible rolling sealing 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, rolling the flexible rolling seal away from the orifice, the orifice opens and the accumulated air is released.
5. Liquid reenters the valve and the float rises, rolling the flexible rolling seal back to its sealing position.

**Note:** Automatic air release valves are designed to release air as it accumulates at peaks in pressurized systems. They are not normally recommended for vacuum protection for releasing large volumes of air, because of their inherently small orifices. For this purpose, air & vacuum valves have much larger orifices.

However, automatic air release valves will permit air to re-enter the system under vacuum conditions. If this is not desirable, specify the one-way out check valve.

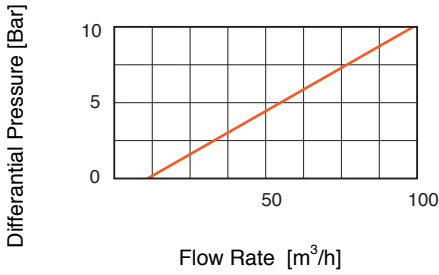
### Main Features

- Working pressure range: **SG-10** 0.1-10 bar. **S-050** 0.2-16 bar.
- Testing pressure: **SG-10** 16 bar. **S-050** 25 bar
- Working Temperature: 60<sup>0</sup> C.
- Maximum short-term temperature: 90<sup>0</sup> C.
- The body is made of high strength composite materials and all operating parts are made of specially selected corrosion- resistant materials.
- Light weight, simple and reliable structure.
- A drainage outlet enables removal of excess fluids.
- The larger than usual orifice enables it to release air at higher flow rates than other automatic air release valves of its kind.
- The enlarged orifice is not exposed to obstruction by debris.
- The valve's rolling seal mechanism design is less sensitive to different pressures than a direct float seal, thus enabling a one-size orifice for a wide pressure range (from 0.2 up to 16 bar).

### Valve Selection

- Available in male threaded sizes: 1/2", 3/4", 1" - BSPT / NPT
- One-way out check valve - 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.

## AUTOMATIC AIR DISCHARGE



## DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions. mm				Weight Kg.	Orifice Area mm²
	A	B	Int. C	Ext.		
1/2" (15mm)	100	140	1/8" BSP	3/8" BSP	0.3	12
3/4" (20mm)	100	140	1/8" BSP	3/8" BSP	0.3	12
1" (25mm)	100	140	1/8" BSP	3/8" BSP	0.3	12

## PARTS LIST AND SPECIFICATION

No.	Part	Material
1.	Body	Reinforced Nylon
2.	Drainage Outlet	Polypropylene
3.	Rolling Seal	Rubber E.P.D.M.
4.	Claping Stem	Reinforced Nylon
5.	Float	Foamed Polypropylene
6.	O-Ring	BUNA-N
7.	Base	Reinforced Nylon
8.	Strainer	Nylon
Optional:	Ball Valve	Brass ASTM B124

