

SOL Series

Automatic air vents valves for solar energy systems

Technical Data Sheet



Description

SOLARVENT valves **SOL Series** are automatic air vent valves for solar systems. Valves are inspectionable, by unscrewing the cap from the valve tank (body). The seal between cap and valve tank is guaranteed by the presence of an O-Ring, therefore it is possible to inspect and eventually clean the internal parts of the valve, in case of presence of foreign matters. Efficiency and functionality of the discharge mechanism during the time are guaranteed by the design characteristics of the valve. Sealing system is suitable to support vibration.



SOL

SOLARVENT.

Automatic air vent valve for solar energy systems with unscrewable cover for inspection. Body and cover of brass CW617N. High resistance polyethylene float. Seal between reservoir and cover with reinforced polyamide gasket. Connections 3/8"-1/2".

Maximum operating pressure: 12 bar. Maximum operating temperature: 160°C. Also suitable for water containing additive (glycol up to 50%).

Type	Part no.	Dn	Weight (g)	Box (pcs.)
SOL10	0248410	3/8"	191	1
SOL10-K10	0248410-K10	3/8"	2.000	10
SOL15	0248415	1/2"	191	1
SOL15-K10	0248415-K10	1/2"	2.000	10



SOL/R

SOLARVENT WITH RIA.

Airvent like SOL Series with automatic sealed shut-off valve.

Type	Part no.	Dn	Weight (g)	Box (pcs.)
SOL10.R10	0248510	3/8"	221	1
SOL10.R10-K10	0248510-K10	3/8"	2.300	10
SOL10.R15	0248511	1/2"	221	1
SOL10.R15-K10	0248511-K10	1/2"	2.300	10



RIA/SOL

Automatic shut-off valve for automatic air vent valves SOL Series with device for quick and total drainage of water from the valve during the execution. Body: brass CW617N. Gasket: FKM. Plug: high resistance polymer. Spring: stainless steel. Connections MF 3/8" and 1/2" DIN-ISO 228/1.

Type	Part no.	Dn	Weight (g)
RIA/SOL	0259310	3/8" x 3/8"	30
RIA/SOL	0259320	3/8" x 1/2"	30

Operation

Opening and closing of the valve is caused by the vertical movement (ascent and descent) of the float.

- With the occurrence of air inside the valve, the level of the water falls down, the float weight acts on the lever, pulling down lever and shutter (which are connected). In this configuration the orifice is open, the air may vent outside the installation.
- During the filling with water of the plant, the air which is contained in the hydraulic circuit is pushed outside through the SOLARVENT valve. When all the air is discharged, the water that moves into the valve body pushes upward the float, as a result the lever pushes upward the shutter which closes the orifice and ensures the hermetic seal of the valve.

The automatic shut-off valve RIA allows to disassemble the automatic solar air vent without the need to drain the system.

Technical features SOL Series

Maximum pressure	12 bar
Maximum operating temperature	160°C

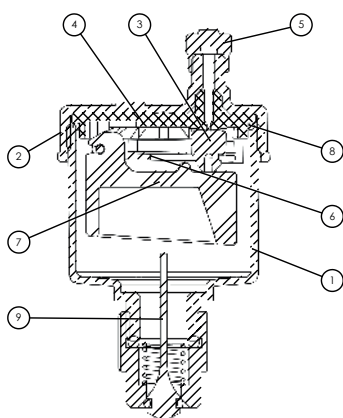
Features SOL Series

Body	Brass CW617N
Cover	Brass CW617N
Gasket	FKM
Cap	Brass CW617N
Lever	Reinforced Polyamide
Float	High resistance polyethylene
Connections	G3/8 - G1/2 DIN – ISO 228/1
Under cap	Reinforced Polyamide

Features RIA Series

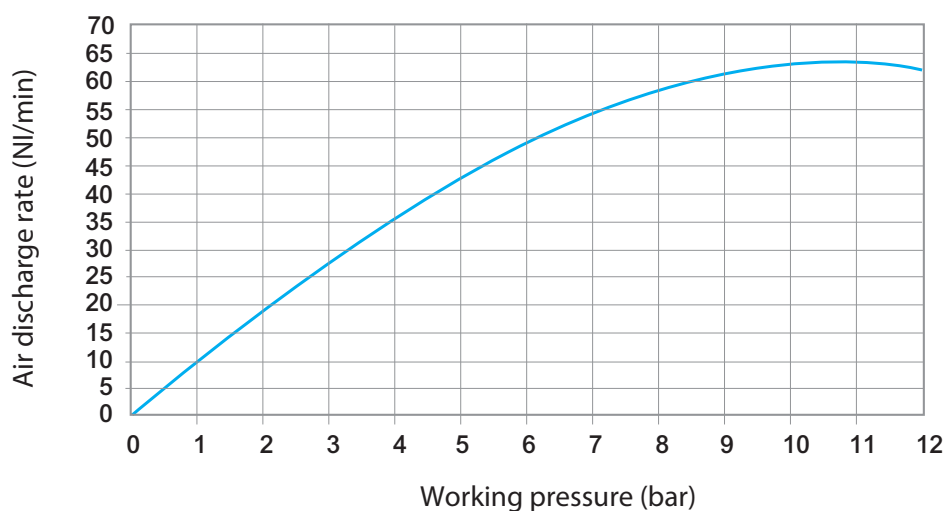
Body	Brass CW614N
Plug	High resistance polymer
Spring	Stainless steel
Sealing	FKM
Vacuum breaker	High resistance polymer

SOLARVENT



1. Body
2. Cover
3. Shutter
4. Spring
5. Cap
6. Lever
7. Float
8. Under cap
9. Vacuum breaker

Chart



Installation

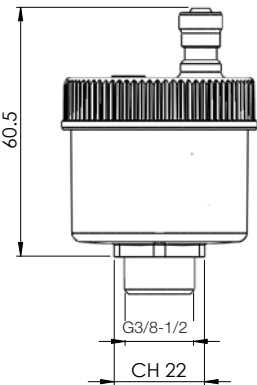
In order to ensure the maximum venting efficiency, the SOLARVENT valve must be installed in the summit of the hydraulic circuit, in a place where the speed of the water is low.
After the installation, in order to maximise the venting capacity, unscrew the protection cap for at least two turns (with this configuration the venting characteristics are shown in the above diagram).

Maintenance

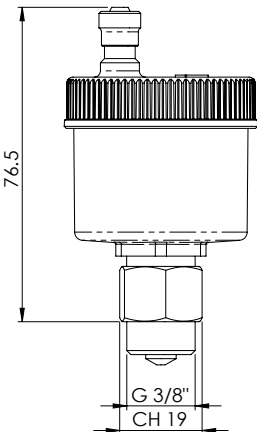
SOLARVENT air vent valve normally does not need maintenance. Anyhow, if the valve must be disassembled, the presence of the automatic shut-off valve RIA/MV-SOL Series allows the operation without emptying the hydraulic circuit.

Overall dimensions (mm)

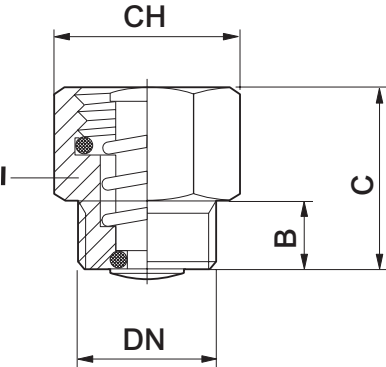
SOL



SOL/R



RIA/MV-SOL



DN	B	C	CH
3/8"	8	11	19
1/2"	8	11	24

Specification text

SOL Series

Automatic air vent valve for solar energy systems SOL Series WATTS brand with removable cover for inspection. Body and cover of brass CW617N. Polyethylene float. Seal between reservoir and cover with reinforced polyamide gasket. Connections 3/8"-1/2". Maximum operating pressure: 12 bar. Maximum operating temperature: 160°C.
Also suitable for water containing additive (glycol up to 50%).

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Watts Industries Italia S.r.l.
Via Brenno, 21 • 20853 Biassono (MB) • Italy
Tel. +39 039 4986.1 • Fax +39 039 4986.222
infowattsit@wattswater.com • www.watts.com