01B111-GB

AUTOMATIC AIR VENT VALVES FOR SOLAR INSTALLATIONS

MAIN FEATURES

Valvole automatiche per sfogo aria negli impianti a pannelli solari grazie alla presenza di un galleggiante in acciaio inox AISI 304.
Disponibili nelle versioni con filettatura maschio DN 3/8" e 1/2".

- Conforme alla DIN – ISO 228/1.
- Ingombri e pesi ridotti.

WATTS INDUSTRIES

DESCRIPTION

MINIVENT valves are inspectionable, by unscrewing the cap from the valve tank (body).

The seal between cap and valve tank is guaranteed from 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 from the design characteristics of the valve.

Sealing system is suitable to support vibration.

MV SOL

Automatic airvent for solar installations with cap unscrew for inspection.

Part No.	ND
0249110	**3/8”**
0249115	**1/2”**

DESIGN FEATURES	
Body and cover	EN12165-99 CW617N brass, hot pressed and sand blasted
Float	AISI304 stainless steel
Lever	Reinforced composite
Shutter	FPM elastomer
Spring	AISI302 stainless steel
Cap	EN12164-01 CW614N brass, nickel plated
Vacuum breaker (only for 3/8”)	AISI304 stainless steel

TECHNICAL CHARACTERISTIC	
Couplings	3/8” male DIN-ISO228/1, 1/2” available on demand (without vacuum breaker)
Maximum operating pressure	12 bar (175 psi)
Maximum operating temperature	160°C (320°F)

OPERATION

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

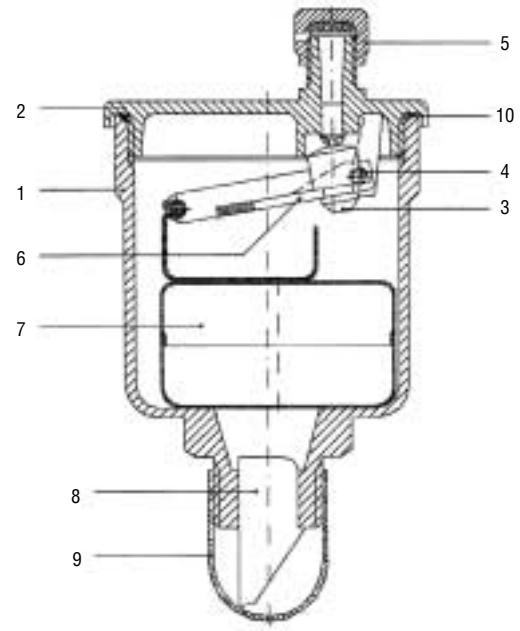
• With the occurrence of air inside the valve, the level of the water falls down, the float weigh acts on the lever, pulling down lever and shutter (which are united). In this configuration the horifice is open, the air may vent outside the installation.

• During the filling with water of the plant, the air which is contained in the hydraulic circuit is pushed outside through the **MINIVENT** 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 horifice and ensures the hermetic seal of the valve.

INSTALLATION

In order to ensure the maximum venting efficiency, the **MINIVENT** 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).

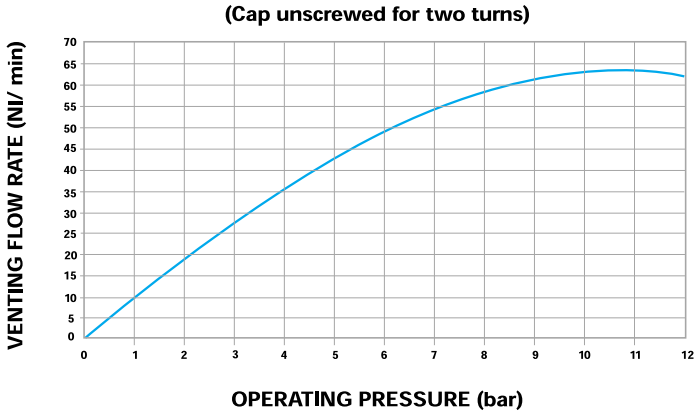


1. Body
2. Cover
3. Shutter
4. Spring
5. Cap
6. Lever
7. Float
8. Vacuum breaker (only for 3/8”)
9. Hood (only for 3/8”)

MAINTENANCE

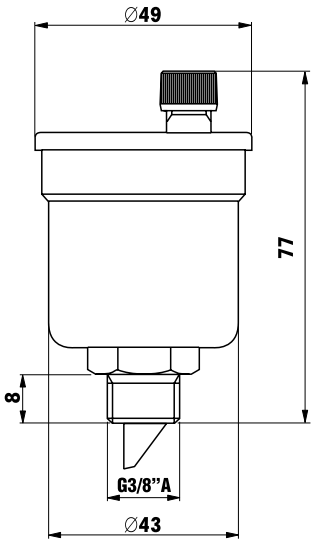
MINIVENT airvent valve normally does not need maintenance. Anyhow, if the valve must be disassembled, the presence of the automatic shut-off valve **RIA** allows the operation without emptying the hydraulic circuit.

Venting Flow rate – Operating Pressure



Overall Dimensions (mm)

MV SOL



OPERATION

Automatic shut-off valve **RIA** allows the air vent valves (**MINIVENT, DUOVENT e MICROVENT**) to be removed without having to empty the system. The **RIA** shut-off valve is fitted with a device for quick total emptying of the water from the valve.

RIA

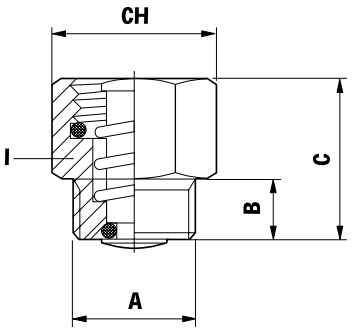
Automatic shut-off valve.

Part No.	ND
0259010	**3/8" x 3/8"**
0259015	**1/2" x 1/2"**

DESIGN FEATURES	
Body	Brass OT 58
Lever	Polyphenylene oxide, glass fibre reinforced
Plug	Polyacetal with o-ring
Spring	Stainless steel
Connections	MF 1/4" - 3/8" - 1/2" DIN -ISO 228/1

Overall Dimensions (mm)

RIA



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

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