# **VP AIR RELEASE VALVES** The lung of your system







**AIR RELEASE VALVES** 

# **VP AIR RELEASE VALVES**

**VP AIR RELEASE VALVES** protect your system against the hazardous air found inside. They have the same incredible performance as the GTR air release valves, but with a smaller and more compact design.

GESTIRIEGO's air release valve range has its own patents, asserting exclusive benefits over competitors.

**P200502308 GESTIRIEGO Patent** -TripleFunction Air Release Valve for Hydraulic Systems- for a higher residual air extraction rate thanks to the 2-buoy system in which the buoys act collectively, thus guaranteeing watertightness at low pressure. **P200402665 GESTIRIEGO Patent** -Improvement of Double-Function Air Release Valve for Hydraulic Systems-, which, by means of the WAVE SYSTEM, ensures air release at high flow rates when the system is under load, guaranteeing watertightness at very low pressure.



## **CHARACTERISTICS / BENEFITS**

#### **√** THANKS TO VP AIR RELEASE VALVES, YOUR SYSTEM IS SAFE AND SECURE

They provide protection against problems caused by air.

VP air release valves prevent ruptures due to air accumulation, making air come out of the piping at the same rate as water enters when the system is put into operation.

Any type of air pockets or bubbles at high points reducing the passageway section are thoroughly eliminated. Air can thus re-enter the main and secondary piping, preventing vacuum, dirt and mud from entering through the emitters. The piping is also protected from breaking and crushing.

#### **√** WAVE SYSTEM LOCK

An exclusive 'Wave System' lock patented by GESTIRIEGO that ensures efficient operation of the air release valve, facilitating air release at high flow rates when the system is under load, guaranteeing watertightness at low pressure.

# $\checkmark$ A SINGLE AIR RELEASE VALVE MANAGES THE 3 PHASES OF YOUR SYSTEM'S OPERATION, REMAINING VERY SMALL IN SIZE

System filling: the air is extracted efficiently as the float is kept away from the kinetic air outlet hole. When the water reaches the VP air release valve, the float lifts the shutter, constricting the silicone tube and

closing kinetic air outlet holes automatically. In this situation, the air release valve is completely tight at a pressure of 0'2 atm.

System vacuum: when the system is vacuumed, the float descends together with the shutter, opening the air release valve kinetic hole and suctioning air from outside, thus preventing the piping from crushing.

On-load system: when air pockets reach the air release valve, the float descends, expanding the silicone tube while the shutter closes the kinetic air outlet hole. In this way, air can get out through the silicone tube automatically.

#### **√** RESISTANT MATERIALS

High resistance to pressure and chemical agents dissolved in irrigation water. The grommet and the tube are made of silicone, which is much more resistant to these products than materials such as EPDM or NBR. In this way, proper air release valve is ensured for a longer period of time than on similar products on the market.

# **APPLICATIONS**

• An essential element in all pressurised water pipelines.

• Suitable for agriculture applications, since its materials are highly resistant to chemical products.

• Underground irrigation systems.

• Industrial systems: water treatment, osmosis, pumping, etc.

# **ADVANTAGES**

	DOUBLE	EFFECT	TRIPLE EFFECT		
ADVANTAGES	VP-1	VP-2	VP-1T	VP-2T	
FOOD USE					
KINETIC EFFECT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
AUTOMATIC EFFECT			$\checkmark$	$\checkmark$	
PN10					
WAVE SYSTEM CLOSURE			$\checkmark$	$\checkmark$	
<b>1" BSP/NPT CONNECTION</b>			$\checkmark$		
2" BSP/NPT CONNECTION		$\checkmark$		$\checkmark$	
METALLIC BASE					

# **PARTS** DOUBLE EFFECT VP-1



#### DOUBLE EFFECT VP-2



### TRIPLE EFFECT VP-1T



### TRIPLE EFFECT VP-2T



G

### **LOCATION POINTS**

#### DOUBLE EFFECT

The recommended strategic points to place the double effect or kinetic air release valves are:

- 1 Between long sections with a constant slope and without hydraulic gradient. Recommended every 500 meters on straight sections.
- 2 At high pipeline points or junctions, as long as it is above the ground.
- 3 At water meter inlets so that air does not impair the reading.
- 4 At the high parts of the head filtration system in order to ensure optimum filtering system operation.
- 5 Before and after slope changes.



#### TRIPLE EFFECT

As the main function of the triple effect air release valves is to control residual air pockets, the optimum points to place these air release valves are:

- 1 Behind buried pipes, as the sudden change in slope may lead to air pockets. It is recommended to remove these in order to protect the main system from overpressure.
- 2 Behind pressure reducers and shut-off valves. Behind reducers, since the air dissolved into the fluid is usually released, creating micro-pockets and, then, air bubbles.
- 3 Behind pipeline section reducers because, as in pressure reducers, a sudden change in piping diameter promotes dissolved air release.



# **TECHNICAL SPECIFICATIONS**

DOUBLE EFFECT VP AIR RELEASE VALVES									
TYPE	SIZE	BOX UNITS	CLOSING PRESSURE	RELEASED AIR VOLUME	WEIGHT	BASE COLOUR	CASING COLOUR	ELBOW/ NUT COLOUR	CODE
VP-1	1	20	0.2	100	0.250	Black	Black	-	450530
VP-2	2	12	0.2	650	0.625	Black	Black	-	450531







VP-1T

VP-2T

TRIPLE EFFECT VP AIR RELEASE VALVES									
TYPE	SIZE	BOX UNITS	CLOSING PRESSURE	RELEASED AIR VOLUME	WEIGHT	BASE COLOUR	CASING COLOUR	ELBOW/ NUT COLOUR	CODE
VP- 1T	1	20	0.2	100	0.250	Black	Grey	-	460274
VP- 2T	2	12	0.2	650	0.625	Black	Grey	-	450538

4



info@gestiriego.com (+34) 968 658 326 Paraje Vistabella s/n 30892 Librilla, Murcia. ESPAÑA

www.gestiriego.com

Creando los caminos del agua

