

GTR AIR RELEASE VALVES

The lung of your system



GESTIRIEGO



AIR RELEASE VALVES

GTR AIR RELEASE VALVES

The **GTR AIR RELEASE VALVES** are the lungs that keep your system in perfect condition, managing the air inside. For this reason, **GESTIRIEGO** has put great efforts into its manufacture and design in order to achieve the most efficient air release valve in the market.

GESTIRIEGO's AIR RELEASE VALVE range has its own patents, asserting exclusive benefits over competitors..

P200502308 GESTIRIEGO Patent Triple-Function 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

✓ GTR PROTECTS YOUR SYSTEM AGAINST ALL POSSIBLE PROBLEMS

They prevent ruptures due to air accumulation, making it come out of the piping at the same rate as water enters.

Any type of air pockets or bubbles at high points reducing the passageway section are thoroughly eliminated. Corrosion damage, water meter reading errors, energy drops, etc. are avoided.

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.

✓ PATENTED WAVE SYSTEM LOCK

Special 'Wave System' lock 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.

✓ A SINGLE AIR RELEASE VALVE MANAGES THE 3 PHASES OF YOUR SYSTEM'S OPERATION

System filling, system vacuum and on-load system.

✓ RESISTANT MATERIALS

High resistance to pressure and chemical agents dissolved in irrigation water. Both 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, adequate air release valve operation is ensured for a much longer period of time than other similar products on the market.

The GTR1T and GTR2T triple-function air release valves are PN16 certified.

APPLICATIONS

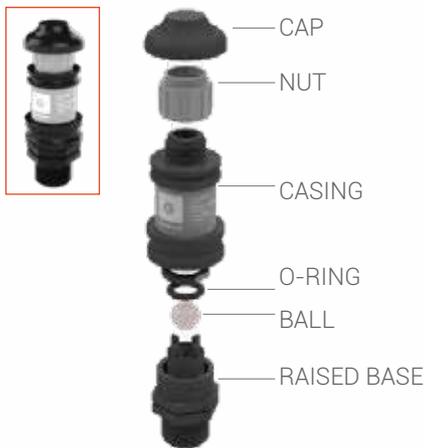
- An essential component in all pressurised water pipelines.
- Suitable for agricultural applications as its materials are highly resistant to chemical products.
- Underground irrigation systems.
- Industrial systems: water treatment, osmosis, pumping, ozone chambers, etc.
- Drinking water pipelines.

ADVANTAGES

ADVANTAGES	DOUBLE EFFECT		TRIPLE EFFECT	
	GTR-1	GTR-2	GTR-1T	GTR2-T
FOOD USE			✓	✓
KINETIC EFFECT	✓	✓	✓	✓
AUTOMATIC EFFECT			✓	✓
PN10	✓			
PN16		✓	✓	✓
WAVE SYSTEM CLOSURE			✓	✓
1" BSP/NPT CONNECTION	✓		✓	
2" BSP/NPT CONNECTION		✓		✓
METALLIC BASE			✓	✓

PARTS

DOUBLE EFFECT GTR-1



DOUBLE EFFECT GTR-2



TRIPLE EFFECT GTR-1T



**THE BEST
AIR RELEASE
VALVE WITHIN
ITS RANGE**

TRIPLE EFFECT GTR-2T

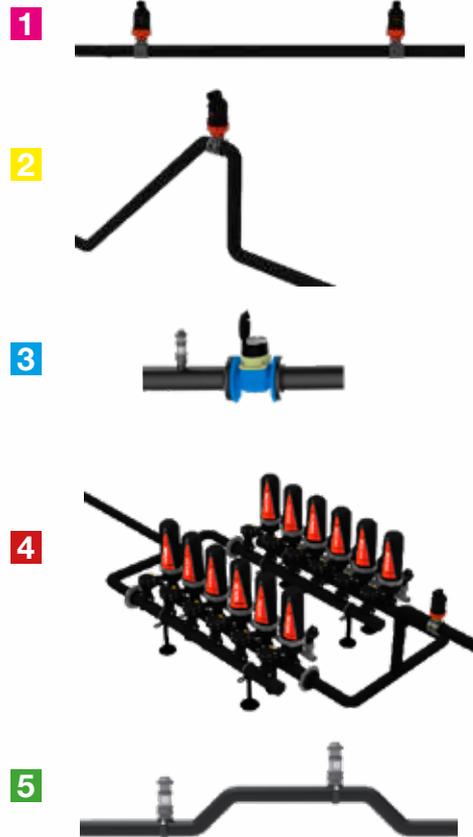


LOCATION POINTS

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 GTR AIR RELEASE VALVES

TYPE	SIZE	BOX UNITS	CLOSING PRESSURE	RELEASED AIR VOLUME	WEIGHT	BASE COLOUR	CASING COLOUR	ELBOW/ NUT COLOUR	CODE
	"		bar	m³/h	kg				
GTR-1	1	15	0.2	-	0.160	Black	Black	Grey	450497
GTR-2	2	12	0.2	720	1.000	Orange	Black	-	450494

TRIPLE EFFECT GTR AIR RELEASE VALVES

TYPE	SIZE	BOX UNITS	CLOSING PRESSURE	RELEASED AIR VOLUME	WEIGHT	BASE COLOUR	CASING COLOUR	ELBOW/ NUT COLOUR	CODE
	"		bar	m³/h	kg				
GTR-1T	1	20	0.2	150	0.360	Black	Grey	-	450518
GTR-2T	2	10	0.2	720	1.016	Black	Grey	Black	450524
GTR-1T FOOD	1	20	0.2	150	0.360	Blue	Blue	-	450516
GTR-2T FOOD	2	10	0.2	720	1.016	Blue	Blue	Blue	450529
GTR-1T METALLIC BASE	1	20	0.2	150	0.510	Metallic grey	Grey	-	450500
GTR-2T METALLIC BASE	2	10	0.2	720	1.426	Metallic grey	Grey	Black	450496



OPERATION

1-FILL

Air is effectively extracted as the float is kept away from the outlet hole. When the water reaches the GTR SUCTION CUP, the thrust of the float raises the shutter, thus constricting the silicone tube and closing the kinetic air outlet holes. In this situation, the tightness of the suction cup is total from a pressure of 0.1 kg / cm².



2-EMPTYING

When the installation is emptied, the float goes down next to the shutter, causing the opening of the kinetic orifice of the suction cup and allowing the suction of air from outside, thus avoiding the crushing of the pipes.

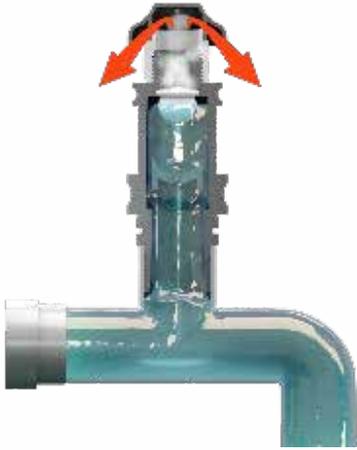


3-DRAINED

When the air bags reach the suction cup, the float descends unfolding the silicone tube while the shutter remains closing the kinetic air outlet port allowing automatic air exit through the silicone tube.



ANTI EARLY CLOSURE OPERATION (MODEL GTR-1)



Kinetic effect. High-rate air discharge without early closure.

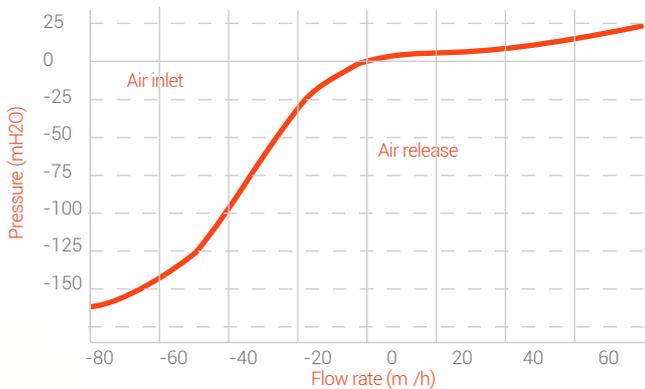


Fluid draining phase and air inlet into the system.

TECHNICAL DATA

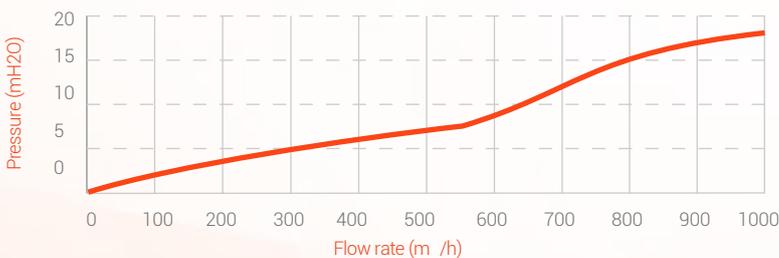
DOUBLE EFFECT AIR RELEASE VALVE GTR-1

OPERATION

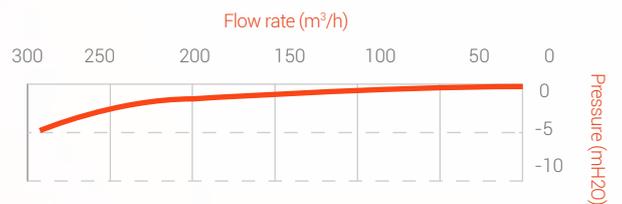


DOUBLE EFFECT AIR RELEASE VALVE GTR-2

KINETIC AIR RELEASE

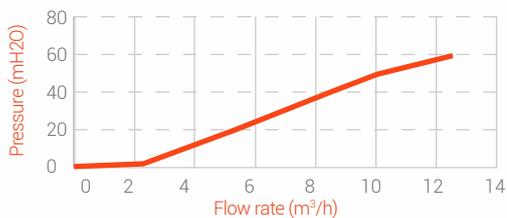


VACUUM AIR INLET

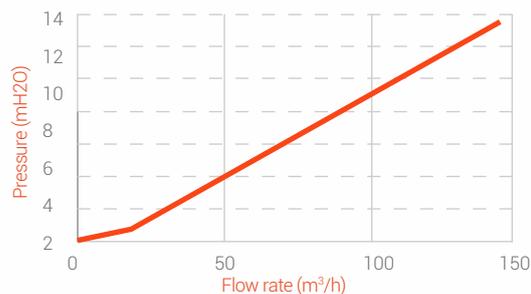


TRIPLE EFFECT VALVE GTR-1T

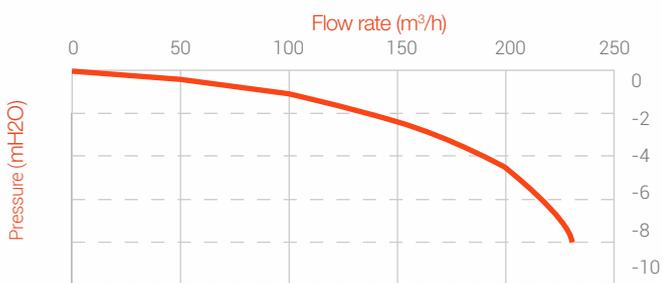
AUTOMATIC AIR RELEASE



KINETIC AIR RELEASE

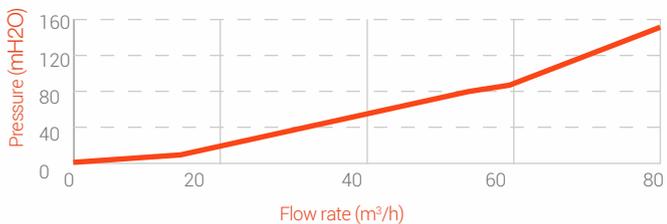


VACUUM AIR INLET

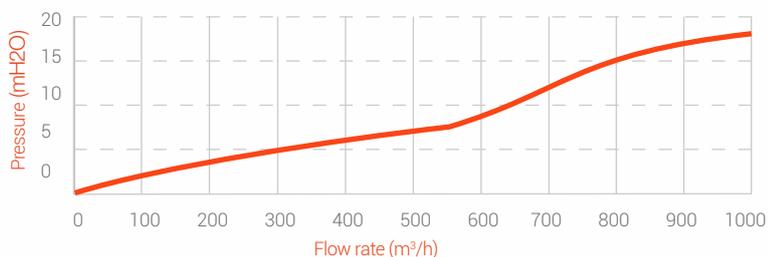


TRIPLE EFFECT VALVE GTR-2T

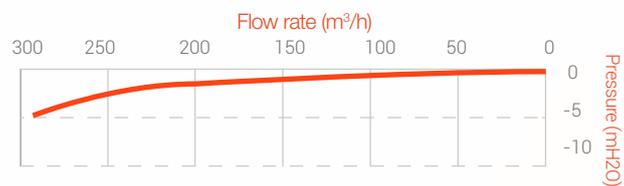
AUTOMATIC AIR RELEASE

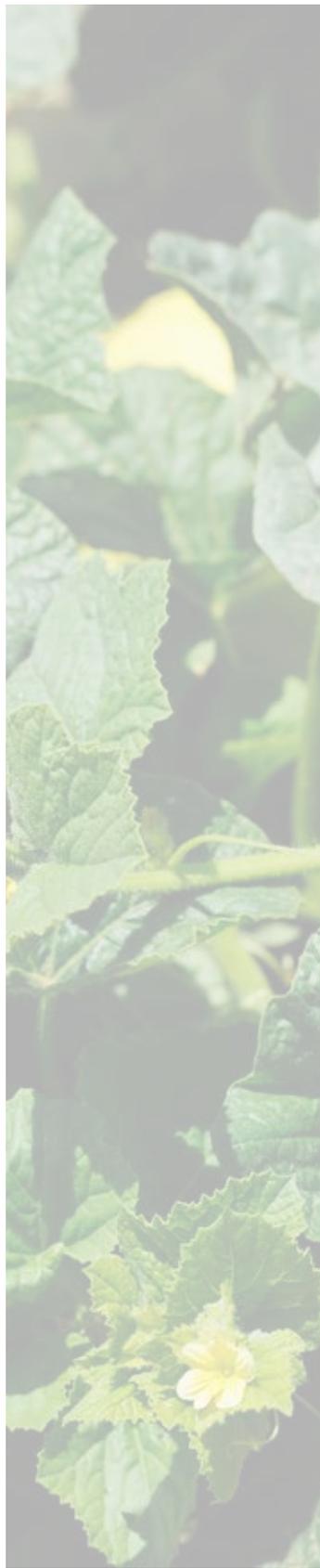


KINETIC AIR RELEASE



VACUUM AIR INLET





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

www.gestiriego.com

Creando los caminos
del agua

