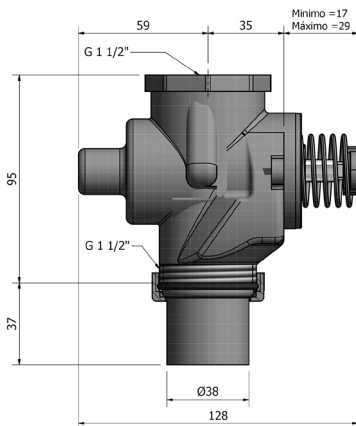


1 1/2" BUILT-IN FLUSHING VALVE

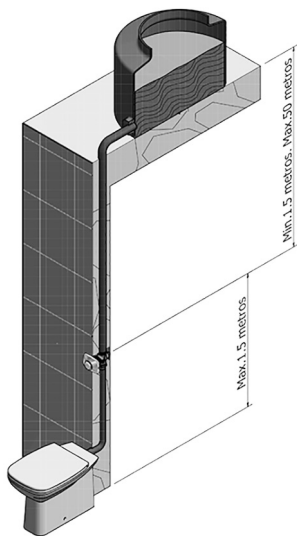
REF: 1054 08



- 1 1/2" flushing valve for flush-mounted toilet for low pressure and pressurised circuits, suitable for use from 0.15 bar to 5 bar, designed to work efficiently with water tanks at 1.5 m in height above it or more, as well as pressurised circuits.
- 15 discharge litres at 3 bar, (8 seconds duration) adjustable flow rate.
- 8 discharge litres at 0.25 bar, (10 seconds duration) adjustable flow rate.
- Option to regulate the water flow rate by discharge.
- Includes a full water flow shut-off system.
- The valve can be directly installed using its 1 1/2" thread and its 1 1/2" thread output, or with one of the supplied adapters, metal for welding with copper pipes or technopolymer for plastic pipes.
- Includes a plastic protector to facilitate the valve's installation and protect it until the plate and push-button are installed.
- Repairing the valve is very straightforward and spare parts are available.
- Three types of plates can be combined with our valve: PA1051, PA1052, PA1054.



RECOMENDED INSTALLATION



- The GENE BRE flushing valve can be used in very low pressure circuits with water tanks or pressurised circuits.
- With the aim of preventing unwanted noise, the installation of a pressure reducer or intermediate tanks is advised above 2.5 bar or 25 meters of water column.
- For tank installations with horizontal piping of up to 4 meters in length, it must have a minimum diameter of 1 1/4" in order to supply one single valve, and a minimum diameter of 1 1/2" to supply more than 1 valve or above 4 meters in length. Please note that exceeding 10 meters in length in the horizontal section is not advised.
- Always install curves and avoid T-type branches for minimum load losses (do not install elbows)
- Our valve has an input thread of 1 1/2" which can be used directly or reduced in the case of using water columns exceeding 10 meters or pressures exceeding 1 bar.
- It is advised to install a maximum of 4 valves per supply line.
- We advise the use of independent supply lines for flushing valves and the remaining installed taps, as please note that using the valve may cause a drop in water pressure in the cold water circuit, which could cause a sharp rise in temperature in mixed taps in use.
- The installation must be correctly sized (see tables) in order to ensure efficient discharge.

INLET PIPE (SPOUT) MINIMUM DIMENSIONS			
Maximum height	Copper pipe	Threaded pipe	Thermofusion pipe
From 4 to 10 meters	Diameter 38 mm.	G1 1/2"	Diameter 50 mm.
From 10 to 30 meters	Diameter 32 mm.	G1 1/4"	Diameter 40 mm.
From 30 to 45 meters	Diameter 25 mm.	G1"	Diameter 32 mm.

OUTLET PIPE (SPOUT) MINIMUM DIMENSIONS

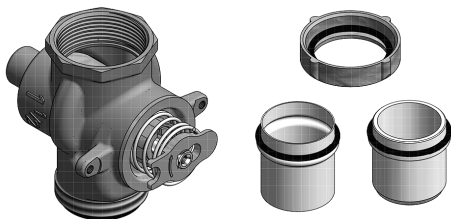
Copper pipe	Threaded pipe	Thermofusion pipe
Diameter 32 mm.	G1 1/4"	Diameter 40 mm.



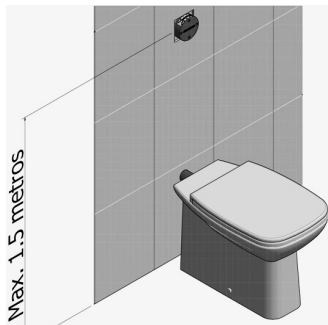
- The GENE BRE discharge valve is supplied with a plastic lid which protects it during the installation process.

Please do not remove until the tiling is complete and proceed to install the push-button.

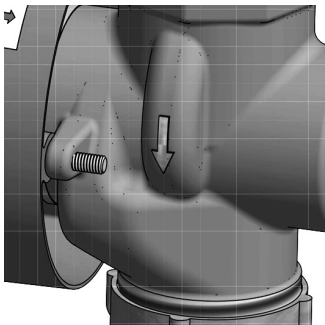
- The valve can be directly installed using its 1 1/2" thread and its 1 1/2" thread output, or with one of the supplied adapters, metal for welding with copper pipes or technopolymer for plastic pipes.



- Prior installation of the valve insures that piping is free from foreign bodies like Teflon, hemp, stones, etc. It is advised to previously purge the installation in order to remove remains that could damage the valve.

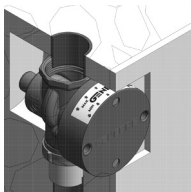
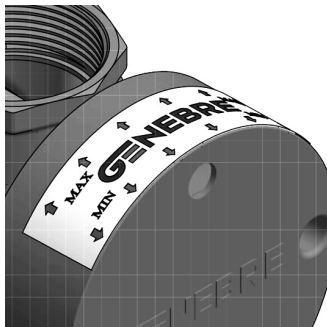


Please note the maximum installation height.

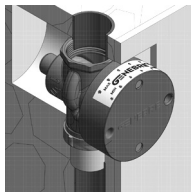


Please check the circulation direction of the water indicated by the arrow marked on the side of the body.

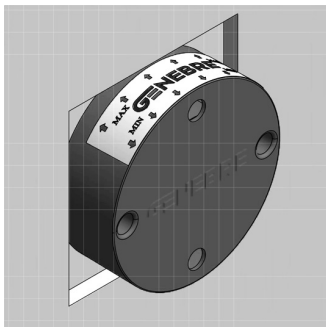
- When installing the valve please note the maximum and minimum depth indicated on the plastic protector, and the final finish (tiles) must be within these limits.



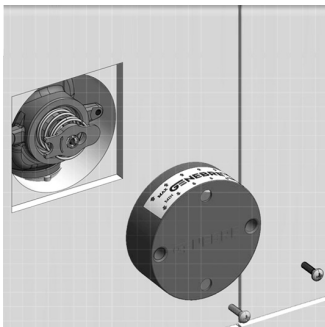
MINIMUM



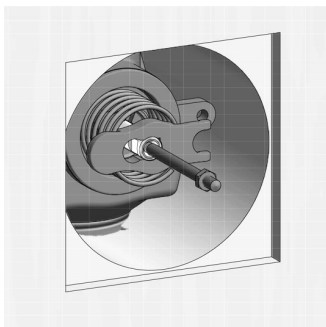
MAXIMUM



- When tiling cut the tiles that are touching the protector.

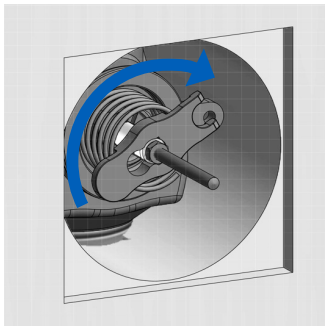


- Remove the plastic protector



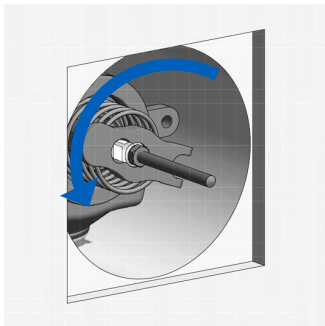
- Mount and adjust the adjusting screw on the stem of the valve, leaving a tolerance of 1 mm to 2 mm between the adjusting screw and the push-button on the plate.

- Adjust to the desired flow by using the adjusting handle, to increase or decrease the discharge volume or completely close the valve.



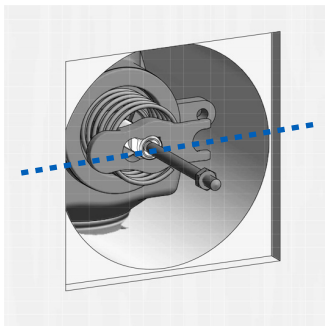
CLOSE

Turn the handle clockwise



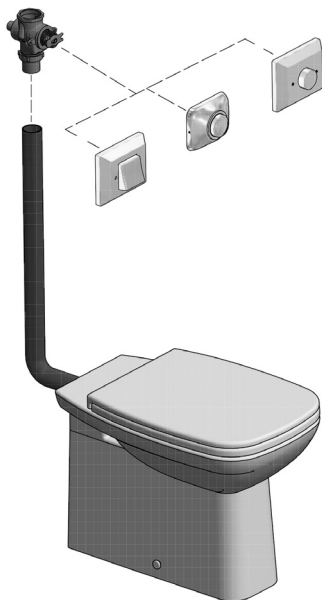
OPEN

Turn the handle anti-clockwise



- Leave the adjusting key in the horizontal position to facilitate the installation of push-button PA-1051.

- Once the valve is installed, please choose one of our three types of push-buttons:



PA-1051



PA-1054



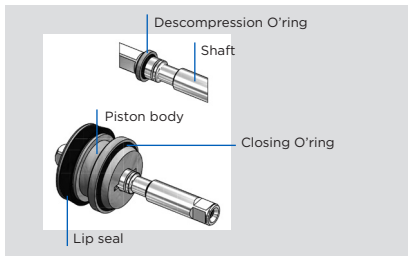
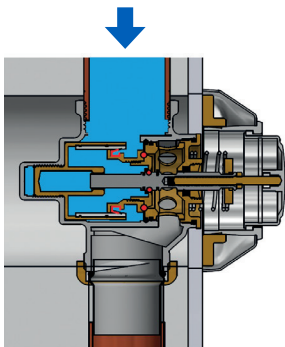
PA-1052

Closed position

Please observe a cross-section of the valve in the CLOSED position.

We can see that the water is in the area above it and retained by the closing O-ring located on the piston body, and the decompression O-ring located on the shaft.

The push-button is at rest, it outcrops over the plate and the spring is decompressed.



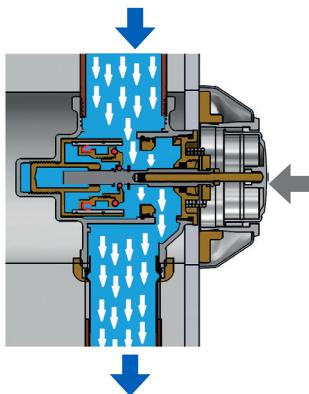
Open position

Please observe a cross-section of the valve in the OPEN position.

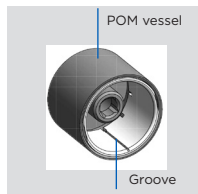
By pressing the push-button we move the shaft and hence the body of the piston, decompressing the chamber of the vessel and opening to let the water flow by separating the closing O-ring located on the body of the piston.

The push-button is flush with the plate and the spring is compressed.

From this position the spring and the internal pressure of the POM vessel cause the piston body to displace towards the exterior, returning to the initial position.



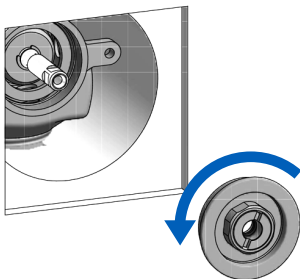
The displacement will be controlled by the vacuum caused inside the POM vessel and the lip seal. Through the POM vessel's groove, water will enter its chamber until it returns to its initial position.



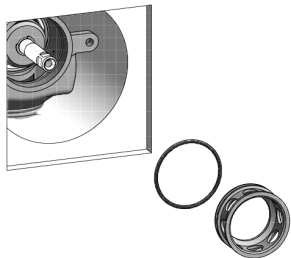
Dismantling the cartridge



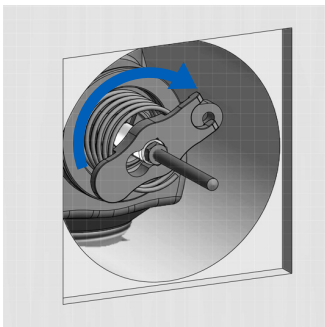
1. Close the installation's shut-off valve and discharge several times in order to empty the water circuit.
2. Dismantle the push-button's plate.
3. Remove the adjusting screw, the flow rate adjusting handle and the spring.



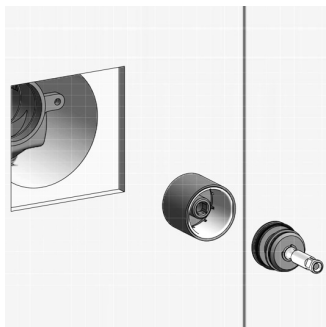
4. Using a 15/16" key, turn anti-clockwise to extract the lid from the valve.



5. Remove the perforated ring and its O'ring joint.



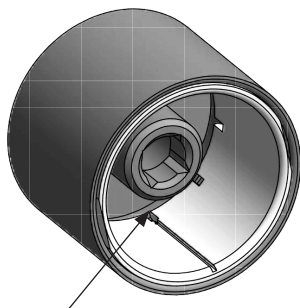
6. Assemble the flow rate adjusting handle and turn clockwise until the cartridge vessel is released from the body of the valve.



7. Remove the shaft-piston set from the body of the valve.
8. To proceed with assembly, please note the correct position of the piston and follow the steps in reverse order.
9. When replacing the shaft into the lid, take care not to bend or damage the lip seal found in its interior.

DO NOT LUBRICATE THE VALVE

Cleaning the timed grooves of the cartridge vessel.



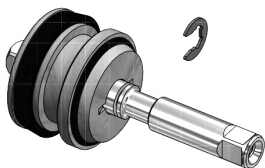
Timed groove

1. Dismantle the cartridge following the instructions "Dismantling the cartridge".
2. Clean the timed vessel's grooves using a toothbrush and rinse thoroughly.
3. To proceed with assembly, please note the correct position of the piston and follow the steps in reverse order.
4. When replacing the shaft into the lid, take care not to bend or damage the lip seal found in its interior.

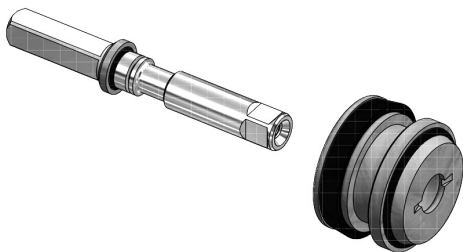
DO NOT LUBRICATE THE VALVE

1. Dismantle the cartridge following the instructions "Dismantling the cartridge".

2. Remove the metal ring (clamp).



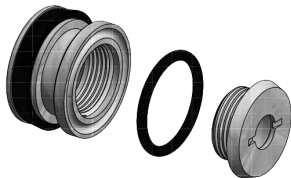
3. Remove the piston body from the shaft.



4. Using a coin or a screwdriver, dismantle the piston body.

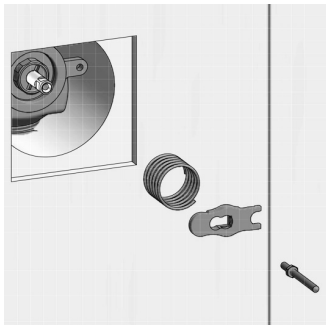
5. To proceed with assembly, please note the correct position of the piston and follow the steps in reverse order.

6. When replacing the shaft into the lid, take care not to bend or damage the lip seal found in its interior.



DO NOT LUBRICATE THE VALVE

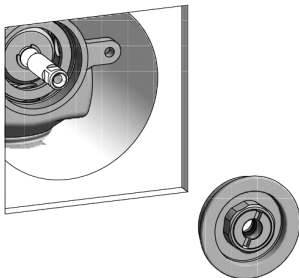
Changing the lip seal



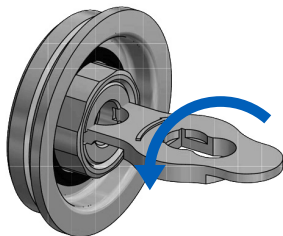
1. Close the installation's shut-off valve and discharge several times in order to empty the water circuit.

2. Dismantle the push-button's plate.

3. Remove the adjusting screw, the flow rate adjusting handle and the spring.



4. Using a 15/16" key, turn anti-clockwise to extract the lid from the valve.



5. Using the flow rate adjusting handle and turning anti-clockwise dismantle the cable gland.



6. Remove the cable gland.

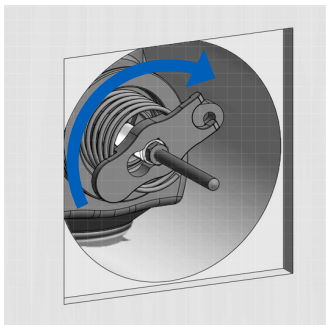
7. To proceed with assembly, please note its correct position and follow the steps in reverse order.

8. When replacing the shaft into the lid, take care not to bend or damage the lip seal found in its interior.

DO NOT LUBRICATE THE VALVE.

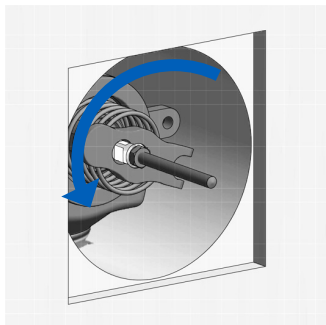
Closing the valve or regulating the water flow rate

1. Dismantle the push-button's plate.
2. Adjust to the desired flow by using the adjusting handle, to increase or decrease the discharge volume or completely close the valve.



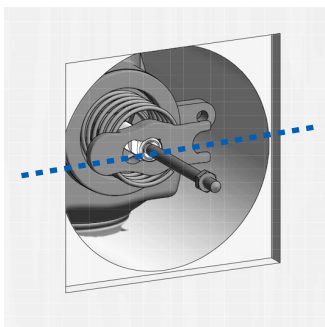
CLOSE

Turn the handle clockwise

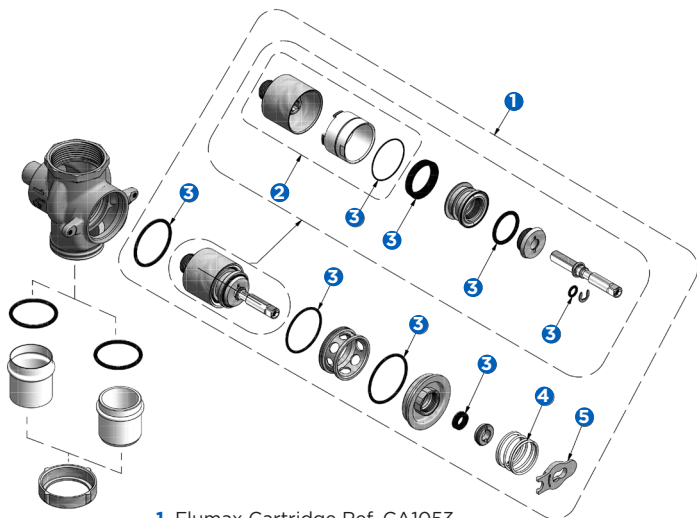


OPEN

Turn the handle anti-clockwise



3. To proceed with the assembly, place the flow rate adjusting handle in the horizontal position if the valve is open, to facilitate the installation of push-button PA-1051 and reassemble the push-button plate.



1. Flumax Cartridge Ref. CA1053
2. Cartridge Vessel. Ref. 9901 0016
3. Set of joints. Ref. 9901 0013
4. Flumax Spring Ref. 9901 0012
5. Fixing key. Ref. 9901 0011

TROUBLESHOOTING

ISSUE	CAUSE	SOLUTION
No discharge, very little water or closing without timing.	Button (key) touching the tiling, unable to move correctly.	Cut the tiles.
	Valve is fully or partially closed.	Open the valve using the adjusting handle.
	The button's (key's) pathway is too long.	Adjust the adjusting screw leaving a tolerance between 1 mm and 2 mm.
	Obstructed pipe.	Remove the obstruction.
	Badly sized piping.	Size the installation correctly by reviewing our recommendations and avoiding the installation of elbows.
	Very tightly closed valve.	Open the valve using the adjusting handle.
	Deterioration of the lip seal (located on the piston)	Dismantle and proceed to replace the lip seal.
Excess water in the discharge.	Valve open too far.	Close and adjust using the adjusting handle.
Excess time for discharge or loss through the toilet.	Cartridge vessel dirty.	Dismantle the cartridge vessel and proceed to clean the timed grooves.
	Cartridge shaft dirty or damaged.	Dismantle and proceed with its cleaning or replacement.
	Non-existence (loss) of tolerance between the button or key and the adjusting screw.	Adjust the adjusting screw leaving a tolerance between 1 mm and 2 mm.
	Obstruction (loss) and or deterioration of the piston's closing joint.	Dismantle and proceed to replace the joints.
Loss of water through the shaft.	Deteriorated shaft.	Replace the shaft and lip seal.
	Deteriorated lip seal.	Replace lip seal, review shaft and replace if necessary

