

WATER HAMMER DAMPER

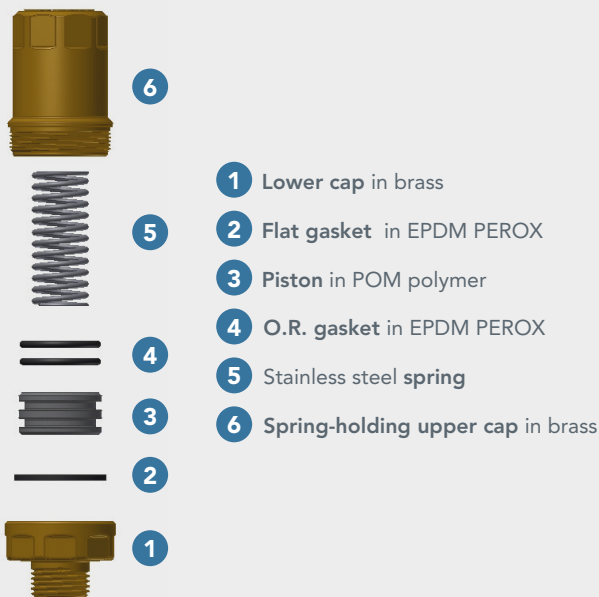


The water hammer damper **absorbs the overpressures generated in the system in the event of a sudden closing or opening of a circuit.** In this way, the fluid pressure is maintained at optimum operating values. Absorption of overpressure prevents damage to the components that make up the system and makes it possible to significantly reduce the noise that occurs in the pipes due to vibrations caused by the sudden closing of shut-off devices.

- Preserves the system components
- Prevents vibrations and noise in the system
- Reduced overall dimensions
- No maintenance



Water hammer damper
Series 3072



- 1 Lower cap in brass
- 2 Flat gasket in EPDM PEROX
- 3 Piston in POM polymer
- 4 O.R. gasket in EPDM PEROX
- 5 Stainless steel spring
- 6 Spring-holding upper cap in brass

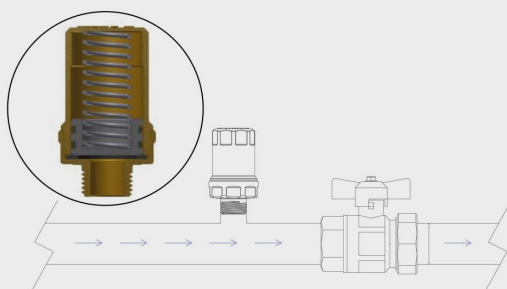
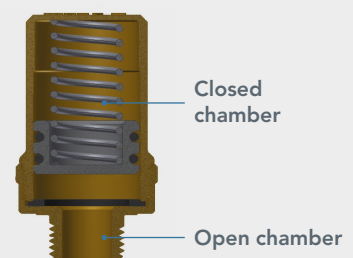
OPERATING PRINCIPLE / POSSIBLE APPLICATIONS

The main function of the **water hammer damper** is to **absorb the overpressures that are generated in the system, in case of sudden closure or opening a circuit.**

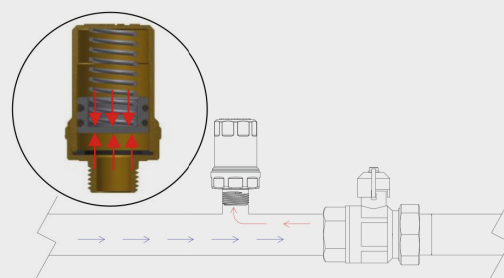
The RBM **water hammer dampers** consist of a cylindrical body divided in two chambers (**open chamber and closed chamber**). The **closed chamber** is the cornerstone of the system, and is one that acts as a damper. It consists of a spring attached to a piston equipped with double O.R. sealing, all housed in an air chamber.

The **open chamber** is directly connected to the pipeline and is affected by changes in pressure in the hydraulic system. The overpressures generated in the system create a push on the spring, causing the change of pressure in the air contained in the closed chamber.

These opposing forces help absorb excess pressure.



When the utilities are **open**, the pressure remains constant throughout the pipeline.



When the utilities are **closed**, the pressure increases along the whole pipeline, causing it to overpressure. The presence of the RBM anti-water hammer device absorbs the overpressure generated, avoiding the trigger of the water hammer phenomenon, preserving in this way all the components in the system.