

# *RoboShock*

shock arrester  
with compression connection



# RoboShock PV016 RS shock arrester with compression connection

PV016 RS shown without compression nut and olive



## Application

If the pressure in a system is high, the water when flowing has a greater momentum which when brought to a sudden halt, will create a shock effect causing pipes to shudder and vibrate.

This is normally caused by the rapid closure of lever operated taps or valves, solenoid valves or valves in dish washers and washing machines.

The RoboShock (patent pending) shock arrester can be used as a water hammer arrester intended for a single outlet, such as a tap or washing machine, or a small group of outlets, such as in a bathroom.

The vibration caused by water hammer is not only annoying but eventually can result in split or cracked pipe fittings, especially at joints.

The RoboShock shock arrester should be installed close to the tap or valve minimising the effect of the shock on the system.

This shock arrester is suitable for use in coastal environments and with brackish water due to its stainless steel construction.

## Operating Principle

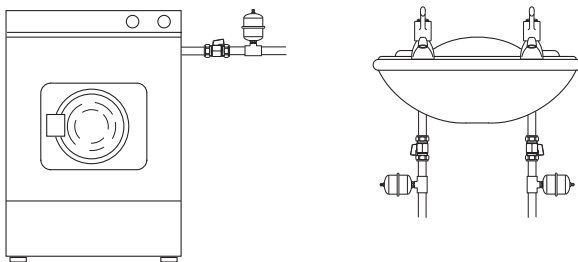
The shock arrester consists of a pressure vessel, divided into two chambers by a flexible rubber membrane or diaphragm.

The closed chamber is filled with air, pressurised to 3.5 bar, which acts as a damper due to the compressibility of the trapped air.

The open chamber is connected directly to the system and is filled with water.

When a pressure surge occurs, the compression of the air counteracts the thrust on the rubber membrane allowing a small change in volume which absorbs the excess pressure.

## Typical Applications



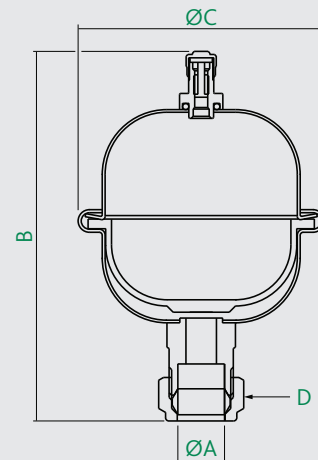
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AL 288 04-07-17

## Dimensions



Prod Code	A	B	C	D A/F	kg
PV016 RS	15	118	80	27	0.24

## Construction Details

Component	Material	Grade
Body	Stainless steel	AISI 304
Inlet connection	Stainless steel	AISI 304
Olive	Brass	
Compression nut	Brass	
Membrane	Synthetic butyl elastomer	

## Technical Data

Medium:	water
Max. working pressure:	15 bar
Temperature range:	-10 to 100°C
Pre-charge pressure:	3.5 bar - air
Compression connection:	BS EN 1254
PED:	97/23/EC

Product Code	Volume	Connection
PV016 RS	0.16 litre	compression

## Service and Maintenance

Altecnic recommend that the air pressure is checked annually and adjusted if necessary.

This can be done using an air pressure gauge and foot pump.

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