

DIY Copper Piston Water Hammer Arresters



The SURGEEx-DIY series offers piston-operated, lead-free water hammer arrestors made from hard-drawn seamless copper with a brass TEE, available in sizes DN20 (3/4") and DN15 (1/2"). These arrestors absorb shock caused by sudden changes in water flow direction to prevent damage to pipes, valves, and fixtures. They are suitable for use in washing machines, dishwashers, and general plumbing applications.

OPERATION

SURGEEx-DIY arresters are pre-charged with pressurized gas (Nitrogen) and installed in the plumbing system near the source of the water hammer. When water flow suddenly stops, the piston inside the arrester compresses the gas, which absorbs the pressure surge and reduces the risk of damage to the plumbing system. The compressed gas then slowly expands back to its pre-charged state, ready for the next water hammer event.

FEATURES

- Seamless body fabricated from hard-drawn copper ensures smooth movement of the piston.
- Superior piston design provides excellent resistance to water hammer and hydraulic shock, ensuring durability and long service life with maintenance-free operation.
- Compact and slim design allows for easy installation in tight spaces, minimizing the area consumed.
- Can be installed at any position for added flexibility.
- Available with BSP connection diameters DN15 (1/2") and DN20 (3/4"), featuring swivel female connections for easy DIY installation.
- Models with the DN20 TEE can be directly installed to standard washing machines or dishwashers with BSP connections.
- Factory pre-charged at 60 PSI (4.2 BAR) with Nitrogen and hermetically sealed, eliminating the need for additional charging after installation.
- Lead-free brass adapter ensures the safety of drinking water.

MATERIALS OF CONSTRUCTION

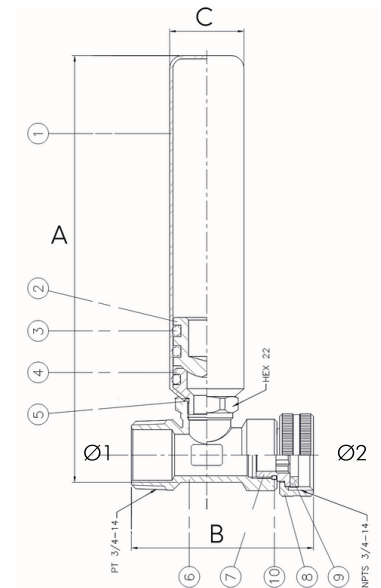
- Body: Hard drawn seamless
- Piston: Polypropylene PP
- O-ring: EPDM
- Seal lubricant: Dow-Corning Silicone or equivalent compound approved for use in potable water systems
- Adapter: Lead Free Brass, C46400

WORKING PARAMETERS

- Pressure range: Up to 350 PSIG (24 BAR)
- Temperature: 33°F to 250°F (0.5°C to 121°C)



1	C1220T-H Pipe
2	PP Piston
3	EPDM O-ring
4	C46400 Sub Adapter
5	EPDM O-ring
6	C46400 Tee
7	C46400 Adapter
8	C46400 Nut
9	EPDM Packing
10	EPDM O-ring



MODEL		C1020	C1520	C1615
SIZE		AA	A	A
FIXTURE UNIT		1-4	5-11	5-11
APPLICATIONS				
DIAMETER (C)	INCH	7/8"	1 1/8"	1 1/8"
	MM	22.22	28.58	28.58
HEIGHT (A)	INCH	5-19/32"	6-15/32"	6-15/32"
	MM	143.24	164.14	164.14
WIDTH (B)	INCH	2-11/16"	2 3/4"	2 3/4"
	MM	68	70	70
Ø1 / Ø2	INCH	3/4" / 3/4"	3/4" / 3/4"	1/2" / 1/2"
	MM	20 / 20	20 / 20	15 / 15

Due to continuous improvement of the products, specifications including design, construction, materials, or dimensions might be modified without prior notice with no obligations to apply such modifications on sold products. Dimensions listed are approximate and for guidance only. Accurate measurements can be obtained or confirmed from Fluidex technical support.