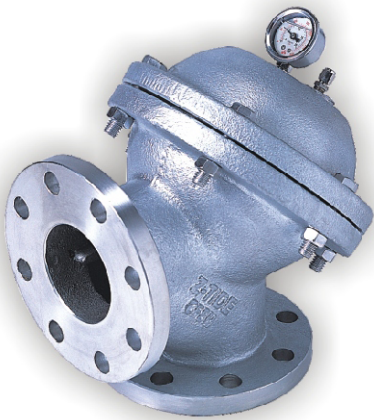


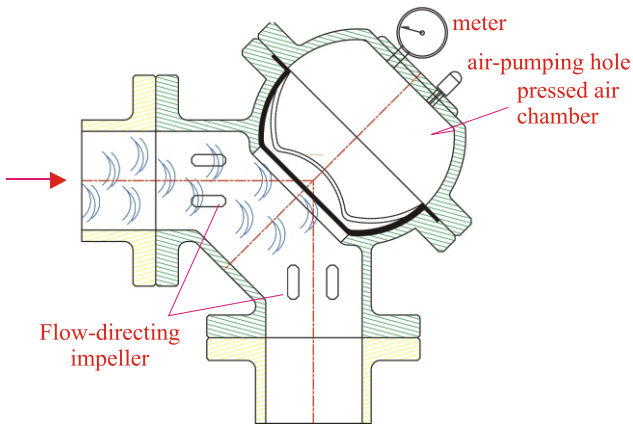


# L STYLE WATER HAMMER ARRESTER



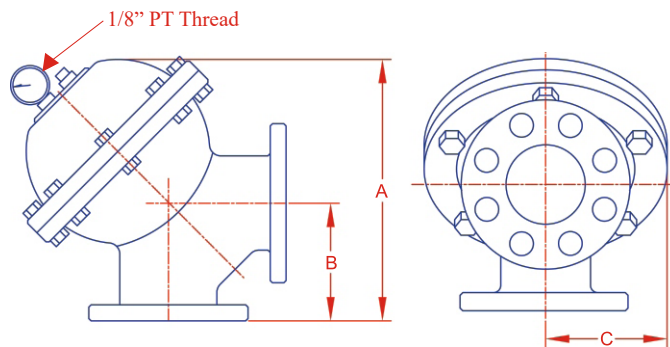
- ▶ The flow-directing mechanism in the valve can guide the flow and stabilize pressure.
- ▶ In the corner of pipe, the water hammer is the most obvious. The design is for meeting the requirement and set the arrester at the corner directly. This design not only saves the space and is easy to set up, but also can replace the traditional crooked head to reduce the cost of setting up.
- ▶ L style absorbs water hammer effect in two ways and brings excellent result.

Patent Number : 131907



- ▶ Applied Conditions: Fluid
- ▶ Applied Temperature:  $-15 \sim 80^{\circ}\text{C}$
- ▶ Diaphragm Material: NBR & Viton
- ▶ Normal air chamber pressure:  $2.5 \text{ kgf/cm}^2$
- ▶ The test pressure of valve body:
  - Cast Iron :  $21 \text{ kgf/cm}^2$
  - Ductile Iron :  $24 \text{ kgf/cm}^2$
  - Stainless Steel 304 & 316 :  $30 \text{ kgf/cm}^2$
- ▶ Maximum Applied pressure:
  - Cast Iron :  $12 \text{ kgf/cm}^2$
  - Ductile Iron :  $16 \text{ kgf/cm}^2$
  - Stainless Steel 304 & 316 :  $20 \text{ kgf/cm}^2$

( $1 \text{ kgf/cm}^2 = 14.2 \text{ psi}$ )



(Flange End)

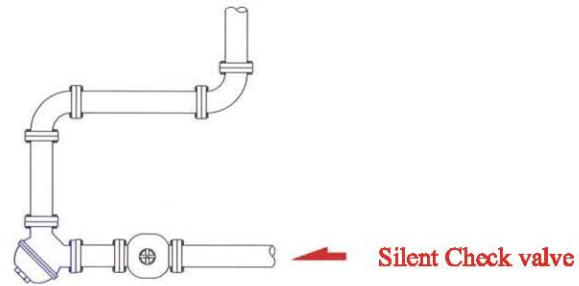
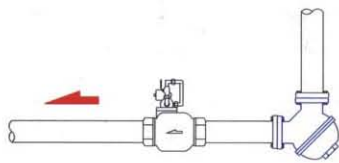
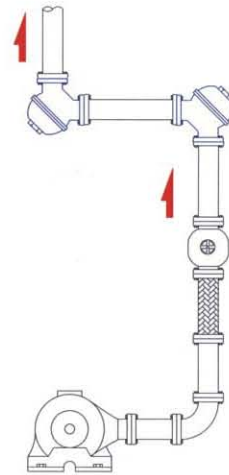
Item No	Size	A(mm)	B(mm)	C(mm)	Weight(kg)	Air Chamber( $\text{cm}^3$ )
ALF-50	2"	230	110	105	17	1490
ALF-65	2.5"	260	130	115	21	2130
ALF-80	3"	275	140	125	22	2465
ALF-100	4"	345	155	150	34	5535
ALF-150	6"	467	200	200	70	15325
ALF-200	8"	560	235	232	124	27230

# THE INSTALLATION CONDITIONS OF L STYLE WATER HAMMER ARRESTER

When pump shuts off, pressure decreases instantly and forms unstable gap of positive and negative pressure that causes water hammer effect and creates noise and pipe vibration. To set up water hammer arrester at the pipe corner upside of the pump (shown as the figure) can prevent the water hammer effect and protect the machine.

**► Remark :**

When lift is longer than 50m and pressure is above 5 kgf/cm<sup>2</sup>, we suggest to set up arresters each at the downside of the long pipe and the upside corner of the check valve.



It's easy to cause water hammer effect when the gate closes fast. To set up arrester at the first corner away from the fast-shut-down valve can absorb and prevent the water hammer effect directly and eliminate the noise.

When the fluid flows through the serial corner, the change of flow speed and direction and friction effect will cause unstable pressure wave, which will lead to vibration and noise. To set up arrester and silent check valve can eliminate the pressure wave.

**Remark**

- ▶ The pressure meter on the valve shows the air chamber pressure before piping and will show the pipeline pressure after piping.
- ▶ To leave a 10 cm opening between valve and wall for easy to maintain.
- ▶ Considering the high-pressure situation, cast iron or stainless steel valve body is suggested for the valve which diameter is larger than 2".
- ▶ When lift is longer than 50m and pressure is above 5 kgf/cm<sup>2</sup>, we suggest to set up arrester each at the downside of the long pipe and the corner upside of the check valve.
- ▶ Before installation, make sure the pressure of water hammer arrester air chamber is lower than pipe pressure.
- ▶ When the pressure of the air chamber of the water hammer arrester is maintained at the 30% ~ 50% of pipe pressure, the arrester will have the best water-hammer-preventing result.
- ▶ If the water pressure in the pipe is lower or the air pressure of the arrester air chamber is lower, both can be corrected by pumped into air or release air from the air-pumping hole at the top of the arrester.
- ▶ When the outlet is under open pressure like float valve, bathroom equipment and faucet, input pressure 1 ~ 1.3 kgf/cm<sup>2</sup> is preferred.