

Water Hammer Arrester - L Style

Benefits & Features

- Installation in any position
- Suitable for water, air etc
- Special model for acid/alkaline or light oils
- Rechargeable air chamber for long life operation
- Body materials: Bronze (epoxy), Ductile Iron (epoxy) or 304 Stainless Steel
- Sizes: 2" to 8" flanged



Specification

Operation	NBR Diaphragm absorbs media energy
Port Sizes	2" to 8" flanged
Body	Ductile Iron or 304 Stainless Steel
Media	Air, gases, liquids etc. Subject to material compatibility
Pressure ranges	See individual data tables below
Seals	NBR (-5 to +80°C) EPDM (WRAS approved -5 to +85°C). Special order

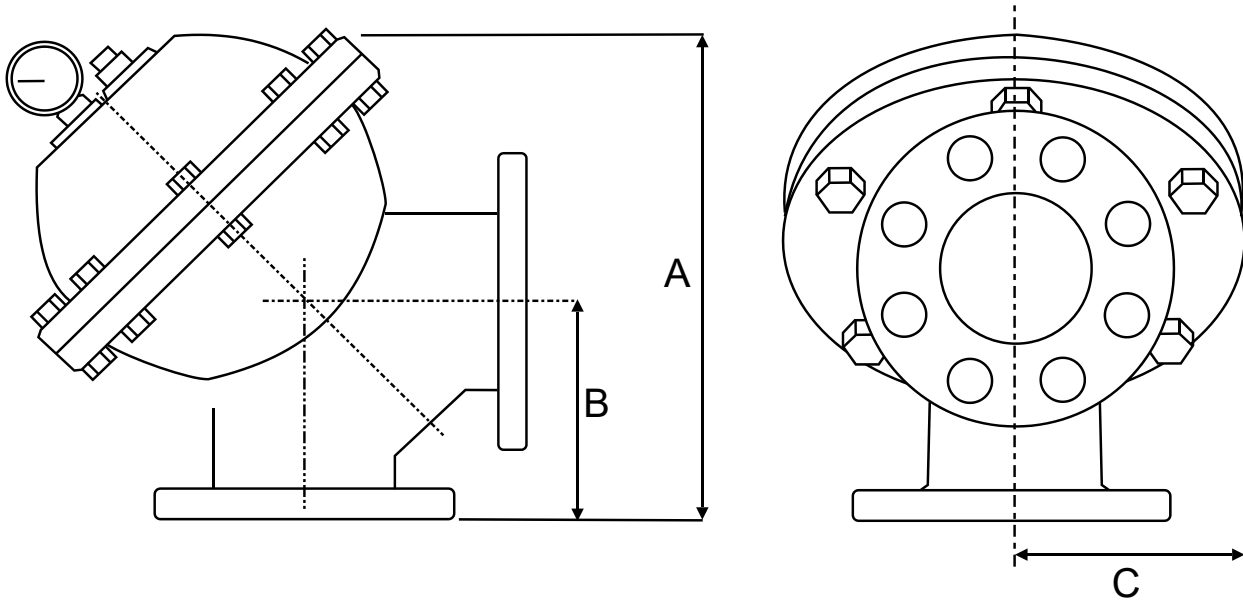


Technical Data

				Test Pressure Bar Ductile Iron Stainless Steel	Max. Applied Pressure (Bar) Bronze Ductile Iron Stainless Steel	Air Chamber (cm ³)	
	A	B	C				
P12	50	FL2A		2"	21/35	12/12/20	1490
P12	65	FL25A		2 1/2"	21/35	12/12/20	2130
P12	80	FL3A		3"	21/35	12/12/20	2465
P12	100	FL4A		4"	21/35	12/12/20	5535
P12	150	FL6A		6"	21/35	12/12/20	15325
P12	200	FL8A		8"	21/35	12/12/20	27230

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Weights & Dimensions

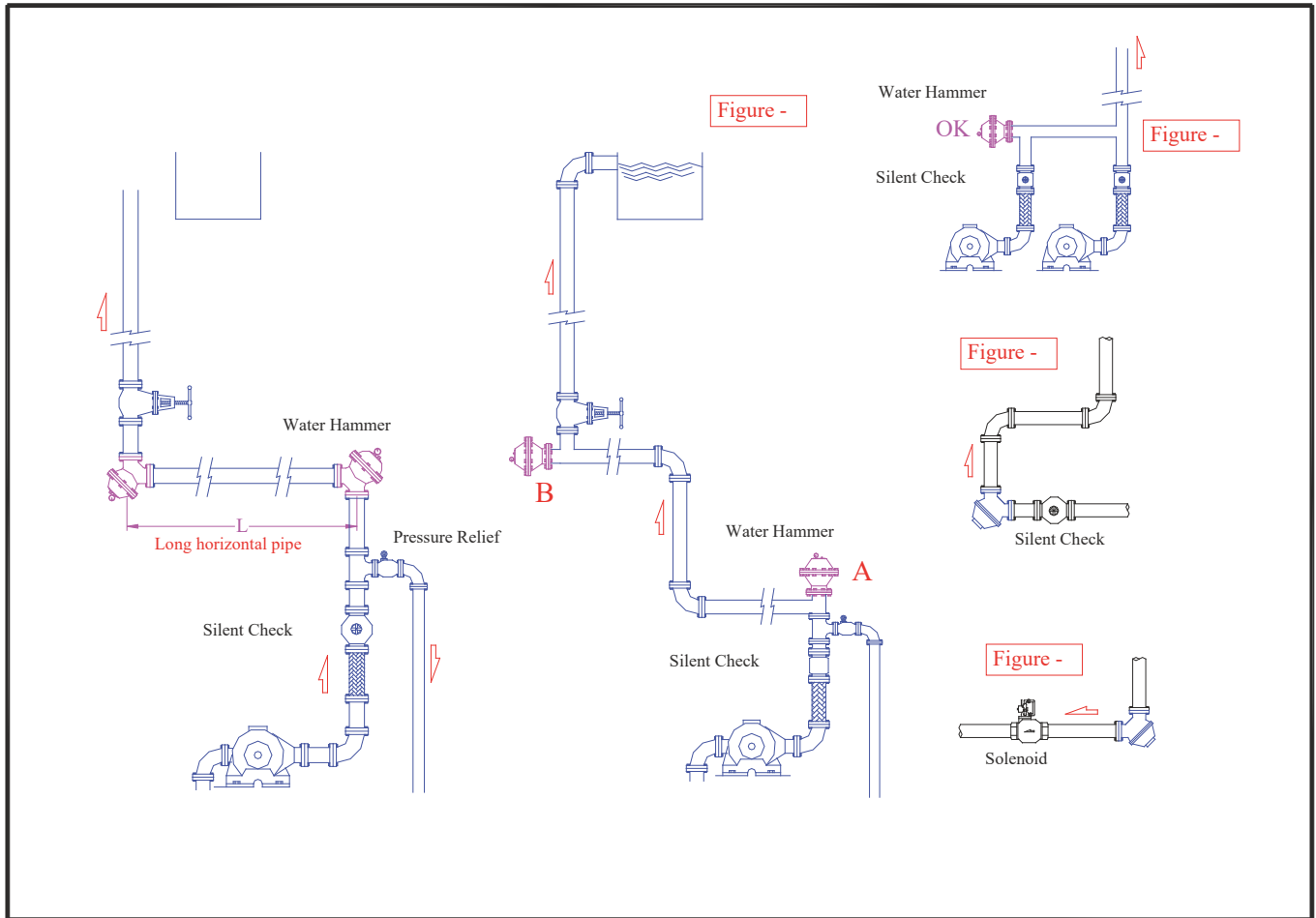


Flanged Port	Weight Kg	Dimensions mm		
		A	B	C
2"	17	230	110	105
2 1/2"	19.0	260	130	115
3"	22.0	275	140	125
4"	34.0	345	155	150
6"	70.0	467	200	200
8"	95.0	560	235	232

Order Codes

A	Body Material	B	Flanged Port	C	Seals (fluid temp min / max)		
D	Ductile Iron	2A	2" PN16	8A	8" PN16	0	NBR (-10°C to + 80°C)
H	304 Stainless Steel	25A	2 1/2" PN16			6	*EPDM (-10°C to + 85°C)
		3A	3" PN16				*Special order
		4A	4" PN16				
		6A	6" PN16				

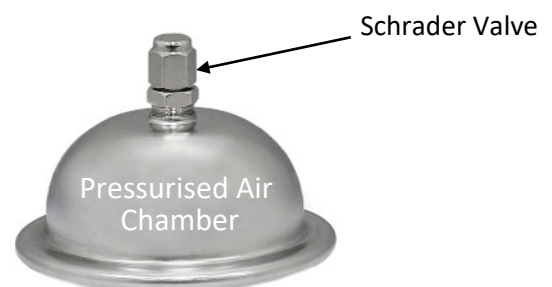
Installation of Water Hammer Arresters



- Figure 1. This illustrates, the water hammer effect taking place above a check valve so installing a water hammer arrester can prevent the water hammer effect. If the length of horizontal pipe is longer than 50 meter in the figure 1, installing a water hammer arrester at the corner between the horizontal pipe and vertical pipe can avoid the water hammer effect.
- Figure 2. If the distance between A and B is longer than 50 meter, installing a water hammer arrester at B can reduce the water hammer effect.
- Figure 3. Two pumps are used alternately, installing a water hammer arrester at horizontal pipe can avoid water hammer effect.
- Figure 4. Here is a pipe line with a serious water hammer effect, due to the many bends. Installing a check valve at the lowest point and installing a water hammer arrester above check valve can reduce the noise and vibration made by the water hammer effect.
- Notes If there are gate valves like solenoid valves or air operated valves which close very fast and produce the water hammer effect, installing a water hammer arrester at the inlet of the valve can reduce the noise and vibration made by the water hammer effect.

Air Chamber

- The air chamber is pressurised by means of a Schrader Type Valve
- Standard pressure is around 2.5 - 3 bar (36-44 psi), or 30-40% of working pressure
- A standard bicycle or car pump, for small arresters, preferably with a gauge fitted, can be used to top up the pressure. For larger models, use a compressor
- The pressure should be checked every 6 months, or as defined by a maintenance schedule, or the duty of the plant



Maintenance of Water Hammer Arresters

Recommended Maintenance - Diaphragm

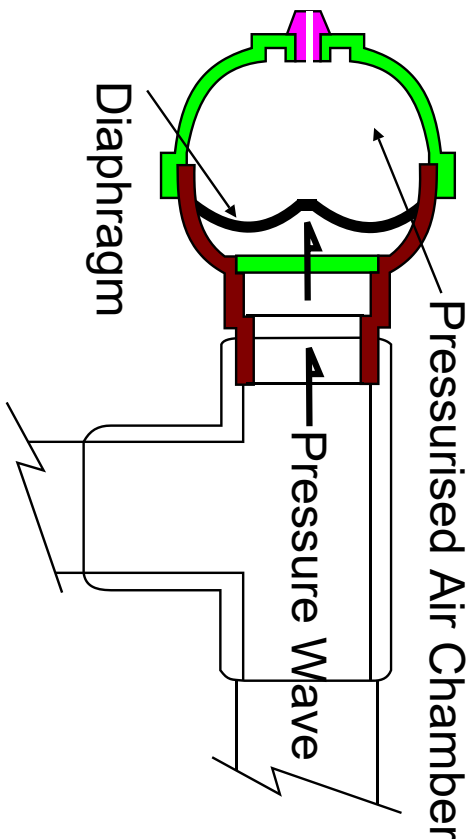
Where the application has clean fluids under 10bar, it is recommended to replace the diaphragm every two years. This is dependant on variable factors such as frequency of operation, environmental conditions etc.

Recommended Maintenance - Air Chamber Top Up

It is recommended to top up the pressure chamber with compressed air (2.5bar using the schrader valve) every six months or so, depending on the application, frequency of operation etc.



P12 - Spare Parts



Diaphragm Spares - Order Codes

Port Size	Seal Material	
	NBR	*VITON
2"	KG/P12.50.0	KG/P12.50.1
2 ½"	KG/P12.65.0	KG/P12.65.1
3"	KG/P12.80.0	KG/P12.80.1
4"	KG/P12.100.0	KG/P12.100.1
5"	KG/P12.125.0	KG/P12.125.1
6"	KG/P12.150.0	KG/P12.150.1
8"	KG/P12.200.0	KG/P12.200.1



*Special order, please ask as subject to minimum quantities