BLADDER AUTOCLAVES FOR SANITARY WATER
Type AS, AC, AF

BLADDER AUTOCLAVES FOR SANITARY WATER

Benefits

Unlike standard air-cushioned accumulators without bladder, the accumulators with bladders feature the following advantages :

• **energy saving** : reduced number of pump start-ups;

• **installation cost reduction** : lack of water contact means that air is no longer dispersed into the water and therefore, there is no further need to supply a compressor to restore the cushion;

• **maintenance costs reduction** : only the tank pre-charge pressure has to be checked. Additionally the bladder can be replaced, disassembled and reassembled easily in a very short time;

• **stored volume reduction** : space saving;

• **water contamination risk is reduced** : the bladder also serves as protection against any substance suspended in the air, such as: oil, smoke, bacteria, smells, dust, etc. that may alter the quality of water. Bladders are certified for alimentary use;

• **long-lasting tank** : the fact that the bladder prevents water from being in direct contact with the inner surface of the tank significantly reduces corrosion;

• **dual purpose** : this type of tank will also cushion water hammer.

Operation

The accumulator vessel with bladder is a device that, fitted into a pressurised water system, will provide system water at a pre-set, sustained pressure. Its most common application is to supply systems in which the main supply pressure is too low and a pump is fitted to boost the pressure to an acceptable level.

The function of an accumulator vessel is to sustain system pressure by feeding additional water into the system at the required pressure. This process will limit the number of times the pump needs to start (pump hunting) in order that system pressure remains at the optimum level. The process is achieved by the addition of a pre-charged nitrogen cushion at higher than atmospheric pressure within the vessel shell.This pre-charged cushion is stored between the water bladder and the inner surface of the tank.

Any water pressure rise (pumping) causes the cushion to be additionally compressed. As system demands arise the nitrogen cushion forces the water from the bladder into the system thus maintaining optimum system pressure. As the retained pressure finally exhausts and system pressure falls a pressure switch will turn the pump on, re-pressurising the system and the accumulator ready for further use. This way the accumulator will prevent the need for the pump to start every time there is a demand on the water system and will flatten the system pressure curve at the optimum pressure

REPLACEABLE BLADDER PRESSURE TANKS
TYPE AF (5-25 L)

The tanks interchangeable membrane Series AS-AC constitute a viable solution for small domestic installations, irrigation systems for parks and all other applications where low flow rates are required.

The AS-25 combines features of convenience and economy, and is suitable for direct installation on the pump; the model AC GPM-25 is designed for the fabrication of smaller pressurization units.

The EPDM membrane makes them usable as water expansion vessel up to a maximum design temperature of + 99 ° C

Construction

• Epoxy powder coating for more durable protection against the elements.

• Complete separation between water and air.

• Complete separation of water from the metal parts of the tank.

• Nontoxic interchangeable EPDM rubber membrane whose elasticity allows a total expansion inside the tank to ensure better performance and longer life.

• In compliance with the essential safety requirements of the European Directive 97/23 / EC (PED) (Models 5 liter is exempt from CE marking).

Limits

- Min. / Max. Operating temperature : -10 ° to + 99 ° C

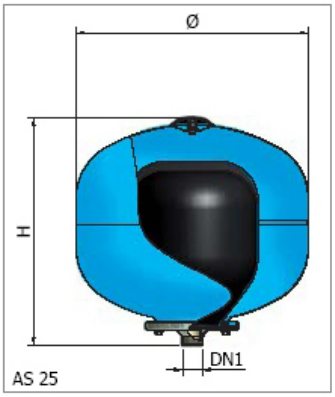
- Max. Operating pressure : 8 bar

- Pre-charge pressure: 1.5 bar

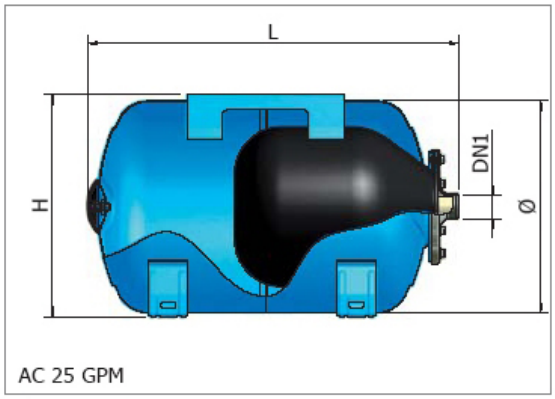
- 2 years warranty.

	MOD		Ppre	Pmax					DN1
AS/AC-CE	AC 5 *	5	1,5	8	+99°C	205	240	-	3/4"
	AC 25 CE	24	1,5	8	+99°C	270	470	-	1"
	AC 25 GPM CE	24	1,5	8	+99°C	270	290	470	1"
	AS 25 CE	24	1,5	8	+99°C	360	365	-	1"

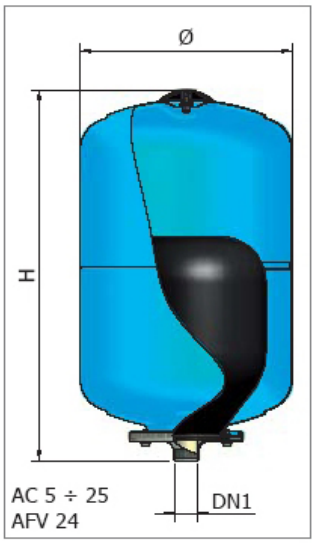
* CE marking not required



AS 25



AC 25 GPM



AC 5 ÷ 25
AFV 24

REPLACEABLE BLADDER PRESSURE TANKS
TYPE AF (50 - 300 L)

The membrane tanks AF series are suitable in most industrial and residential installations where required water flow rates are considerable.

The horizontal version is equipped with an universal motor support bracket in way to instal the pump directly above the tank.

Construction

• Epoxy powder coating for more durable protection against the elements (Mod. AFV-500 16 bar: coating solvent).

• Complete separation between water and air.

• Complete separation of water from the metal parts of the tank.

• Can also be used as an expansion tank up to a maximum temperature of + 99 ° C

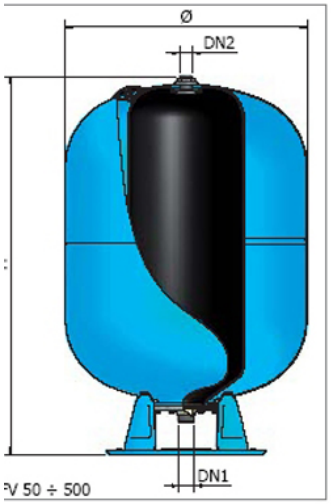
• Nontoxic interchangeable EPDM rubber membrane whose elasticity allows a total expansion inside the tank to ensure better performance and longer life.

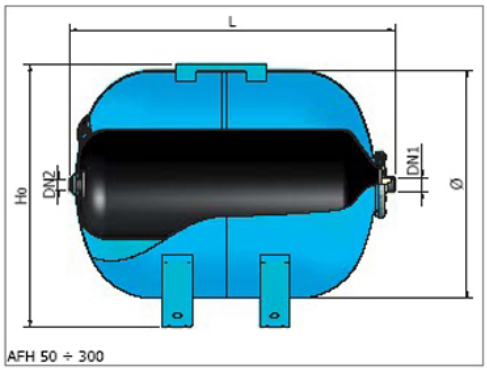
• In compliance with the essential safety requirements of the European Directive 97/23 / EC (PED).

Limits

- Min. / Max. operating temperature : 10 ° to + 99 ° C
- Max. Operating pressure : 10 bar
- Pre-charge pressure : 1.5 bar
- 2 years warranty.

MOD		Ppre	Pmax					DN1	DN2
AFH 50 CE	50	1,5	10	+99°C	400	425	515	1"	-
AFV 50 CE	50	1,5	10	+99°C	400	600	-	1"	-
AFH 60 CE	60	1,5	10	+99°C	400	480	675	1"	1/2"F 3/4"M
AFV 60 CE	60	1,5	10	+99°C	400	750	-	1"	1/2"F 3/4"M
AFH 80 CE	80	1,5	10	+99°C	400	480	765	1"	1/2"F 3/4"M
AFV 80 CE	80	1,5	10	+99°C	400	815	-	1"	1/2"F 3/4"M
AFH 100 CE	100	1,5	10	+99°C	500	585	720	1"	1/2"F 3/4"M
AFV 100 CE	100	1,5	10	+99°C	500	805	-	1"	1/2"F 3/4"M
AFV 150 CE	150	1,5	10	+99°C	500	1030	-	1"1/4	1/2"F 3/4"M
AFV 200 CE	200	1,5	10	+99°C	600	1065	-	1"1/4	1/2"F 3/4"M
AFV 300 CE	300	1,5	10	+99°C	650	1270	-	1"1/4	1/2"F 3/4"M
AFV 500 CE	500	1,5	10	+99°C	775	1420	-	1"1/4	1/2"F 3/4"M





AF-CE