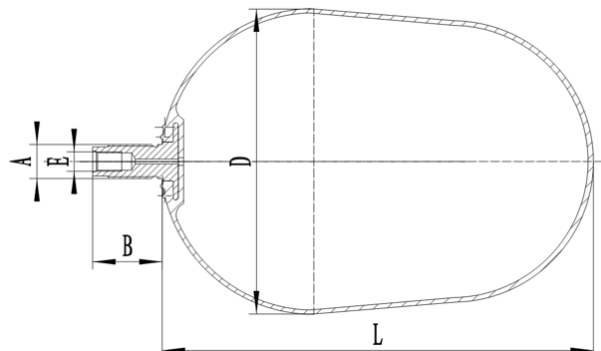


Siken Rubber Bladder

An accumulator bladder is a key component of a hydraulic bladder accumulator, which is a device used to store and release hydraulic energy in a fluid power system. The accumulator bladder is a flexible membrane that separates the hydraulic fluid and gas or nitrogen charge in a hydraulic accumulator. It enables the storage and release of hydraulic energy, contributing to the overall performance and efficiency of the hydraulic system.

The choice of bladder material depends on the specific application requirements, including the type of hydraulic fluid used, operating pressures, temperature range, and compatibility with other system components. Common bladder materials include elastomers such as nitrile rubber (NBR) or ethylene propylene diene monomer (EPDM).

Accumulator bladders are designed to be durable, flexible, and resistant to hydraulic fluid and gas permeation. They undergo rigorous testing to ensure their integrity, performance, and long service life. Regular inspection and maintenance of the bladder are necessary to check for any signs of wear, damage, or leakage.



Bladder Model

B **S** **V** - **N** **I**
1 **2** **3** **4** **5**

1) Rubber Bladder

2) Standard A – ASME, P – PED

3) Volume

ASME: 1PT, 1QT, 1G-1Gallon ,10G-10Gallon 15G-15Gallon

PED: 1L-1 liter, 4L- 4 liters 40G-40 liters 50L- 50 liters

4) Rubber materials

N: NBR (Buna-N)

B : Butyl

LN: Low temperature NBR (Buna-N)

HN: HNBR

V: Viton (FPM)

5) Gas stem thread 1 - 5/8"UNF 2 – 7/8"UNF 3 – M50 X1,5

For example

1) BP10LN1 stands for PED bladder, 10liters ,NBR materials, 5/8"UNF stem.

2) BA1QTB2 stands for ASME bladder, 1 pint , Butyl materials, 7/8"UNF stem.

ASME standard bladder size

Dimensions of the shell		Dimensions of the rubber bladder				
OD (mm)	Volume	D(mm)	E	A	B(mm)	L(mm)
89	1PT	70	3/8-24UNF	5/8-18UNF	30	120
114 123	1QT	96	3/8-24UNF 1/2-20UNF	5/8-18UNF 7/8-14UNF		145
	1.5QT					226
	150CI					320
168	1Gal	144	1/2-20UNF	7/8-14UNF		195
180	1.5Gal					320
219 229 232 245 255 267	2.5Gal	200	1/2-20UNF	7/8-14UN M50X1.5	41	320
	5Gal					589
	10Gal					1108
	11Gal					1258
	12.5Gal					1550
	14Gal					1625
	15Gal					1711

PED standard bladder size

Dimensions of the shell		Dimensions of the rubber bladder				
OD (mm)	Volume(L)	D(mm)	E	A	B(mm)	L(mm)
89	0.5	70	3/8-24UNF	5/8-18UNF	30	120
114 123	1	96	3/8-24UNF 1/2-20UNF	5/8-18UNF 7/8-14UNF		145
	1.5					226
	2.5					320
168 180	4	144	1/2-20UNF	7/8-14UNF		195
	5					255
	6					320
219 229 232 245 255 267	10	200	1/2-20UNF	7/8-14UN M50X1.5	41	320
	12					365
	13					415
	20					589
	24.5					760
	32					1108
	42					1258
	50					1625
	54					1711