AS Spherical accumulators

AS 400 bar

Maximum pressure : 400 bar (except for AS 0.7 L)
Extreme operating temperatures : – 20°C to + 120°C

► Technical description

LEDUC spherical accumulators consist of two hemispherical shells which are screwed together and which hold a diaphragm. This diaphragm has a metal stud which closes off the operation hole when the fluid is completely discharged. There is therefore no danger of damage to the diaphragm.
The gas side port is fitted with a charging valve allowing the pressure in the accumulator to be checked or changed.
Separator:

- Standard, Nitrile: from -20°C to +100°C
- Other diaphragms are available on request.

► Advantages

The diaphragm only changes position, the elastomer in fact works little. The LEDUC spherical accumulator owes most of its qualities to its diaphragm and metal stud :

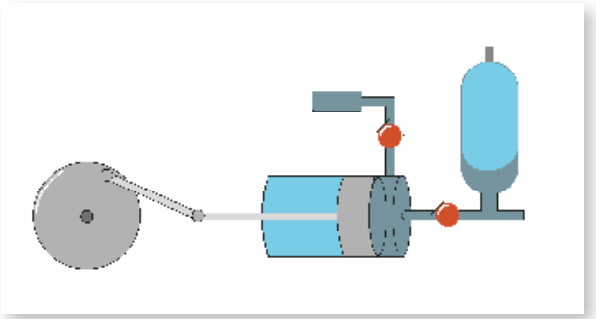
- excellent gas/fluid tightness
- possibility of total and rapid discharge
- can be adapted to suit a wide range of fluids.

► Operating fluids

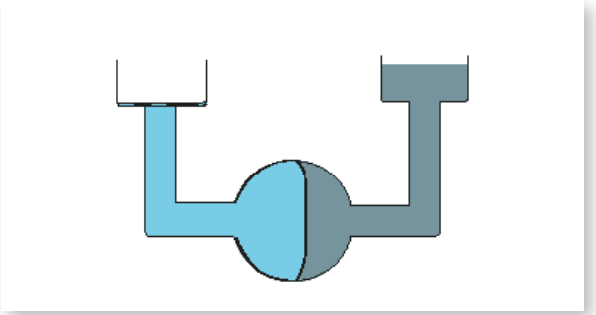
- Mineral-based hydraulic fluids: standard diaphragm
- Corrosive or non-standard fluids: please consult our Customer Service Department.

► Examples of applications

Pulsation dampening



Transfer



► Deformation of the diaphragm

► Filling gas

Nitrogen only.

► Volumetric ratio(V0–V2)/V0

The volumetric ratio of this type of accumulator is 0.75.

For example: an AS 1 accumulator can take in a maximum volume of 0.75 V0:
0.75 V0 = 0.75 x 1.1 = 0.82 litres.

► Protection

On request, ARCOR® anti-corrosion treatment or paint.

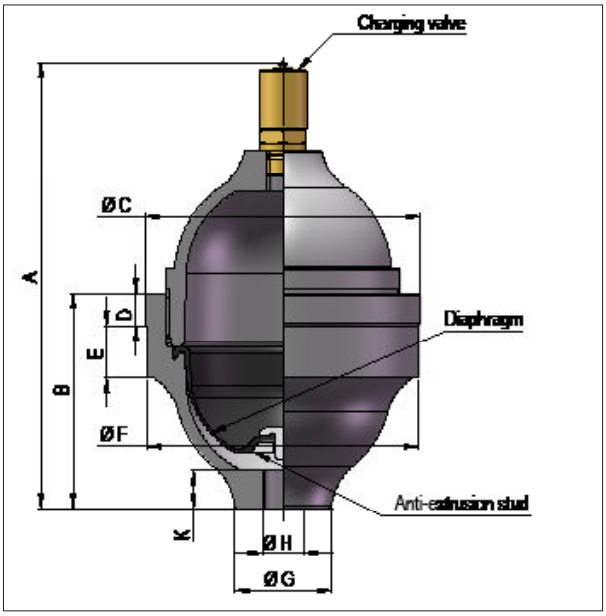
► Tests and certificates

Designed and certified according to the European Directive 2014/68/UE. Other certificates on request.

► After-sales service

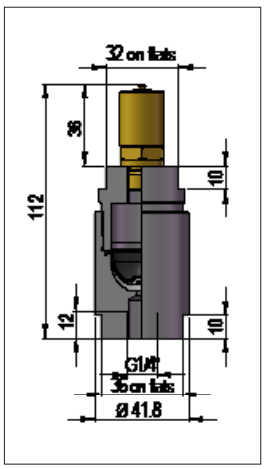
HYDRO LEDUC provides after sales service and supplies spare parts.

CHARACTERISTICS AND DIMENSIONS



AS	Nitrogen capacity Vo (litres)	Max. pressure (bar)	Weight (kg)	Dimensions (mm)								
				A	B	Ø C	D	E	Ø F	Ø G	Ø H	K
AS 00 20	0.19	400	1.2	150	69	84.5	9	20	83.5	29	G1/4"	12
AS 00 50	0.45	400	2.8	184	89	114	12	23	112.5	40	G3/8"	16
AS 00 70	0.65	250	3	197	89	119.5	9	24	118.5	30	G3/8"	13
AS 01 00	1.1	400	5.5	197	112	163.5	50.5	50.5	163.5	40	M18 x 1.5	12
AS 02 50	2.55	400	14	251	161	213.5	37	29	210	51	G3/4"	17
AS 04 00	4.1	400	22	298	202	251	44	40	247	105	M33 x 2	20
AS 10 00	10.19	400	53	391	268	339	52.5	52.5	333	105.1	M33 x 2	20

AC	Nitrogen capacity Vo (litres)	Max. pressure (bar)	Weight (kg)	Dimensions (mm)								
				A	B	Ø C	D	E	Ø F	Ø G	Ø H	K
AC 00 02	0.017	400	0.640	See drawing below.								



Dimensions in mm.

AS Spherical accumulators

AS/AC					
01	02	03	04	05	06

To obtain the code of your AS or AC accumulator, complete the different parameters from 01 to 06 in the table on the left according to the options you require (see table below).

Accumulator type										
01	Spherical accumulator		•	•	•	•	•	•	•	**AS**
	Compact accumulator	•								**AC**
Nominal size (L)										
02		0,02	0,2	0,5	0,7	1	2,5	4	10	
Shell protection										
03	Without protection	•	•	•	•	•	•	•	•	**N**
	ARCOR® treatment	○	○	○	○	○	○	○	○	**P**
Diaphragm material										
04	NBR		•	•		•	•	•	•	**12R**
	NBR with adherized metal stud	•	○	○	•	○	○	○	○	**12A**
	NBR with stainless steel stud		○	○		○	○	○	○	**11R**
	EPDM (epr)		○	○		○		○		**31R**
	FKM (Viton®)		○		○		○	○		**41R**
Charging valve										
05	P1620 valve (M16x200)	•	•	•	•	•	•	•	•	**W**
	P1620 stainless steel valve (M16x200)	○	○	○	○	○	○	○	○	**X**
	SCHRADER valve (8V1)	○	○	○	○	○	○	○	○	**Y**
Gas charging pressure										
06	Specify the charging pressure (in bar)									

• Standard version

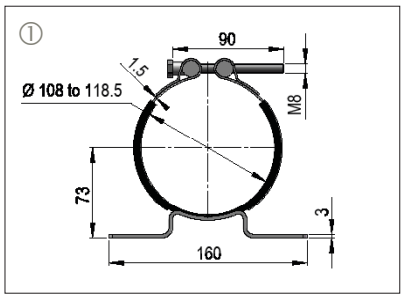
○ Special version on request.

ACCESSORIES

► Fixation clamps ①

Volume (L)	Characteritics	Code LEDUC
0.5 - 0.7	Zinc-plated steel	254021
	Zinc-plated steel quick tightening	254031
	Stainless steel	254032

Dimensions in mm.



► Fixation clamps ②

Volume (L)	Dimensions (mm)			Characteritics	Code LEDUC
	Ø D	L1	L2		
1	168	184	148	Zinc-plated steel	254022
2.5	210	254	212		254006
4	247	300	248		254005

Dimensions in mm.