AP(L) Piston accumulators

► Technical description

AP(L) accumulators are designed with a high mechanical resistance forged steel body.
The fluid-gas separating piston is equipped with seals adapted to:

- the fluids to convey,
- the operating temperature,

The AP(L) accumulators can be fitted with a charging screw or charging valve, and are a modern solution for the needs of hydraulic circuits.

► Advantages

LEDUC AP(L) piston accumulators, are designed:

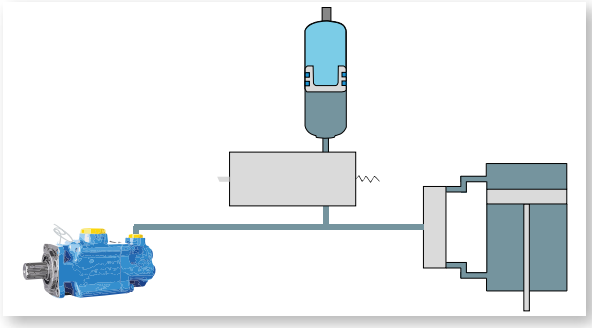
- to withstand very high volumetric ratios,
- to ensure total and rapid discharge of fluid,
- for assembly in any position,
- to guarantee minimal nitrogen loss overtime,
- for easy adaptation for use with different fluids and temperatures.

► Operating fluids

- Mineral-based hydraulic fluids.
- Non-standard and/or corrosive fluids: please consult our Customer Service Department.

► Example of applications

Energy storage



AP 350 bar

Maximum pressure: 350 bar
Extreme operating temperature:

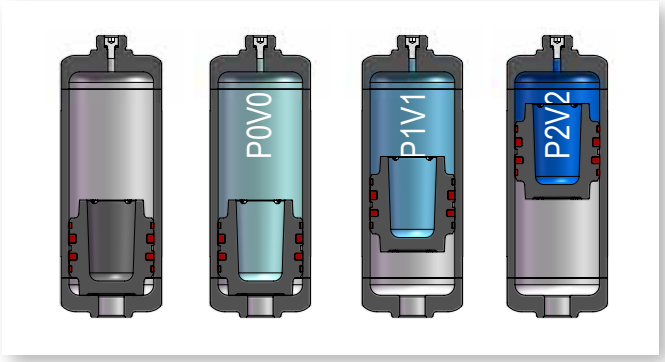
- Standard version: – 20°C to + 80°C
- For other temperatures, please consult us.

APL 250 bar

Maximum pressure: 250 bar
Extreme operating temperature:

- Standard version: – 20°C à + 80°C
- For other temperatures, please consult us.

► Movement of the piston



► Filling gas

Nitrogen only.

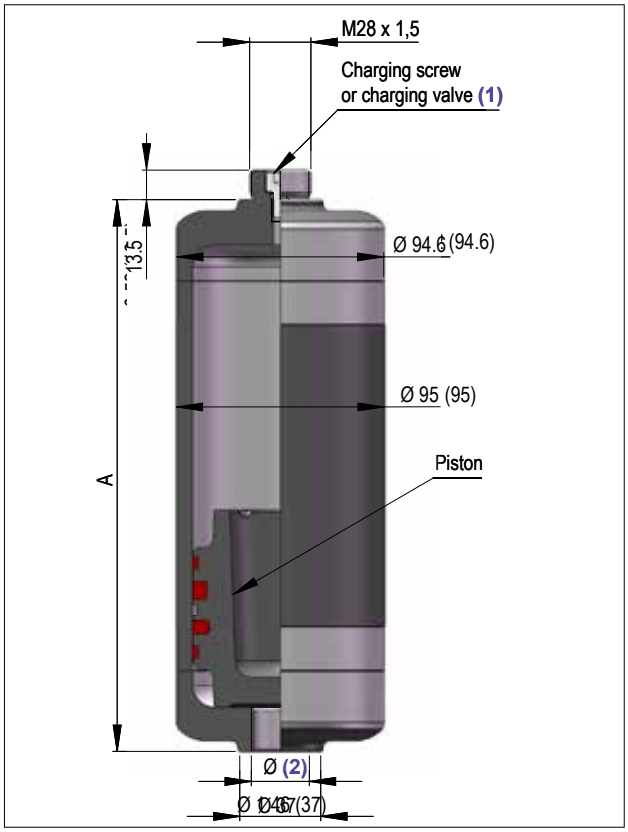
► Charging

Two versions available:

- with charging screw,
- with charging valve.

► Tests and certifications

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



(1) See order code system code **06** (next page)
(2) Hydraulic connections - see order code system code **05** (next page)

CHARACTERISTICS AND DIMENSIONS

	Volume (L)	Max. pressure (bar)	A (mm)	Ø D (mm)	Ø C (mm)	Weight (kg)
AP	0.16	350	149.5	64	63.5	2.4
	0.32		231			3.2
	0.5		323			4.1
	0.75		450			6.1
	1		577			7.6
	1.25		705			9.6
	1.5		832			10.6
	1.8		985			12.4

	Volume (L)	Max. pressure (bar)	A (mm)	Ø D (mm)	Ø C (mm)	Weight (kg)
APL	0.5	250	202.3	95	94.6	6.2
	0.75		252.1			7
	1		301.8			7.9
	1.5		401.3			9.5
	2		500.8			11.1
	2.5		600.2			12.8
	3		699.7			14.4
	3.5		799.2			16
	4		898.6			17.6

Dimensions in mm.

AP(L) Order code system

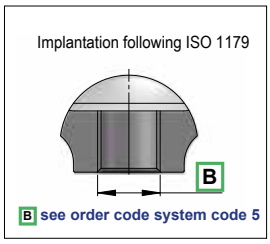
AP(L)							
01	02	03	04	05	06	07	08

To obtain the code of your piston accumulator AP(L), complete the different parameters from 01 to 08 in the table on the left according to the options you require (see table below).

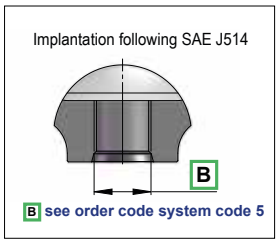
Make your choice as a function of the possible combinations, using the columns below, and use the code in the far right-hand column.

Accumulator type																			
01	**AP 350 bar**	•	•	•	-	-	•	•	-	•	•	-	•	-	-	-	-	-	AP
	APL 250 bar	-	-	-	•	•		-	•		-	•	-	•	•	•	•	•	APL
Volume (L)																			
02		**0,16**	**0,32**	**0,5**		**0,7**	**0,75**	**1**		**1,25**	**1,5**		**1,8**	**2**	**2,5**	**3**	**3,5**	**4**	
Type of seal																			
03	Double sealing	•	•	•		•	•	•		•	•		•	•	•	•	•	•	D
Piston diameter																			
04	Ø 50 mm	•	•	•	-	-	•	•	-	•	•	-	•	-	-	-	-	-	06
	Ø 80 mm	-	-	-	•	•	-	-	•	-	-	•	-	•	•	•	•	•	08
Fluid side connection																			
05	G1/2”	•	•	•	-	-	•	•	-	•	•	-	•	-	-	-	-	-	G2
	G3/4”	-	-	-	•	•	-	-	•	-	-	•	-	•	•	•	•	•	G3
	9/16 - 18 UNF	•	•	•			•	•		•	•		•						U0
	3/4 - 16 UNF	•	•	•	-	-	•	•	-	•	•	-	•	-	-	-	-	-	U1
	1"1/16 - 12 UNF	-	-	-	•	•	-	-	•	-	-	•	-	•	•	•	•	•	U2
Gas side connection																			
06	M28 x 1.5 screw	•	•	•		•	•	•		•	•		•	•	•	•	•	•	V
	P1620	•	•	•		•	•	•		•	•		•	•	•	•	•	•	W
Gas side options																			
07	Without protection	•	•	•		•	•	•		•	•		•	•	•	•	•	•	N
	With metallic plug	•	•	•		•	•	•		•	•		•	•	•	•	•	•	P
Fluid side options																			
08	Without protection	•	•	•		•	•	•		•	•		•	•	•	•	•	•	N
Charging pressure																			
09	Specify the charging pressure (in bar)																		

► Hydraulic connections - Code 05

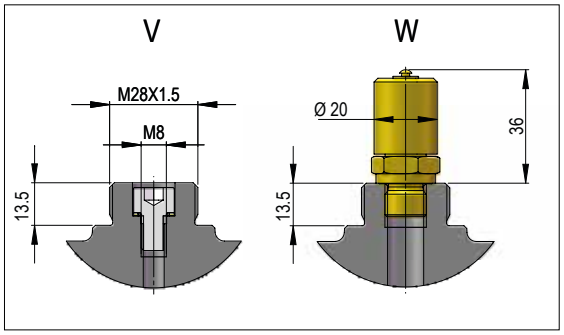


Code 05	Ø B
G2	G1/2"
G3	G3/4"

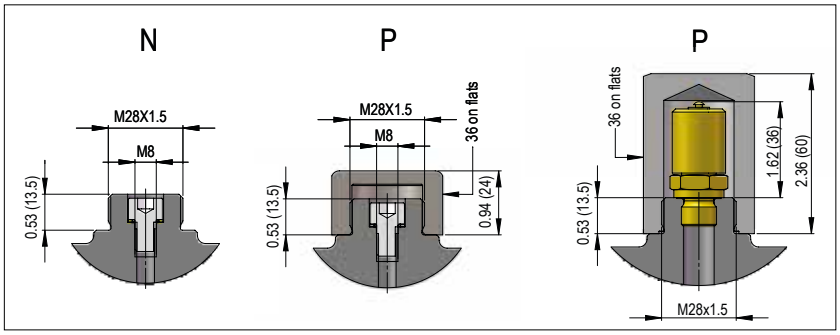


Code 05	Ø B
U0	9/16 - 18 UNF- 2B
U1	3/4-16UNF - 2B
U2	1"1/16 - 12UNF - 2B

► Gas side connexion - Code 06



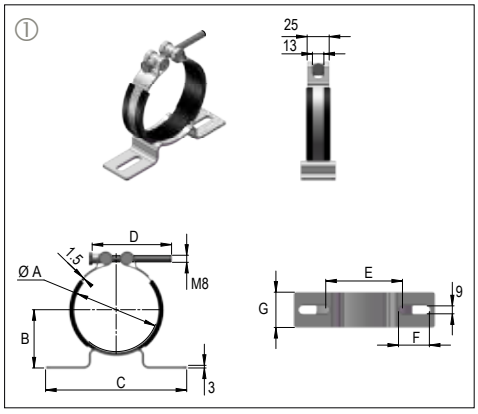
► Gas side connexion - Code 07



ACCESSORIES FOR APL

► Adjustable clamps ①

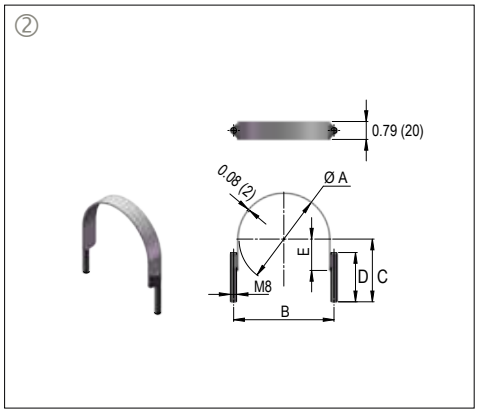
Model	Volume (L)	Dimensions (mm)							Characteristics	Code
		A	B	C	D	E	F	G		
APL	0.5 to 4	Ø 95 to 100	66	160	90	87	35	40	Zinc-plated steel	C001026
									Zinc-plated steel quick tightening	C001033
									Stainless steel	C001027
AP	0.16 to 1.8	Ø 60 to 70	40.5	120	70	85	19	50	Zinc-plated steel	C002160



► Fixed clamps ②

Model	Volume (L)	Dimensions (mm)					Characteristics	Code
		A	B	C	D	E		
APL	0.5 to 4	100	112	70	55	35	Zinc-plated steel	C001029
							Stainless steel	C001030
AP	0.16 to 1.8	65	77	50	50	20	Zinc-plated steel	C002163

Tightening torque of the fixation screws: 20 N.m.



Dimensions in mm.