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:

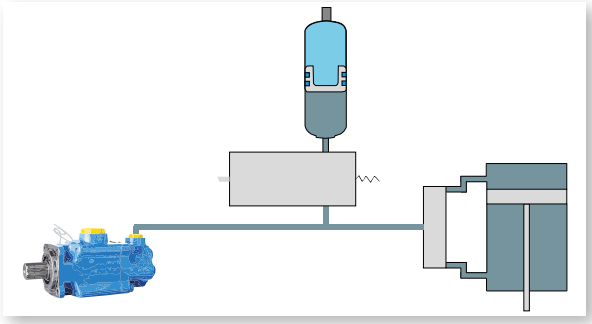
- to withstand very high volumetric ratios
- to ensure total and rapid discharge of fluid
- for assembly in any position
- to guarantee minimal nitrogen loss overtime
- for easy adaptation for use with different fluids and temperatures.

► 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 temperatures :

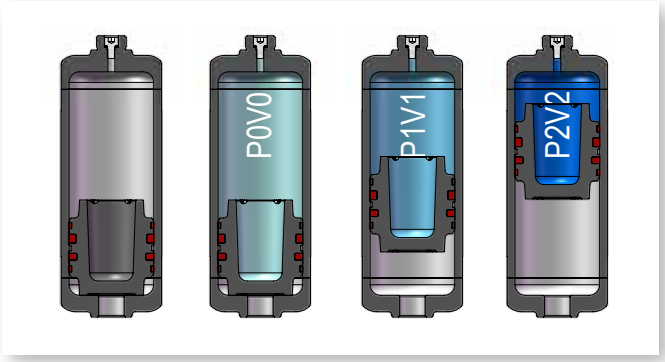
- Standard version: – 20°C to + 80°C
- For other temperatures, please consult us.

APL 250 bar

Maximum pressure: 250 bar
Extreme operating temperatures :

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

► Movement of the piston



► Filling gas

Nitrogen only.

► Charging

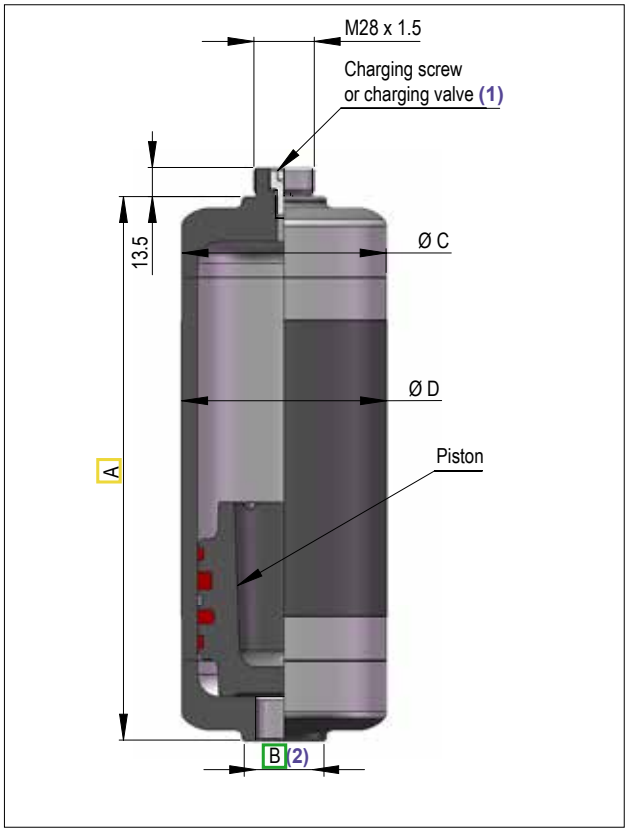
Two versions available:

- with charging screw
- with charging valve.

For AP(L) series accumulators that are supplied pre-charged, P0 must be over 5 bar.

► 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)	B (inches)	Ø D (mm)	Ø C (mm)	Weight (kg)
AP	0.16	350	149.5	G1/2"	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

	Volume (L)	Max. pressure (bar)	A (mm)	B (inches)	Ø D (mm)	Ø C (mm)	Weight (kg)
APL	0.5	250	202.3	G1/2" or G3/4"	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	G3/4"			12.8
	3		699.7				14.4
	3.5		799.2				16
	4		898.6				17.6

Dimensions in mm.

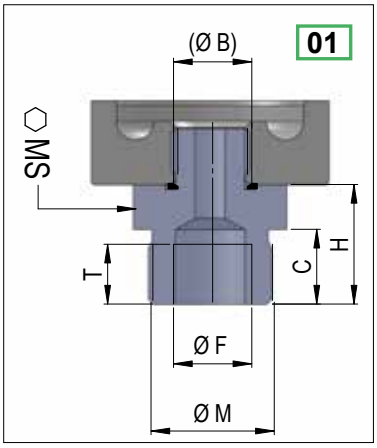
AP(L) Order code system

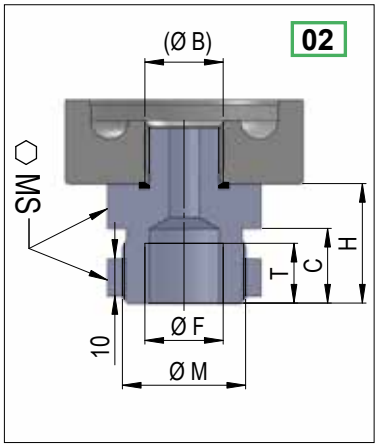
AP(L)							
01	02	03	04	05	06	07	08

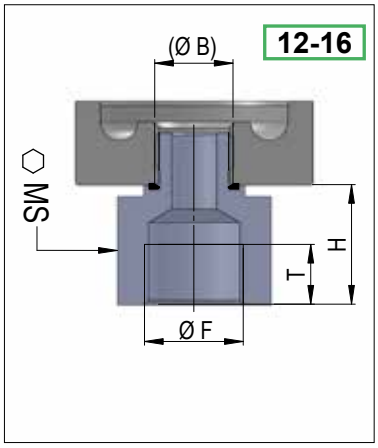
To obtain the code of your piston accumulator AP(L), complete the different parameters from 01 to 08 in the table on the left according to the options you require (see table below).

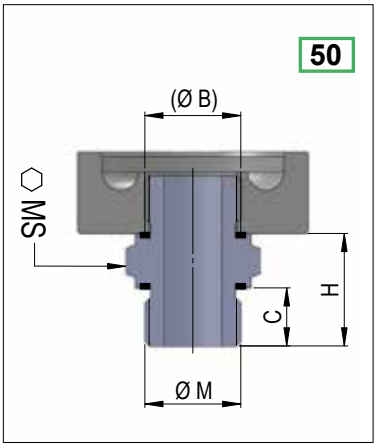
Accumulator type																	
01	**AP 350 bar**	•	•	•		•		•		•	•						AP
	APL 250 bar				•		•		•			•	•	•	•	•	•	APL
Volume (L)																	
02		**0.16**	**0.32**	**0.5**		**0.75**		**1**		**1.25**	**1.5**		**2**	**2.5**	**3**	**3.5**	**4**	
Type of seal																	
03	Double sealing	•	•	•		•		•		•	•		•	•	•	•	•	D
Piston diameter																	
04	Ø 50 mm	•	•	•		•		•		•	•							05
	Ø 80 mm				•		•		•			•	•	•	•	•	•	08
Fluid side connection																	
05	Male M33x1.5 - Female G1/2”	•	•	•	•	•	•	•	•	•	•	•	•					01
	Male M33x1.5 - Female G1/2” + M33x1.5 nut	•	•	•	•	•	•	•	•	•	•	•	•					02
	Female G1/2”	•	•	•	•	•	•	•	•	•	•	•	•					10
	Female G3/4”				•		•		•			•	•	•	•	•	•	11
	Female G3/8”				•		•		•			•	•					12
	Female M16x1.5				•		•		•			•	•					13
	Female M18x1.5				•		•		•			•	•					14
	Female 3/4”-16UNF-2B				•		•		•			•	•	•	•	•	•	15
	Female 1”1/16-12UNF-2B				•		•		•			•	•	•	•	•	•	16
	Male G3/4”				•		•		•			•	•	•	•	•	•	50
Gas side connection																	
06	M28 x 1.5 screw	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	V
	P1620	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	W
Gas side options																	
07	Without protection (P1620) Plastic plug (M28 x 1.5 screw)	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	N
	With metallic plug	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	P
Charging pressure																	
08	Specify the charging pressure (in bar)																	

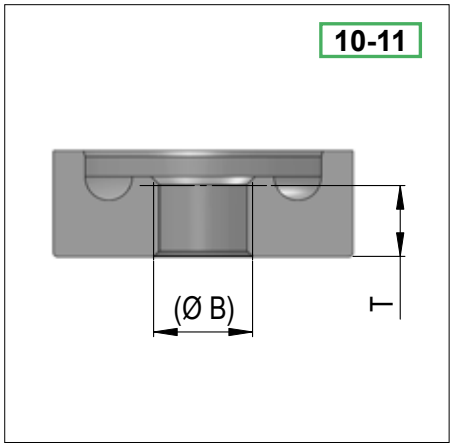
► Hydraulic connections - Code 05

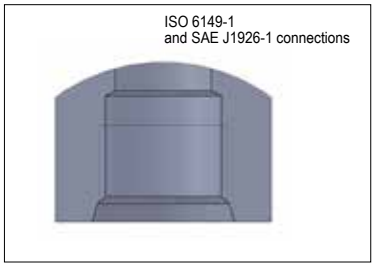












Connection for fittings : 13, 15 and 16.

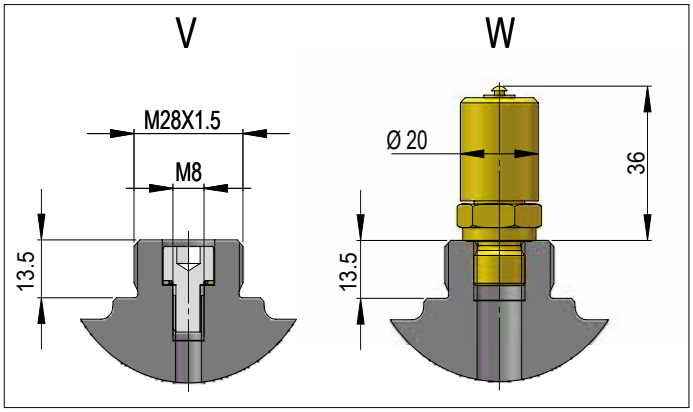


Connection for fittings : 02, 01, 12 and 14.

Code	Ø B	Ø F	H	SW	T useful	C	ØM
01	G1/2"	G1/2 - ISO 1179-1	32	41	16	20	M33x1.5
02							
10	G3/4"	without fitting	-	-	18	-	-
11		without fitting	-	-	18		
12		G3/8 - ISO 1179-1	10	32	12		
13		M16x1.5 - ISO 6149-1	10	32	13		
14		M18x1.5 - ISO 09974-1	10	32	12		
15		3/4-16UNF-2B - SAE J1926-1	25	32	14,3		
16		1 1/16-12UNF-2B - SAE J1926-1	27	46	19		
50		-	31	32	-	16	G3/4 - DIN 3852-11

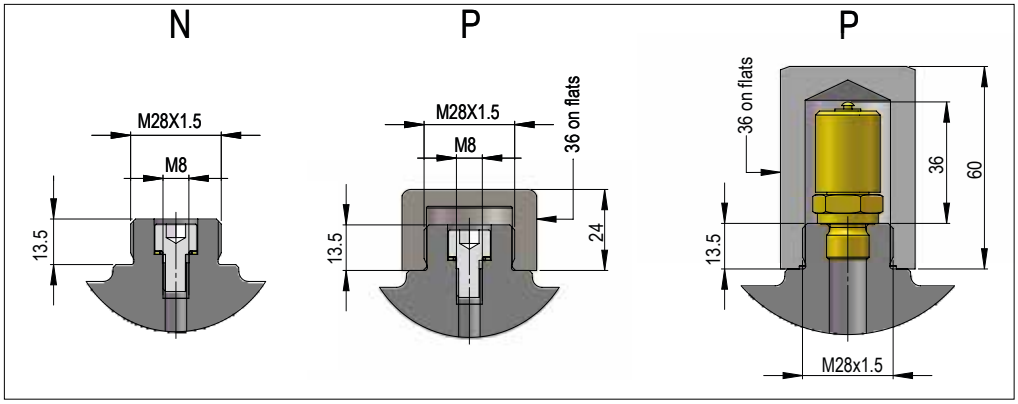
Dimensions in mm.

► Gas side connexion - Code 06



Dimensions in mm.

► Gas side connexion - Code 07



Dimensions in mm.