

LIGHTWEIGHT ALUMINIUM DIAPHRAGM ACCUMULATORS



Our hydraulic energy diaphragm accumulators are available in a variety of types for a wide range of applications. We offer a selection of accumulators that accommodate differences in nominal volumes, permissible operating pressures, gas pre-load, diaphragm materials, and fluid connections. Also, our aluminum diaphragm accumulators correspond to the European directive 2014/68/EU.

Materials*

Housing	Filling/Suggested Oil Type
Aluminum	Nitrogen/ Mineral oil of fluid group
Diaphragm Material	Permitted Operating Temperature
NBR	-20° C to +80° C
ECO	-40° C to +80° C

Operating Conditions

Maximum Pressure	Gas Filling	Installation Position
80 bar	Pure nitrogen; the required gas filling must be specified when placing the order**	Optional, preferably vertical

Dimensions

Volume [liters]	Height [mm]/Ø [mm]	Weight [kg]
0.16	h = 104 mm / Ø = 87 mm	0.5 kg
0.25	h = 116 mm / Ø = 97 mm	0.6 kg
0.32	h = 137 mm / Ø = 97 mm	0.8 kg
0.50	h = 147 mm / Ø = 110 mm	0.9 kg
0.75	h = 165 mm / Ø = 126 mm	1.3 kg

*Different diaphragm materials available on request. The permitted working temperatures are dependent on the application limits of the metal materials (housing) and the diaphragm materials.

**Catalog products do not contain a gas pre-charge. Please specify the gas fill pressure when placing the order.

Technical manual available on request.

VALUES FOR THE CUSTOMER

- Light weight
- High corrosion resistance
- Long service life due to design and diaphragm durability
- Reduced cost of system (aluminium accumulators allow for less expensive system components)
- Reduced total system weight (aluminium accumulators and components weigh less than steel, etc.)

Potential industrial and automotive applications include:

- Pilot circuits for agricultural and construction machinery
- Robotics
- Transmission control unit
- Brake systems

