

DIAPHRAGM ACCUMULATOR



Diaphragm Type | 100bar | Threaded

Specification/ Technical Data

Max. Operating Pressure	100 bar
Max. Nitrogen Pressure	60 bar
Min. N2 Pressure	$P_{max} \div 2.5$
Max Flow	15 lpm
Re-chargeable	Yes
Repairable	No
Body Material	Cast Steel
Media	Mineral Oil
Oil Temperature Range	+10 to 60°C
Oil Viscosity	ISO VG 46-100
Oil Cleanliness (ISO 4406)	20/18 /15
Orientation	Any
Weight (approx.)	2.5 - 3.7 Kg



FAD is a hydro-pneumatic accumulator used to store liquid under pressure. A flexible membrane or diaphragm is fitted into the body to separate the nitrogen and oil chambers. An inert gas like Nitrogen is charged into the port G1 through a pressure valve to a pressure P0. As the diaphragm expands, it fills the complete volume of the accumulator body V0.

When connected to a hydraulic system with pressure P1, which is higher than P0, the oil now compresses the nitrogen and thereby reduces the gas volume to V1.

A potential energy is now stored in the accumulator to be utilised whenever needed to absorb shocks, stabilise flow, leakage compensation and reduce any vibrations in hydraulic systems and thus improve equipment performance.

Key Features:

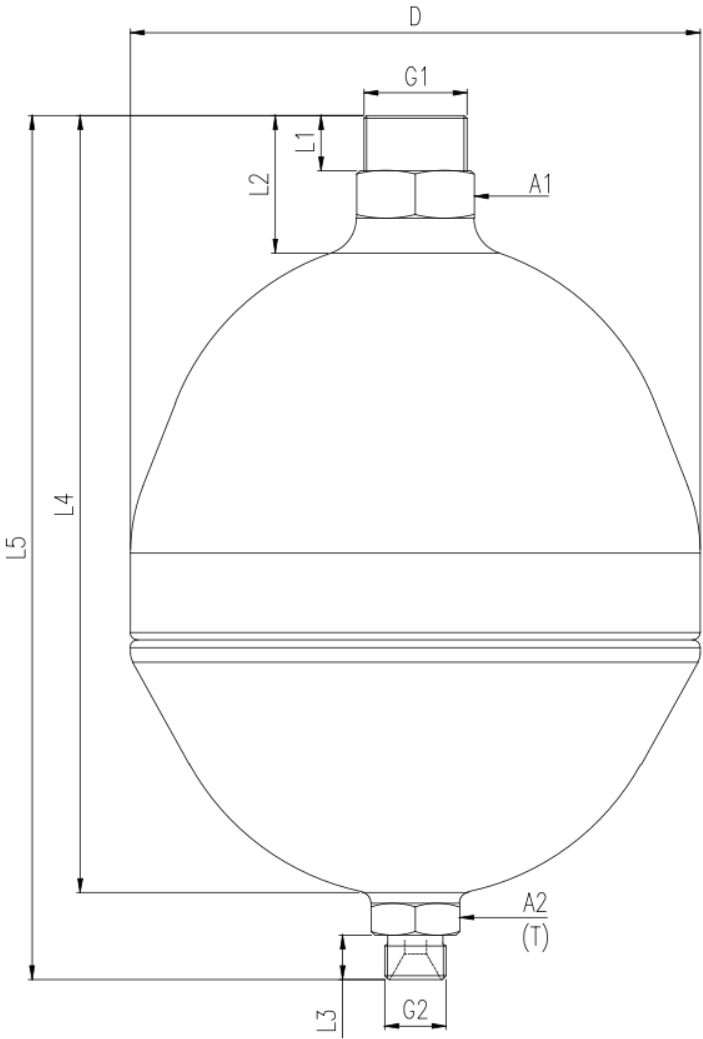
- Energy efficient
- Fast response
- Light weight and compact dimensions
- Refillable gas port compatible with popular filling equipment
- Specially designed for machine tool applications

Ordering Information

Basic Code	Diaphragm Accumulator	FAD
Capacity	1.0 or 1.5ltr	1.0
Max Pressure	100bar	100
Seal Material	Viton	No Code
Pre-Charge	Po	/20
Version		1x

Note: Nitrogen pressure will not be set unless specifically mentioned in the Purchase Order. Nitrogen Pressure can be set to a maximum of 60bar subject to application and accumulator limitations and requirements.

Dimensions



Model Code	Nominal Size	Max. Flow (L/min)	Weight (kg)
FAD-1.0	1.0L	15	5.0
FAD-1.5	1.5L	15	6.0

Size	øD	L1	L2	L3	L4	L5	G1	G2	A1	A2	Tightening Torque T (N-m)
1.0L	140	15	35	12	195	220	M18x1.5	3/8" BSP	32	24	19
1.5L	155	15	35	12	215	240	M18x1.5	3/8" BSP	32	24	19