



DIAPHRAGM ACCUMULATORS EUROPEAN STANDARD RANGE

FOR INDUSTRIAL APPLICATIONS

DIAPHRAGM ACCUMULATORS

VOLUMES FROM 0.07 TO 3.50 L

In Diaphragm Accumulators the hydraulic fluid is separated from the gas by a diaphragm. Designed for the most challenging applications that demand lightweight and high-strength performance, our Diaphragm Accumulators come in a variety of materials, seal types, and configurations. Our Diaphragm Accumulators offer exceptional functional reliability and durability, and expand versatile application areas with volumes from 0.07 up to 350 liters. Freudenberg meets your application challenges by providing accumulators that cover wide temperature ranges and deliver longer service life.

VALUES TO THE CUSTOMERS

- Several installation positions possible
- Metal diaphragm clamping ring to avoid temperature damages
- In-house diaphragm development
- Durable poppet valve
- Application-optimized in-house development of rubber material and sealing solutions
- Standard product range available in stock and ready to ship
- Low permeation
- High bursting strength and high permissible dynamic loads on the accumulator
- Regular testing procedures to ensure and proof the products' high quality
- Customer-specific solutions
- Simple maintenance through to a refillable design

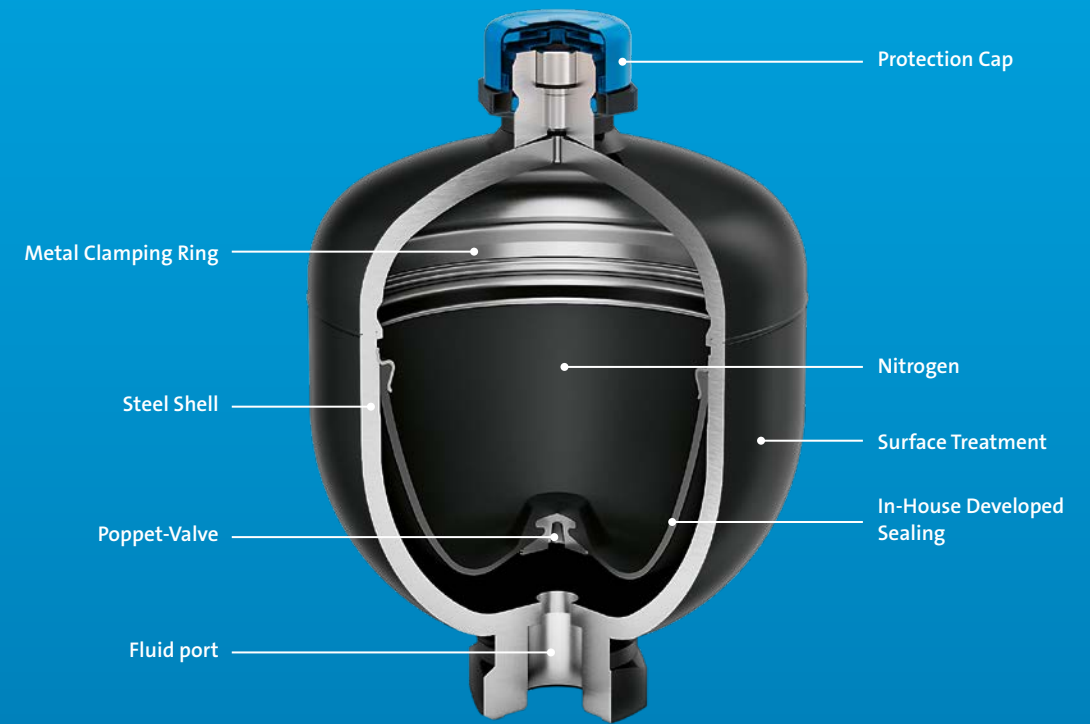
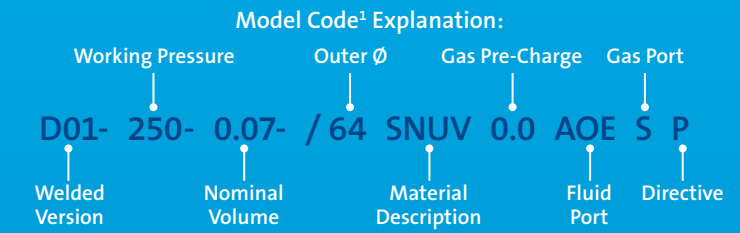
APPLICATION

- Fluid energy control system for:
- Industrial and mobile hydraulic systems
 - Agricultural and construction equipment
 - Factory automation and robotics
 - Machine tools
 - Power generation applications
 - Automotive applications

EUROPEAN STANDARD SERIES



With more than 60 years of accumulator experience we listed the mostly used diaphragm sizes and configurations. Further information and 3D models can also be found in our e-Catalog: <https://ecatalog.fst.com/seals/all/accumulator/>



STANDARD SERIES CONFIGURATIONS

Diaphragm Material <small>Further material or design options are available on request.</small>	Permissible Operating Temperature ²
Acrylnitril-butadiene-rubber (NBR) ¹	- 20 °C to + 80 °C
Epiclorhydrin rubber (ECO) ¹	- 40 °C to + 80 °C
Butyl rubber (CIIR)	- 40 °C to + 120 °C
Viton® (FKM)	- 20 °C to + 150 °C

FLOW RATE

Nominal Volume	Recommended Flow Rate in All Operating Conditions ⁴ [l/min]	Achievable Flow Rate [l/min]
0.07 - 0.16	10	38
0.32 - 1.4	40	95
2.00 - 3.50	60	95

Housing Material ²	Surface Treatment	Suggested Oil Type	Gas	Port		Installation Position	Directives	Documents <small>PED documents included</small>
				Female Thread	Male Thread			
Steel	UV lacquer or 2K-Epoxy resin varnish in black with long corrosion resistance	Mineral based oil of PED fluid group 2	Nitrogen	G ½ G ¾ M18x1.5 M22x1.5 ½-16 UNF-2B	M14x1.5 M16x1.5 M28x1.51 M33x1.5 ¾-14UNF 2A	Different positions possible	PED ³	· Declaration of Conformity/ · Manufacturer Certification · User Manual

EXAMPLE RFQ

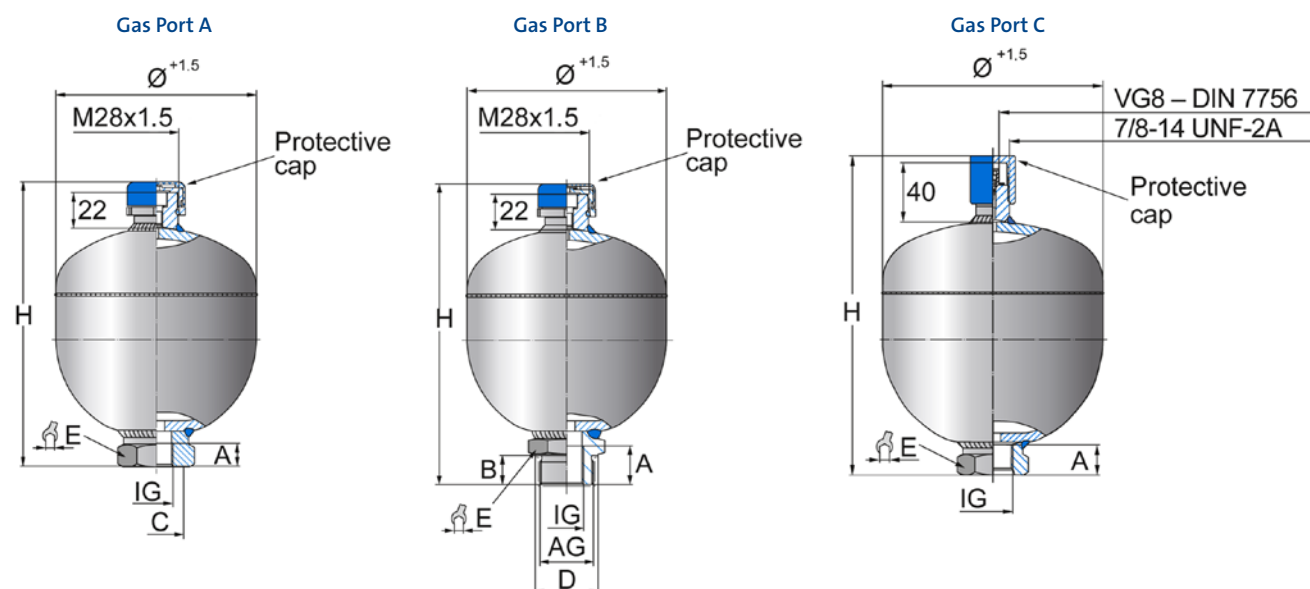
Model Code	Fluid Port	Gas Pre-Charge Pressure [bar]	Operating Fluid / Temperature Range / Gas Port
D01-210-0.75-/121SEUV0.0AOFSP	G ½	20.00	Standard

¹ Standard range

² Dependent on the application limits of the steel housing and diaphragm material

³ Further directives on request

⁴ Flow rates in relation to pressure drops in specific applications can be higher



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FREUDENBERG ACCUMULATOR PARTNER

With a broad product range and a global support network of experts, Freudenberg is your single source for accumulators. We drive innovation with research, development and production teams integrated across our global operations to meet the demands of global and local markets.

Our preferred partners provide you with products and knowledge expertly, reliably and quickly – close to the customer worldwide.

