

DIAPHRAGM ACCUMULATORS



Diaphragm Accumulators by Freudenberg Sealing Technologies are designed for industrial and mobile equipment applications that demand lightweight, high-strength performance. Diaphragm accumulators are used for a variety of applications including: energy storage, shock or pulsation dampening, leakage compensation, thermal expansion, energy conservation/supplement pump flow, noise reduction, and improved response time.

Our Diaphragm Accumulators are an integral part of a fluid energy control system for industrial and mobile hydraulic systems in agricultural and construction equipment, factory automation and robotics, machine tools, and power generation applications.

Our diaphragm accumulators are assembled in accordance with ASME and Pressure Equipment Directive 2014/68/EU standards. They are available in a variety of industry standard capacities and pressures to fulfill the needs of the global marketplace.

We continuously optimize and further develop our product portfolio to meet the demands of our customers. With nominal volumes from 0.07 to 3.5 and working pressures of upto 350 bar we have the perfect to meet your needs.

Freudenberg Sealing Technologies, through its subsidiaries in the Power & Vibration Control Division of Freudenberg Sealing Technologies, designs and produces accumulators with high-strength alloys and proprietary compounds for extreme duty, superior performance, reliability, and extended service life.

VALUES FOR THE CUSTOMER

- Low permeation
- Durable poppet valve
- Metal diaphragm clamping ring
- Extended maintenance intervals
- Wide temperature range
- Light weight
- A variety of models available, in stock and ready to ship
- Several installation positions
- Extensive material options to fit any application



The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

www.fst.com

DIAPHRAGM ACCUMULATORS MODEL NUMBERS

EUROPEAN UNION STANDARD RANGE

Freudenberg Sealing Technologies Type	Part Number	Nominal Volume V [L]	Permissible Operating Pressure PS [bar]	Test Pressure (1.5 x PS) PT [bar]	Permissible Working Pressure Range (*) DP [bar]	Working Temp Range TS [°C]	Max. Permissible Pressure Ratio P0 : P2	Weight kg	ø+3 mm	H mm	Fluid Port IG	Hex mm	
MBSP 0,07-250	49338274	0.07	250	375	140	-35 / 80	1 : 8	0.8	64	118	9/16-18 UNF-2B	SAE 6	32
	49338273					-10 / 80							
MBSP 0,16-250	49338272	0.16	250	375	140	-35 / 80	1 : 6	1.0	75	126	9/16-18 UNF-2B	SAE 6	32
	49338271					-10 / 80							
MBSP 0,32-210	49338276	0.32	210	315	120	-35 / 80	1 : 8	1.8	95	148	3/4-16 UNF-2B	SAE 8	41
	49338275					-10 / 80							
MBSP 0,50- 210	49338278	0.5	210	315	100	-35 / 80	1 : 8	2.1	107	158	3/4-16 UNF-2B	SAE 8	41
	49338277					-10 / 80							
MBSP 0,75- 210	49338292	0.75	210	315	93	-35 / 80	1 : 8	2.7	122	173	3/4-16 UNF-2B	SAE 8	41
	49338291					-10 / 80							
MBSP 0,75-250	49338279	0.75	250	375	140	-35 / 80	1 : 8	3.0	124	176	3/4-16 UNF-2B	SAE 8	41
	49338290					-10 / 80							
MBSP 1,0-210	49338363	1.0	210	315	115	-35 / 80	1 : 8	4.0	136	187	3/4-16 UNF-2B	SAE 8	41
	49338355					-10 / 80							
MBSP 1,4-210	49338259	1.4	210	315	140	-35 / 80	1 : 8	4.2	147	198	3/4-16 UNF-2B	SAE 8	41
	49338258					-10 / 80							
MBSP 1,4-250	49338341	1.4	250	375	140	-35 / 80	1 : 8	5.5	152	197	3/4-16 UNF-2B	SAE 8	41
	49338340					-10 / 80							
MBSP 2,0-250	49338344	2.0	250	375	140	-35 / 80	1 : 6	8.7	156	253	3/4-16 UNF-2B	SAE 8	41
	49338345					-10 / 80							
	49338346					-35 / 80							
	49338342					-10 / 80							
MBSP 2,8-250	49338348	2.8	250	375	140	-35 / 80	1 : 6	8.4	169	268	3/4-16 UNF-2B	SAE 8	41
	49338347					-10 / 80							
	49338360					-35 / 80							
	49338349					-10 / 80							
MBSP 3,5-250	49338362	3.5	250	375	140	-35 / 80	1 : 4	10.2	169	316	11/16-12 UNF-2B	SAE 12	41
	49338361					-10 / 80							

Notes:

- (1) Working fluid: mineral oil qualified for diaphragm material ECO, fluid group II according to PED 97/23/EC
- (2) Gas port: M28 x 1.5—charging valve
- (3) Maximum permissible nitrogen pressure: P0 max. = 130 bar
- (4) All accumulators are designed, manufactured and tested according to the requirements of PED
- (*) Permissible working pressure range represents dynamic housing fatigue 2 mio. pressure cycles

The information contained herein is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information presented herein is based on laboratory testing and does not necessarily indicate end product performance. Full scale testing and end product performance are the responsibility of the user.

www.fnst.com

FREUDENBERG
SEALING TECHNOLOGIES

 **FREUDENBERG**
INNOVATING TOGETHER