DIAPHRAGM ACCUMULATORS
EUROPEAN STANDARD RANGE
FOR INDUSTRIAL APPLICATIONS
DIAPHRAGM ACCUMULATORS

VOLUMES FROM 0.07 TO 3.5 L

- Simple maintenance through to a refillable design
- Customer-specific solutions
- Durable poppet valve
- Metal diaphragm clamping ring to avoid temperature damages
- Several installation positions possible

VALUES TO THE CUSTOMERS

- Installation flexibility
- Fluid energy control for specific applications
- Fully integrable and easily serviceable
- Applicable for a wide range of applications
- High process safety
- Easy maintenance and installation

EUROPEAN STANDARD SERIES

90+ years of experience in accumulator design and production
Manufacturing machinery for the production of diaphragm accumulator bodies and assemblies: High-precision and high-performance machines for the production of high-quality accumulators.

STANDARD SERIES CONFIGURATIONS PART 1

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Type</th>
<th>Size</th>
<th>Port</th>
<th>Version</th>
<th>Thread</th>
<th>Material</th>
<th>Working Pressure</th>
<th>Volume</th>
<th>Oil Type</th>
<th>Oil Group</th>
<th>Sealing</th>
<th>Pressure Relief</th>
<th>Description</th>
<th>Surface Treatment</th>
<th>In-House Developed</th>
<th>Declaration of Conformity/ PED documents included</th>
<th>Achievable</th>
</tr>
</thead>
<tbody>
<tr>
<td>D01-210-0.75-/121SNUV0.0AOFSP</td>
<td>1</td>
<td>SW 32</td>
<td>A</td>
<td>1</td>
<td>3/4-16 UNF 2A</td>
<td>Steel</td>
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<td>0.075</td>
<td>20</td>
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<td>Pressure Relief</td>
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<td>Steel Shell</td>
<td>2K-Epoxy resin</td>
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<tr>
<td>D01-250-0.50-/106SNUV0.0AOFSP</td>
<td>2</td>
<td>SW 41</td>
<td>A</td>
<td>2</td>
<td>M14x1.5</td>
<td>Steel</td>
<td>0.50</td>
<td>0.05</td>
<td>160</td>
<td>None</td>
<td>Pressure Relief</td>
<td>2</td>
<td>Steel Shell</td>
<td>20.00</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>D01-330-0.50-/110SNUV0.0AAFSP</td>
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<td>SW 32</td>
<td>A</td>
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<td>M14x1.5</td>
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<td>Steel Shell</td>
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<td>Pressure Relief</td>
<td>2</td>
<td>Steel Shell</td>
<td>20.00</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

- Catalogue notes: entries are per range of our product groups. Properties remaining for the type or series description shall be determined within the example.

- All information is to be confirmed prior to purchase.

- All calculation based on specified oil and temperature.

- All conditions and specifications are subject to change without notice.
### European Standard Series

**Accumulators for a wide range of applications.**

**Features:**
- **Diaphragm Accumulators**
- **Diaphragm Material:**
  - Viton® (FKM) -20 °C to +150 °C
  - Acrylnitril-butadiene-rubber (NBR) -20 °C to +80 °C
- **Additional Features:**
  - In-house diaphragm development
  - Metal diaphragm clamping ring to avoid temperature deformation
  - Several installation positions possible

**Applications:**
- **Challenging Applications**
  - Lightweight and high-strength performance
  - Power generation applications
  - Machine tools
  - Factory automation and robotics
  - Agricultural and construction equipment

**Values to the Customers:**
- Regular testing procedures to ensure and proof the quality of the products
- High reliability and long-term stability
- Simplified application through its overall design

**Nominal Flow Rate**

<table>
<thead>
<tr>
<th>Pressure Ratio</th>
<th>Flow Rate (l/min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:8</td>
<td>0.07 - 0.16</td>
</tr>
</tbody>
</table>

**Catalog Articles**

- Use Manual
- Manufacturer Certification
- Declaration of Conformity/PED

**EUROPEAN STANDARD SERIES**

**Dimensions:**

<table>
<thead>
<tr>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ø 100 – 350 mm</td>
</tr>
</tbody>
</table>

**Working Pressure:**

<table>
<thead>
<tr>
<th>Pressure Band</th>
<th>Working Pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 100 bar</td>
<td>0 – 100 bar</td>
</tr>
</tbody>
</table>

**Thread Details:**

<table>
<thead>
<tr>
<th>Thread</th>
</tr>
</thead>
<tbody>
<tr>
<td>G ½</td>
</tr>
</tbody>
</table>

**Thread Types:**

- Male
- Female

**Pressure Ratio:**

<table>
<thead>
<tr>
<th>Ratio</th>
</tr>
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<tbody>
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<td>1:8</td>
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</table>

**Accumulator Design:**

- **D** External thread screw-in depth oil side
- **E** External thread screw-in depth external side
- **F** External thread screw-in depth female thread sealing surface
- **G** External thread screw-in depth external thread sealing surface

**Flow Rate Table**

<table>
<thead>
<tr>
<th>Model Code</th>
<th>Diaphragm Material</th>
<th>Diaphragm Thickness (mm)</th>
<th>Nominal Flow Rate (l/min)</th>
<th>Working Pressure (bar)</th>
<th>Gas Port A</th>
<th>Gas Port B</th>
<th>Gas Port C</th>
</tr>
</thead>
<tbody>
<tr>
<td>D01-160-0.50-/103SNUV0.0AOFSP</td>
<td>NBR -20 °C to +80 °C</td>
<td>0.50</td>
<td>16.00</td>
<td>100</td>
<td>160.00</td>
<td>160.00</td>
<td>160.00</td>
</tr>
</tbody>
</table>

**STANDARD SERIES CONFIGURATIONS PART 1**

**Thread Types:**

- **G ½**
- **M33x1.5**
- **M16x1.5**
- **M14x1.5**

**Pressure Band:**

- 0 – 100 bar

**Flow Rates:**

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</table>

**Protection Cap**

- In-House Developed
- Manufacturer Certification
- Declaration of Conformity/PED

**In-House Developed**

- User Manual
- Declaration of Conformity
- Manufacturer Certification
- Certification

**Stainless Steel**

- For Extreme Environments
- For High-Pressure Applications

**Diaphragm Accumulators**

- **Volume:** 0.07 to 3.50 L
- **Application:**
  - Power generation applications
  - Machine tools
  - Factory automation and robotics
  - Agricultural and construction equipment

**Additional Features:**

- Regular testing procedures to ensure and proof the quality of the products
- High reliability and long-term stability
- Simplified application through its overall design

**Thread Details:**

- **G ½**
- **M33x1.5**
- **M16x1.5**
- **M14x1.5**

**Pressure Ratio:**

- 1:8

**Flow Rate Table**

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<tr>
<td>D01-137-3.50-/137SNUV0.0AAFSP</td>
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<td>128.50</td>
<td>G1/2</td>
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<td>D01-200-2.00-/156SEIC0.0COFSP</td>
<td>156.00</td>
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<td>ECO</td>
<td>-40.00</td>
</tr>
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<td></td>
<td></td>
<td>NBR</td>
<td>-20.00</td>
</tr>
<tr>
<td>D01-250-1.00-/137SNUV0.0AOFSP</td>
<td>137.00</td>
<td>G1/2</td>
<td>M33x1.5</td>
<td></td>
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<td>137.00</td>
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<td>none</td>
<td></td>
<td></td>
<td>NBR</td>
<td>-20.00</td>
</tr>
</tbody>
</table>

* Catalog articles do contain a gas pre-charge of 0 bar. Please specify the gas fill pressure, if departing from 0 bar, when placing the order. The Article short description and SAP number will then be adapted.

Permanent Working Liquid connection external thread sealing surface

Liquid connection female thread sealing surface

SIEMENS SEALS TECHNOLOGIES

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**DIAPHRAGM ACCUMULATORS**

**EUROPEAN STANDARD RANGE**

**FOR INDUSTRIAL APPLICATIONS**

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 across our global operations to meet the demands of global and local markets.

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