Application
In the suction line of pumps of hydraulic or lubricating circuits.

Performance features
Protection against malfunction:
By full-flow filtration in the suction line, particularly the pumps are protected from coarse dirt particles that have remained in the system after manufacture or repair, or enter the system when it is filled with oil.

Special features
The robust construction with hose fittings, corpus out of reinforced plastics and embedded mesh screen material offers the following advantages:
› high reliability at low dead weight
› enormous shock and vibration resistance
› easy mounting

Construction
Flow direction from outside to center. By using optimized filter material, pressure drops are kept down. The suction filters operate without by-pass valves. This guarantees continuous full flow filtration.

Filter maintenance
These suction filters have to be replaced on regular basis, e.g. together with the replacement of the hydraulic fluid. It is recommended to change the filter every 2 years or every 2000 operating hours, depending on what occurs first.
When replacing, it is inevitable to prevent any dirt from entering the inner side (clean oil side) of the filter.
Please refrain from cleaning these suction filters.
**Characteristics**

**Nominal flow rate**
Up to 160 l/min / 42.3 gpm (see Selection Chart, column 2). The nominal flow rates indicated by ARGO-HYTOS are based on the following features:
- pressure drop \( \Delta p \) < 0.035 bar at \( \nu = 35 \text{ mm}^2/\text{s} \) 
  < 0.507 psi at \( \nu = 162 \text{ SUS} \)
- pressure drop \( \Delta p \) \leq 0.25 bar / 3.62 psi 
  at 1/3 of the nominal flow rate and \( \nu = 4,000 \text{ mm}^2/\text{s} / 18,600 \text{ SUS} \) 
  (~ HLP 46 at -20 °C / 4 °F)
- flow velocity in the connection lines \( \leq 1.5 \text{ m/s} / 4.9 \text{ ft/s} \)

**Connection**
Fittings for hoses up to DN 60.
Sizes see Selection Chart, column 6, (other port threads on request).

**Filter fineness**
135 µm, 280 µm

**Hydraulic fluids**
Mineral oil and biodegradable fluids (HEES and HETG, see info-sheet 00.20).

**Temperature range**
-30 °C ... +80 °C (temporary -40 °C ... +100 °C)
-22 °F ... +176 °F (temporary -40 °F ... +212 °F)

**Materials**
- Corpus: Polyamide, GF reinforced
- Cap: Polyamide, GF reinforced
- Seal: NBR (FPM on request)
- Filter mesh: Polyester

**Viscosity at nominal flow rate**
- \( \nu < 60 \text{ mm}^2/\text{s} / 280 \text{ SUS} \) at operating temperature
- as start-up viscosity \( \nu_{\text{max}} \) equivalent to the permitted pump inlet pressure (refer to diagram D1), \( \Delta p \) to be determined as a function of the viscosity (take pressure loss in connection lines into account!)

**Mounting position**
Optional, preferably in horizontal position.
Under all operating conditions (min. oil level, max. inclination) the suction must occur under the oil level.

**Diagrams**

- \( \Delta p \)-curves for filters in Selection Chart, column 3

**Diagram D1**
Pressure drop as a function of the flow volume at \( \nu = 35 \text{ mm}^2/\text{s} / 162 \text{ SUS} \)

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### Selection Chart

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Nominal flow rate (l/min)</th>
<th>Pressure drop (µm)</th>
<th>Filter fineness (µm)</th>
<th>Filter surface (cm²)</th>
<th>Connection B (mm)</th>
<th>Connection M* (mm)</th>
<th>Material</th>
<th>Length L₁ (mm)</th>
<th>Length L₂ (mm)</th>
<th>Length L₃ (mm)</th>
<th>Length L₄ (mm)</th>
<th>Weight (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S0.0426-02</td>
<td>30</td>
<td>D1/1</td>
<td>135</td>
<td>115</td>
<td>32.0</td>
<td>M42 x 2</td>
<td>60</td>
<td>39</td>
<td>251</td>
<td>198</td>
<td>AF 50</td>
<td>1</td>
</tr>
<tr>
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<td>60</td>
<td>D1/2</td>
<td>280</td>
<td>115</td>
<td>32.0</td>
<td>M42 x 2</td>
<td>60</td>
<td>39</td>
<td>251</td>
<td>198</td>
<td>AF 50</td>
<td>1</td>
</tr>
<tr>
<td>S0.0638-01</td>
<td>80</td>
<td>D1/3</td>
<td>135</td>
<td>320</td>
<td>60.5</td>
<td>M64 x 2</td>
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<td>55</td>
<td>370</td>
<td>290</td>
<td>AF 65</td>
<td>1</td>
</tr>
<tr>
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<td>160</td>
<td>D1/4</td>
<td>280</td>
<td>320</td>
<td>60.5</td>
<td>M64 x 2</td>
<td>85</td>
<td>55</td>
<td>370</td>
<td>290</td>
<td>AF 65</td>
<td>1</td>
</tr>
</tbody>
</table>

**Remarks:**

The filters listed in this chart are standard filters. If modifications are required we kindly ask for your request.

### Dimensions

![Dimensions Diagram]

Recommended port sizes

*The thread dimensions do not exactly conform to the DIN ISO standard thread (functioning with the DIN ISO standard thread is guaranteed)*
Symbols

1

2

Quality Assurance

Quality management according to DIN EN ISO 9001
To ensure constant quality in production and operation, ARGO-HYTOS filter elements undergo strict controls and tests according to the following ISO standards:

ISO 2941  Verification of collapse / burst pressure rating
ISO 2942  Verification of fabrication integrity (Bubble Point Test)
ISO 2943  Verification of material compatibility with fluids
ISO 3968  Evaluation of pressure drop versus flow characteristics
ISO 16889 Multi-Pass-Test (evaluation of filter fineness and dirt-holding capacity)
ISO 23181 Determination of resistance to flow fatigue using high viscosity fluid

Various quality controls during the production process guarantee the leakfree function and solidity of our filters.

Illustrations may sometimes differ from the original. ARGO-HYTOS is not responsible for any unintentional mistake in this specification sheet.