



**High-Pressure Safety Filters**

**HD 040 • HD 081  
HD 150**

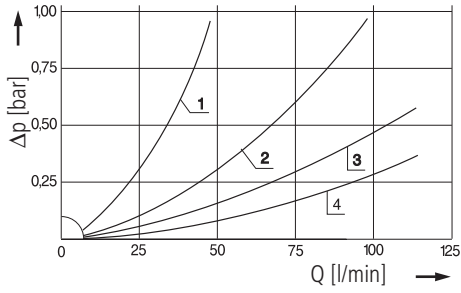
- In-line mounting
- Operating pressure up to 315 bar
- Nominal flow rate up to 100 l/min



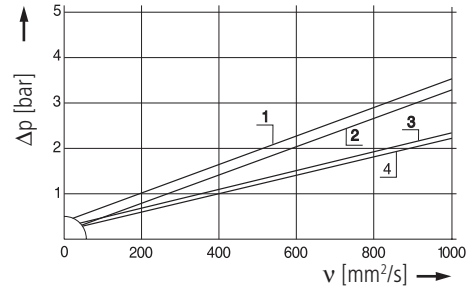
## Diagrams

$\Delta p$ -curves for the filters in Selection Chart, column 3

**D1** Pressure drop as a function of the **flow volume**  
at  $v = 35 \text{ mm}^2/\text{s}$

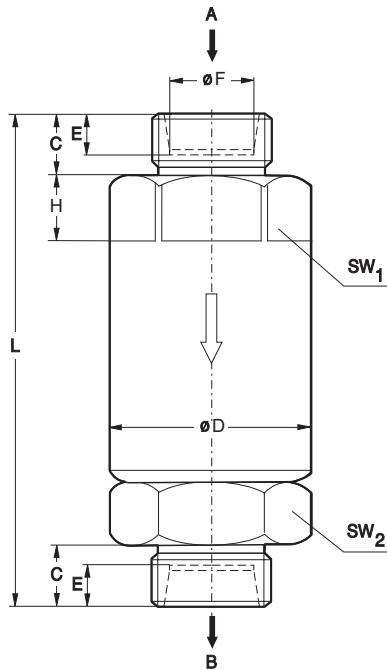


Pressure drop as a function of the **kinematic viscosity**  
at nominal flow

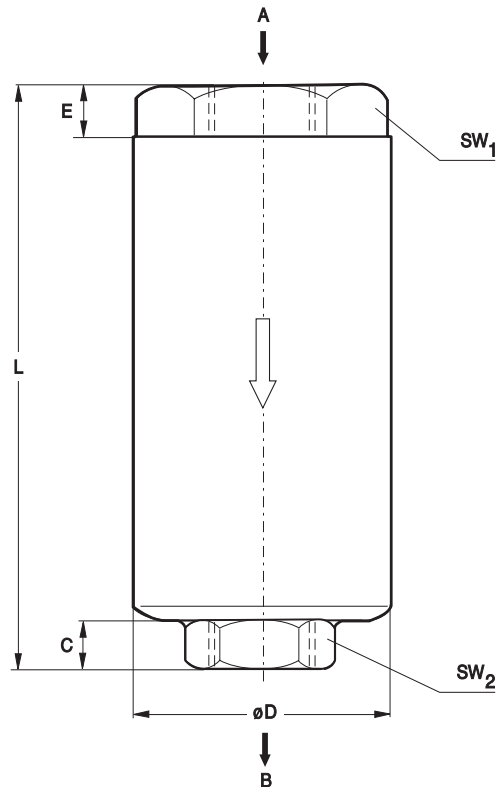


## Dimensions

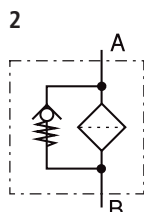
HD 040 / HD 081



HD 150



## Symbols



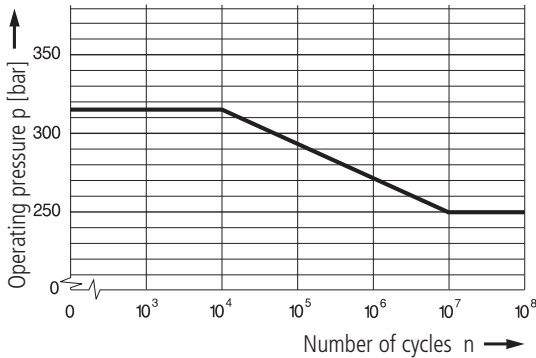
## Characteristics

### Operating pressure

0 ... 250 bar, min.  $10^7$  pressure cycles  
Nominal pressure according to DIN 24550

0 ... 315 bar, min.  $10^4$  pressure cycles  
Quasi-static operating pressure

### Permissible pressure for other numbers of cycles



### Nominal flow rate

Up to 100 l/min (see Selection Chart, column 2)  
The nominal flow rates indicated by ARGO-HYTOS are based on the following features:

- closed by-pass valve at  $v \leq 200$  mm<sup>2</sup>/s
- flow velocity in the connection lines:
  - up to 250 bar  $\leq 8$  m/s
  - up to 450 bar  $\leq 12$  m/s

### Filter fineness

60  $\mu$ m, 100  $\mu$ m  
(see Selection Chart, column 4)

### Hydraulic fluids

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

### Temperature range

- 30 °C ... + 100 °C (temporary - 40 °C ... + 120 °C)

### Viscosity at nominal flow rate

- at operating temperature:  $v < 60$  mm<sup>2</sup>/s
- as starting viscosity:  $v_{\max} = 1200$  mm<sup>2</sup>/s
- at initial operation: The recommended starting viscosity can be read from the diagram D (pressure drop as a function of the kinematic viscosity) as follows: Find the 70%  $\Delta p$  of the cracking pressure of the by-pass valve on the vertical axis. Draw a horizontal line so that it intersects the  $\Delta p$  curve at a point. Read this point on the horizontal axis for the viscosity.

### Mounting position

As desired

### Connection

Threaded ports according to ISO 228, DIN 13 and/or DIN 3861. Sizes see Selection Chart, column 7 (other port threads on request).

## 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 DIN and ISO standards:

- DIN ISO 2941** Verification of collapse/burst resistance
- DIN ISO 2943** Verification of material compatibility with fluids
- DIN ISO 3724** Verification of flow fatigue characteristics

### ISO 2942 ISO 3968 ISO 16889

Verification of fabrication integrity (Bubble Point Test)  
Evaluation of pressure drop versus flow characteristics  
Multi-Pass-Test (evaluation of filter fineness and dirt-holding capacity)

Before release into the series production the filter casing is tested for fatigue strength in our pressure pulse test rig. Various quality controls during the production process guarantee the leakfree function and solidity of our filters.

Our engineers will be glad to advise you in questions concerning filter application, selection as well as the cleanliness class of the filtered medium attainable under practical operating conditions.

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



### We produce fluid power solutions

ARGO-HYTOS GMBH · Industriestraße 9 · D-76703 Kraichtal

Tel: +49 7250 76-0 · Fax: +49 7250 76-199 · info.de@argo-hytos.com · www.argo-hytos.com