



High-Pressure Safety Filters

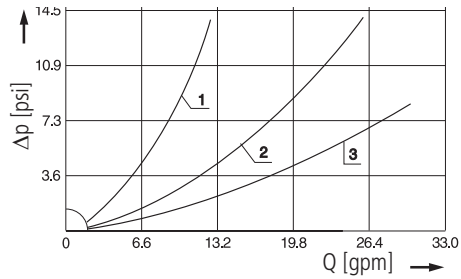
**HD 040 • HD 081
HD 150**

- In-line mounting
- Operating pressure up to 7250 psi
- Nominal flow rate up to 26.4 gpm

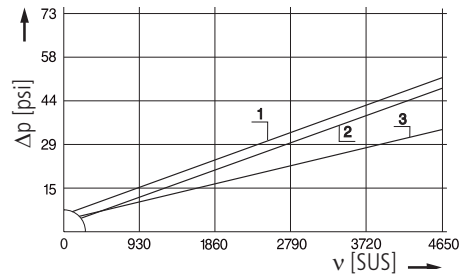
Diagrams

Δp -curves for the filters in Selection Chart, column 3

D1 Pressure drop as a function of the **flow volume**
at $\nu = 162$ SUS

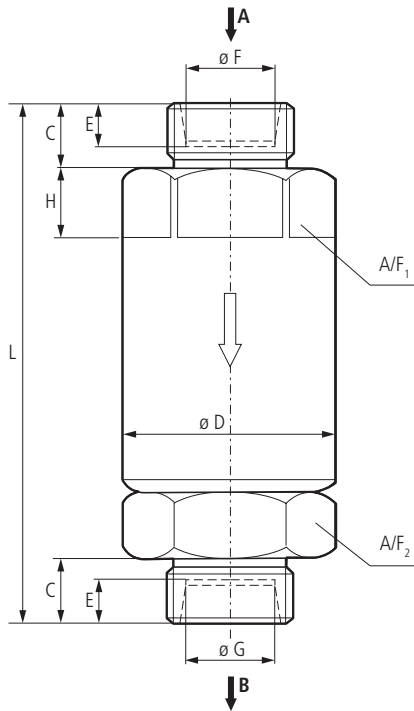


Pressure drop as a function of the **kinematic viscosity**
at nominal flow

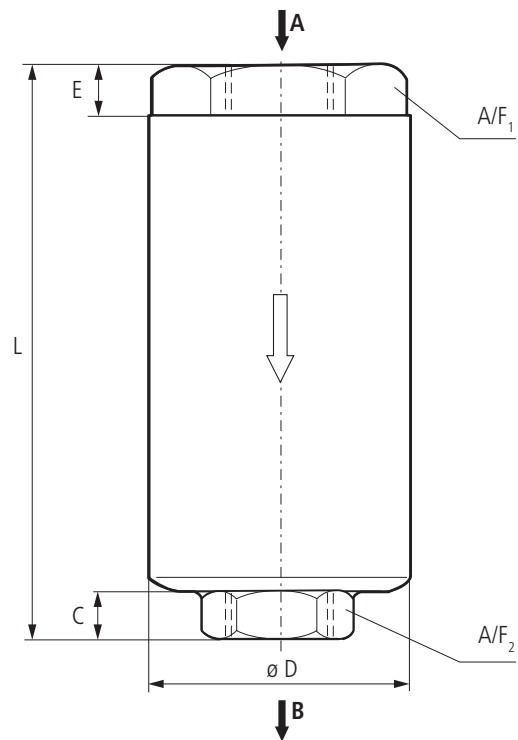


Dimensions

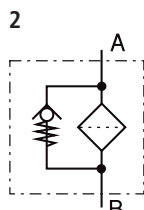
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HD 150



Symbols



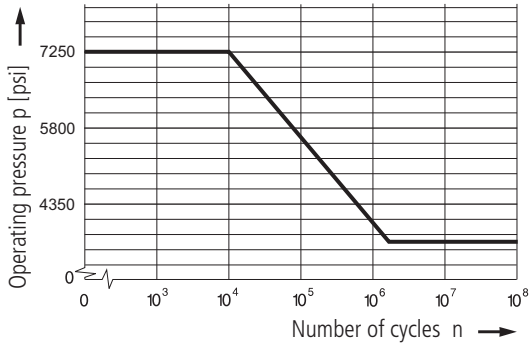
Characteristics

Operating pressure

0 ... 3625 psi min. 2×10^6 pressure cycles
Nominal pressure according to DIN 24550

0 ... 7250 psi, min. 10^4 pressure cycles
Quasi-static operating pressure

Permissible pressure for other numbers of cycles



Nominal flow rate

Up to 26.4 gpm (see Selection Chart, column 2)
The nominal flow rates indicated by ARGO-HYTOS are based on the following features:

- closed by-pass valve at $v \leq 930$ SUS
- flow velocity in the connection lines:
 - up to 3626 psi ≤ 26.3 ft/s
 - > 3626 psi ≤ 39.4 ft/s

Filter fineness

60 μm , 100 μm
(see Selection Chart, column 4)

Hydraulic fluids

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

Temperature range

- 22 °F ... + 212 °F (temporary - 40 °F ... + 248 °F)

Viscosity at nominal flow rate

- at operating temperature: $v < 280$ SUS
- as starting viscosity: $v_{\text{max}} = 5560$ SUS
- 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 % Δp of the cracking pressure of the by-pass valve on the vertical axis. Draw a horizontal line so that it intersects the Δp curve at a point. Read this point on the horizontal axis for the viscosity.

Mounting position

As desired

Connection

Threaded ports according to SAE standard J514. 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 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 ISO 16889

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

ISO 23181

Determination of resistance to flow fatigue using high viscosity fluid

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

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