

Suction Filters

S0.0426 · S0.0638

- In Tank mounting
- Hose connection up to DN 60
- Nominal flow rate up to 160 l/min

Description

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 centre. 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.

Selection Chart

Part No.	Nominal flow	Pressure drop see diagram D /curve no.	Filter fineness	Filter surface	Connection B	Connection M	Diameter D ₁	Diameter D ₂	Length L ₁	Length L ₂	Dimension K	Symbol	Weight	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S0.0426-02	30	D1/1	135	115	32,0	M42 x 2	60	39	251	198	SW50	1	0,09	-
S0.0426-13	60	D1/2	280	115	32,0	M42 x 2	60	39	251	198	SW50	1	0,09	-
S0.0638-01	80	D1/3	135	320	60,5	M64 x 2	85	55	370	290	SW65	1	0,17	-
S0.0638-03	160	D1/4	280	320	60,5	M64 x 2	85	55	370	290	SW65	1	0,17	-

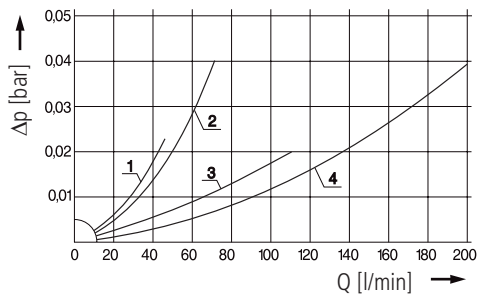
Remarks:

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

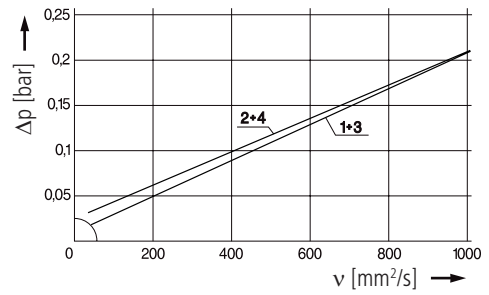
Diagrams

Δp -curves for filters in Selection Chart, column 3

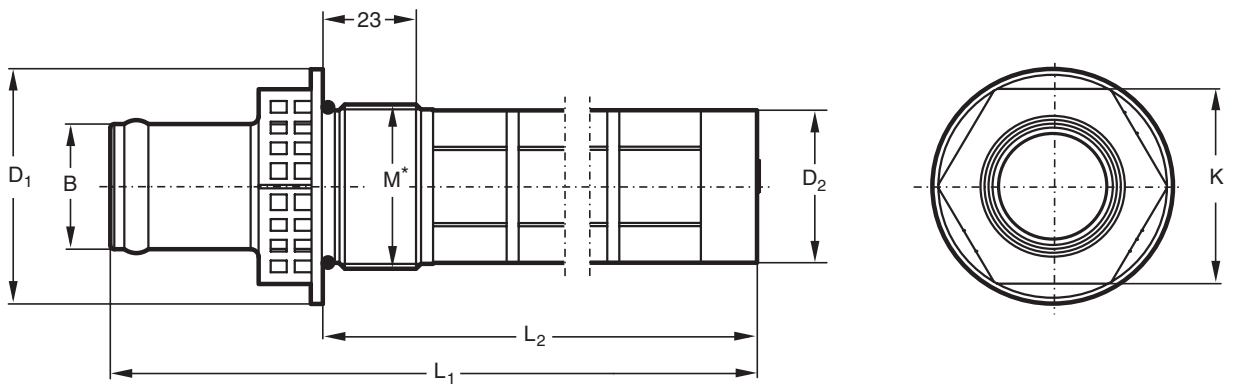
D1 Pressure drop as a function of the **flow volume**
at $v = 35 \text{ mm}^2/\text{s}$



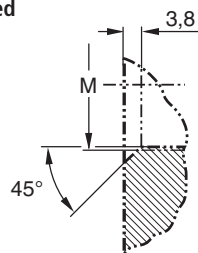
Pressure drop as a function of the **kinematic viscosity**
at nominal flow



Dimensions



Recommended
port sizes



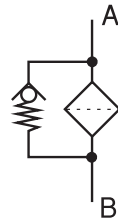
* The thread dimensions do not exactly conform to the DIN ISO standard thread (functioning with the DIN ISO standard thread is guaranteed)

Symbols

1



2



Characteristics

Nominal flow rate

Up to 160 l/min (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 $v = 35$ mm²/s
- Pressure drop $\Delta p \leq 0,25$ bar at $\frac{1}{3}$ of the nominal flow rate and $v = 4000$ mm²/s (~ HLP 46 at -20 °C)
- flow velocity in the connection lines $\leq 1,5$ m/s

Connection

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

Filter fineness

135 μ m, 280 μ m

Hydraulic fluids

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

Temperature range

-30 °C ... +80 °C (temporary -40° ... +100 °C)

Materials

Corpus: Polyamide, GF reinforced
Screw-on cap: Polyamide, GF reinforced
Seal: NBR (Viton on request)
Filter mesh: Polyethylene terephthalate

Viscosity at nominal flow rate

- at operating temperature: $v < 60$ mm²/s
- start-up viscosity: v_{max} equivalent to the permitted pump inlet pressure (refer to diagram D), Δp 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.

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)

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

Our engineers will be glad to advice 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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