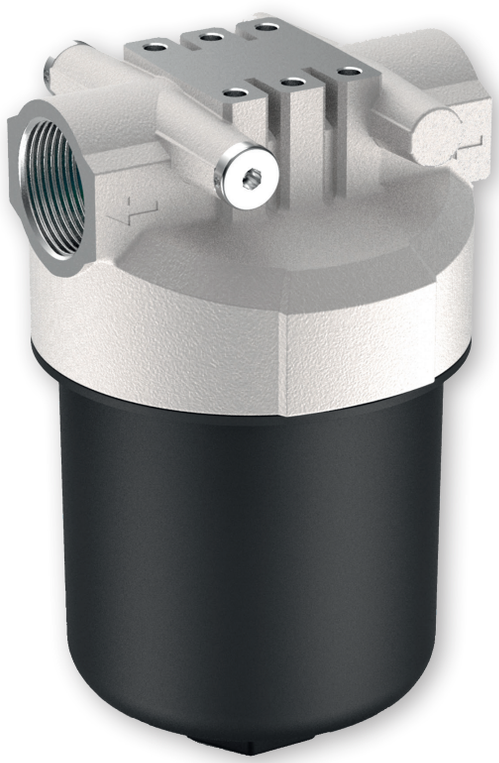
SFL 040 · SFL 075

In-line mounting · Connection G1¼ / -20 SAE · Nominal flow rate up to 90 l/min / 23.8 gpm



In-line Suction Filter SFL 075

Description

Application

To be installed in the suction line of the pumps of hydraulic systems resp. upstream of the charge pumps of hydrostatic drives.

Filter maintenance

By using a clogging indicator the correct moment for maintenance is stated and thus the optimum utilization of the filter life is guaranteed.

Materials

Filter head:	Aluminum alloy
Filter bowl:	Polyamide, GF reinforced
Seals:	NBR (FPM on request)
Filter media:	Paper - cellulose web, impregnated with resin

Accessories

Electrical and optical clogging indicators are available.
For technical data and dimensions see datasheet 60.20.

Characteristics

Nominal flow rate

Up to 90 l/min / 23.8 gpm.
The nominal flow rates indicated by ARGO-HYTOS are based on the following features:

- Closed by-pass valve at $\nu \leq 150$ mm²/s / 695 SUS
- Element service life > 500 operating hours at an average fluid contamination of 0.07 g per l/min / 0.27 g per gpm flow volume
- Flow velocity in the connection lines ≤ 2 m/s / 6.5 ft/s

Connection

Threaded ports according to ISO 228 or DIN 13 and SAE standard J514. Sizes see Selection Chart, page 3,
(other port threads on request).
For installation recommendations, see info sheet 00.325.

Filter fineness

50 µm(c)
ß-values according to ISO 16889 (see diagrams)

Hydraulic fluids

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

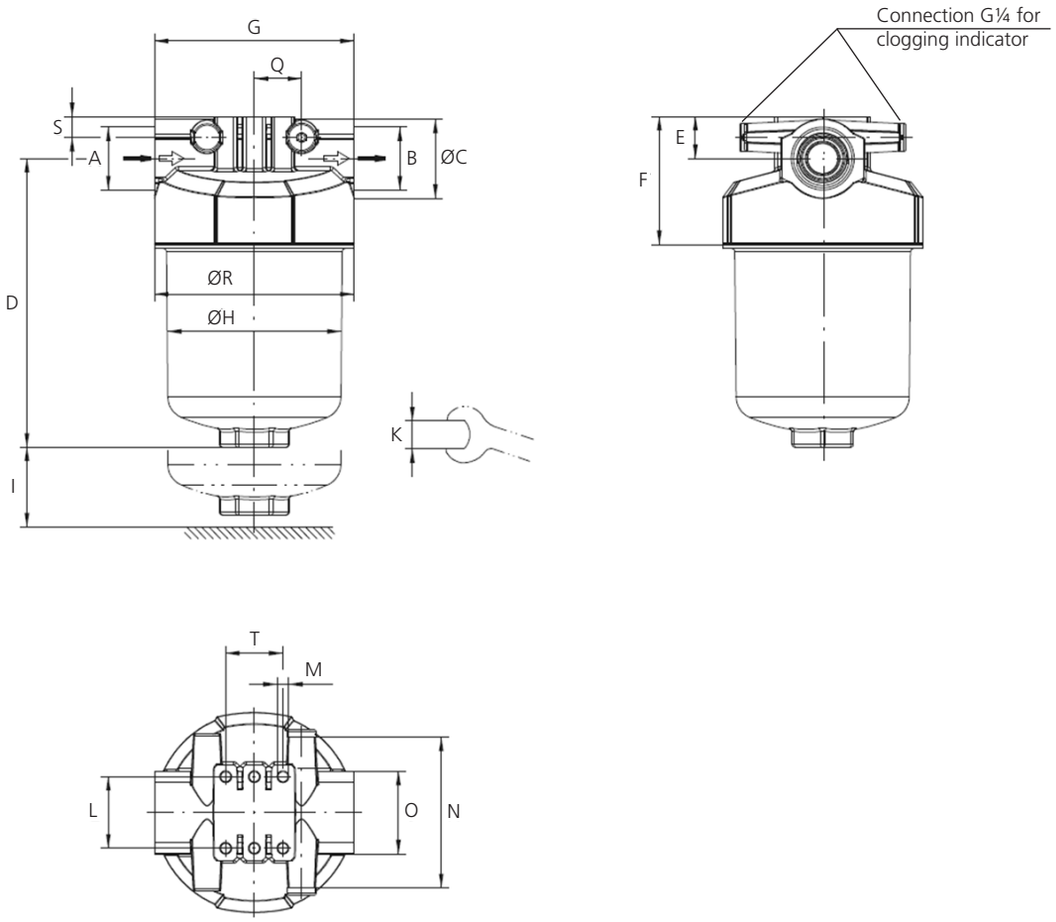
Temperature range

-30 °C ... +100 °C (temporary -40 °C ... +120 °C)
-22 °F ... +212 °F (temporary -40 °F ... +248 °F)

Mounting position

Vertical mounting to be preferred, filter head on top.

Dimensions



Measurements in mm / inch

Type [mm]	A	B	C	D	E	F	G	H	I	K	L	M Ø/depth	N	O	Q	R	S	T
SFL 040	G1¼	G1¼	52	192	28	85	133	117	60	AF 41	47.6	M8 / 15	100	AF 55	31.5	133	14	38.1
SFL 075	G1¼	G1¼	52	302	28	85	133	117	60	AF 41	47.6	M8 / 15	100	AF 55	31.5	133	14	38.1

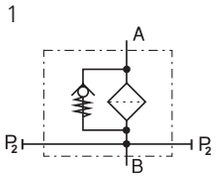
Type [inch]	A	B	C	D	E	F	G	H	I	K mm	L	M Ø/depth	N	O mm
SFL 040	-20 SAE*	-20 SAE*	2.05	7.56	1.10	3.35	5.24	4.61	2.36	AF 41	1.87	M8 / 15	3.94	AF 55
SFL 075	-20 SAE*	-20 SAE*	2.05	11.89	1.10	3.35	5.24	4.61	2.36	AF 41	1.87	M8 / 15	3.94	AF 55

Type [inch]	Q	R	S	T
SFL 040	1.24	5.24	0.55	1.50
SFL 075	1.24	5.24	0.55	1.50

*Corresponds to $1^{5}/_{8}$-12 UN-2B

Symbol

1



Ordering Code

Filter assembly

Order example:
SFL - 040 - GE - P3 - DM - 100

SFL - ___ - ___ - P3 - DM - 100

Type of filter	Code
Suction Filter, In-line	SFL

Flow rate, max.	Code
50 l/min / 13.2 gpm	040
90 l/min / 23.8 gpm	075

Connection thread	Code
G1¼	GE
- 20 SAE	UE

Filter fineness	Code
50 µm (50P)	P3

Air breather	Code
not available	100

Bypass setting	Code
-0.3 bar / -4.4 psi	DM

Filters delivered with 2 plugged connections G¼ for clogging indicators.

Spare filter element

Order example:
P3.1014-02

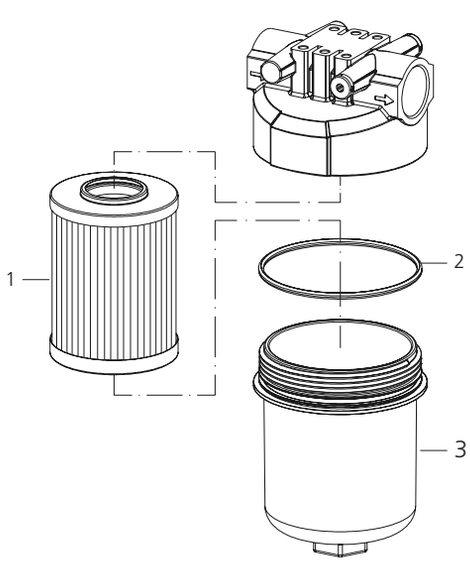
P3.10 ___ - 0 2

Filter media	Code
Paper	P

Length	Code
for SFL 040	14
for SFL 075	25

Filter fineness	Code
50P	2

Spare parts



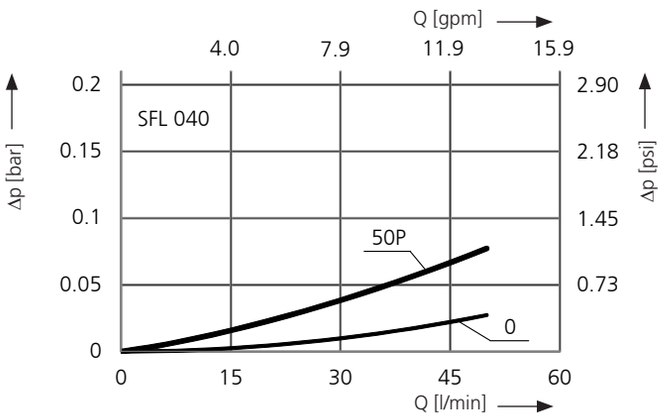
Pos.	Designation	Part No.
1	Filter element	see above
2	O-ring 115 x 4.5 mm 4.53 x 0.18 inch	N007.1155
3	Filter bowl SFL 040	D 230.0102
3	Filter bowl SFL 075	D 230.0101

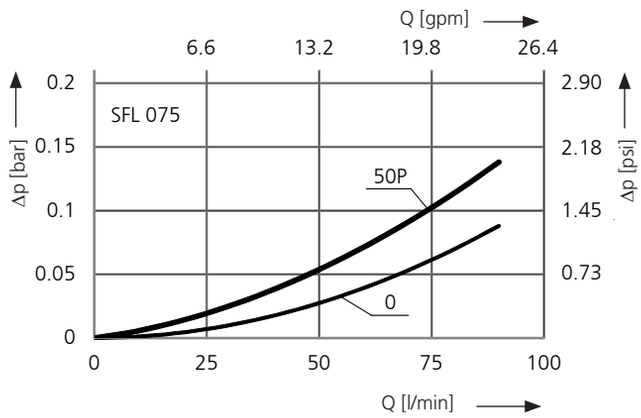
The functions of the complete filters as well as the outstanding features of the filter elements assured by ARGO-HYTOS can only be guaranteed if original ARGO-HYTOS spare parts are used.

Diagrams

Δp-curves for complete filters

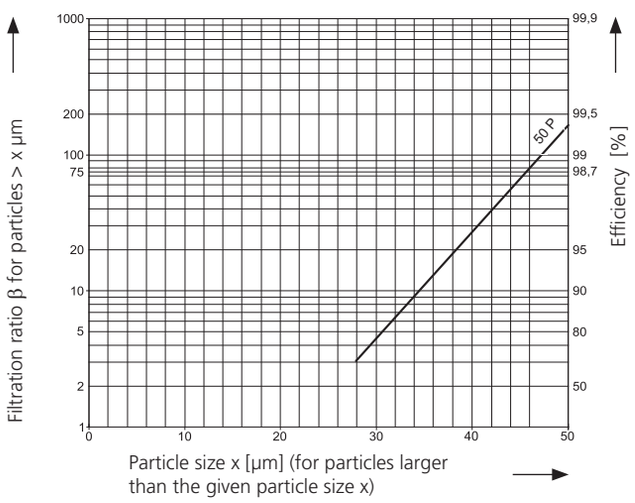
D1 Pressure drop as a function of the **flow volume** at ν = 35 mm²/s / 162 SUS (0 = housing empty)





Filter fineness curves

Dx Filtration ratio β as a function of particle size x obtained by the Multi-Pass-Test according to ISO 16889



The abbreviations represent the following β-values resp. finenesses:

For EXAPOR®Light and Paper elements:

50 P = $\bar{\beta}_{50(c)}$ = 200 Paper

Based on the structure of the filter media of the 50P paper elements, deviations from the printed curves are quite probable.

For screen elements:

40S	=	screen material with mesh size	40 µm
60S	=	screen material with mesh size	60 µm
100S	=	screen material with mesh size	100 µm

Tolerances for mesh size according to DIN 4189.

For special applications, finenesses differing from these curves are also available by using special composed filter material.

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.