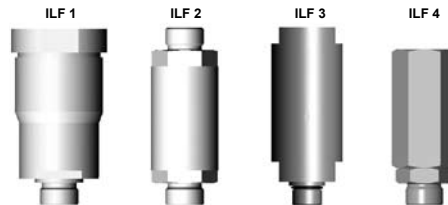




Inline Filter ILF

up to 120 l/min, up to 350 bar



1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Construction

The filter housings are designed in accordance with international regulations. They consist of a filter head with screw-in filter bowl.

Standard equipment:

- without bypass valve (only ILF 1, ILF 3 and ILF 4)
- with and without bypass valve (only ILF 2 and ILF 3)

1.2 FILTER ELEMENTS

HYDAC filter elements are validated and their quality is constantly monitored according to the following standards:

- ISO 2941
- ISO 2942
- ISO 2943
- ISO 3724
- ISO 3968
- ISO 16889

Filter elements are available with the following pressure stability values:

Betamicon® (BN4HC): 20 bar
 Betamicon® (BH4HC): 210 bar
 Wire mesh (W): up to 100 bar

1.3 FILTER SPECIFICATIONS

Nominal pressure	ILF 1, 2, 3: 350 bar The perm. operating pressure will be reduced depending on the max. perm. value of the threaded connection used! ILF 4: 160 bar
Fatigue strength	at nominal pressure 10 ⁶ load cycles from 0 to nominal pressure
Temperature range	-10 °C to +100 °C
Material of filter housing and cover plate	ILF 1, 2, 3: Steel 52-3 ILF 4: Aluminium
Bypass cracking pressure optional:	ILF 2: 5.5 bar ILF 3: 3 or 6 bar

1.4 SEALS

NBR (= Perbunan)

1.5 MOUNTING

As inline filter

1.6 SPECIAL MODELS AND ACCESSORIES

- bypass valve for ILF 3
- others on request

1.7 SPARE PARTS

See Original Spare Parts List

1.8 CERTIFICATES AND APPROVALS

On request

1.9 COMPATIBILITY WITH HYDRAULIC FLUIDS TO ISO 2943

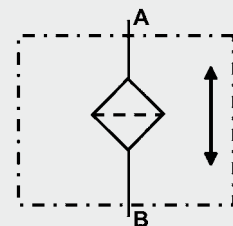
- Hydraulic oils H to HLPD DIN 51524
- Lubrication oils DIN 51517, API, ACEA, DIN 51515, ISO 6743
- Compressor oils DIN 51506
- Biodegradable operating fluids VDMA 24568 HETG, HEES, HEPG
- Operating fluids with high water content (>50% water content) on request

1.10 IMPORTANT INFORMATION

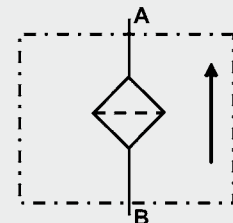
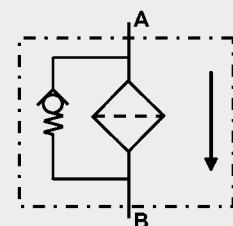
Filter housing must be earthed

Symbol for hydraulic systems

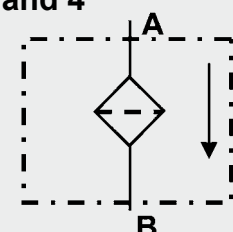
ILF 1



ILF 2



ILF 3 and 4



2. MODEL CODE (also order example)

ILF W 2 R F F 100 W 1 . X /-B5.5-IA

2.1 COMPLETE FILTER

Filter type

ILF

Filter material of element

W Wire mesh

BN/HC Betamicron® (only ILF 3)

BH/HC Betamicron® (only ILF 3)

Size of filter or element

ILF: 1, 2, 3, 4

Operating pressure

K = 160 bar (only ILF 4)

R = 350 bar

The perm. operating pressure will be reduced depending on the max. perm. value of the threaded connection used!

Type and size of port - Inlet

Type	Port	Filter size			
		1	2	3	4
A	M18x1.5	●	●		
B	G ½			X	
D	M22x1.5	●	●	●	
F	M24x1.5	●	●		●
H	M30x2		●		

NOTE:

Same port size at inlet and outlet (for ILF 1 and 2)
Please see point 4 "Dimensions" !

X = only possible for female thread
(Supplementary detail code: II)

Type and size of port - Outlet

Type	Port	Filter size			
		1	2	3	4
A	M18x1.5	●	●		
B	G ½			X	
D	M22x1.5	●	●	●	●
F	M24x1.5	●	●		
H	M30x2		●		

X = only possible for female thread
(Supplementary detail code: II)

Filtration rating in µm

BN/HC, BH/HC : 10, 20 (only ILF 3)

W : 40, 80¹⁾, 100, 200 others on request

Type of clogging indicator

W without port for clogging indicator

Type code

1

Modification number

X the latest version is always supplied

Supplementary details

B5.5 Standard: bypass cracking pressure 5.5 bar = **required info for ILF 2²⁾**

B3 or B6 = **required info for ILF 3** (if bypass valve is required!)

V FPM seals

Connection type = **required info:**

Inlet	Outlet	Code
Female	Female	II
Female	Male	IA
Male	Female	AI
Male	Male	AA

NOTE:

Same port size at inlet and outlet (for ILF 1 and 2)
Please see point 4 "Dimensions" !

¹⁾ Only for ILF 4

²⁾ not possible for ILF 1 and ILF 4

2.2 REPLACEMENT ELEMENT ¹⁾

HE03119932 100 -W /-V

Size

0015 R²⁾] only ILF 3

0015 D²⁾]

HE1468 only ILF 1

HE03119932 only ILF 2

Filtration rating in µm

BN4HC, BH4HC : 10, 20 (only ILF 3)

W : 40, 100, 200 (others on request)

Filter material

BN4HC, BH4HC, W

Supplementary details

B3 Standard bypass cracking pressure for R elements

B6 Special bypass cracking pressure 6 bar (only for BN4HC elements)

V (for descriptions, see point 2.1)

¹⁾ Replacement element for ILF 4 on request!

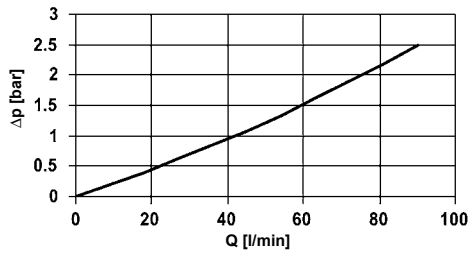
²⁾ Replacement element 0015 R... (bypass version) or 0015 D... (version without bypass)

3. FILTER CALCULATION / SIZING

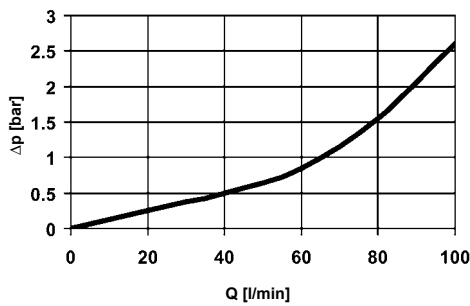
3.1 GRAPHS FOR COMPLETE FILTER

The housing graphs apply to mineral oil with a density of 0.86 kg/dm³ and a kinematic viscosity of 30 mm²/s.

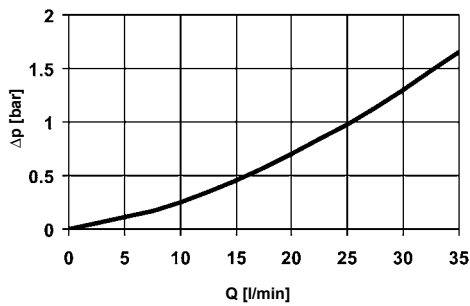
ILF 1



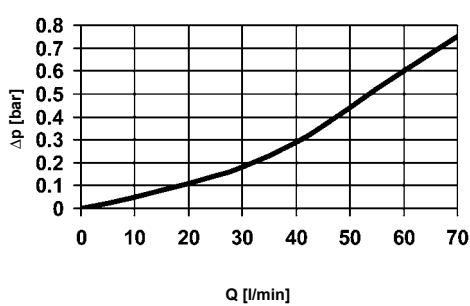
ILF 2



ILF 3

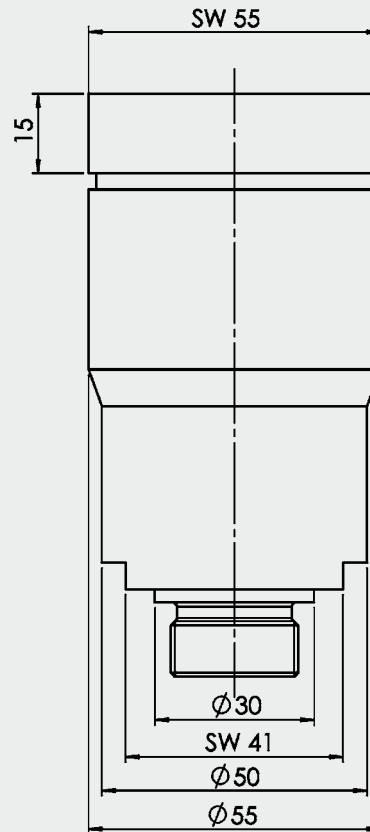
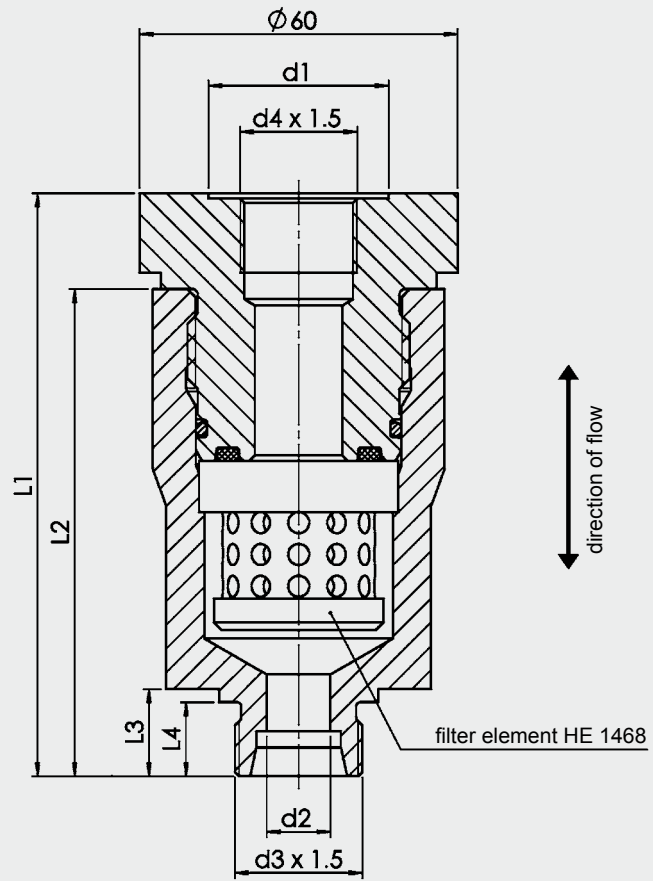


ILF 4

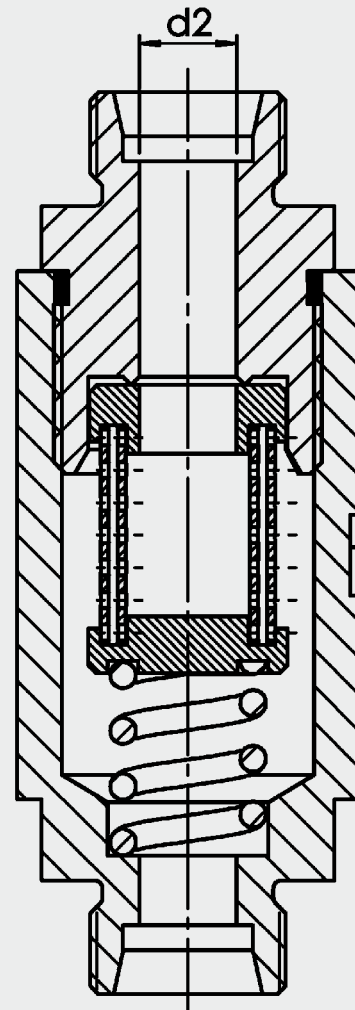
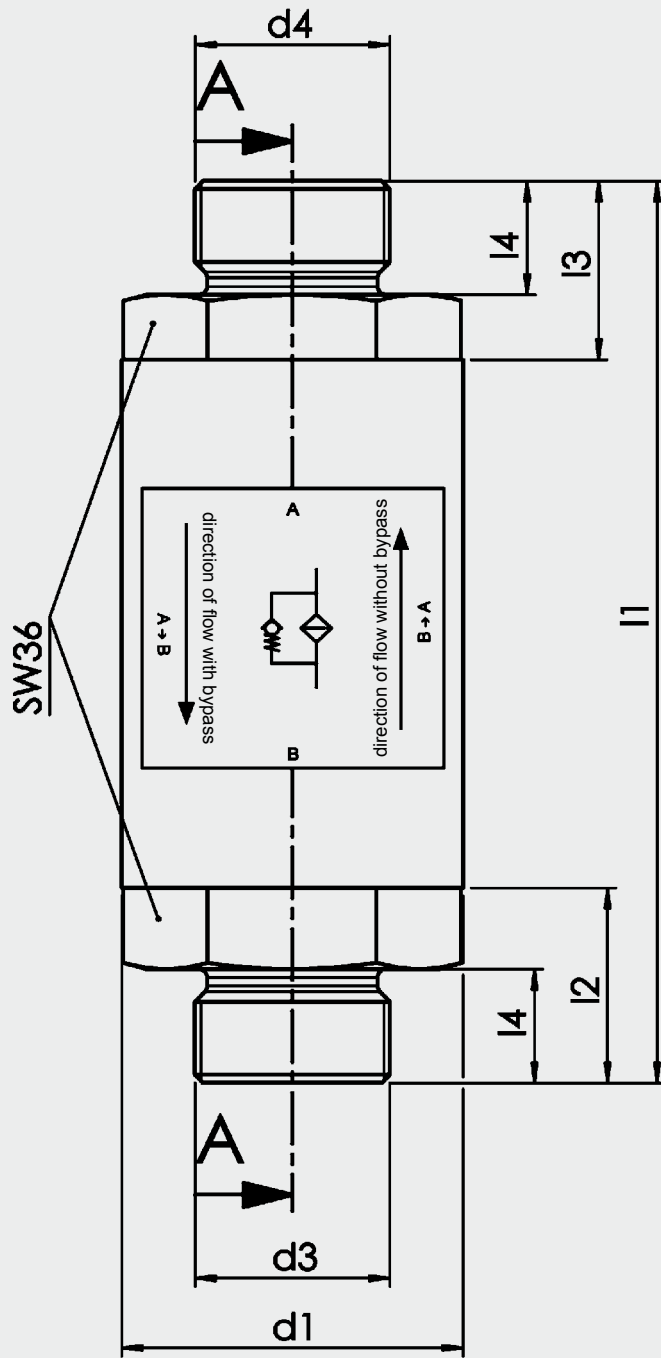


4. DIMENSIONS

ILF 1



ILF	d1	d2	d3	d4	L1	L2	L3	L4	Weight incl. element [kg]	Vol. of pressure chamber [l]
1	28	10	M18	M18	108	90	13.5	11	1.40	0.03
	34	12	M22	M22	109	91	14.5	12	1.39	
	34	12	M24	M24	110	92	16.5	14	1.39	

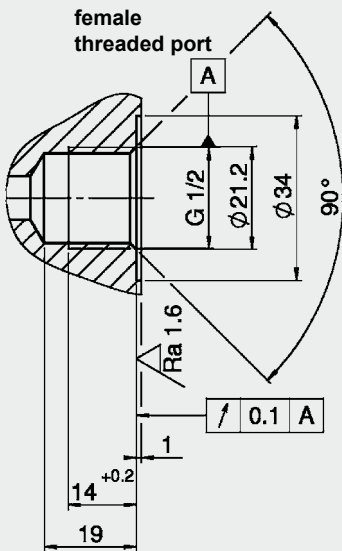
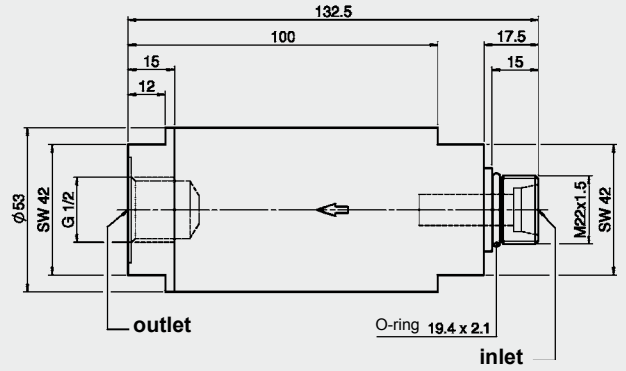
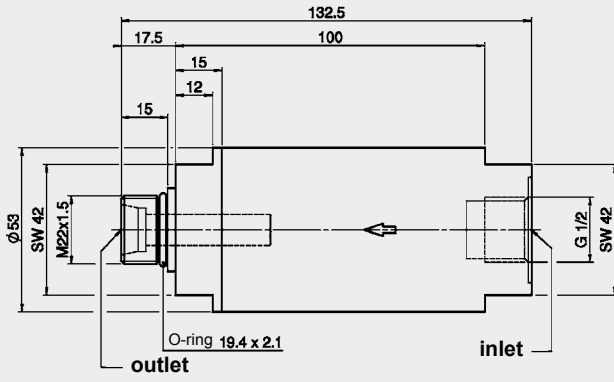
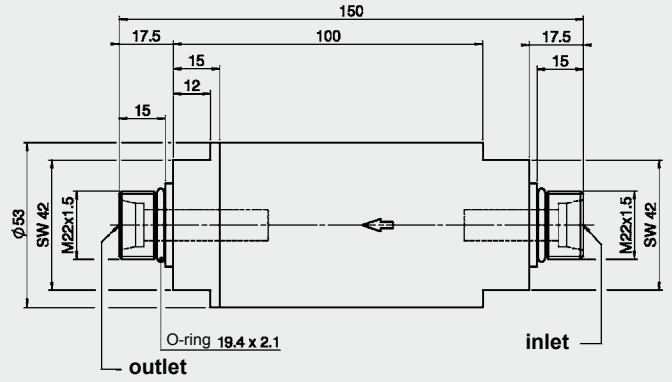
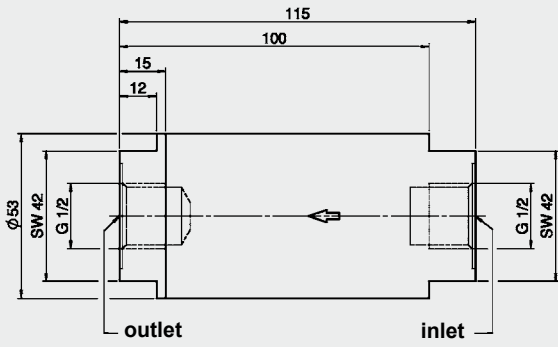


A-A

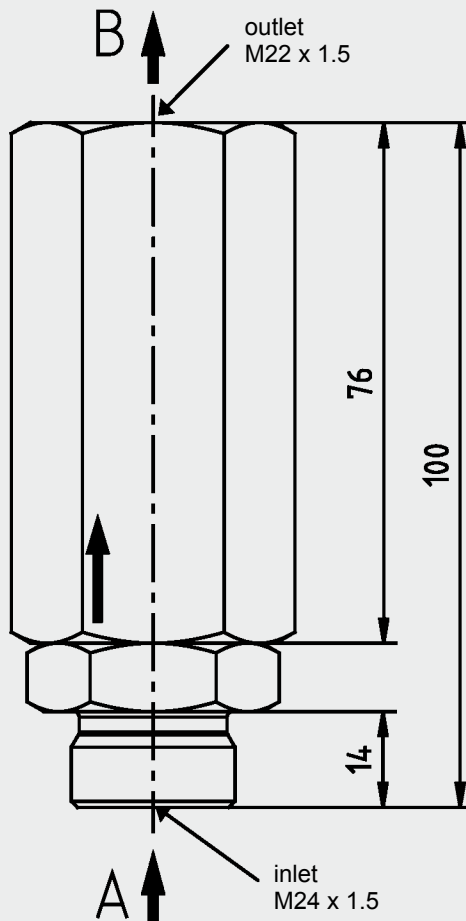
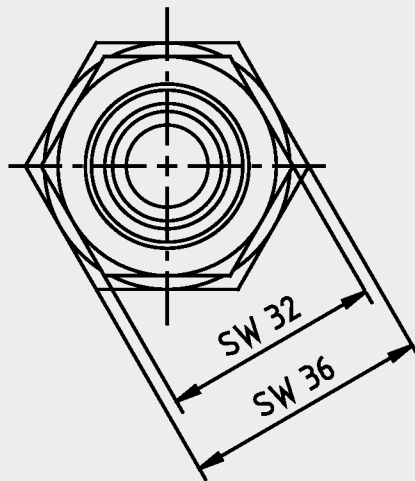
ILF	d1	d2	d3	d4	L1	L2	L3	L4	Weight incl. element [kg]	Vol. of pressure chamber [l]
2	42	9	M18x1.5	M18x1.5	107	22	22	12	0.77	0.04
		12	M22x1.5	M22x1.5	111	24	22	14	0.78	
		12	M24x1.5*	M24x1.5*	111	24	22	14	0.79	
		12	M30x2	M30x2	115	26	24	16	0.83	

* standard models

ILF 3



ILF	Weight incl. element [kg]	Vol. of pressure chamber [l]
3	approx. 1.4	0.07



NOTE

The information in this brochure relates to the operating conditions and applications described.
 For applications or operating conditions not described, please contact the relevant technical department.
 Subject to technical modifications.

HYDAC Filbertechnik GmbH
 Industriegebiet
D-66280 Sulzbach/Saar
 Tel.: 0 68 97 / 509-01
 Fax: 0 68 97 / 509-300
 Internet: www.hydac.com
 E-Mail: filter@hydac.com