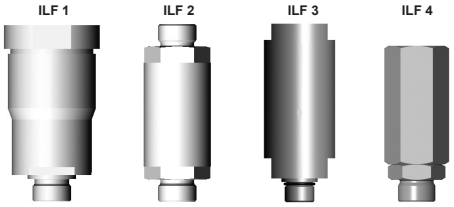
Inline Filter ILF
up to 120 l/min, up to 350 bar



1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Construction

The filter housings are designed in accordance with international regulations. They consist of a filter housing and a screw-in cover plate.

Standard equipment:

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

Optimicron® (ON):	20 bar
Betamicron® (BH4HC):	210 bar
Wire mesh (W):	up to 100 bar

1.3 FILTER SPECIFICATIONS

Nominal pressure	ILF 1, 2, 3: 350 bar The permitted operating pressure will be reduced according to the max. permitted value of the threaded connection used! ILF 4: 160 bar
Fatigue strength	At nominal pressure 10^6 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
Cracking pressure of bypass: optional:	ILF 2: 5.5 bar ILF 3: 3 or 6 bar

1.4 SEALS

Perbunan (=NBR)

1.5 INSTALLATION

As inline filter

1.6 SPECIAL MODELS AND ACCESSORIES

- Bypass valve for ILF 3
- Others on request see original spare parts list

1.7 SPARE PARTS

See Original Spare Parts List

1.8 CERTIFICATES AND APPROVALS

On request

1.9 COMPATIBILITY WITH HYDRAULIC FLUIDS DIN ISO 2943

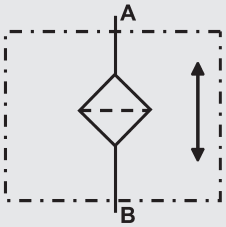
- Hydraulic oils H to HLPD DIN 51524
- Lubrication oils DIN 51517, API, ACEA, DIN 51515, ISO 6743
- Compressor oils DIN 51506
- Biodegradable operating fluids VDMA 24568 HETG, HEES, HEPG
- Operating fluids with high water content (>50% water content) on request

1.10 MAINTENANCE INSTRUCTIONS

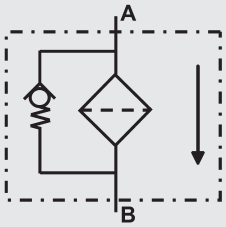
- Filter housings must be earthed.

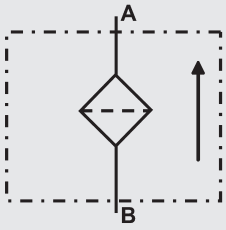
Symbol for hydraulic systems

ILF 1

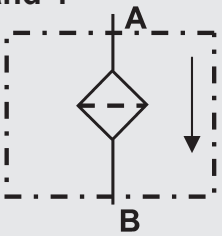


ILF 2





ILF 3 and 4



E 7.569.3/11.16

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
W wire mesh
ON Optimicron® (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 permitted operating pressure will be reduced according to the max. permitted 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 threads
(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 threads
(Supplementary detail code: II)

Filtration rating in µm
ON, BH/HC : 10, 20 (only ILF 3)
W : 40, 80[1], 100, 200 Others on request

Type of clogging indicator
W without port, no 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 2**[2]
B3 or B6 = **required info for ILF 3** (if bypass valve is required!)
V FPM seals

Connection type = **Required info: (1st letter = inlet; 2nd letter = outlet)**

ILF1	-AI	--	(-IA*)	--
ILF2	--	-AA	-IA	--
ILF3	-AI	-AA	--	-II
ILF4	-AI	--	--	--

NOTICE:
Same port size at inlet and outlet (for ILF 1 and 2)
* = selection of flow direction for ILF1 only possible for initial installation
-- = not possible!
Please see Point 4 "Dimensions"!

A = external connection; **I** = internal connection
[1] only for ILF 4
[2] not possible for ILF 1 and ILF 4

2.2 REPLACEMENT ELEMENT

HE03119932 100 -W /-V

Size
0015 R [3]]
0015 D [3]] only for ILF 3
HE1468 only for ILF 1
HE03119932 only for ILF 2

Filtration rating in µm
ON, BH4HC : 10, 20 (only ILF 3)
W : 40, 100, 200 Others on request

Filter material
ON, BH4HC, W

Supplementary details
B3 standard: bypass opening pressure for R elements
B6 special bypass cracking pressure 6 bar (only for BN4HC elements)
V (for descriptions, see Point 2.1)

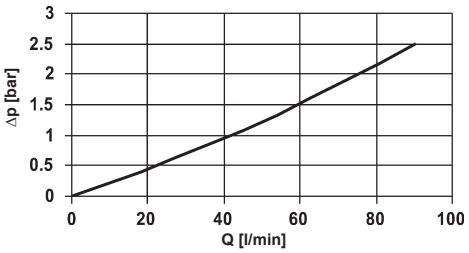
Replacement element for ILF 4 not available. These filters are only available complete!
[3] Replacement element 0015 R... (bypass version) or 0015 D... (version without bypass)

3. FILTER CALCULATION / SIZING

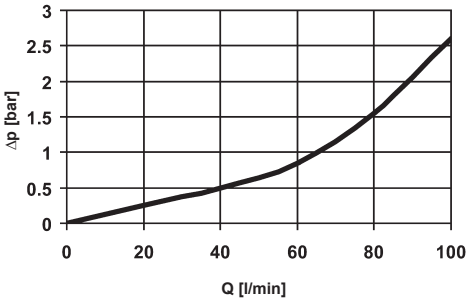
3.1 HOUSING CURVES

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

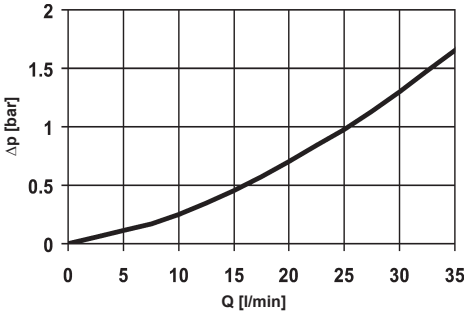
ILF 1



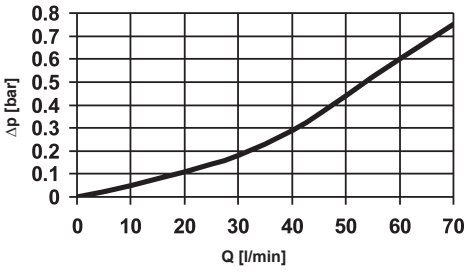
ILF 2



ILF 3

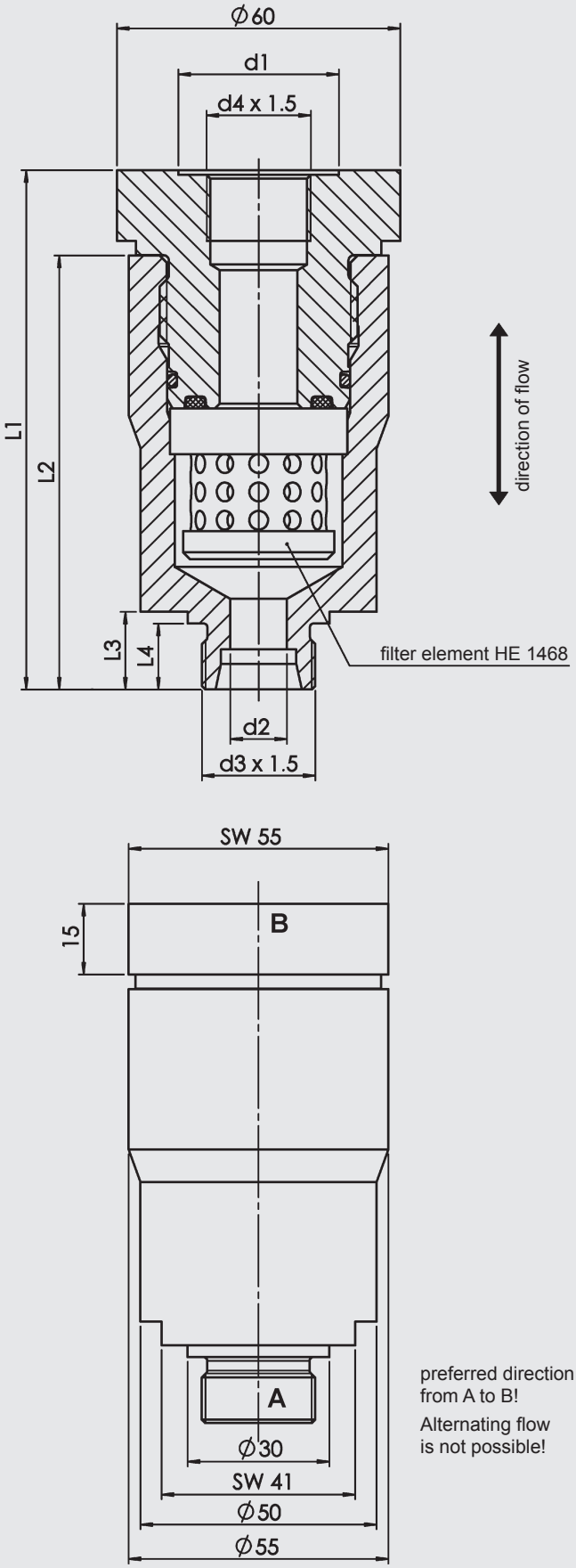


ILF 4



4. DIMENSIONS

ILF 1

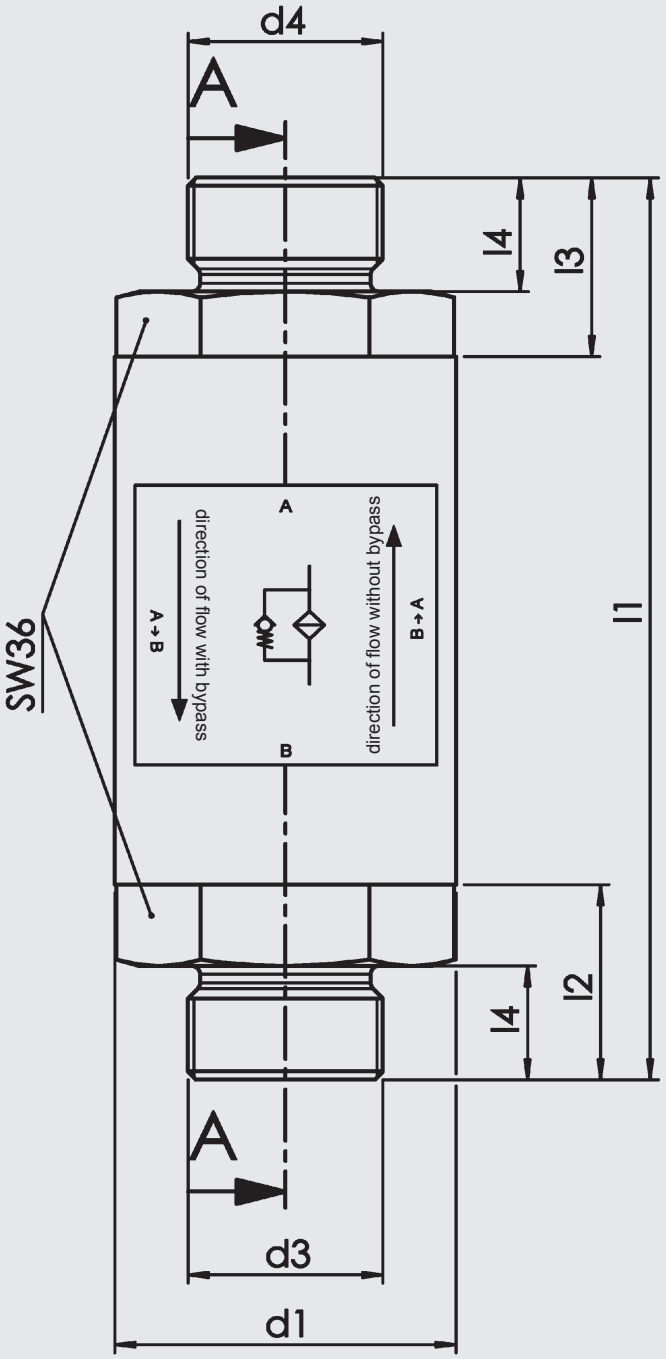


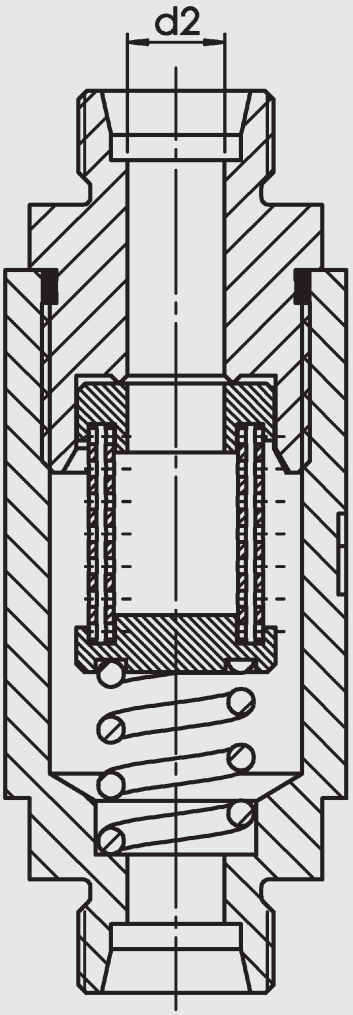
preferred direction from A to B!

Alternating flow is not possible!

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	

ILF 2



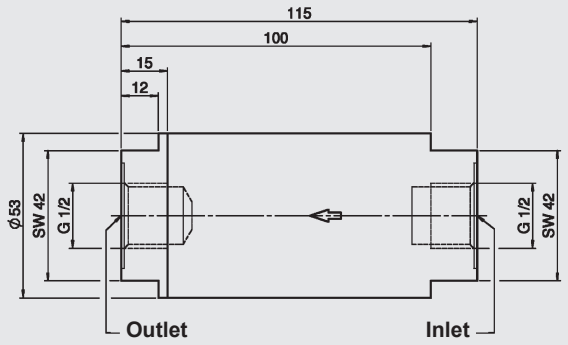


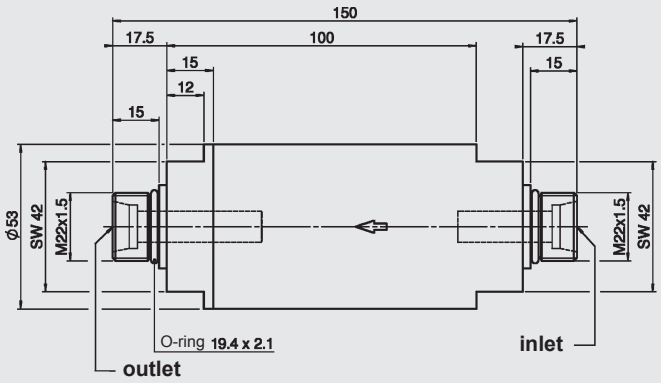
A-A

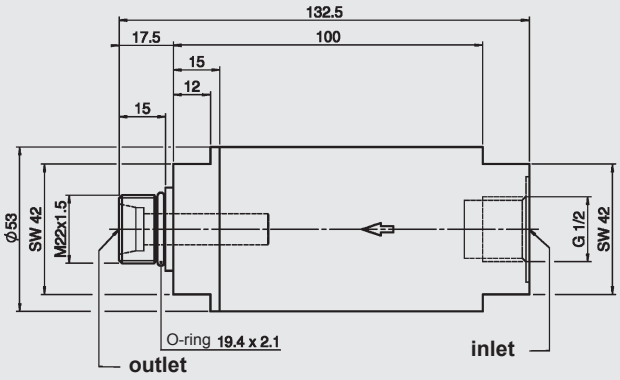
ILF	d1	d2	d3	d4	L1	L2	L3	L4	Weight incl. element [kg]	Vol. of pressure chamber [l]
2	42	9	M18x1.5	M18x1.5	107	22	22	12	0.77	0.04
		12	M22x1.5	M22x1.5	111	24	22	14	0.78	
		12	M24x1.5*	M24x1.5*	111	24	22	14	0.79	
		12	M30x2	M30x2	115	26	24	16	0.83	

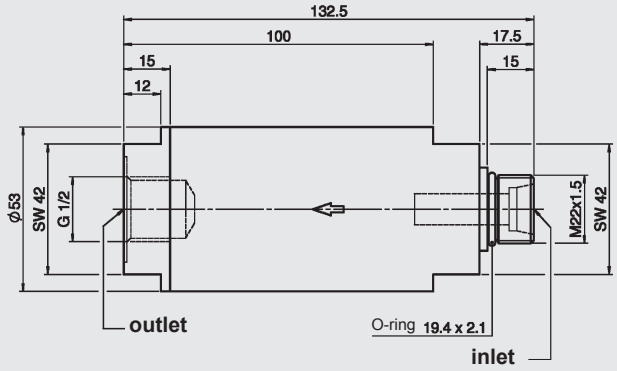
* Preferred types

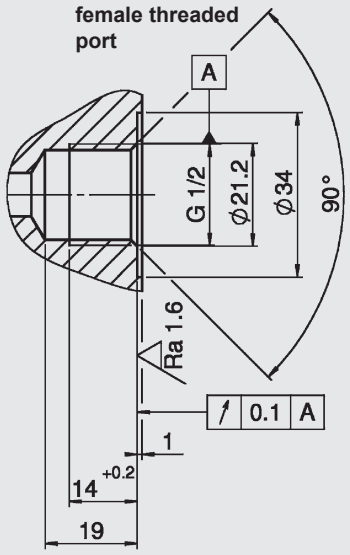
ILF 3





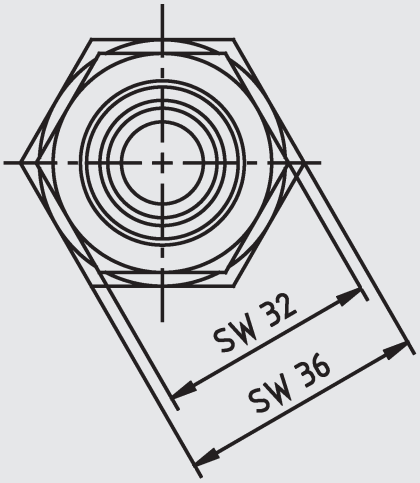


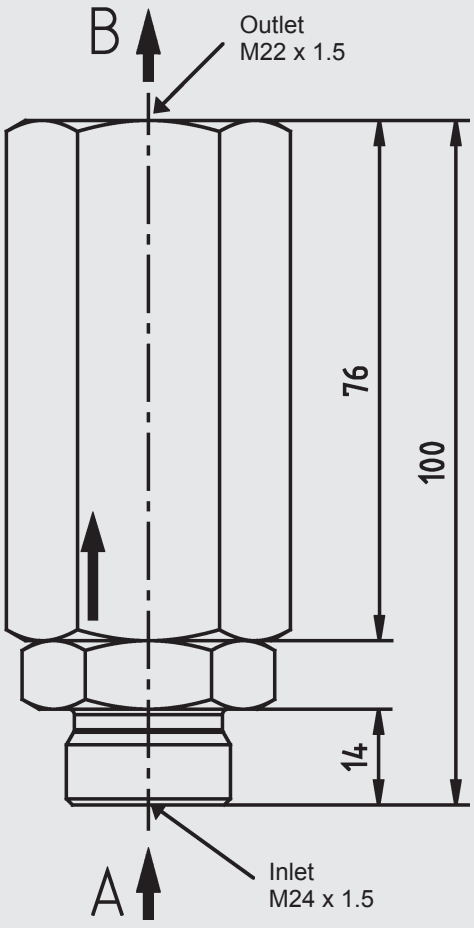




ILF	Weight incl. element [kg]	Vol. of pressure chamber [l]
3	approx. 1.4	0.07

ILF 4





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.

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