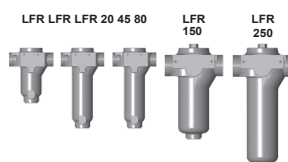


HYDAC INTERNATIONAL



Inline Filter LFR up to 250 l/min, up to 120 bar



**ELEMENT FLOW
DIRECTION FROM IN TO
OUT**

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-on cover plate. The element is top-removable.

Standard equipment:

- installation holes in the housing
- magnetic core built into cover plate
- without bypass valve
- oil drain plug

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 3968, ISO 11170, ISO 16889
- Contamination retention capacities in g**

	Glass fibre (ULP)		
	5 µm	10 µm	25 µm
20	1.45	2.61	2.9
45	3.35	6.03	6.7
80	4.18	7.51	8.35
150	5.25	9.45	10.5
250	8.5	15.3	17

	Glass fibre with pre-filter (UHC)		
	5 µm	10 µm	20 µm
20	4.64	6.96	7.83
45	10.72	16.08	18.09
80	13.36	20.04	22.55
150	16.8	25.2	28.35
250	27.2	40.8	45.9

Filter elements are available with the following pressure stability values:

Glass fibre (ULP):	6 bar
Glass fibre with pre-filter (UHC):	6 bar
Wire mesh (WR):	6 bar
Other filtration ratings on request	

1.3 SEALS

NBR (=Perbunan)

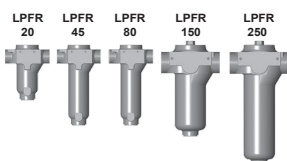
1.4 SPECIAL MODELS

- Port for clogging indicator in filter housing
- Without magnetic core
- Bypass valve built into the head
- Seals in FPM, EPDM

FILTER SPECIFICATIONS

Nominal pressure	120 bar
Temperature range	-10 °C to +120 °C
Material of filter housing	EN-GJS
Material of cover plate	EN-GJS: LFR 20 to 80 9SMn28k: LFR 150 to 250
Type of clogging indicator	VM (differential pressure measurement up to 210 bar operating pressure)
Pressure setting of the clogging indicator	2 bar (others on request)
Bypass cracking pressure (optional)	2.5 bar (others on request)

Inline Filter LPFR 25 bar

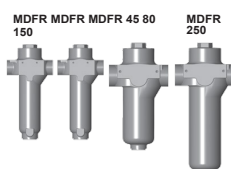


**ELEMENT FLOW
DIRECTION FROM IN TO
OUT**

FILTER SPECIFICATIONS

Nominal pressure	25 bar
Temperature range	-10 °C to +120 °C
Material of filter housing	EN-GJS: LPFR 20 to 250
Material of cover plate	EN-GJS: LPFR 20 to 80 EN-GJL: LPFR 150 to 250
Type of clogging indicator	VM (differential pressure measurement up to 210 bar operating pressure)
Pressure setting of the clogging indicator	2 bar (others on request)
Bypass cracking pressure (optional)	2.5 bar (others on request)

Inline Filter MDFR 250 bar



**ELEMENT FLOW
DIRECTION FROM IN TO
OUT**

FILTER SPECIFICATIONS

Nominal pressure	250 bar
Temperature range	-10 °C to +120 °C
Material of filter housing	EN-GJS
Material of cover plate	S355JR: MDFR 45 to 80 EN-GJS: MDFR 150 to 250
Type of clogging indicator	VD (differential pressure measurement up to 400 bar operating pressure)
Pressure setting of the clogging indicator	2 bar (others on request)
Bypass cracking pressure (optional)	2.5 bar (others on request)

2. MODEL CODE

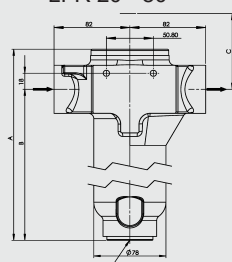
2.1 COMPLETE FILTER

Type Filter element	Filter material of	Size	Operating pressure	Port	Filtration rating	Clogging indicator (VA)	Type code	Modification number	Supplementary details
LFR	ULP =Glass fibre	20*	D =25 bar (only LPFR)	B =G 1/2	5	W =no port for indicator	1 =indic. on right in flow direction	.x =the latest version is always supplied	-V =FPM direction (Viton) -B =special bypass cracking pressure
LPFR	UHC =Glass fibre with pre-filter	45	I =120 bar (only LFR)	C =G 3/4	10	B =visual	2 =indic. on left in flow direction		
MDFR	WR =Wire mesh	150	M =250 bar (only MDFR)	D =G1	20(UHC)	C =electrical	3 =no indic.		-OM =without magnetic core
		250		F =G1 1/2	25(ULP)	D =visual / electrical			

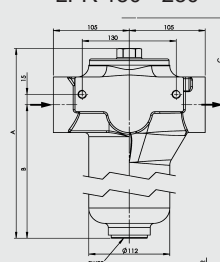
* Size 20 only possible for LPFR and LFR!

3. DIMENSIONS

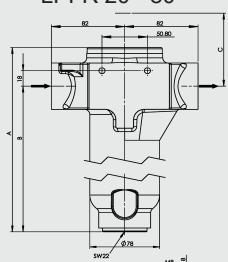
LFR 20 - 80



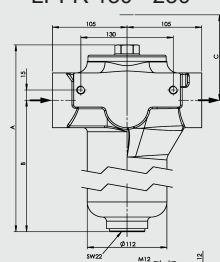
LFR 150 - 250



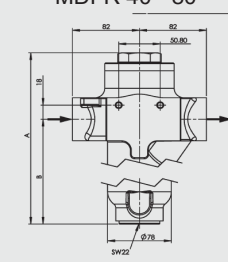
LPFR 20 - 80



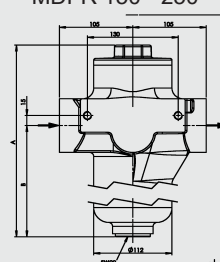
LPFR 150 - 250



MDFR 40 - 80



MDFR 150 - 250



LFR	A B	C E F Ø	Weight incl. element [kg]
20	212 167 180	G ½ 34 5.3	
45	312 267 250	G ¾ 42 5.8	
80	312 267 280	G 1 47 6.6	
150	354 273 335	G 1½ 68 14.2	
250	454 373 435	G 1½ 65 15.0	

LPFR	A B	E	F Ø	Weight incl. element [kg]
20	212 167	G ½ 34		5.3
45	312 267	G ¾ 42		5.8
80	312 267	G 1 47		6.6
150	354 273	G 1½ 68		14.2
250	454 373	G 1½ 65		15.0

MDFR	A	B C E F Ø	Weight incl. element [kg]
45	360 274 275	G ¾ 42	7.9
80	360 274	305 G 1 47 G	8.6
150	405 282	365 1 ½ 65	18.4
250	505 382 465	G 1½ 68 19.0	

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.