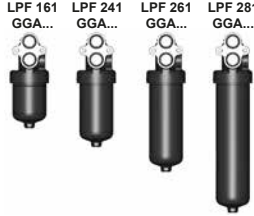




Filter LPF Flange-Mounted, With Integrated Cooler Bypass Valve up to 260 l/min, up to 50 bar



1. TECHNICAL SPECIFICATIONS

1.1 FILTER HOUSING

Construction

The filter housings are designed in accordance with international regulations. They consist of a filter head and a screw-in filter bowl. The built-in check valve in the filter head supplies partial flow to the cooler.

Standard equipment:

- cooler bypass valve
- connection for a clogging indicator

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 11170, ISO 16889

Contamination retention capacities in g

LPF/GGA	Betamicron® (BN4HC)			
	3 µm	5 µm	10 µm	20 µm
161	15.2	16.8	20.2	22.9
241	25.1	27.8	33.5	37.9
261	38.8	43.0	51.7	58.5
281	62.4	69.2	83.2	94.1

Filter elements are available with the following pressure stability values:

Betamicron® (BN4HC):	20 bar
Mobilemicron (MM):	10 bar

1.3 SEALS

Perbunan (=NBR)

1.4 INSTALLATION

Inline filter

1.5 SPECIAL DESIGNS AND ACCESSORIES

- Seals in FPM, EPDM
- Without clogging indicator connection

1.6 FILTER SPECIFICATIONS

Nominal pressure	50 bar
Fatigue strength	At nominal pressure 10 ⁶ cycles from 0 to nominal pressure
Temperature range	-10 °C to +120 °C
Material of filter head	EN-GJS-400
Material of filter bowl	Aluminium
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	3.4 bar

1.7 SPARE PARTS

See Original Spare Parts List

1.8 CERTIFICATES AND APPROVALS

On request

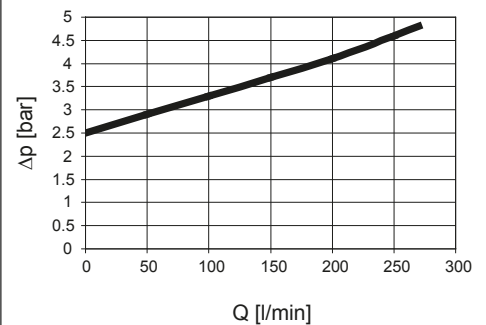
1.9 COMPATIBILITY WITH HYDRAULIC FLUIDS ISO 2943

- 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
- Fire-resistant fluids HFC and HFD
- Operating fluids with high water content (> 50 % water content) on request

1.10 FILTER CALCULATION / SIZING

GRAPHS FOR COMPLETE FILTER

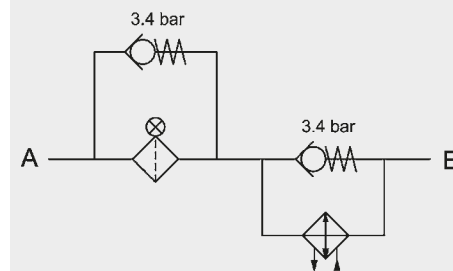
The total pressure drop graphs apply to mineral oil with a density of 0.86 kg/dm³ and a kinematic viscosity of 30mm²/s.



The gradient coefficients in mbar/(l/min) apply to mineral oils with a kinematic viscosity of 30 mm²/s. The pressure drop changes proportionally to the change in viscosity.

LPF/GGA	Betamicron® (BN4HC)			
	3 µm	5 µm	10 µm	20 µm
161	13.4	10.4	6.5	3.5
241	8.1	6.3	3.9	2.1
261	5.2	4.1	2.5	1.4
281	3.3	2.5	1.6	0.9

Symbol for hydraulic systems



2. MODEL CODE

2.1 COMPLETE FILTER

Type	Filter material of element	Size	Pressure range	Inlet / outlet to cooler	Type of connection	Filtration rating [μm]	Type of clogging indicator*	Type code	Modification number	Supplementary details
LPF	BN/HC = Betamicon® (glass fibre) MM = Mobilemicon (synthetic fibre)	161 241 261 281	G = 50 bar	G = M27x2	A = 2 mounting holes	BN/HC: 3, 5, 10, 20 MM: 8, 10, 15	W = without port, no clogging indicator A = steel plug in indicator port B = visual C = electrical D = visual/ electrical	1	.x = The latest version is always supplied	V = FPM seal L.. = light with appropr. voltage (24, 48 110, 220 Volt)

* for other clogging indicators see brochure no. 7.050../..

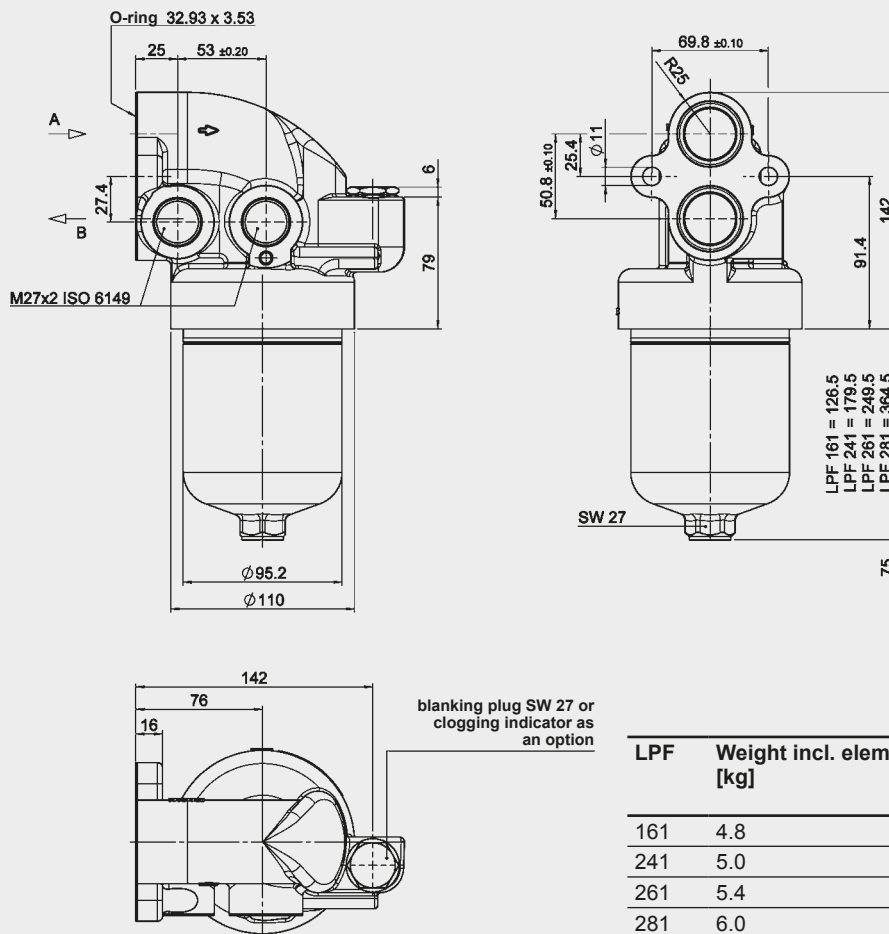
2.2 REPLACEMENT ELEMENT

Size	Type	Filtration rating [μm]	Filter material	Supplementary details
0161 0241 0261 0281	RD = Return line element for pressure filter	BN4HC = 003, 005, 010, 020 MM = 008, 010, 015	BN4HC = Betamicon® MM = Mobilemicon	B3.4 = with bypass valve (cracking press. 3.4 bar) B6 = with bypass valve (cracking press. 6 bar) KB = without bypass valve

2.3 REPLACEMENT CLOGGING INDICATOR

Type	Pressure setting	Type of clogging indicator*	Modification number	Supplementary details
VM	2 = standard 2 bar	W = no port, no indicator B = visual C = electrical D = visual/ electrical	.x = The latest version is always supplied	-V = FPM seal

3. DIMENSIONS



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 Filtrertechnik 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