



FPG

PRESSURE FILTERS



DESCRIPTION

Medium pressure filter

MATERIALS

Head: Aluminum alloy
Bowl: Steel
Bypass valve : Steel
Seals: NBR Nitrile (FKM Fluoroelastomer on request)
Indicator housing: Brass

PRESSURE

Max working: 5 MPa (50 bar)
Collapse, differential for the filter element:
1 MPa (10 bar)

BYPASS VALVE

Setting: 350 kPa (3,5 bar) $\pm 10\%$

FLOW RATE

Qmax 400 l/min

WORKING TEMPERATURE

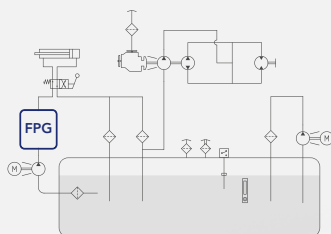
From -25° to +110° C

COMPATIBILITY (ISO 2943)

Full with fluids: HH-HL-HM-HV-HTG
(according to ISO 6743/4)
For fluids different than the above mentioned,
please contact our Customer Service.



HYDRAULIC DIAGRAM



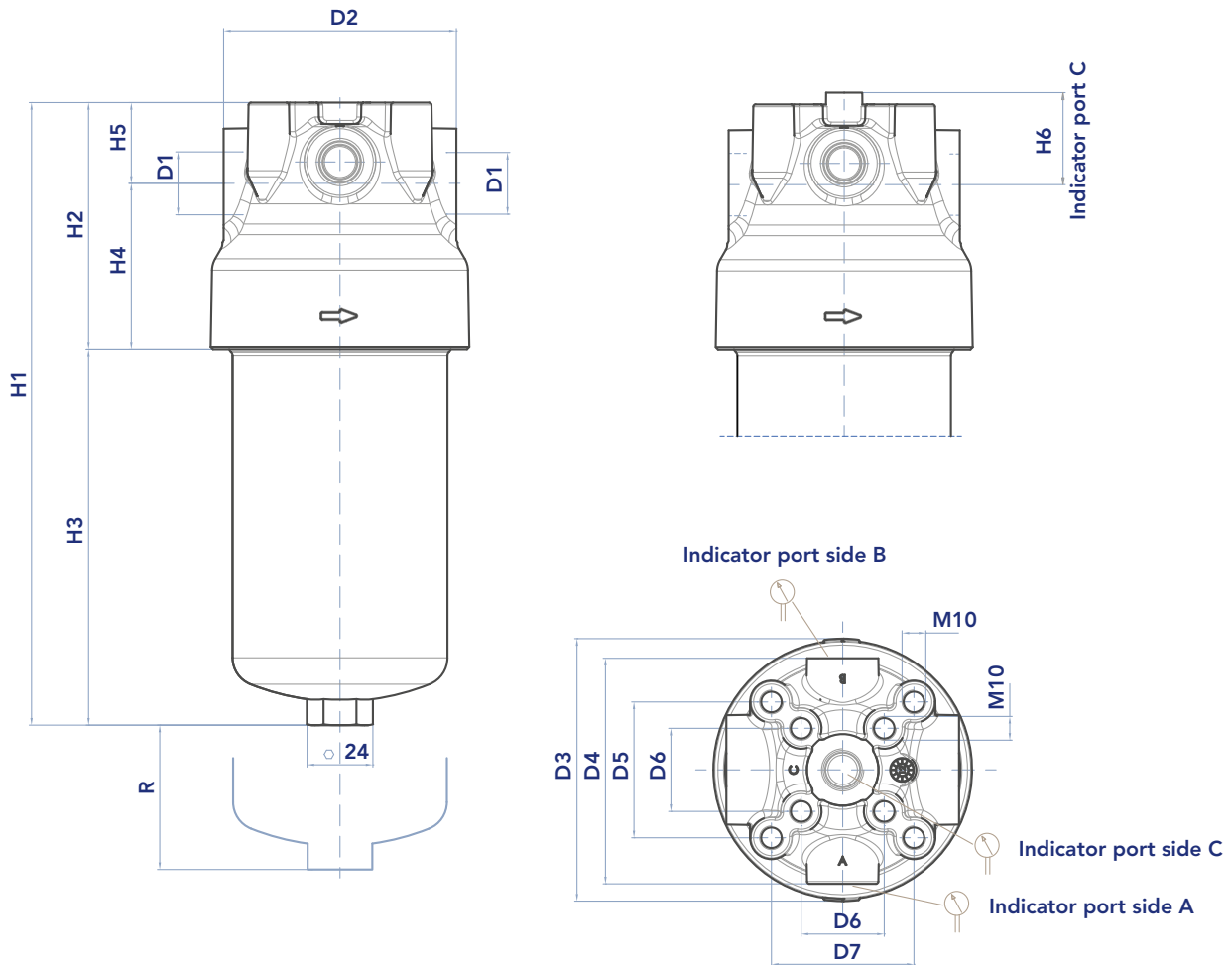
Is this datasheet the latest release? Please check on our website



SPARE SEAL KIT

	NBR	FKM
FPG20-21-22	521.0117.2	521.0118.2
FPG31	521.0119.2	521.0120.2

INSTALLATION DRAWING



FILTER HOUSING

	D1	D2	D3	D4	D5	D6	D7	H1	H2	H3	H4	H5*	H6*	R	Kg
FPG20	3/4" - 1"	98	110,5	95	57	35	60	202	104	98	70	34	39	70	2,00
FPG21	3/4" - 1"	98	110,5	95	57	35	60	262	104	158	70	34	39	70	2,25
FPG22	3/4" - 1"	98	110,5	95	57	35	60	342	104	238	70	34	39	70	2,80
FPG31	1"1/4 - 1"1/2	122	126	115	70	48	70	335	116	219	77	39	44	70	3,50

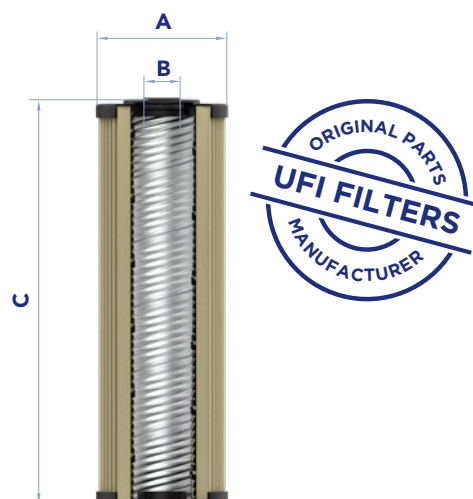
* with clogging indicator option W, A and B, please consider H5; with clogging indicator option C, please consider H6

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FILTER ELEMENT

	A	B	C	Kg	AREA (cm ²)		
					Media F+	Media F+	Media M+
EPG20	78	30	100	0,20	1.300	1.500	1.000
EPG21	78	30	160	0,30	2.200	2.550	1.700
EPG22	78	30	240	0,45	3.300	3.900	2.600
EPG31	92	40	220	0,45	4.700	5.100	3.500



MAINTENANCE

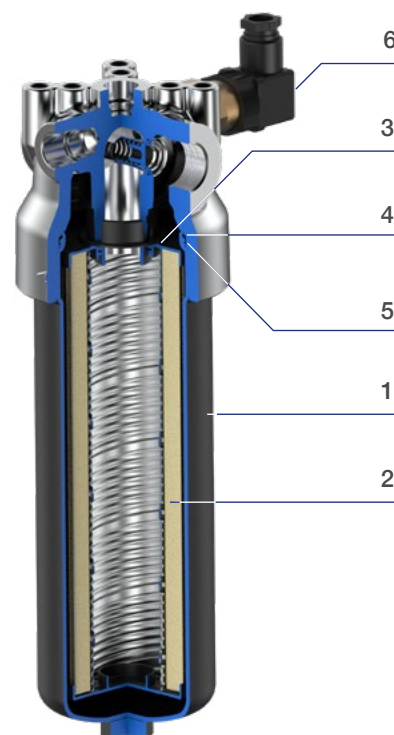
- 1) Stop the system and verify there is no pressure in the filter.
- 2) Collect the oil inside the filter with a suitable container.
- 3) Unscrew the bowl (1) and clean it.
- 4) Remove the dirty filter element (2).
N.B. The exhausted filter elements and the oil dirty filter parts are classified "Dangerous waste material" and must be disposed of according to the local laws, by authorized Companies.
- 5) Check the filter element part number on the filter label or in the ordering and option chart.
N.B. The locking system is patented. Use only original spare parts.
- 6) Lubricate the element o-ring gasket (3) with oil.
- 7) Insert the clean element into its seat with care.
The element must be rotated clockwise on the shank to be in the correct locking position.
- 8) Check the bowl o-ring condition (4) and lubricate with oil.
If damaged, check the seal kit part number in the spare seal kit table
N.B. The anti-extrusion o-ring (5) must be positioned downwards (under the gasket).
- 9) Screw the bowl (1) until it stops, with a tightening torque of 70 Nm + 5/0.

Accessories:

Clogging indicator (6).

If damaged, unscrew and replace it (check the part number in the ordering and option chart).

Lubricate the o-ring gasket with oil and tighten until it stops, with a tightening torque of 40 Nm +5/0.



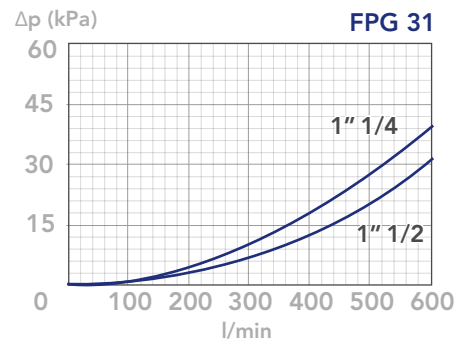
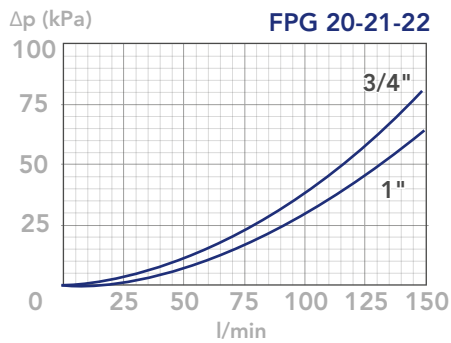


PRESSURE DROP CURVES (Δp)

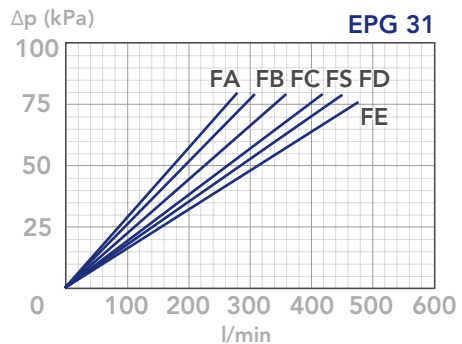
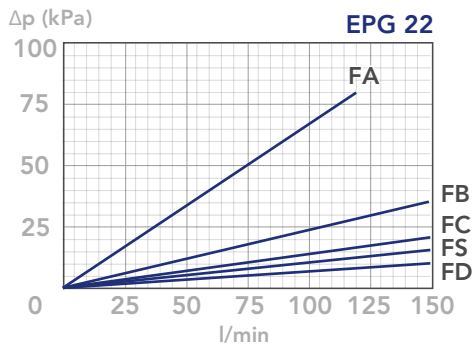
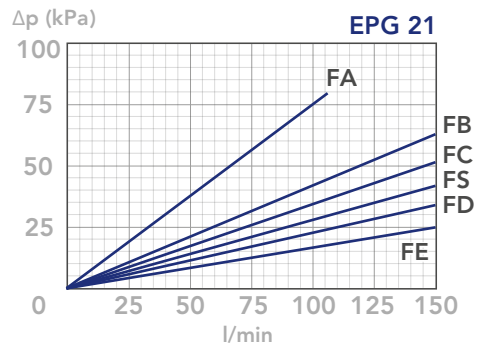
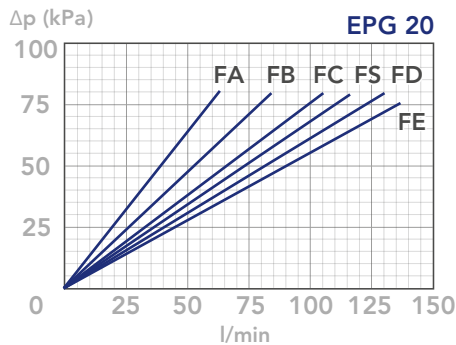
The “Assembly Pressure Drop (Δp)” is obtained by adding the pressure drop values of the Filter Housing and of the Clean Filter Element corresponding to the considered Flow Rate and it must

be lower than 100 kPa (1 bar). In any case this value should never exceed 1/3 of the bypass valve setting.

FILTER HOUSING PRESSURE DROP
(mainly depending on the port size)



CLEAN FILTER ELEMENT PRESSURE DROP WITH F+ AND C+ MEDIA
(depending both on the internal diameter of the element and on the filter media)



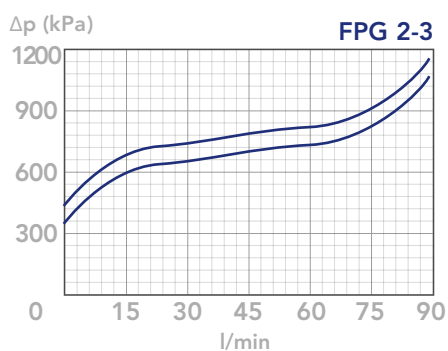
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BYPASS VALVE PRESSURE DROP

When selecting the filter size, these curves must be taken into account if it is foreseen that any flow peak is to be absorbed by the bypass valve, it also must be of proper configuration to avoid pressure peaks. The valve pressure drop is directly proportional to fluid specific gravity.



N.B.

All the curves have been obtained with mineral oil having a kinematic viscosity 30 cSt and specific gravity 0,86 kg/dm³; for fluids with different features, please consider the factors described in the first part of this catalogue. All the curves

are obtained from test done at the UFI FILTERS HYDRAULICS Laboratory, according to the specification ISO 3968. In case of discrepancy, please check the contamination level, viscosity and features of the fluid in use.