

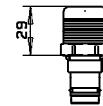
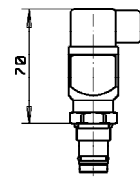
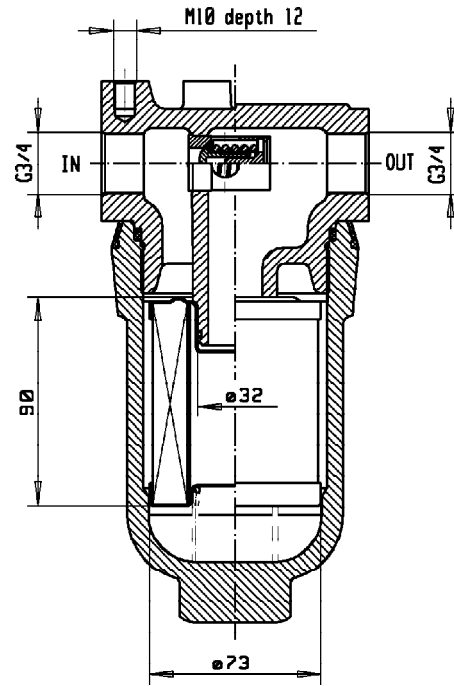
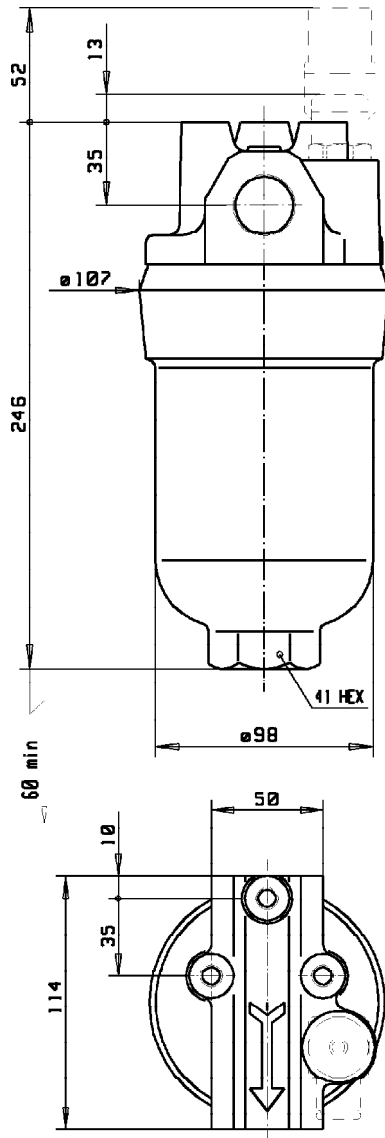
Finn-Filter

*High Pressure Filters
Series 5000*

Brochure BR5000-EN



High pressure filters series 5000



Electronic or electrical differential pressure indicator
Visual differential pressure indicator

The technical information in this brochure may be changed due to continuous R&D.

Technical data:

Assembly:

As in-line filter

Operating pressure:

Max 320 bar (32 MPa), filter housing pulse fatigue tested: 10^6 pulses 0-275 bar

Connections:

Thread G3/4 (ISO 228/1). Two different housing types: model 5000 with indicator connection, type 5001 without connection.

Seal material:

Nitrile (NBR) or fluoroelastomer * (FPM)

Operating temperature:

-20°C...+100°C

Filter housing and holder:

Material ductile cast iron (GJS)/steel

By-pass valve:

Opening pressure 3,0 bar

* Fluoroelastomers are available under various registered trademarks, including Viton (a registered trademark of DuPont) and Fluorel (a registered trademark of 3M).

Indicators:

Indicating differential pressure $2,5 \pm 0,2$ bar (to be used with 3,0 bar by-pass valve)

Electronic indicator FPC.F (10...36 VDC)

Electrical indicator FPC.T (max 250 VAC)

Visual indicator FPC.V

Indicator housing

Material brass

Filter element:

Degree of filtration

Determined by Multi-pass-test according to ISO16889, see Table 2

Filtration material

Microglass III, supported with epoxy coated metal wire mesh, end cap material steel

Flow fatigue characteristics

Filter media is supported so that the optimal fatigue life is achieved (ISO 3724)

Element collapse rating

20 bar (ISO 2941)

Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils. For other fluids consult Parker Hannifin Oy Finn-Filter.

Ordering instructions

FILTER ASSEMBLY: FF S

FILTER HOUSING: FG S

FILTER ELEMENT: FC S

dp INDICATOR: FPC M

SEAL KIT: FD5000-

Table 1

FILTER TYPE	
Filter housing type	CODE
Housing with indicator connection	5000
Housing without indicator connection	5001
Filter element type	5000

Table 2

DEGREE OF FILTRATION						
Average filtration ratio β (ISO 16889)/particle size μm (c)						CODE
2	10	75	100	200	1000	
N/A	N/A	N/A	N/A	N/A	4,5	Q002
N/A	N/A	4,5	5	6	7	Q005
N/A	6	8,5	9	10	12	Q010
6	11	17	18	20	22	Q020

Table 3

SEAL TYPE	
Seal material options	CODE
Nitrile	B
Fluoroelastomer	V

Table 4

BY-PASS VALVE	
Opening pressure	CODE
3,0 bar	30

Table 5

FILTER CONNECTION	
Connection type	CODE
G3/4 thread, T-model housing	GT12

Table 6

dp INDICATORS	
Indicator type options	CODE
Visual indicator 2,5 bar	V25
Electronic indicator 2,5 bar (10...36 VDC)	F25*
Electrical indicator 2,5 bar (max 250 VAC)	T25

Table 7

FPC.F INDICATOR	
Electronic connection	CODE
Output type NPN	NPN
Output type PNP	PNP

*for F-type indicator choose also Table 7

ORDERING EXAMPLES:

COMPLETE FILTER: **FF5000.Q020.BS30.GT12**

This code is for complete filter assembly including an element with 20 micron absolute degree of filtration ($\beta_{20} > 200$, ISO 16889). Seal material is nitrile and the filter holding is of steel. Filter includes 3,0 bar by-pass valve and G3/4 threads for connection.

FILTER ELEMENT: **FC5000.Q010.VS**

This filter element has 10 micron absolute degree of filtration ($\beta_{10} > 200$, ISO 16889). The seal material is fluoroelastomer and element end caps are of steel.

FILTER CAPACITY

NOMINAL FLOW (l/min) FOR FILTER ASSEMBLY AT VISCOSITY 30 cSt	
Filter type	Filter connection GT12
FF5000 Q002	60
Q005	70
Q010	80
Q020	110

Pressure drop curves for series 5000

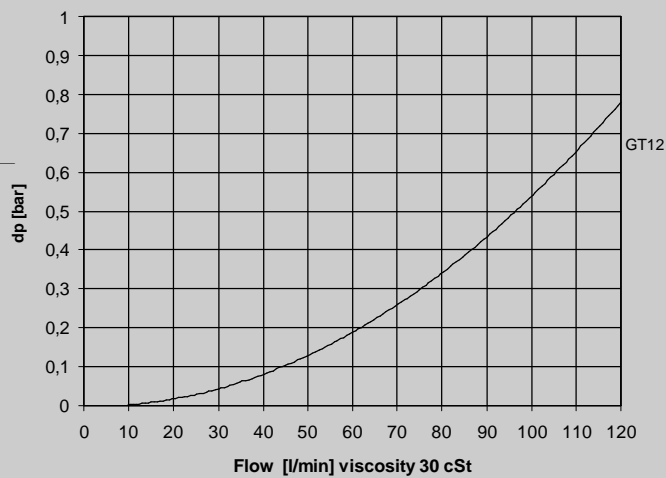
$$dp_{\text{total}} = dp_{\text{housing}} + dp_{\text{element}}$$

The recommended level of the initial pressure drop for this filter is max 0,8 bar.

If the medium used has a viscosity different from 30 cSt, pressure drop over the filter can be estimated as follows:

$$dp = (dp_{30} \times \text{viscosity of medium used}) / 30 \text{ cSt}$$

Filter housing (without element)



Elements FC5000

