Tanktop Mounted Return Line Filters

ETF Series

MAX 140 l/min - 6 bar

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Features & Benefits

Features	Advantages	Benefits
Co-polymer head	Compact profile, lightweight and durable	Less weight, smaller envelope and cleaner appearance
Multiple return line ports	Flexibility related to return line hose(s) arrangement	More compact solutions can be realised
Quick release cover	No tools required to release the filter cover	Easy change of filter element
Optional magnetic pre-filtration	Removes ferro particles, even during bypass conditions	Improved fluid cleanliness levels
In-to-Out filtration	All captured contamination retains inside the element	No recontamination of system during change of elements
Full flow bypass with low hysteresis	Reduction of bypass period due to low hysteresis	Improved protection of system
	Only a small part of the total flow is bypassing the element	
Optional funnel	Ensures that oil enters the tank under the oil level	Significant reduction of oil foaming

Typical Applications

- Lorry mounted cranes
- Agricultural equipment
- Container hook loaders

The Parker Filtration ETF Series Low Pressure Filters

For tank top mounting installation. The ETF Series utilises a reinforced co-polymer head equipped with two return ports and quick release cover. This filter represents an economic solution for hydraulic systems with nominal flows up to 140 l/min.

Specification

Pressure ratings:
Max. 6 bar.

Assembly:
Tank top mounted.

Connections:
Threads G1" + G1" (ISO 228), port B supplied as plugged connection.

Filter housing:
Glass reinforced co-polymer.
Funnel made from steel.

Seal material:
Nitrile.

Operating temperature range:
-20° to +80°C.

Bypass valve:
Opening pressure 1.6 bar.

Filter element:
Conventional style element with steel end caps.

Degree of filtration:
Determined by multipass test according to ISO 16889.

Flow fatigue characteristics:
Filter media is supported so that the optimum fatigue life is achieved.

Filtration media:
Microglass III.

Element collapse rating:
8 bar (ISO 2941).

Indicator options:
Setting 1.2 bar.

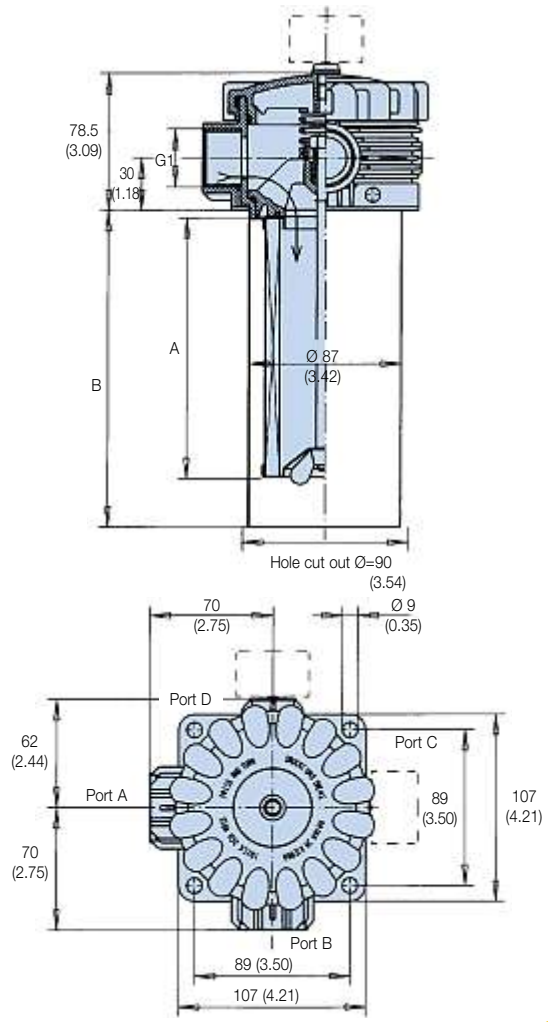
Options:
Magnetic pre-filtration.

Fluid compatibility:
Suitable for use with mineral and vegetable oils, and some synthetic oils. For other fluids, please consult Parker Filtration.

Installation Details

ETF Length	Dimensions mm (inches)	A	B
1	ETF45	82 (3.22)	100 (3.94)
2	ETF60	106 (4.17)	125 (4.92)
3	ETF90	150 (5.90)	177 (6.97)
4	ETF120	200 (7.87)	225 (8.86)
4A	ETF140	260 (10.24)	300 (11.81)

mm
(inches)



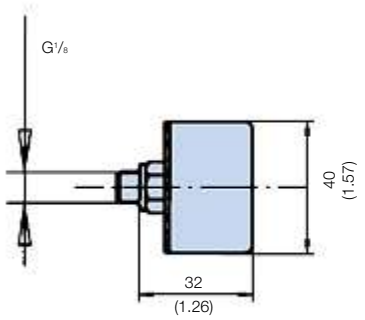
ETF Series

Indicator Details

Visual pressure indicator

Code G2

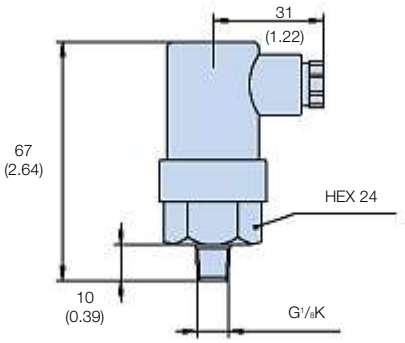
mm (inches)



48 Vdc electrical indicator 1.2 bar

Code S2/S3

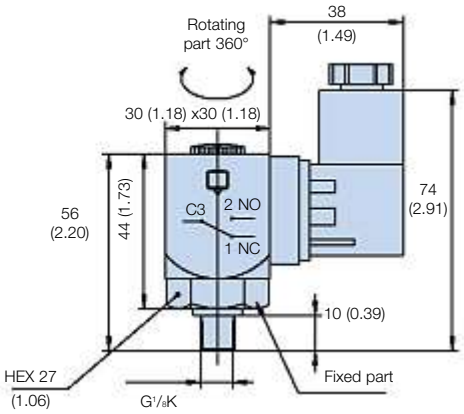
mm (inches)



250 VAC electrical indicator 1.2 bar

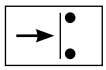
Code S4

mm (inches)

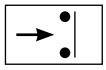


Option	Description	Connection/Voltage	Wiring	Part number
G2	Visual indicator 1.2 bar	N/A	N/A	FMUG2FBMG02L
S2/S3	Electrical indicator 1.2 bar	42 Vdc max	+  - Select either normally open (NO) or normally closed (NC)	FMUS2FBMG02L or FMUS3FBMG02L
S4	Electrical indicator 1.2 bar	250 VAC max	 1 NC, 2 NO, 3 C	FMUS4FBMG02L

Normally open contacts



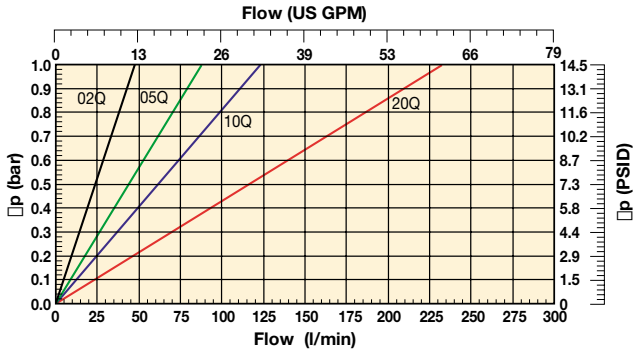
Normally closed contacts



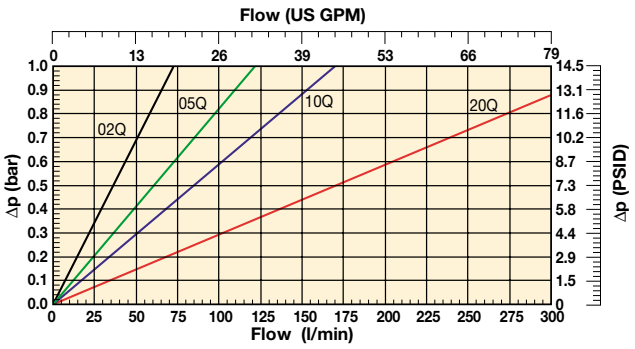
Pressure Drop Curves

The recommended level of the initial pressure drop for low pressure filters is max 0.5 bar.
If the medium used has a viscosity different from 32cSt, pressure drop over the filter can be estimated as follows:
□p = (□p32 x viscosity of medium used) / 32cSt.

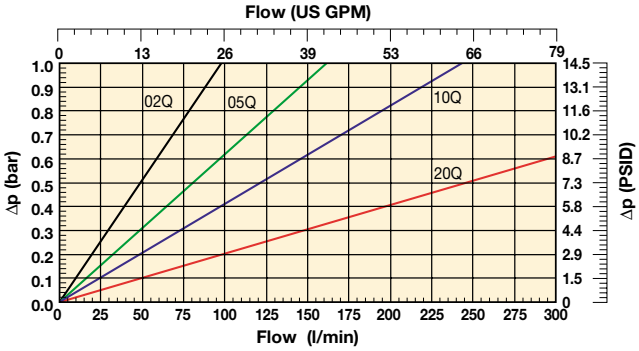
ETF45 (Element length code 1)



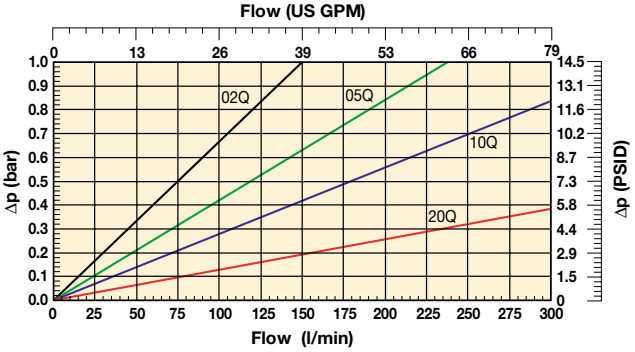
ETF60 (Element length code 2)



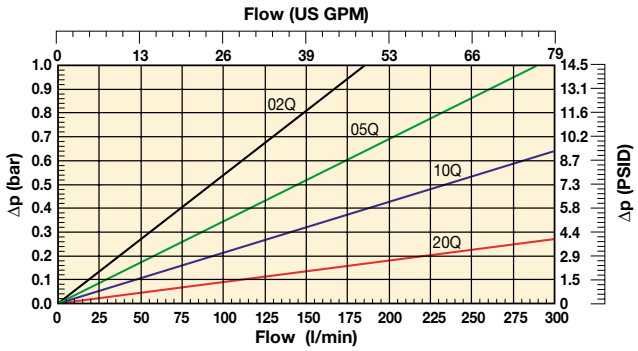
ETF90 (Element length code 3)



ETF120 (Element length code 4)



ETF140 (Element length code 4A)



Note: All pressure drop curves above show total pressure drop. i.e. they are combined housing and element curves.

ETF Series

Ordering Information

Standard products table

Part number	Supersedes	Flow (l/min)	Model number	Element length	Media rating (µ)	Seals	Indicator	Bypass settings	Ports	Included options	Replacement elements	Supersedes
ETF210QBP2FG164	FK1230.Q010.BK16.GX16	60	ETF60	Length 2	10	Nitrile	Plugged	1.6 Bar (22 Psi)	2xG1 (one port plugged)	Diffuser type P	**937950Q**	FC1230.Q010.XS
ETF220QBP2FG164	FK1230.Q020.BK16.GX16	60	ETF60	Length 2	20	Nitrile	Plugged	1.6 Bar (22 Psi)	2xG1 (one port plugged)	Diffuser type P	**937951Q**	FC1230.Q020.XS
ETF310QBP2FG164	FK1240.Q010.BK16.GX16	90	ETF90	Length 3	10	Nitrile	Plugged	1.6 Bar (22 Psi)	2xG1 (one port plugged)	Diffuser type P	**937952Q**	FC1240.Q010.XS
ETF320QBP2FG164	FK1240.Q020.BK16.GX16	90	ETF90	Length 3	20	Nitrile	Plugged	1.6 Bar (22 Psi)	2xG1 (one port plugged)	Diffuser type P	**937953Q**	FC1240.Q020.XS

Note: Filter assemblies ordered from the product configurator below are on extended lead times. Where possible, please make your selection from the table above.

Product configurator

Configurator example of an ETF Series filter

Box 1	Box 2	Box 3	Box 4	Box 5	Box 6	Box 7	Box 8
ETF	**3**	**10Q**	**B**	**S2**	**F**	**G16**	**1**

Box 1

Code
ETF

Box 2

Filter type	
Housing	**Code**
ETF 1-45	1
ETF 1-60	**2**
ETF 1-90	**3**
ETF 1-120	4
ETF 1-140	**4A**

Box 3

Degree of filtration				
	Glassfibre media			
	Microglass III (for disposable elements)			
Disposable element	02Q	05Q	**10Q**	**20Q**

Box 4

Seal type	
Seal material	**Code**
Nitrile	**B**

Box 5

Indicator	
	Code
Pressure gauge, setting 1.2 bar, G1/8 for dual head ports and TSR series	**G2**
Pressure switch 42V, 1.2 bar setting, NO with G1/8 BSP	**S2**
Pressure switch 42V, 1.2 bar setting, NC with G1/8 BSP	S3
Pressure switch 250V, 1.2 bar setting NO/NC with G1/8	S4
No indicator, indicator ports L + R plugged	**P2**
Other settings for indicators / gauges on request	on request

Box 6

Bypass valve	
Bypass valve	**Code**
1.6 bar	**F**
Other bypass settings	on request

Box 7

Filter connection	
Ports	**Code**
G1"(BSP) (2 ports, one supplied as plugged connection)	**G16**

Box 8

Options	
Options	**Code**
No diffuser required	1
Diffuser type P without perforated plate area	**4**
Diffuser with integrated hose connection	on request
Magnets	E
Diffuser type P and magnets	F
Other combinations	on request

Note: ETF filters are standard supplied without magnets and including diffuser type P

Spare elements	
Replacement elements	**Supersedes**
937969Q	FC1220.Q002.XS
937970Q	FC1220.Q005.XS
937948Q	FC1220.Q010.XS
937949Q	FC1220.Q020.XS
937971Q	FC1230.Q002.XS
937972Q	FC1230.Q005.XS
937950Q	FC1230.Q010.XS
937951Q	FC1230.Q020.XS
937973Q	FC1240.Q002.XS
937974Q	FC1240.Q005.XS
937952Q	FC1240.Q010.XS
937953Q	FC1240.Q020.XS
937975Q	FC1250.Q002.XS
937976Q	FC1250.Q005.XS
937954Q	FC1250.Q010.XS
937955Q	FC1250.Q020.XS
937977Q	FC1260.Q002.XS
937978Q	FC1260.Q005.XS
937956Q	FC1260.Q010.XS
937957Q	FC1260.Q020.XS
937979Q	FC1275.Q002.XS
937980Q	FC1275.Q005.XS
937981Q	FC1275.Q010.XS
937982Q	FC1275.Q020.XS

Degree of filtration						Media code
Average filtration beta ratio ß (ISO 16889) / particle size µm [c]						
ßx(c)=2	ßx(c)=10	ßx(c)=75	ßx(c)=100	ßx(c)=200	ßx(c)=1000	
% efficiency, based on the above beta ratio (ßx)						
50.0%	**90.0%**	**98.7%**	**99.0%**	**99.5%**	**99.9%**	
N/A	N/A	N/A	N/A	N/A	4.5	**02Q**
N/A	N/A	4.5	5	6	7	**05Q**
N/A	6	8.5	9	10	12	**10Q**
6	11	17	18	20	22	**20Q**

Highlights Key (Denotes part number availability)

123	Item is standard
123	Item is standard green option
123	Item is semi standard
123	Item is non standard

Note: Standard items are in stock, semi standard items are available within four weeks

Note 1: Part numbers featured with bold highlighted codes will ensure a 'standard' product selection.
Note 2: Alternate displayed part number selection will require you to contact Parker Filtration for availability.