

# DF40

## Duplex Filters



### Cast iron duplex filter for Marine applications:

The new DF40 duplex filter gives you extra flexibility in installation because it can be serviced from the top or the bottom. The durable cast iron housing and strong steel bowls make it especially good fit for engine room applications.

The DF40 with flow up to 200 l/min and pressure up to 40 bar contains Eco elements which help to save the environment and reduce the customer's disposal costs as no metal parts are included. This filter also disposes of a double indicator port and test connections which can be isolated with shut-off valves for possible assembly and maintenance.



### Contact Information:

Parker Hannifin Corporation  
**Hydraulic Filter Division Europe**  
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[www.parker.com](http://www.parker.com)

### Applications:

- Fuel filter for diesel engines up to 10 MW
- Lubrication filter for gearboxes and propulsion systems
- Medium pressure duplex filter in hydraulic systems
- In-line return duplex filter in hydraulic systems

## Specification

### Duplex filter:

Change-over valve with open center position. Locking device for both end positions. Element change is possible by opening either the top cover or the bowl in the bottom. Safety guards ensure that pressure is released prior opening the filter.

### Maximum operating pressure:

40 bar

### Connections:

Flanges SAE 1½" 3000-M as standard. Optional thread connections G1½ and G1¼ available with flange adapters.

### Seal material:

Fluoroelastomer

### Operating temperature:

-20°C...+120°C, for other temperatures consult Parker Filtration.

### Housing material:

Cast iron (GJS)

### Weight:

52 kg

### Nominal flow rate (30 cSt):

200 l/min (12 m<sup>3</sup>/h)

### Bypass valve:

Standard without bypass, optional opening pressure 3.5 bar

### Indicators:

Integrated indicator port. Filter can be equipped with visual, electrical or electronic differential pressure indicator. Setting 2.5 bar, other settings available.

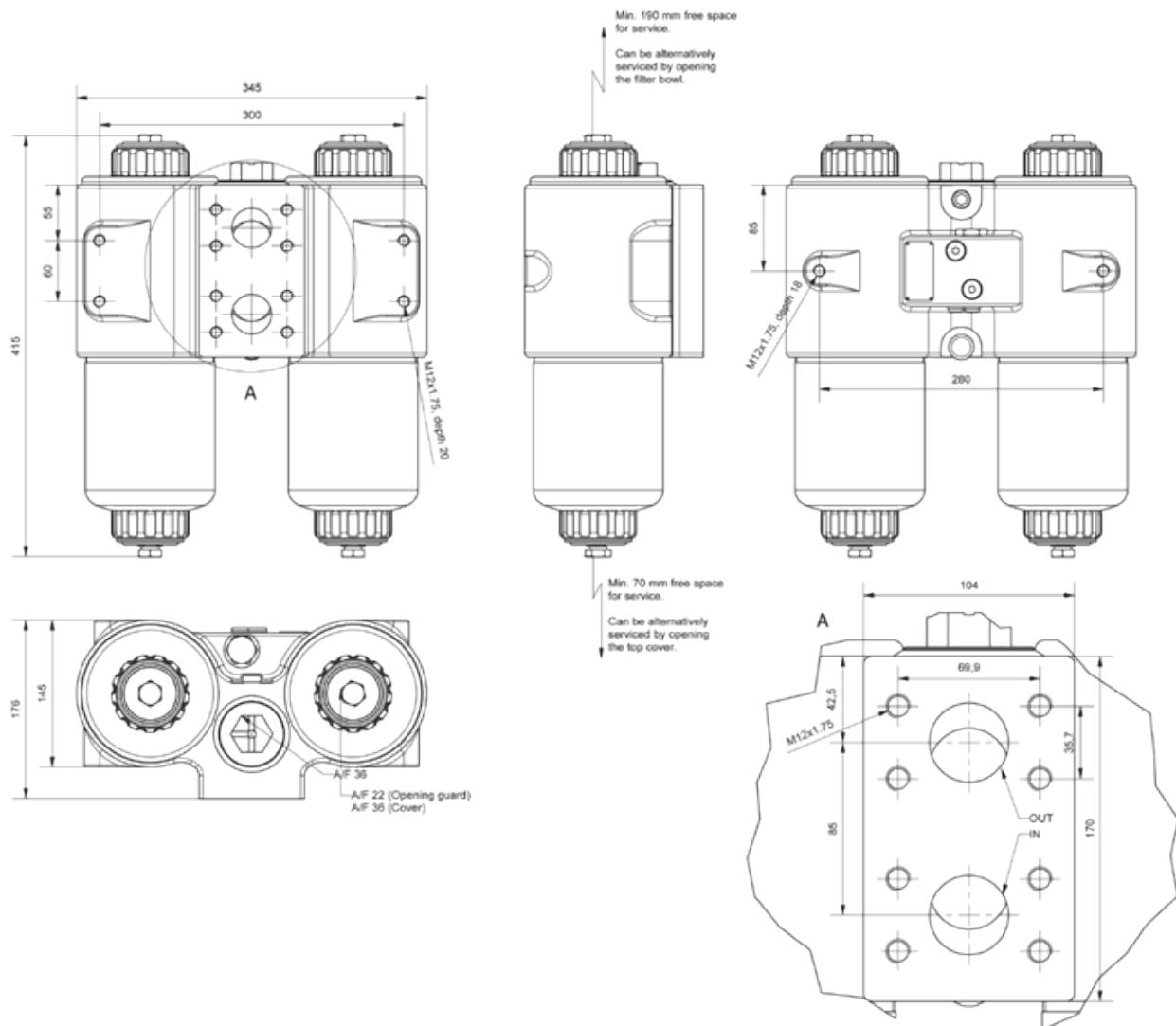
Additional indicator port and isolation valves which also enable indicator testing are available by request. For details contact Parker Filtration.

### Filter elements:

- Environmentally friendly Ecoglass III elements, micron ratings(abs): 2 µm, 5 µm, 10 µm and 20 µm. Ecoglass III elements contribute to ISO14001 because they do not include metal parts.
- Glassfibre Microglass III elements, micron ratings(abs): 2 µm, 5 µm, 10 µm and 20 µm.
- Cleanable metal mesh elements, micron ratings(abs): 35 µm and 60 µm

### Fluid compatibility:

Suitable for use with regular hydraulic and lubrication oils & light fuel oils. For heavy fuel oils and other fluids consult Parker Filtration.



# DF40

## Pressure Drop Curves

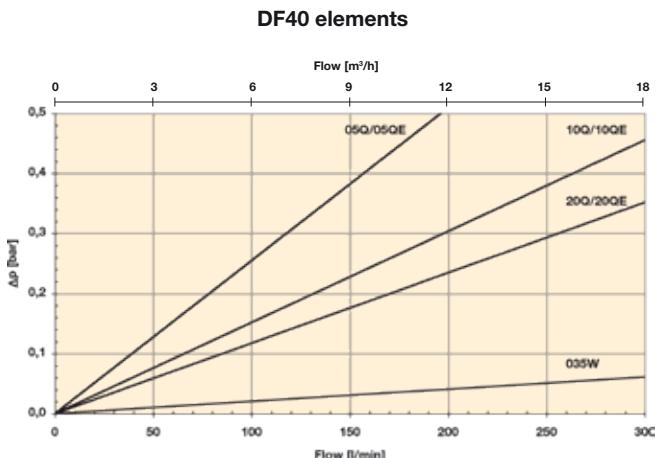
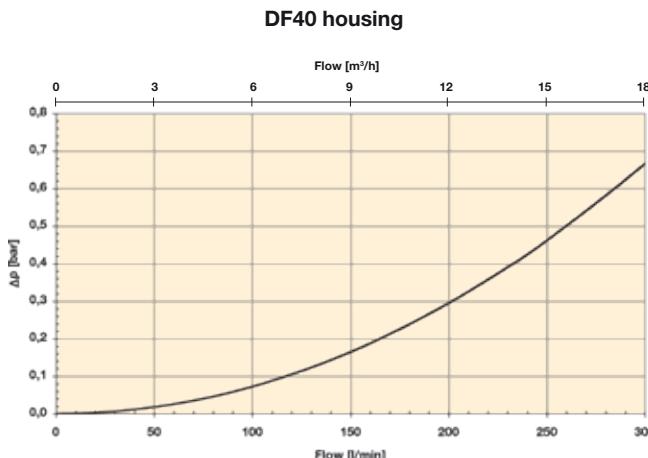
$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

The recommended level of the initial pressure drop for this filter is maximum 0.5 bar.

$\Delta p$ -curves are measured at 30 cSt.

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

$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}} \times \frac{\text{working viscosity}}{30 \text{ cSt}}$$



### REPLACEMENT ELEMENTS WITH FLUOROELASTOMER SEALS

Media code	Order code	
Glassfibre	Microglass III	Ecoglass III
02Q/02QE	939200Q	939204Q
05Q/05QE	939201Q	939205Q
10Q/10QE	939202Q	939206Q
20Q/20QE	939203Q	939207Q
<b>Cleanable metal mesh</b>		
035W	939208	
060W	939209	

### SPARE PARTS

Seal kit (fluoroelastomer)	CODE
For spool valve	939215
Seals needed in element service are included in Parker original replacement element package.	

## Product Description for DF40

### Complete Filter:

Table 1

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Table 2

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Table 3

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Table 4

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Table 5

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Table 6

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Table 7

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Table 8

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Table 1

FILTER TYPE	
Model	CODE
Duplex filter	<b>DF40</b>

Table 2

FILTER SIZE	
Element length	CODE
Length 1	<b>1</b>

Table 3

DEGREE OF FILTRATION	
Element type	CODE
<b>Microglass III</b>	
Glassfibre 2 µm	02Q
Glassfibre 5 µm	05Q
Glassfibre 10 µm	10Q
Glassfibre 20 µm	20Q
<b>Ecoglass III</b>	
Glassfibre 2 µm	02QE
Glassfibre 5 µm	05QE
Glassfibre 10 µm	<b>10QE</b>
Glassfibre 20 µm	<b>20QE</b>
<b>Other medias</b>	
Cleanable metal mesh 35 µm	035W
Cleanable metal mesh 60 µm	060W

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	<b>V</b>

Table 5

INDICATORS	
Options	CODE
Indicator port plugged	<b>P</b>
Visual indicator	<b>M3</b>
Electrical indicator	<b>T1</b>
Electronic indicator (PNP/N.O.)	F1
Electronic indicator (NPN/N.O.)	F2

Table 6

BYPASS VALVE	
Bypass/indicator setting	CODE
3.5 bar/2.5. bar	<b>K</b>
No/No	X

Table 7

FILTER CONNECTIONS	
Port size	CODE
SAE flange 1 1/2" 3000-M	<b>R24</b>
G 1 1/4 with adaptor	G20
G 1 1/2 with adaptor	G24

Table 8

OPTIONS	
Options	CODE
With bypass	<b>1</b>
No bypass	<b>2</b>
No safety covers, with bypass	N1
No safety covers, no bypass	N2
HFO use, no bypass, max. pressure 30 bar	H2

Please note the bolded options reflect standard options with reduced lead-time.

#### WARNING – USER RESPONSIBILITY

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