DF40

Duplex Filters
Max. 200 I/min. 40 bar



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 makes it an 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

Hydraulic Filter Division Europe

European Product Information Centre Freephone: 00800 27 27 5374 (from AT, BE, CH, CZ, DE, EE, ES, FI, FR, IE, IT, PT, SE, SK, UK) filtrationinfo@parker.com

www.parker.com/hfde

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 $1\frac{1}{2}$ " 3000-M as standard. Optional thread connections G1½ and G1¼ available with flange adapters.

Seal material:

Fluoroelastomer

Operating temperature:

- -20°C...+120°C with Fluoroelastomer seals,
- -20° C... $+160^{\circ}$ C with metal mesh elements and Fluoroelastomer seals.

Housing material:

Cast iron (GJS)

Weight:

52 kg

Nominal flow rate (30 cSt):

200 l/min (12 m³/h)

Bypass valve:

Standard without bypass, optional opening pressure 3.5 bar

Indicators:

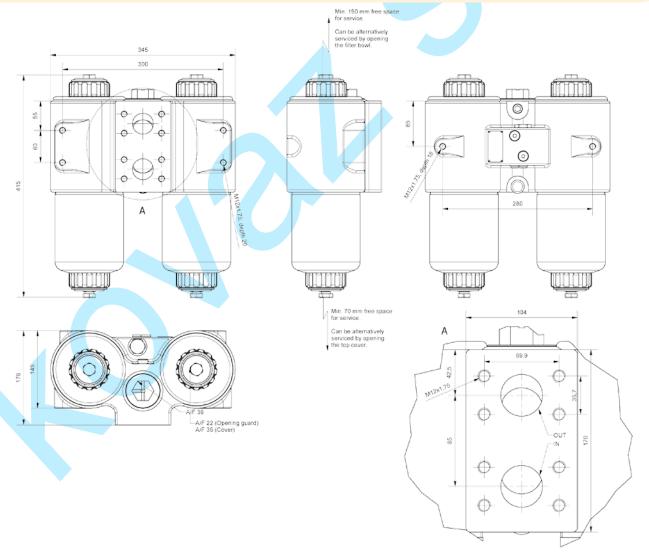
Integrated indicator port. Filter can be equipped with visual, electrical or electronic differential pressure indicator. Setting 2.5 bar, other settings available. Additional indicator port and isolation valves which also enable indicator testing are available by request. For details see indicator options table on product description page and catalogue section 4.

Filter elements:

- Environmentally friendly Ecoglass III elements, micron ratings(abs): 2 μ m, 5 μ m, 10 μ m and 20 μ m. 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

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

The recommended level of the initial pressure drop for this filter is maximum $1.0\,\mathrm{bar}$.

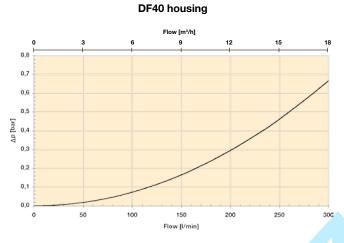
 Δ p-curves are measured at 30 cSt.

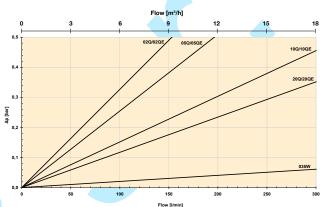
If the medium used has a viscosity different from 30 cSt, pressure drop over the element can be estimated as follows:

DF40 elements

10 lows:

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





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				
Cleanable metal mesh						
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	Tal	ble 2	-	Table 3	-	Table 4	Table 5	Table 6	Table 7	Table 8

Table

Table 1	
FILTER TYPE	
Model	CODE
Duplex filter	DF40

Table 2

FILTER SIZE	
Element length	CODE
Length 1	1

Table 3

Table 3					
DEGREE OF FILTRATION					
Element type	CODE				
Microglass III					
Glassfibre 2 µm	02Q				
Glassfibre 5 µm	05Q				
Glassfibre 10 µm	10Q				
Glassfibre 20 µm	20Q				
Ecoglass III					
Glassfibre 2 µm	02QE				
Glassfibre 5 µm	05QE				
Glassfibre 10 µm	10QE				
Glassfibre 20 µm	20QE				
Other medias					
Cleanable metal mesh 35 µm	035W				
Cleanable metal mesh 60 µm	060W				

Table 4

SEAL TYPE	
Seal material	CODE
Fluoroelastomer	V

Table 5

INDICATORS	
Options	CODE
Indicator port plugged	Р
Visual indicator	М3
Electrical indicator	T1
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	K		
No/No	X		

Table 7

FILTER CONNECTIONS				
Port size	CODE			
SAE flange 11/2" 3000-M	R24			
G 11/4 with adaptor	G20			
G 1½ with adaptor	G24			

Table 8

OPTIONS	
Options	CODE
With bypass	1
No bypass	2
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.

