

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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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



ENGINEERING YOUR SUCCESS.

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 m³/h)

Bypass valve:

Standard without bypass, optional opening pressure 3.5 bar

Indicators:

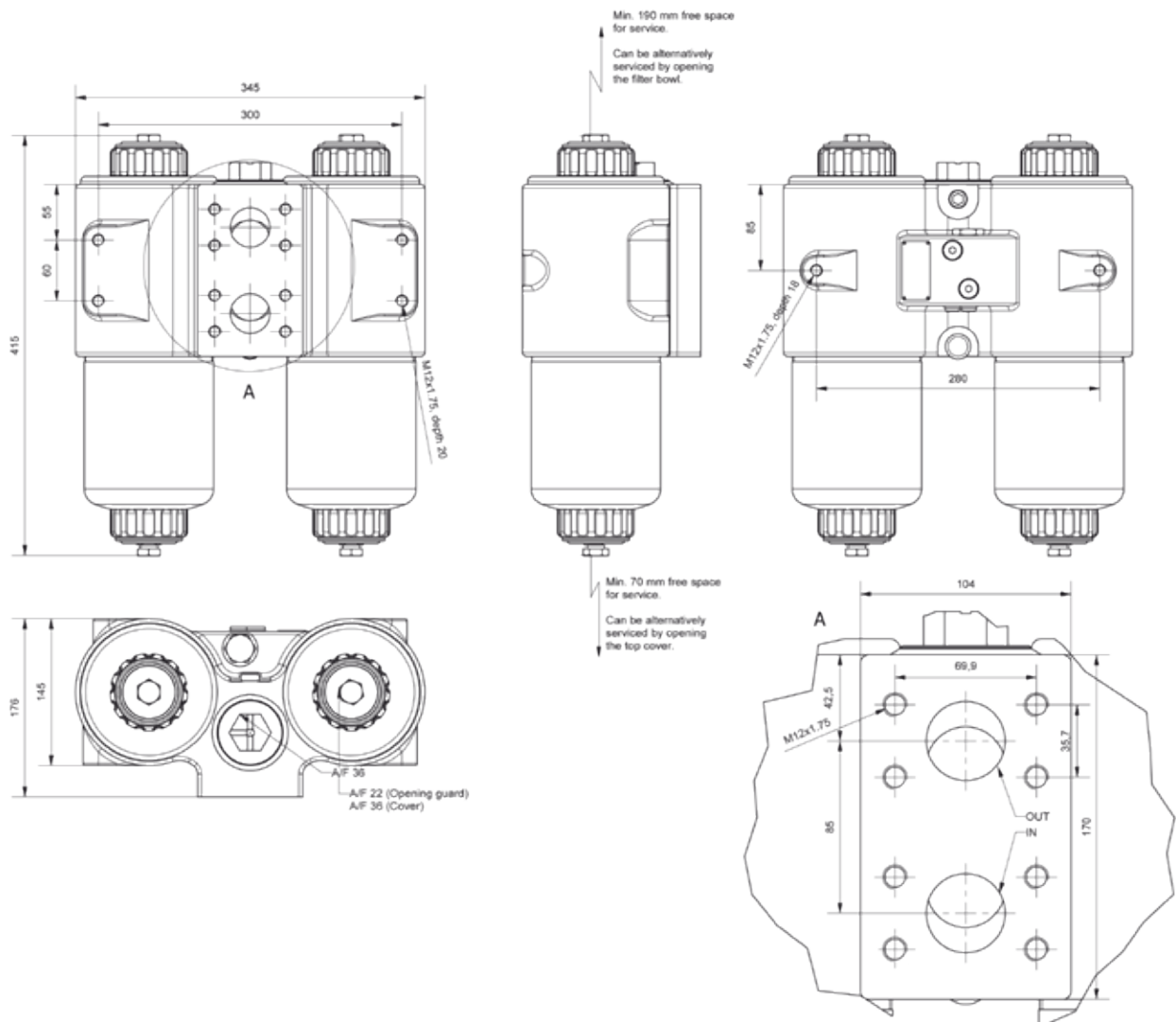
Integrated indicator port. Filter can be equipped with visual, electrical or electronic differential pressure indicator. Setting 2.5 bar, other settings available. Additional indicator port and isolation valves which also enable indicator testing are available by request. For details contact Parker Filtration.

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

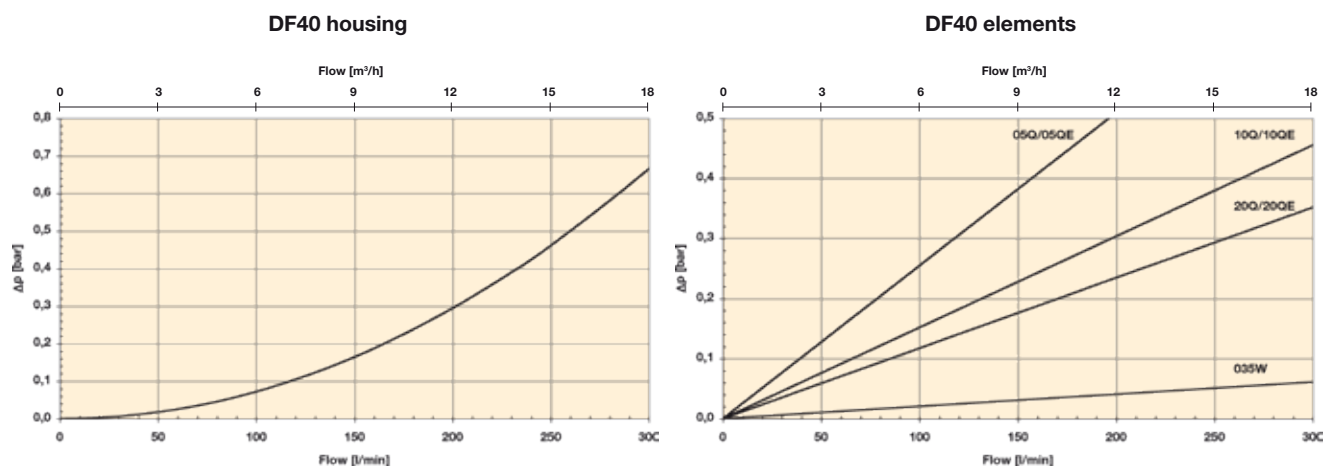
$$\Delta p_{\text{total}} = \Delta p_{\text{housing}} + \Delta p_{\text{element}}$$

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

Δp -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 |
| 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

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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 | DF40 |

Table 2

| FILTER SIZE | |
|----------------|----------|
| Element length | CODE |
| Length 1 | 1 |

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 | P |
| Visual indicator | M3 |
| 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 1½" 3000-M | R24 |
| G 1¼ 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.

WARNING – USER RESPONSIBILITY

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

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