

## **PreLine®**

Improved filter performance for diesel fuel.





## Perfect water separation in diesel fuels.

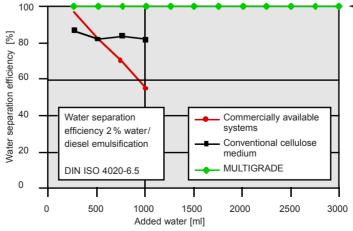
High-performance, stateof-the-art technology is now used for fuel-injection systems in diesel-powered vehicles. This means that the requirements relating to diesel filtration have increased substantially. Both ultrafine particles and large quantities of water must be separated efficiently from the fuel. In order to satisfy these requirements, MANN+HUMMEL have developed the PreLine pre-filter system which uses a new filter medium from the MULTIGRADE series.

The MULTIGRADE F\_ PFO filter medium offers maximized service life together with high separation efficiency of fine contaminant.

Compared with standard filter

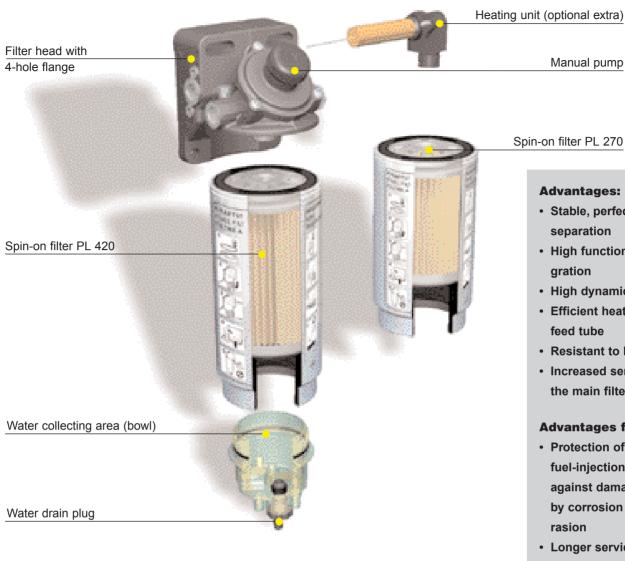
media, greatly improved water separation efficiency is achieved with the MULTI-GRADE filter media. The required water separation efficiency of > 93 % is reliably attained. The ultrafine synthetic fibers ensure stable and high water separation throughout the service life of MULTIGRADE filter media. Thanks to the integration of

MULTIGRADE in the modular PreLine, system, all the demands of modern dieselinjection systems have been satisfied by an innovative filter system. Optional components mean that the filter system can be used in different vehicles.



Compared with commercially available cellulose media, the MANN+HUMMEL MULTIGRADE F\_PFO medium functions reliably even with large quantities of water.

## PreLine®: a modular system.



Spin-on filter PL 270

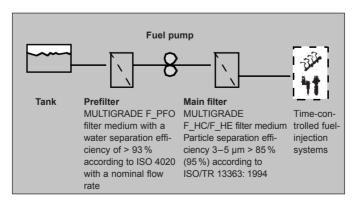
#### **Advantages:**

- · Stable, perfect water separation
- · High function integration
- · High dynamic rigidity
- · Efficient heating in the feed tube
- · Resistant to biodiesel
- · Increased service life of the main filter

#### Advantages for you:

- Protection of modern fuel-injection systems against damage caused by corrosion and ab-
- · Longer service life
- Reduced costs due to fewer repairs

The flexible PreLine® prefilter system is a universal prefilter solution for diesel fuel. The concept is very easy to use: it is based on the principle of the spin-on filter. The filter can therefore be replaced quickly and inexpensively. The PreLine® system is a practical retrofitting solution.



Application of the different MULTIGRADE filter media

Maximum filter performance thanks to the multi-stage filter solution: prefilter and main filter with the MULTIGRADE medium.

Complete system 1 Including installation instructions



PreLine 270

# Complete system 2 Including installation instructions

Flexible solution: the PreLine® modules.



PreLine 420

#### General technical specifications:

#### PreLine 270

Head with spin-on filter PL 270 x: H 284  $\times$  B 148  $\times$  T 141 mm Nominal flow rate: 270 l/h Water collecting area: 0.3 l

#### PreLine 420

Head with spin-on filter PL 420 x: H 364  $\times$  B 148  $\times$  T 141 mm Nominal flow rate: 420 l/h Water collecting area: 0.5 l

#### Spin-on filter

Sizes: 270/420 I/h

Separation efficiency: Singlepass

(according to ISO/TR 13 353: 1994):  $\eta$  3 – 5  $\mu$ m > 15%

Absolute fineness Multipass (ISO/DIS 19 438: 2000) 99 %: 30 mm Water separation:  $\eta$  H<sub>2</sub>O > 93 %

according to DIN ISO 4020 with a nominal flow rate

#### **Bowl + installation tool**

Seal: radial sealing ring for optimized bowl sealing Water collecting area: approx. 0.3 or 0.5 l

PreLine  $270 \ge 0.3 \text{ I}$ PreLine  $420 \ge 0.5 \text{ I}$ 

#### Head heating unit (optional extra)

Voltage/output: 24 V/350 W Switch-on point: 5 °C, switches on automatically Electrical connections: plus and ground

#### Filter system:

Operating pressure: max. 4 bar Ambient temperature: –40 °C bis +120 °C Water drained by means of manually operated valve

#### Media resistance:

Diesel (EN 590), RME (biodiesel DIN E 51 606) Hydraulic connection M 16 x 1.5 mm Fixing bore holes for filter head M 12, Hole length 50-86 mm

#### Instructions for use:

- Prefilter should be replaced at the same time as the main fuel filter
- Filter size should be chosen according to the volume flow of the engine intake pump

#### Legal requirements:

- Installation of the prefilter according to the installation instructions does not lead to cancellation of type approval for the vehicle (TÜV Automotive dated August 3, 2001)
- Heating unit has an ABE installation acceptance (entry in vehicle registration document) is not required

Parts available separately



Spin-on filter PL 270 x PL 420 x



Bowl + installation tool
Order No. 66 606 12 982
Installation tool separately
LS 7/4



Complete head heating unit Order No. 29 017 00 202

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