



## Duplex-Filters 50 & 63 FLDK(N)

Innovative, Connectable, Resource-Saving

# Reliable and continuously clean operating fluid

Conserve resources and reduce costs: The new duplex filter series from Hengst will extend the service life of your filter elements and operating fluids.



With the two newly designed 50FLDK(N) and 63FLDK(N) duplex filter series, operators are not only able to reduce the overall footprint of the filter but also ensure that continuous system operation is maintained.

Simply flip the change-over lever. With the newly developed duplex change-over filters, it is only necessary to switch over one lever in order to replace a used filter element. The second filter simply continues to filter without causing any interruption.

Of particular interest is the filter assemblies compact design, where actual dynamic flow analysis were used in order to optimize the design accordingly. The combination of the patented Cyclone effect and the new Pure Power filter element technology, allows end users to significantly extend their filter element service intervals, and in turn reduce their total cost of ownership.

## Duplex Filter 50 FLDK(N)

**63 FLDK(N)**  
with Type Approval  
from Lloyd's  
Register (LR)



## Innovative Design

The newly designed 50 and 63FLDK(N) duplex filter series can accomplish flow rates of up to 2500 l/min.

With the help of complex flow analyses and various simulation tools, the specialists at Hengst have developed a duplex filter series, that has an optimal flow path with exceptional high dirt holding capabilities, at half the footprint of its predecessors.

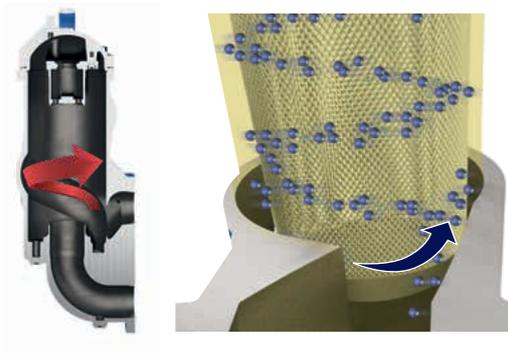
# Two types: optimally designed to meet the respective requirements

The duplex filters 50 and 63FLDK(N) follow common design and application principles. In order to optimally meet the different requirements, there are different designs in detail: The 50FLDK(N) series encompasses six variations and permit flow rates up to 2,500 l/min at an operating pressure of up to 50 bar.

The filter housing design encompasses integral pressure compensation and newly designed filter bowl end caps for easier removal and/or serviceability.

The longer change over valve handle allows for more efficient and improved operator ergonomics, requiring less change-over force from the operator. The handle is merely pushed back if not used for safety purposes.

The 63FLDK(N) series also encompasses six variations and permit flow rates up to 450 l/min at an operating pressure of up to 63 bar.



## **Cyclone effect protects filter elements**

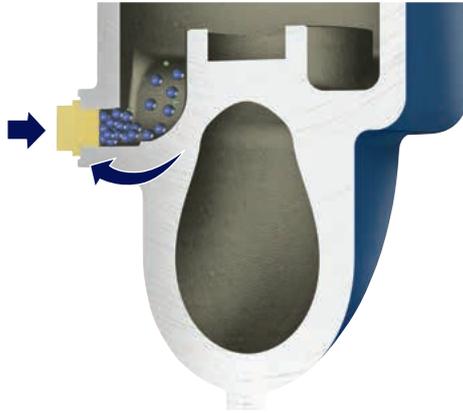
The patented cyclone effect prevents the incoming fluid from impacting the filter element head-on and causing damage to the filter material. Instead, the fluid flows upwards in a helical pattern along the inner wall of the filter housing. Particularly large particles are carried to the outside and guided downwards along the inside wall without clogging the filter element. The pre-cleaned fluid then flows through the filter material.

The result: a significantly longer filter element service life.



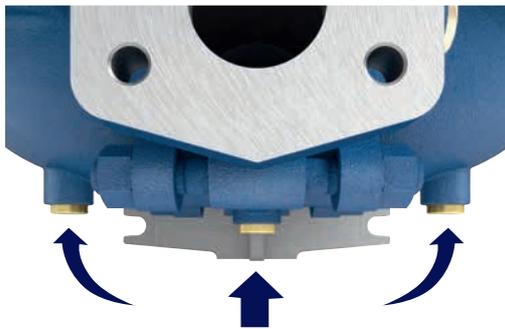
## **Dirt collector collects large solid particulates**

In the bottom of the filter bowls, precisely where the cyclone flow breaks off, dirt-capture pockets have been installed in order to collect large dirt particles. This permanently removes them from the operating fluids without stressing the filter element. This increases the service life. Users can simply flush out the dirt at this point by draining a small amount of fluid.



#### Magnetic drain plug

A standard, side-mounted oil drainage point with a magnetic drain plug attracts metal particles, allowing for easy visual inspection of metallic particles in the system. Positioning this magnetic plug near the end of the cyclonic action ensures high reliability. As the volume of these metallic particles increases maintenance technicians can troubleshoot proactively, before machine downtime.



#### Complete drainage without disassembly

Drain plugs, located at the lowest point of the two filter bowls permit complete drainage of the filter prior to removal. This prevents accumulation of contaminant and fluids, even during operation over multiple years. The new duplex filter series: Innovative, detailed solutions that lower your overall system lifecycle costs.

# Installation ready: cost-effective installation

Due to the spheroidal/ductile cast iron construction and the optimized flow geometry the FLDK(N) series duplex filters are considerably lighter and only half the footprint of competitive solutions. Complete wall/floor mounting kits are supplied with the filter assemblies. The mounting interface and dimensions for the different variations in each series are identical.

Mini-mess sampling ports are fitted on the inlet and outlet ports as a standard, and facilitate proper fluid sampling procedures.

#### Applications according data sheet:

Filtration of:

- Hydraulic fluids
- Lubricants
- Gear oils
- Engine oils
- Turbine oils
- Coolants

# Easy, trouble-free operation

## Modular clogging indicator

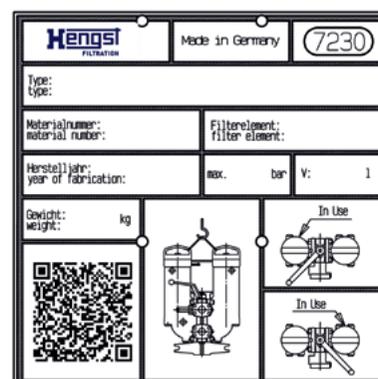
The modular contamination indicator shows the degree of contamination of the filter element and when filter element service life has been reached. An additional electrical module allows users to integrate the duplex filters into the Internet / Industry 4.0: The degree of contamination is recorded electronically and reported to higher-level systems.

Maintenance staff can schedule the change of filter elements and trigger corresponding orders accordingly. This allows your fluid management to fit seamlessly into your condition monitoring and preventive maintenance concepts.



## Nameplate

Each duplex filter is equipped with a robust, riveted metal nameplate. It ensures a long-lasting readability, even under extreme operating conditions. In addition to assembly information for lifting the filter, a pictogram shows the operating position of the filter as it relates to the filter element changeover lever. Additionally, a QR code instantly directs smart-phone users to more information about the new duplex filter series.





**Hengst**  
FILTRATION

FORMERLY  
**Rexroth**  
FILTRATION

**Hengst Filtration GmbH**

Hardtwaldstr. 43 | 68775 Ketsch, Germany  
Telefon +49 (0) 62 02 / 603-0 | [hydraulicfilter@hengst.de](mailto:hydraulicfilter@hengst.de)

[www.hengst.com](http://www.hengst.com)