

ByPass bath maintenance filter

KNOLL
.It works

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Properties

Compact and mobile installation

Autonomous control

Standardised and proven assemblies

Various filter principles

Filtration of ultra-fine particles

Filter principles with easy handling

Benefits

Process and location-independent adaptation

- Independent operation of the system, even on weekends
- No signal exchange with the existing system required

Rapid availability and high process reliability

Universally usable

Extension of the cooling lubricant service life and prevention of concentration

Low maintenance costs

Areas of application

KNOLL ByPass bath maintenance filters are filter systems for improving the quality of cooling lubricants. They are used to remove ultra-fine particles and foreign matter from the main filter system in the bypass flow.

Possible areas of application are

- Individual or central systems with backwash filters
- Machining of cast iron or carbide
- Processing of silicon, ceramics or graphite
- Grinding applications
- Weekend circulation

Equipment



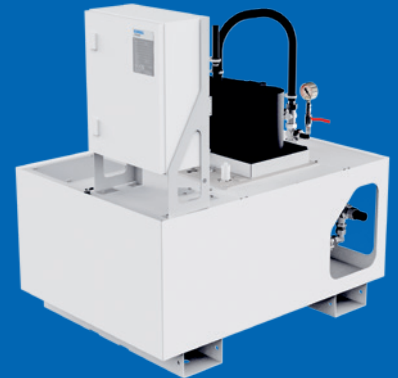
ByPass U

- Lifting pump
- Filter bowls
- Filter insert (original equipment)
- Manual aeration/venting



ByPass K

- Lifting pump
- Compact filter
- Filter fleece (original equipment)
- Fleece shortage warning
- Return pump
- Buffer tank
- Control unit



ByPass Z

- Lifting pump
- Centrifuge
- Catch pan
- Control unit

Description

ByPass-U

1. The lifting pump conveys the dirty cooling lubricant into the filter bowl.
2. The liquid flows through the filter element, which retains dirt particles.
3. The cleaned cooling lubricant flows back into the main filter system.

ByPass K

1. The lifting pump conveys the dirty cooling lubricant into the intake box of the filter.
2. The filter fleece retains dirt particles as they flow through.
3. The return pump returns the cleaned cooling lubricant from the buffer tank to the main filter system.

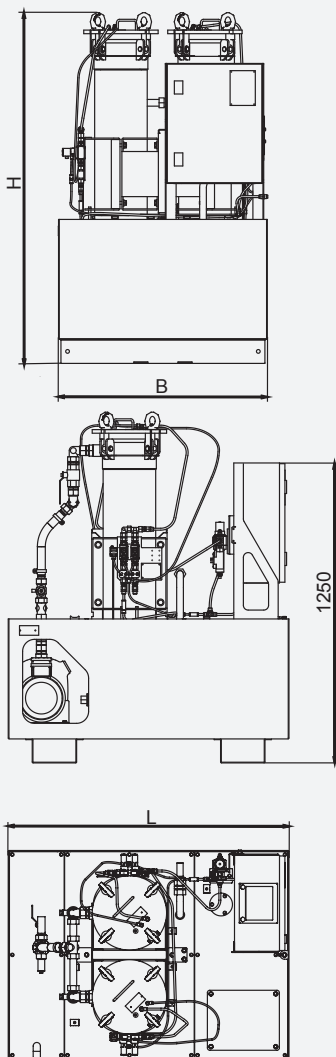
ByPass Z

1. The lifting pump conveys the dirty cooling lubricant into the centrifuge drum.
2. Dirt particles are separated on the drum wall by the centrifugal forces.
3. The cleaned cooling lubricant passes through a peeling tube into the catch pan.
4. The lifting pump returns the cleaned cooling lubricant to the main filter system via a switch valve.

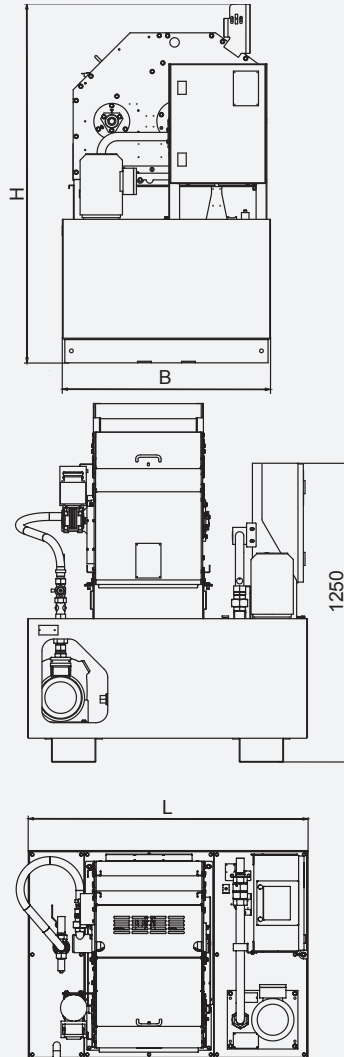
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Dimensions and technical data

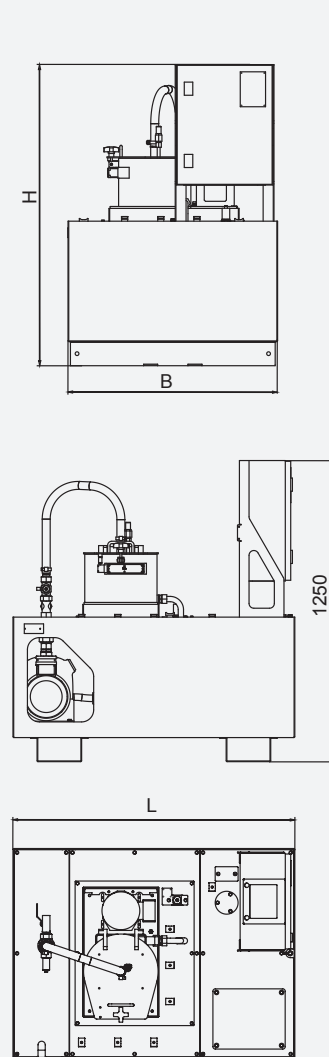
ByPass-U



ByPass-K



ByPass-Z



ByPass U

50 l/min

Max. flow rate

ByPass K

50 l/min

Grade of filtration (nominal)

1 - 70 µm

up to 20 µm

ByPass Z

35 l/min at 1 cSt
 20 l/min at 21 cSt

Power supply

400 V | 50 Hz

460 V | 60 Hz

400 V | 50 Hz

460 V | 60 Hz

400 V | 50 Hz

460 V | 60 Hz

Tank capacity

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300 l

—

Dimensions (LxWxH)

1170 x 870 x 1462 mm

1170 x 870 x 1500 mm

1170 x 870 x 1250 mm