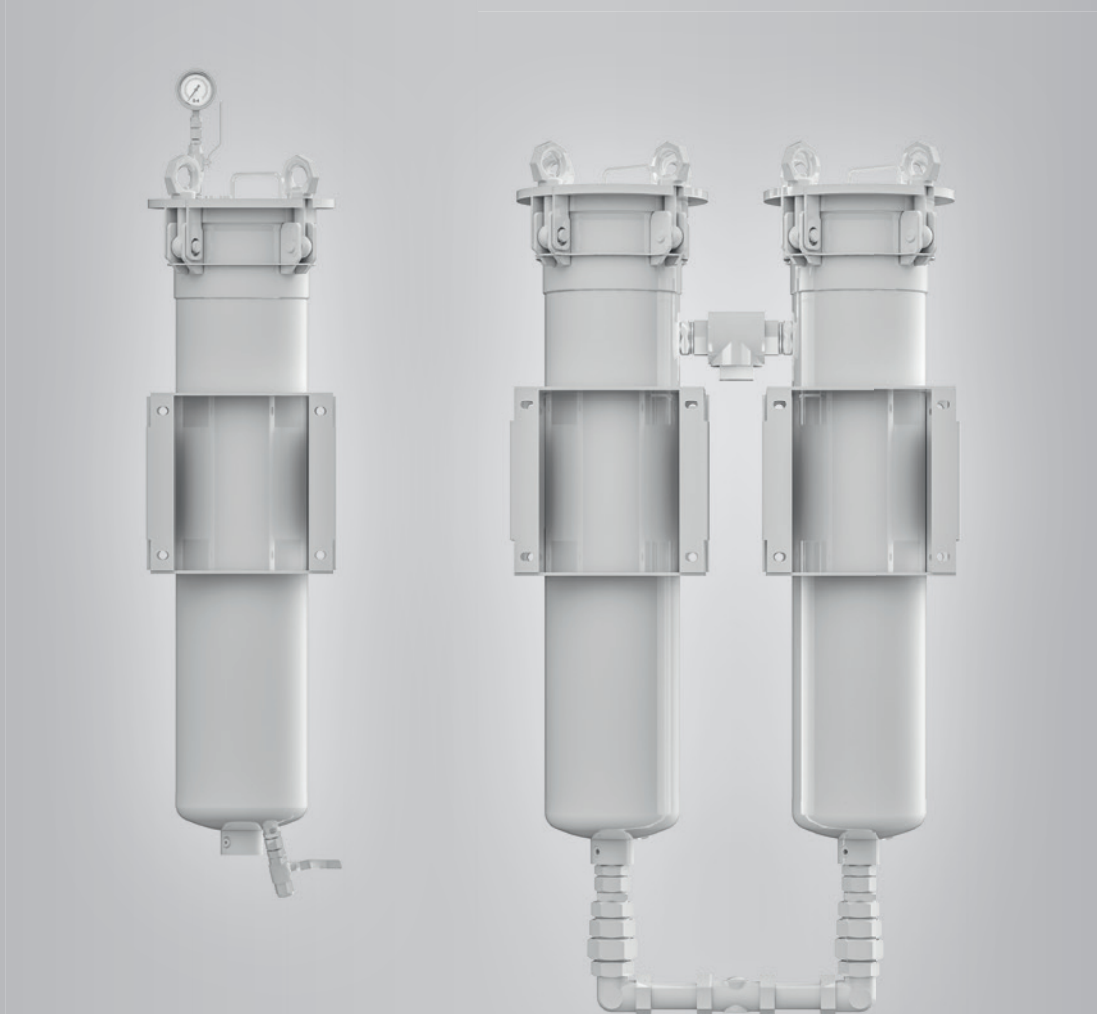
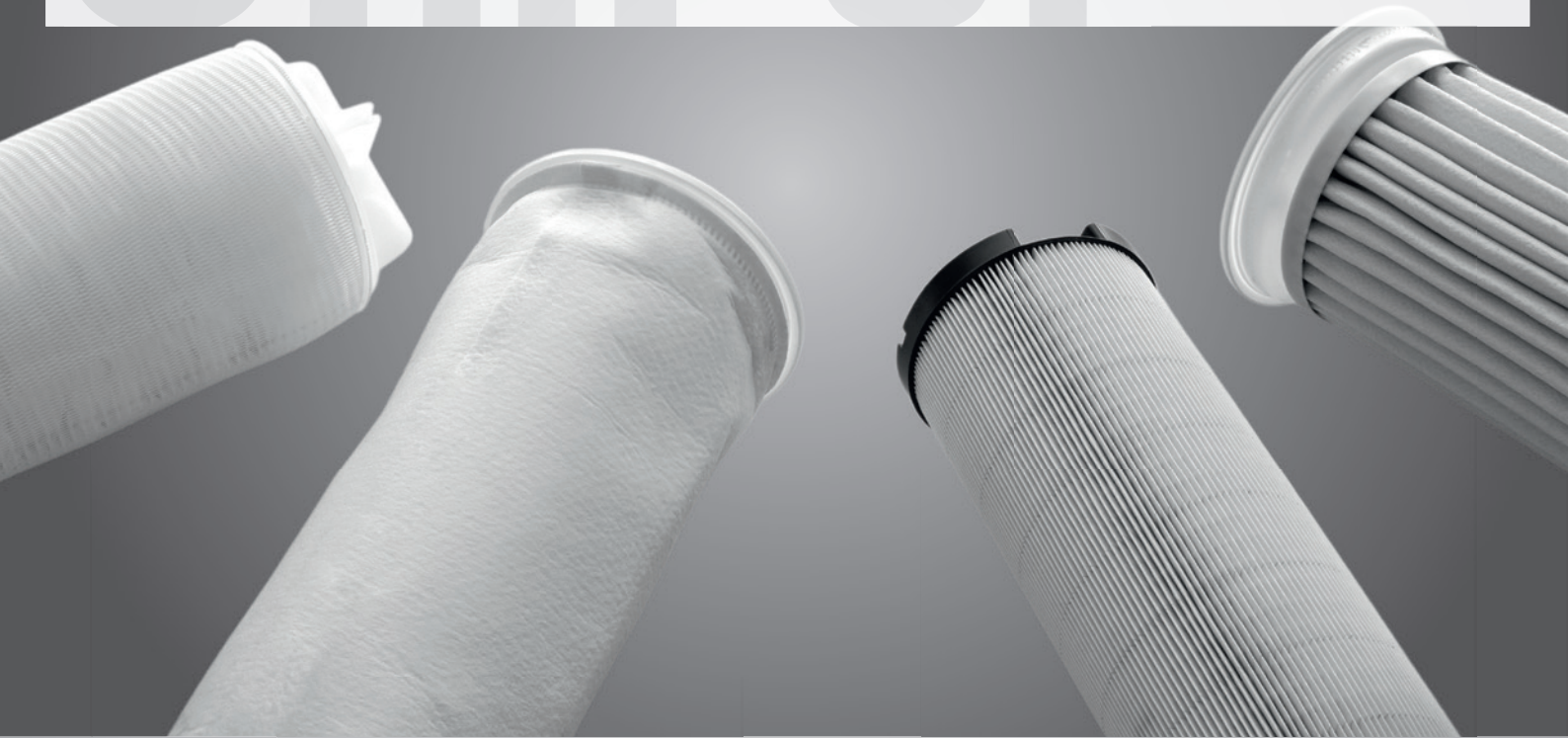


UniPur Canister Filters

KNOLL
.It works

UniPur

Issue 11-2022



Features

Many suitable filter inserts available

Easy filter change

Benefits

High flexibility when changing the requirements for the grade of filtration

Low maintenance costs

Areas of application

KNOLL UniPur cannister filters are devices for cleaning cooling lubricants (KSS). They form a cost-effective, manual alternative to self-cleaning filters. For a particular housing, there are different filter elements that achieve grades of filtration from 1 µm to 100 µm, depending on the requirements.

The UniPur cannister filter is versatile

- in the main or side stream
- as an additional filter (additional filter stage, bath upkeep, policing filter)
- as a standalone filter for small volume flows

Description

Function

Filtering

- 1) A pump conveys the contaminated KSS from above into the filter cannister
- 2) The liquid flows through the filter element, which retains the dirt particles
- 3) The cleaned KSS emerges from the bottom of the filter cannister

Regeneration

- 1) The collected dirt particles impede the KSS flow
- 2) The inlet pressure increases
- 3) Replacing the filter elements when a defined pressure is reached
 - Filter with differential pressure switch: Signaling at a preset pressure
 - Filter with pressure gauge: Periodic visual inspection necessary

Design as a duplex switch filter

- Functions like a single filter
- Switchability allows the filter to be changed during operation

Design as a double filter

- Functions like a single filter
- Parallel flow through both filter housings, thus increasing the flow rate

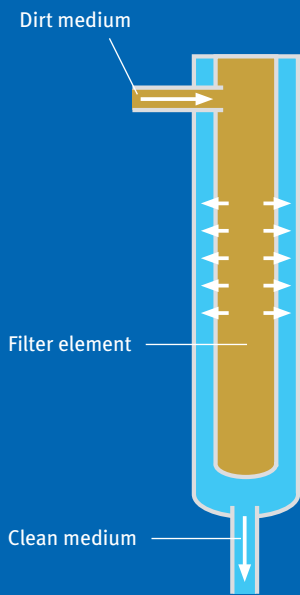
Combination options

For other requirements, we can combine the UniPur on request

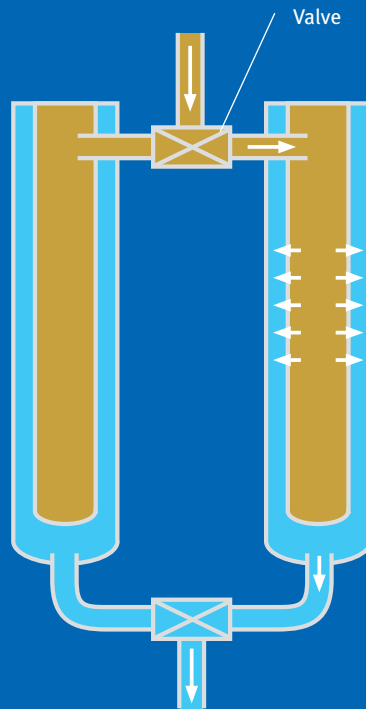
- Conveyor systems for transporting chips
- Filter systems for cleaning the KSS and supplying the machine tool

Diagram

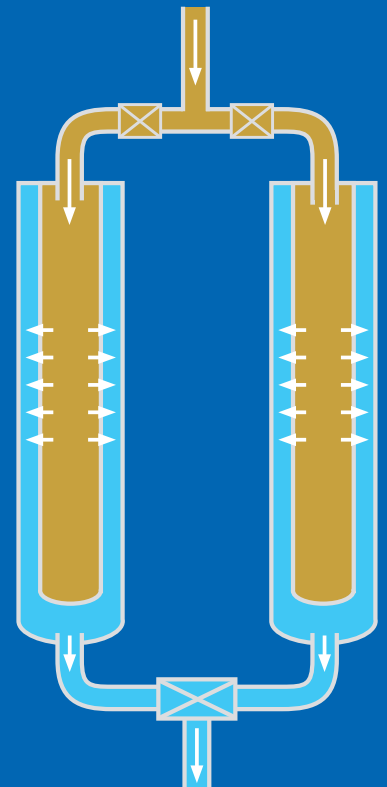
Single filter



Duplex switch filter



Double filter



Equipment

Filter canister	●
Filter insert (original equipment)	●
Pressure gauge	○
Differential pressure switch	○

● Basic equipment
○ Optional

Filter variants



MicroPur®



LOFPLEAT™ CP



DURAGAF™



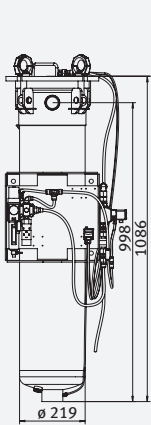
MAX-LOAD™

KNOLL Maschinenbau GmbH
 Schwarzachstraße 20
 DE-88348 Bad Saulgau
 Tel. +49 7581 2008-0
 Fax +49 7581 2008-90140
 info.itworks@knoll-mb.de
 www.knoll-mb.com

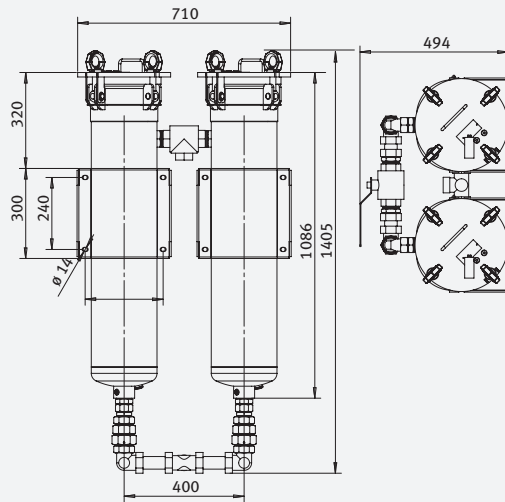
UniPur

Dimensions and technical data

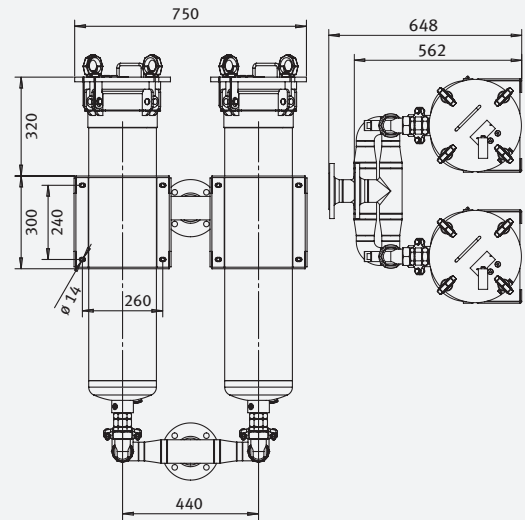
Single filter



Duplex switch filter



Double filter



Filter element overview

Manu- facturer	Filter type	Material No.	Grade of filtration		Outer diameter [mm]	Length [mm]	Filter surface* [m ²]		Rate of flow* [l/min]		
			absolute	nominal			per element	No. of elements	Oil	Emulsion	Solution
KNOLL	MicroPur®	166880		1-3	143	410	3,2	2	60	-	-
KNOLL	MicroPur®	210507		3-5	143	410	3,2	2	70	-	-
KNOLL	MicroPur®	210511		5-10	143	410	3,2	2	80	-	-
KNOLL	MicroPur®	444028		<1	143	410	3,2	2	-	-	60
EATON	LOFPLEAT™ CP	618296	10		165	991	20	1	200	300	300
EATON	LOFPLEAT™ CP	516163	20		165	991	20	1	200	400	400
EATON	LOFPLEAT™ CP	516166	30		165	991	20	1	250	500	500
EATON	LOFPLEAT™ CP	516167	40		165	991	20	1	300	500	500
EATON	LOFPLEAT™ CP	516170	70		165	991	20	1	400	500	500
EATON	DURAGAF™	516142		10	180	810	0,48	1	50	100	100
EATON	DURAGAF™	486736		25	180	810	0,48	1	100	200	200
EATON	DURAGAF™	493810		50	180	810	0,48	1	150	300	300
EATON	DURAGAF™	455029		100	180	810	0,48	1	200	400	400
EATON	MAX-LOAD™	516171		10	180	730	1,6	1	100	200	200
EATON	MAX-LOAD™	516173		25	180	730	1,6	1	150	300	300
EATON	MAX-LOAD™	516174		50	180	730	1,6	1	200	400	400

* Information applies to single filters - Not suitable