



FE B

FILTER ELEMENT FOR EF 4.121 / DF 221/ DF 225

DESCRIPTION

Replacement filter elements for single filter EF 4.121 (DN 20/32/50/80), double filter DF 4.225 (DN 20) and DF 4.221 (DN 32/50/80)

APPLICATION

Filtration of hydraulic fluids, lubricants, industrial fluids, gases and water

DESIGN

Star pleated special filter material, longitudinally microplasma welded, with inner support tube. End caps glued. Sealing takes place via O-ring.

MATERIALS

End caps: Galvanised sheet steel (others on request)

Filter material:

- optimesh® wire mesh (10-100µm) made of 1.4401
- precimesh® wire mesh (< 10 µm; > 100 µm) made of stainless steel 1.4401
- optional: glass fiber paper; filter paper; metal fiber fleece (stainless steel 1.4404)

Seals: NBR Nitrile (FKM Fluor elastomer and other materials on request)

Sealing compound: 2K epoxy resin; other options available on request.

PRESSURE

Max working pressure 16 bar, others on request

FLOW RATE

From 30 to 1200 l/min depending on DN (nominal connection width/size)

WORKING TEMPERATURE

From -10° to +120° C

ISO COMPITABILITY

DIN ISO 2941	Fluid technology hydraulic filter elements, collapse and burst pressure test.
DIN ISO 2942	Fluid technology filter elements, verification of flawless manufacturing quality.
DIN ISO 2943	Fluid technology hydraulic filter elements, verification of compatibility with the pressure fluid.
DIN ISO 3723	Fluid technology hydraulic filter elements, procedure for testing the end cap load.
ISO 3968	Hydraulic fluid power-filters-evaluation of pressure drop versus flow characteristics.





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FILTER ELEMENT

Type code (ordering example) - The product type key is shown on the sieve ring.

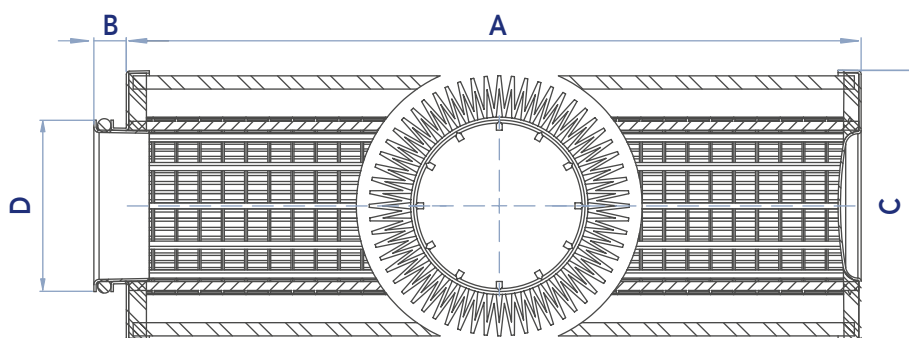
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DIMENSIONS AND TECHNICAL DATA

FLOW FROM OUTSIDE TO INSIDE



DN	Key to length *Standard overall lengths	A [mm]	B [mm]	C [mm]	D [mm]	Filter area ca. [cm ²]	Collapse pressure [bar]	Weight [kg]
20	L1*	71	4,5	55	28.3	418	14	0,14
	L2	106	4,5	55	28.3	684	14	0,19
32	L1	106	10,8	71	42	810	30	0,33
	L2*	171	10,8	71	42	1.395	30	0,49
50	L1	172	10,8	86,5	54	2.028	17	0,65
	L2*	252	10,8	86,5	54	3.068	17	0,88
80	L1	252	9,8	122,5	82	4.680	6.4	1,26
	L2*	336	9,8	122,5	82	6.360	6.4	1,84

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FILTER ELEMENT

MAINTENANCE

Is this filter element cleanable?

Whether a filter element can be effectively cleaned depends primarily on the type of filter material used. At FRIEDRICHS FILTERSYSTEME, we offer a wide range of filter elements designed for the most diverse filtration needs, and we want to provide you with the necessary information to make the right choice and to increase the lifetime.

Standard Wire Mesh: In our standard filter elements, we use wire mesh that can be cleaned multiple times. You can find detailed information about cleaning procedures in a separate Data Sheet.

Custom Filter Media: If you've requested filter elements with different materials, such as fleece or paper, these are generally not suitable for cleaning, so once exhausted must be properly disposed of according to the local laws.

Cleaning Considerations: When cleaning is possible (as with wire mesh), the number of cleaning cycles is limited by the accumulation of insoluble contaminants in the mesh, causing a gradual pore blockage. As a result, pressure loss increases over time, and cleaning intervals become shorter. The degree of this effect depends on the nature of the contaminants and the filter media. Fibrous, viscous, and insoluble particles tend to accelerate this aging effect.

Cleaning Equipment: We can provide you with valuable information about suitable cleaning equipment to maintain the effectiveness of your filter elements. Please feel free to contact us for any additional information or support.

CAUTION: When cleaning wire mesh filter elements, due to the fine wire construction, has to be handled them with care to ensure effective filtration, it's crucial to avoid cracks or damage to the pleats of the filter material.

At FRIEDRICHS FILTERSYSTEME, we are committed to providing you with not only high-quality filter elements but also the knowledge and support you need to make the most of your filtration solutions. If you have any questions or require assistance with cleaning procedures or equipment, our team is here to assist you.