Filter element conversion

from Series FE to FE_B

Filter elements for filter 4.121/221/225

fluidtech® Filter elements

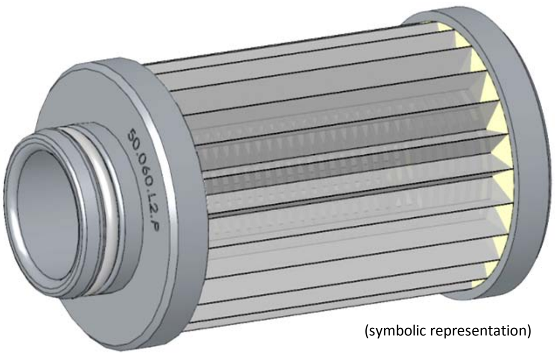
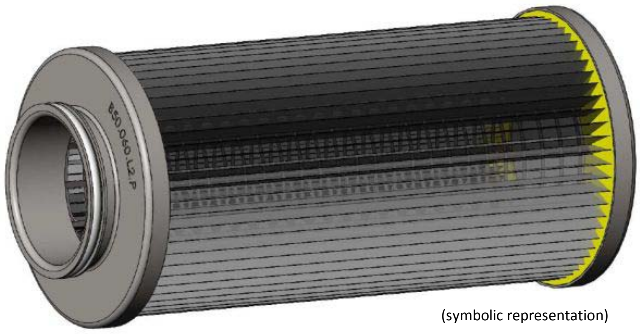
Production series filter elements with designation FE will in future be replaced by the new production series FE_B

Our traditional product key will remain as is, but with the nominal connection size now prefixed with B. (Example: B32.060.L2-P)

This will affect Series 4.121/221/225 filters, from now on to be fitted with the new FE_B filter elements.

Replacement /exchange filter elements will also in future be replaced by this FE_B filter element.

Illustration of the visible change:

Previous filter element with designation FE:	New filter element with designation FE_B:
 (symbolic representation)	 (symbolic representation)

List of changed features

- Future sieve cover made of 1.4301 sheet steel (previously made of GK-AlSi12(Cu))
- Future sieve ring made of 1.4301 sheet steel (previously GK-AlSi12(Cu))
- Increase of the filter area (up to 19%)
- Complete filter element now made of stainless steel (Standard 1.4301)

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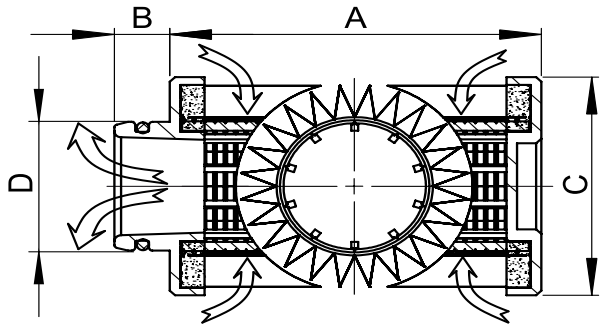
Overview table of technical changes:

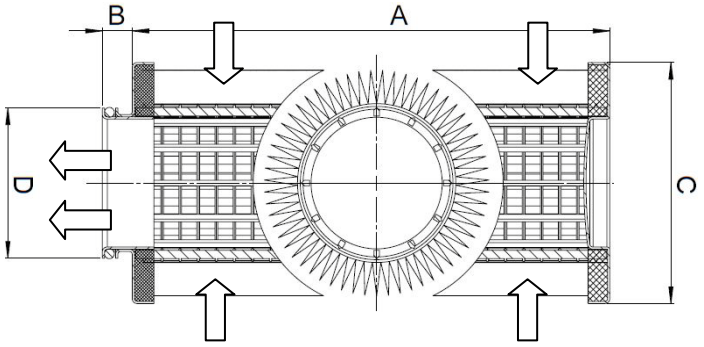
Previous filter element designated FE:



Operating temperature: -10...120°C

DN	Key to length *Standard overall lengths	A [mm]	B [mm]	C [mm]	D [mm]	Filter area ca. [cm²]	Collapsing pressure [bar]	Weight [kg]
20	L1*	71	10	55	30	350	14	0.17
	L2	106	10	55	30	580	14	0.22
32	L1	106	16	71	42	765	30	0.35
	L2*	171	16	71	42	1 350	30	0.51
50	L1	172	16	86.5	54	1 950	17	0.72
	L2*	252	16	86.5	54	3 000	17	0.95
80	L1	252	15	122.5	82	4 620	6.4	1.36
	L2*	336	15	122.5	82	6 300	6.4	1.94

New filter element designated FE_B:



Operating temperature: -10...120°C

DN	Key to length *Standard overall lengths	A [mm]	B [mm]	C [mm]	D [mm]	Filter area ca. [cm²]	Collapsing 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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Areas of application

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

Construction

Star-like folded special filter material, microplasma welded lengthwise, with inner support tube. End caps glued.
O-rings are used for sealing.

Cleaning

Cleanable?	Whether a filter element can be cleaned depends on the filter material:
	The standard version has wire mesh and may be cleaned repeatedly (see separate fact sheet)
	Should other filter media have been used on customer request, then these generally cannot be cleaned (e.g. fibre mats and paper)
	With proper cleaning (i.e. wire mesh and potting compounds remain intact), the number of cleaning cycles is limited only by accumulation of insoluble dirt in the mesh over time, blocking the pores. This results in increasing loss of pressure and shorter cleaning intervals.
	The more fibrous, sticky and insoluble the dirt particles or the medium to be filtered, the faster the ageing effect.
Cleaning apparatus:	We shall upon request gladly provide you with information on suitable cleaning equipment.

ATTENTION:	The wire mesh consists of thin, sensitive wires and therefore requires gentle cleaning!
	To ensure proper filtration, the filter material must not be torn or damaged!

Materials Type B

End caps:	1.4301; others on request
Filter material:	optimesh® wire mesh (10 - 100 µm) made of 1.4401
	precimesh® wire mesh (< 10 µm; > 100 µm) made of 1.4401
	Optional: glass fibre paper; filter paper; metal fibre mat (1.4404)
Seals:	NBR, (alternatively FPM, special materials)
Potting compound:	2-component epoxy resin; other on request

Possible certifications

DIN ISO 2941	Hydraulic fluid power filter elements, collapsing/burst resistance tests.
DIN ISO 2942	Hydraulic fluid power filter elements, proof of manufacturing quality.
DIN ISO 2943	Hydraulic fluid power filter elements, proof of material compatibility with hydraulic fluids.
DIN ISO 3723	Hydraulic fluid power filter elements, method for end load test.
ISO 3968	Hydraulic fluid power - filters - evaluation of pressure drop versus flow characteristics.

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Product type keys for Type FE_B: (order example)

The product type key is shown on the sieve ring.

B32 . 060 . L2 - P . St

End cap material: (Standard 1.4301)	
St	Steel
1.4571	Stainless steel
other materials on request	

Sealing material	
P	NBR (Standard)
V	FPM
other materials on request	

Overall length key	
L1	Overall length for DN 20
L2	Standard overall length for all sizes
other overall lengths on request	

Filter fineness/medium	
005	Optimesh® wire mesh 5 µm nominal, 10 µm absolute
010	Optimesh® wire mesh 10 µm nominal, 25 µm absolute
015	Optimesh® wire mesh 15 µm nominal, 34 µm absolute
020	Optimesh® wire mesh 20 µm nominal, 40 µm absolute
025	Optimesh® wire mesh 25 µm nominal, 60 µm absolute
040	Optimesh® wire mesh 40 µm nominal, 80 µm absolute
060	Optimesh® wire mesh 60 µm nominal, 100 µm absolute
080	Precimesh® wire mesh 80 µm nominal, 150 µm absolute
100	Precimesh® wire mesh 100 µm nominal, 200 µm absolute
120	Precimesh® wire mesh 120 µm nominal, 250 µm absolute
150	Precimesh® wire mesh 150 µm nominal, 300 µm absolute
xxx	Paper, glass fibre paper
other fineness on request	

Nominal connection size/overall size DN for Type B
20 / 32 / 50 / 80

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