

ECOCLEAN®



Filter Elements and Cartridges

for **ECOCLEAN®** compressed air filters and other makes of compressed air filters

ECOCLEAN®

Compressed air filter elements



KSI ECOCLEAN® filter elements for economical and safe filtration of compressed air and gases.

In modern compressed air systems the quality of the compressed air is of decisive importance. Compressed air filters play a key role in safely removing solid particles, oil fractions, condensate, oil vapour, odours and many other substances from the compressed air system. The heart of the compressed air system is its filter insert (element), which must be optimally designed to meet each specific requirement.



The ECOCLEAN® approach of KSI filter elements and its comprehensive advantages

The combination of operating safety and economy in a single product is the **ECOCLEAN®** approach of KSI, which is perfectly implemented in KSI filter elements.

All the advantages of the **ECOCLEAN®** filter elements are available to customers not only when using the elements in an **ECOCLEAN®** compressed air filter but also when using them in the housings of almost all other make of filter on the market.

validated and certified
class 1 according to
ISO 8573



Failure safety/Quality

- A** The use of Spirax stainless cylinders for the inner and outer support jacket increases overall robustness.
- B** The end caps of the filter elements are made of plastic. This provides a barrier against corrosion (“blooming”) and the resulting formation of bacteria. The end caps are fastened with a special adhesive that is resistant to chemicals.
- C** A drainage layer made of needled felt prevents potential swelling of the outer medium, thereby preventing cracking, which would otherwise cause a loss of filter efficiency. In addition, the felt is silicone-free, resistant to temperatures up to 120°C and has high resistance to chemicals and mechanical stress.



Economy

- 1** The Spirax stainless steel cylinder used for the inner and outer support jacket has specially formed and arranged openings, resulting in up to 40% lower differential pressure than in conventional support cylinders.
- 2** The overall filtration area is increased by winding the filter medium up to 8 times. This system replaces surface filtration by depth filtration, thereby slowing the build-up of differential pressure and increasing efficiency through improved absorbency.

ECOCLEAN® filter elements for ECOCLEAN® compressed air filters

Element type	VF25	FF5	MFO	SMA	CA	Elements
Particle filtration	25 microns	5 microns	1 micron	0,01 micron		per
Max. residual oil at 20°C	10 mg/m³	5 mg/m³	0,1 mg/m³	0,01 mg/m³	0,003 mg/m³	housing
Housing	Element	Element	Element	Element	Element	Quantity
F25	FE3711 VF25	FE3711 FF5	FE3711 MFO	FE3711 SMA	FE3711 CA	1
F50	FE3711 VF25	FE3711 FF5	FE3711 MFO	FE3711 SMA	FE3711 CA	1
F70	FE5111 VF25	FE5111 FF5	FE5111 MFO	FE5111 SMA	FE5111 CA	1
F90	FE7111 VF25	FE7111 FF5	FE7111 MFO	FE7111 SMA	FE7111 CA	1
F110	FE7311 VF25	FE7311 FF5	FE7311 MFO	FE7311 SMA	FE7311 CA	1
F120	FE7411 VF25	FE7411 FF5	FE7411 MFO	FE7411 SMA	FE7411 CA	1
F130	FE7411 VF25	FE7411 FF5	FE7411 MFO	FE7411 SMA	FE7411 CA	1
F140	FE8501 VF25	FE8501 FF5	FE8501 MFO	FE8501 SMA	FE8501 CA	1
F160	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	1
F170	FE8701 VF25	FE8701 FF5	FE8701 MFO	FE8701 SMA	FE8701 CA	1
Fo65-01	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	1
F100-02	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	2
F100-03	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	3
F150-04	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	4
F150-06	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	6
F200-08	FE8601 VF25	FE8601 FF5	FE8601 MFO	FE8601 SMA	FE8601 CA	8

ISO 8573.1 air quality classifications of ECOCLEAN® filter elements

Typ SMA	Typ MFO	Typ FF5	Typ VF25	Typ CA
max. particle Ø [microns]	max. particle Ø [microns]	max. particle Ø [microns]	max. particle Ø [microns]	max. particle Ø [microns]
40 15 5 1 0,1	40 15 5 1 0,1	40 15 5 1 0,1	40 15 5 1 0,1	40 15 5 1 0,1
5 K 4 A 3 S 2 E 1	5 K 4 A 3 S 2 E 1	5 K 4 A 3 S 2 E 1	5 K 4 A 3 S 2 E 1	5 K 4 A 3 S 2 E 1
25 5 1 0,1 0,01	25 5 1 0,1 0,01	25 5 1 0,1 0,01	25 5 1 0,1 0,01	25 5 1 0,1 0,01
max. residual oil content [mg/m³]	max. residual oil content [mg/m³]	max. residual oil content [mg/m³]	max. residual oil content [mg/m³]	max. residual oil content [mg/m³]

Filter elements

Compatible with filter housings of other makes (alternative filter elements)

Alup	Boge	Domnick Hunter	MTA	Schneider
Types	Types	Types	Types	Types
VA/MA/SA/AK	1/5 – 1/250	K009 – K620	1/06050 – 1/76090	B640288 – B640296
1030 – 5075	V/F/A	PF/AO R/AA/AX/ACS	P/M/S/A	B640308 – B640316
VA/MA/SA/AK		K006 – K500		B640348 – B640356
3/1 – 30/5		PF/AO R/AA/ACS		
	Compair	K006 – K085	Ingersoll Rand	
	Types	AC	Types	Sullair
Atlas Copco	98245	E006 – E085	E4 – E300	Types
Types	121–130/141–150/161–179	AC	AO R/AA/AC	2500024
DD/PD/QD	CE0005 – 0372	AC		423–430/431–438/443–441
009 – 520 (from 2002)	A/B/C/D			
DD/PD/QD		Ecoair	Kaeser	ultrafilter (Donaldson)
6G – 500G		Types	Types	Types
	Deltech	EV/EF/ES/EA	E–B/D/E/F/G	PE/FF/MF/SMF/AK
	Types	01 – 10	6 – 283 (from 2000)	2/05 – 30/50 (90's)
Beko	VA/MA/SA/AK		02/05 – 30/50	V-PE/FF/MF/SMF/AK
Types	1030 – 5075	Hankison	V /X/A (1991 – 2000)	3/1 – 30/5 (80's)
FE361 – 981	VA/MA/SA/AK	Types	9.2100.0 – 9.2109.0	
X25/X5/X1/XA/AC	3/1 – 30/5	E9/E7/E5/E3/E1–12–54	9.2125.0 – 9.2134.0	
			9.9150.0 – 9.2159.0	Zander
			(to 1991)	Types
		Hiross		1030 – 5075
		Types		V/Z/X/XA/XP/ZP
		Q/P/S/C		
		010 – 280		

Cartridges



CAK Activated carbon cartridges:

For removing oil vapour and odours, residual oil content 0.003 mg/m³

MSK Molecular sieve cartridges:

For removing moisture (dewpoint down to -40°C possible)

HC catalyst filter cartridges:

For removing carbon monoxide (CO)

Element type	CAK	MSK	HC
KSI housing	Cartridge	Cartridge	Cartridge
F70	FE5111 CAK	FE5111 MSK	FE5111 HC
F90	FE7111 CAK	FE7111 MSK	FE7111 HC
F110	FE7311 CAK	FE7311 MSK	FE7311 HC
F130	FE7411 CAK	FE7411 MSK	FE7411 HC

Compatible with filter housings of other makes

Donaldson (ultrafilter) · Activated carbon cartridges		
KSI Type	for AK element size	
EU 0410 CAK	03/10 – 04/10	
EU 0420 CAK	04/20	
EU 0520 CAK	05/20	
EU 0525 CAK	05/25	
EU 0725 CAK	07/25	
EU 0730 CAK	05/30	
EU 1030 CAK	10/30	

Zander · Activated carbon cartridges		
KSI Type	Zander	for AK element size
EZ 1012 CAK	KTA 1012	1050 / 1070
EZ 1019 CAK	KTA 1019	1140
EZ 2016 CAK	KTA 1016	2010
EZ 2023 CAK	KTA 2023	2020
EZ 2033 CAK	KTA 2033	2030
EZ 2053 CAK	KTA 2053	2050

Zander · Molecular sieve cartridges - MSK stage	
KSI Type	
EZ 2016 MSK	KT2016 M - MDK 6
EZ 2033 MSK	KT2033 M - MDK 10
EZ 2053 MSK	KT2053 M - MDK 15