



## FZ low temperatures

Datasheet

@2021 v.1.0



## › Description

**KingAir®** separators are designed exclusively to remove solid impurities, water, aerosols, hydrocarbons, odors from the compressed air system and non-aggressive technical gases such as argon, nitrogen and mixtures thereof. It must not be used for cleaning liquids and aggressive gases such as acetylene.

## › Applications

Automotive, chemical and petrochemical industries, plastics, electronics, food and beverages, painting, etc.

## › Installation:

Separators are designed to protect terminal equipment. Placing in front of equipment with compressed air consumption is best. The device can also be used to clean the entire backbone. Behind the condensation air dryer, it creates a set of full equipment to drain water, oil, solids and water vapor. It guarantees the efficiency of the device according to the parameters of the manufacturer of condensing dryers. **For safety reasons, the ball valve must always be installed under the separator, even if the device is equipped with an automatic trap. In case of installation without ball valve, the device is considered incomplete and must not be used.**

## › Maintenance:

The device is maintenance-free. In the event of a problem, contact CMP Trade Service. Disposed condensate must be disposed of in accordance with the Waste Material Directive. The condensate must not be drained freely into the public sewer or the surrounding environment.

## › Technical specification and a certification:

Pressure drop: max. 0.38 bar (at 7 bar (102 psi) reference and 20 ° C)

Water removal: 99.9999%

Filtration of impurities: 0.2 µm (90%); 1 µm (100%)

Working pressure: 1 to 16 bar

Operating temperature: -40 ° C to 55 ° C

Material: aluminum

Inner material: ABS

## › Technical specification and a certification:

Separation: water, impurities, oil, bacteria

Condensate drain: automatic integrated (mechanical float)


Heating supply: 12 or 24 VDC

### ISO 12500-3 IUTA (particles):

2,0 µm 100%


1,0 µm 99%

0,2 µm 90%

<b>Test parameter:</b>		 7 bar (e) [8 bar (a)] 48 Nm³/h = 100 % nominal flow rate from inside to outside DEHS (0.19 – 2.74) µm PCS 2100 (Palas GmbH)						
Inlet pressure								
Air flow								
Flow direction								
Test aerosol								
Particle size range								
Aerosol Spectrometer								
<b>Test results:</b>								
<b>Particle-size range [µm]</b>	lower	0.19	0.24	0.36	0.52	0.81	1.15	1.78
	upper	0.24	0.36	0.52	0.81	1.15	1.78	2.74
<b>Average efficiency² [%]</b>		<b>90.11</b>	<b>91.51</b>	<b>93.71</b>	<b>96.45</b>	<b>99</b>	<b>99.81</b>	<b>100</b>

### ISO 12500-4 IUTA (water):

99,9999% in range 1-16 bar

<b>Test parameters</b>					
Inlet pressure	7 bar (e) [8 bar (a)]				
Air flow for testing	25%, 50%, 75%, 100%, 125% of rated flow (48 Nm³/h)				
Injected water per L/s air flow	2 ml/min				
<b>Test results</b>	25%	50%	75%	100%	125%
Pressure drop [mbar] at each flow rate	22	83	184	334	520
Water-removal efficiency (%)	>99.9999%	>99.9999%	>99.9999%	>99.9999%	>99.9999%

### ISO 8573-2 SGS (oil aerosol):

0,01 mg/m<sup>3</sup> >91% (\* SGS laboratory detection limit)

Sampling Point	Test Results	Detected Limit	Unit
01 Before filter	0.113	0.0100	mg/m <sup>3</sup>
02 After filter	N.D.	0.0100	mg/m <sup>3</sup>

### Total HydroCarbon(THC) Removal Efficiency

Test Item	Removal Efficiency (%)
Total Aerosol oil	>91



Note: 1.The report will be in vain if it is used separately.

2."N.D."non-detected means the test results is lower than detection limit value.

The combination of AISI316 stainless steel separator material and the PERMA-CEMET 901.902 epoxy adhesive used is suitable for contact with foodstuffs according to 90/128 / EEC and Directive 97/48 / EEC (amendment 90/128 / EEC) and 2005/79 / EC .

### Staphylococcus aureus test: 99.998%



Uvedené průtoky odpovídají referenčním tlaku 7 bar (102 psi) a teplotě 20°C.  
These flows correspond to a reference pressure of 7 bar (102 psi) and a temperature of 20 ° C.

Označení <i>Product code</i>	Materiálové provedení <i>Product material</i>	Nominální průtok při 7 bar <i>Referenced flowrate at 7 bar</i>		Vstup / Výstup <i>Intlet/Outlet</i>	Odtok výstup * <i>Drain *</i>	Rozměr výrobku <i>Product dimension</i>			Vaha <i>Weight</i>
		[L/min]	[m3/hod]			Ø [mm] tělo <i>body</i>	Ø [mm] hlava <i>head</i>	[mm] * délka <i>length</i>	
KA300FZ	hliník aluminium	300	18	1/2"	1/8"	95	60	350	2,14
KA900FZ	hliník aluminium	900	54	1"	1/8"	95	60	410	2,32

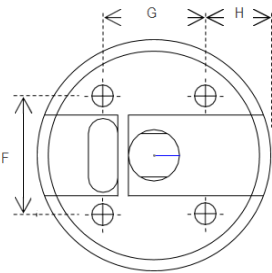
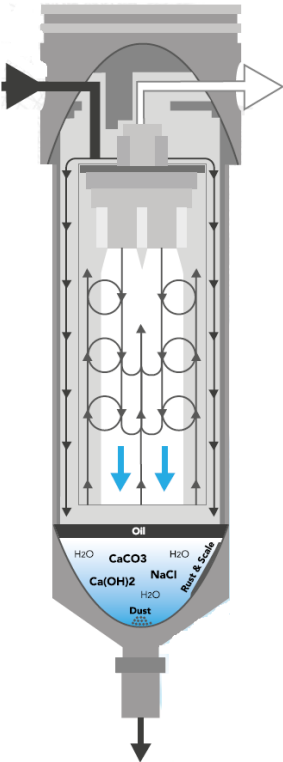
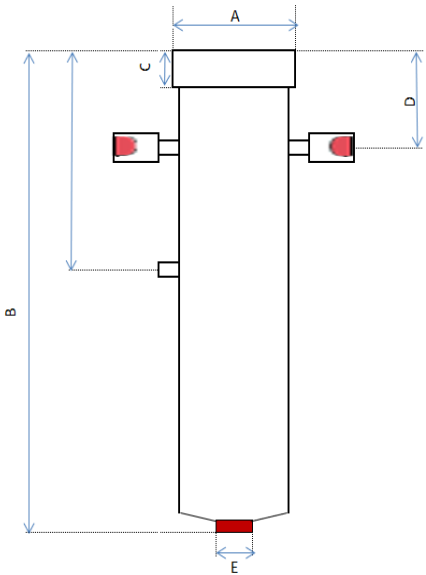
\* Střed závitu připojovacích matic od horní části. Výroba KA2000FZ, KA4000FZ na dotaz.  
\* Thread center of the connection nuts from the top. Production KA2000FZ, KA4000FZ on request.

The flow rates indicated are 7 bar (102 psi) reference pressure and 20 ° C.  
\* Length with ball valve installed, manual condensate drain. Included.

Korekční faktor při jiném tlaku než referenčním (7 bar). <i>Correction factor for another pressure than the reference (7 bar).</i>															
Tlak v rozvodu <i>Line pressure</i>	1 bar <i>14,5 psi</i>	2 bar <i>29 psi</i>	3 bar <i>43,5 psi</i>	4 bar <i>58 psi</i>	5 bar <i>72,5 psi</i>	6 bar <i>87 psi</i>	7 bar <i>101,5 psi</i>	8 bar <i>116 psi</i>	9 bar <i>130,5 psi</i>	10 bar <i>145 psi</i>	11 bar <i>159,5 psi</i>	12 bar <i>174 psi</i>	13 bar <i>188,5 psi</i>	14 bar <i>203,1 psi</i>	15 bar <i>217,6 psi</i>
Korekční faktor <i>Correction factor</i>	0,53	0,63	0,73	0,79	0,89	0,94	1	1,09	1,17	1,25	1,33	1,4	1,48	1,56	1,64

The new flow rate is calculated = correction factor to the real pressure x flow at the reference pressure

Označení Type	Připojovací rozměry pro montáž Connection dimensions				
	A	B	C	D	E
KA300FZ	95	355	30	60	120
KA900FZ	95	355	30	60	120



Type	Connection dimensions			
	F	G	H	screw 4 pcs
KA300FZ	50	47	25	M6
KA600FZ	50	47	25	M6

Classification under Pressure Equipment Directive (PED) 2014/68 / EU for Group 2 fluids:

**PED**  
PRESSURE EQUIPMENT

Product code Označení	Volume Objem	Category Kategorie	
	[L]	[16 bar]	[70 bar]
KA300FZ	0,76	SEP	SEP
KA900FZ	0,99	SEP	SEP



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