

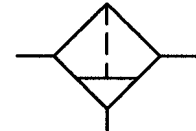


## Micro-filter

PN 16

**430.5102 to 430.2612**

**0.01 µm  
Efficiency 99.9999%**



### Description

- **Borosilicate filter with a high capacity**
- **Filter rating 0.01 µm**
- **Efficiency 99.9999%**
- Ideal for filtering out aerosols and solid impurities larger than 0.01 µm
- Micro-filter for connection upstream of an activated carbon filter. Installation of an upstream pre-filter is recommended!
- Optionally with a differential pressure gauge
- Automatic drain as standard

### Applications

- All applications where standard centrifugal filters with a sintered element do not afford the desired efficiency. ausreichend ist.
- Part of a modular system that also includes a pre-filter and an activated carbon filter, this device belongs to a homogeneous product family that is suitable for a wide variety of applications, such as paint spraying plants, sandblasting systems, controllers, vacuum systems, measuring instruments, fluidics, feed air, process air, air bearings and air conditioning systems.
- The differential pressure gauge indicates the pressure drop  $\Delta p$  inside the filter.

### Operating principle

- Flow direction (inside the element) **from the inside to the outside**.
- The air, which should preferably be pre-filtered (using a pre-filter), is cleaned in several stages. It flows through the filter element from the inside to the outside. Coarse impurities are removed by a pre-filtration mesh. This stage is followed by fine filtration in multi-layered, borosilicate glass-fibre material. The large cavity (85%) between the glass fibres ensures good absorptivity of solid matter.  
The foam plastic sheaths are resistant to acidic and synthetic oils as standard.
- The (optional) differential pressure gauge indicates the degree of contamination of the element as a function of the pressure drop.

### Cleaning / element replacement

**The filter cannot be cleaned!**

**The element should be replaced at the latest when the pressure drop is 0.6 bar, i.e. when the pressure gauge scale shows a value in the red sector.**

### Materials

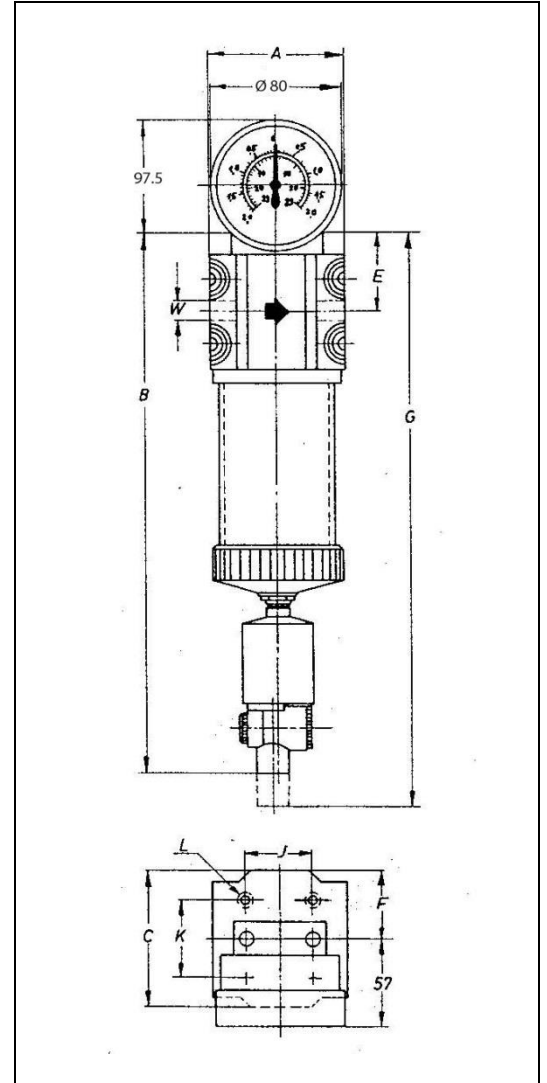
Part	Material
Head piece	Al
Filter bowl	Plastic
Filter element	Borosilicate - glass-fibre material foam plastic - stainless steel
O-rings	NBR

### Important

→ **When the pressure system is started up again (e.g. after the element has been replaced), the pressure should be built up gradually to prevent irreparable damage to the filter element**

### Characteristics

Order No. (1)	Port (thread) G	Size	Accessories			
			Filter element	Con- nectors	Mounting kit	Differential pressure gauge
430.2102	1/4	1	430/2	429/29	429/25	5429.10
430.2104	3/8					
430.2106	1/2					
430.2208	3/4	2	430/6	429/33	429/27	
430.2309	1	3	430/8			
430.2410	1¼	4	430/9			
430.2511	1½	5	430/11			
430.2612	2	6	430/12			
General						
Operating pressure:						
Max.		12 bar				
- With automatic drain						
Min.		4 bar				
- With manual drain valve						
Min.		0 bar				
Operating temperature:		5°C to 60°C				
Port: ISO 228		G 1/4 to G 2 standard; G 2½ and G 3 on request				
Indicating range of diff. pressure gauge		0 to 2 bar (0 to 29 lb/in <sup>2</sup> )				
Mounting position		Vertical				
Flow direction		Indicated by arrow				



(1) The first digit after the point is 5 instead of 2 for micro-filters without a differential pressure gauge.

#### Order example:

Micro-filter G 1/4 without differential pressure gauge: 430.5102

### Dimensions [mm]

Size	Port	Dimensions					Space needed for element replacement G	Mounting			Weight incl. pr.gauge [g]	
		A	B	C	E	F		J	K	L		
1	G 1/4 / 3/8 / 1/2	83	335	83	57	41.5	410	40	48	M 6	2100	
2	G 3/4		405									2100
3	G 1		420									4700
4	G 1¼	118	520	118	72	59	730	70	80	M 8	5000	
5	G 1½		620									5500
6	G 2		810									6140

### Flow rates

	Size	Pressure [bar]								
		2	4	6	8	10	12	14	16	
Flow rate at pressure drop $\Delta p = 1.5\%$	1	13	21	78	39	47	56	64	73	
	2	26	43	120	77	94	111	129	145	
	3	39	64	245	116	141	167	193	219	
	4	69	114	275	206	251	297	343	389	
	5	107	179	390	321	393	464	536	607	
	6	171	286	540	514	629	743	857	971	