

## Cartridge filter

### AFS1-8

### 1. Introduction

Specially designed for sterile filter applications we can offer a range of high quality sanitary filter housings in stainless steel. Filtration Group supplies a complete range of filter housings. These housings have proven their quality in the pharmaceutical and beverage industries. For models from 12 up to 30 cartridges, please see Data Sheet AFS12-30.



### 2. Features

- Compact design
- For 10", 20", 30" or 40" cartridges
- O-ring sealing: standard silicone, FDA / BfR approved
- Vessel material stainless steel 1.4404 (316L)
- Externally mechanically polished
- Tri-clamp closing
- Three adjustable support legs
- One vent connection (1.5" clamp)
- Drain connections optional
- Various instrument configurations possible

#### Internal finish

Mechanically polished (Ra < 0.8 µm)

On request:

- Internally mechanically polished (Ra < 0.4 µm)
- Electropolishing (internal/external)

### 3. Standard specifications

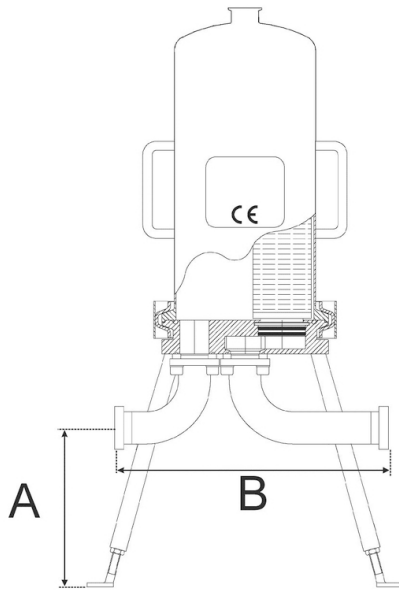
Design pressure : 0 / 10 bar(g) at 40 °C  
0 / 7.5 bar(g) at 150 °C  
Test pressure : 14.5 bar(g)  
Design temperature : 0 / 150 °C

Operating pressure : depending on application  
Operating temperature : depending on application, filter cartridge and gasket

Design code : AD-Merkblätter  
Approval : PED 2014/68/EU  
Hazard category : I  
Fluid group : 1 and 2



## 4. Housing data and dimensions



A = Height Inlet / Outlet

B = Distance Inlet / Outlet

## 5. Housing data

	Cartridge length	Number of cartridges			
		1	3	5	8
Diameter		102	169	219	273
Total height [mm]	10"	800	800	800	800
	20"	1050	1060	1075	1096
	30"	1300	1310	1325	1346
	40"	1550	1560	1575	1596
Additional height required for lifting bowl [mm]	10"	300	290	290	290
	20"	550	540	540	540
	30"	800	790	790	790
	40"	1050	1040	1040	1040
Volume [dm <sup>3</sup> ]	10"	3.0	7.3	11.0	21.3
	20"	4.8	12.6	20.0	35.5
	30"	6.7	17.8	29.1	49.7
	40"	8.6	23.1	38.2	63.9
Total weight empty [kg]	10"	7.0	17.4	18.0	27.0
	20"	8.2	19.4	22.0	30.0
	30"	9.4	21.4	22.0	33.0
	40"	10.6	23.4	24.0	36.0
Bowl weight [kg]	10"	2.0	4.0	5.3	7.0
	20"	3.3	6.0	7.5	10.0
	30"	4.6	8.0	10.2	13.0
	40"	5.9	10.0	12.9	16.0



## 6. dimensions

Inlet / Outlet connections	Weld	DIN 11851 male part										Clamp				
		1.0"	1.5"	2.0"	2.5"	3.0"	DN25	DN40	DN50	DN65	DN80	1.0"	1.5"	2.0"	2.5"	3.0"
[mm]		381	340	310	281	253	381	340	310	281	253	381	340	310	281	253
1 cartridge	no drains	163	-	-	-	-	221	-	-	-	-	189	-	-	-	-
	with drains	244	-	-	-	-	-	-	-	-	-	270	-	-	-	-
3 cartridges	no drains	-	285					351					310			
	with drains	-	360					426					385			
5 cartridges	no drains	-	305	353				371	423				331	379		
	with drains	-	380	420				446	490				406	446		
8 cartridges	no drains	-	331	379	442	498	-	379	449	518	588	-	357	405	469	524
	with drains	-	406	446	522	578	-	472	516	602	658	-	432	472	548	604

Dimensions are for reference only. Use dimensional drawing for installation purposes.

Subject to technical alteration without prior notice.

## 7. Ordering code

Example

AFS3	4	2	B	0	7
Type	Cartridge length	Inlet / outlet size	Inlet / outlet connection	Drain connections	Cartridge style
AFS1 = 1 cartridge	1 = 10"	1 = 1.0" / DN25	B = weld	0 = no drains	7 = X7 and X6 style
AFS3 = 3 cartridges	2 = 20"	1.5 = 1.5" / DN40	M = DIN 11851 male part	2 = two drains (clamp 1.5", for AFS1 clamp 1")	8 = X8 and X3 style
AFS5 = 5 cartridges	3 = 30"	2 = 2.0" / DN50	T = clamp		
AFS8 = 8 cartridges	4 = 40"	2.5 = 2.5" / DN65			
		3 = 3.0" / DN80			