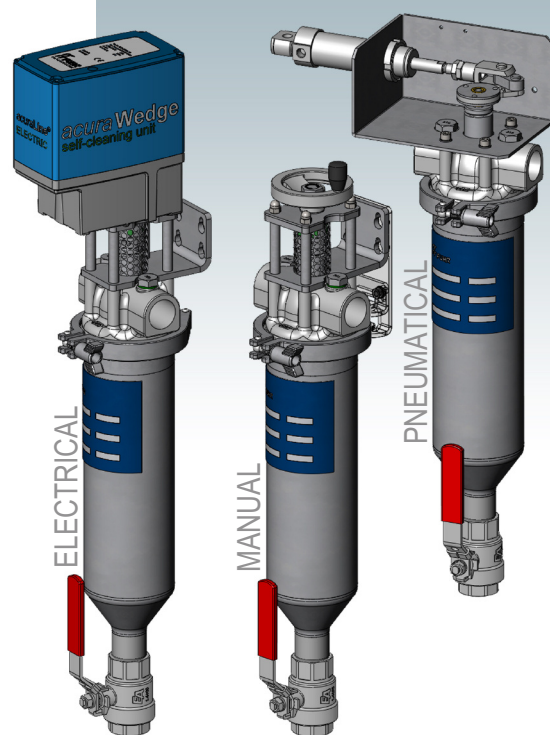




## Type *acuraWedge* KSF-1FU(C) Self-cleaning filter units

The basis of this development is the patented and proven cartridge filter housing of the 1FU series (screwed closure) and the 1FUC series (with quick closure). When converting from the cartridge filter to the automatic filter, the cast part of the filter head was modified to create a connection between the drive and the filter element. Also in terms of dead spaces and flow behavior, *acuraWedge* self-cleaning filters set new standards. The free choice of the closure enables use in many areas of industry, since all common sealing materials can be selected, e.g. NBR; EPDM; FPM; FEP-O-SEAL, core FPM; FFKM; GYLON blue. The drive shaft is not sealed with a stuffing box packing, but with a low-maintenance **3D driveshaft sealing**. Annoying readjustments are therefore no longer necessary to guarantee optimal tightness.

A new type of **sintered filter element** is just as revolutionary, which absolutely guarantees **crystal clear filtration of 1 µm** (> 25 µm can only be applied to this sintered element). The maximum flow of size 10 at 100 µm is 2 m³ / h and at 1 µm up to 1 m³ / h based on water.



### TECHNICAL DATA

#### *acuraWedge* KSF-1FU(C)

	KSF-1FU(C)-10	KSF-1FU(C)-20
Flow rate > 500 µm	4.5 m³/h	
Flow rate at 100 µm	2.0 m³/h	4.0 m³/h
Flow rate at 1 µm	up to 1.0 m³/h	up to 2.0 m³/h
Material filter housing / element	1.4301*1	
Inlet and outlet (N1/N2)	Rp 1"	
Drain (N3)	R 1"	
Vent / Flush (N4/N5)	Rp 1/4"	
Gasket	FPM*2	
Max. operation pressure	25 bar	
Max. operation temperature	-10/+80°C*3	
Volume	1.8 l	2.9 l
Weight	15 kg	17 kg
<b>Electrical Type: AU</b>	230V, 50(60) Hz, 20 W, IP65	
<b>Manuel Type: MA</b>	manually driven by hand wheel	
<b>Pneumatical Type: RA</b>	horizontal mounted cylinder	

\*1 Optional 1.4401 available

\*2 Optional NBR, EPDM, FEP, FFKM or GYLON blue available

\*3 According to media and gasket up to 160°C

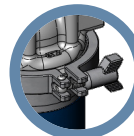
### DIMENSIONS

\*B = 650 mm [KSF-1FU(C)20]

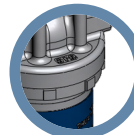
Housing type	A (mm)	B* (mm)	C (mm)	D (mm)	E (mm)	F (mm)
KSF-1FU(C)10-AU	259	450	120	88,9	76	112
KSF-1FU(C)10-MA	149	450	120	88,9	76	75
KSF-1FU(C)10-RA	111	450	120	88,9	65	75

Subject to technical alterations.  
AL1107-00-E - page 1/2

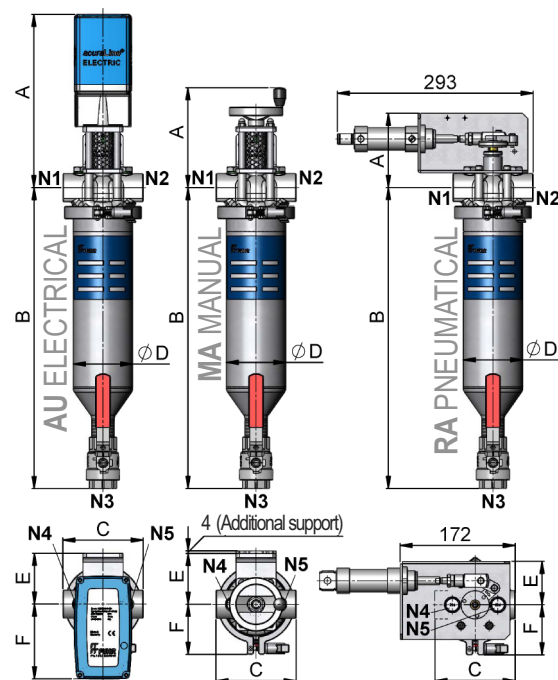
### CLOSURE TYPES



**QUICK CLOSURE**  
optionally as **HYGIENIC-version**  
available (Ra < 0.8 µm)  
DIN 11851/ DIN 32676



**SCREWED CLOSURE**  
especially suitable for hard  
conditions of use and oils



**acuraLine®**



## CHARACTERISTICS

- No disposal problems
- Self-cleaning without interruption
- Quick and easy cleaning due to the completely removable filter insert
- Low operating costs due to long lifetime
- Robust and easy to use two-piece housing
- Easy and time-saving maintenance micron ratings from 35 microns
- On request with TÜV approval, explosion protection, special materials, etc.

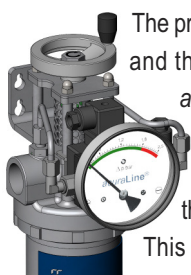
## APPLICATIONS

- Paints and varnish
- Emulsion paints
- Inks
- Underbody protection
- Adhesives
- Bitumen products
- Solvents
- Gear oil, rolling oil
- Emulsions
- Electrophoretic varnish
- Chocolate mass
- Flexibilizer
- Industrial wastewater
- Sewage sludge
- Food and beverage

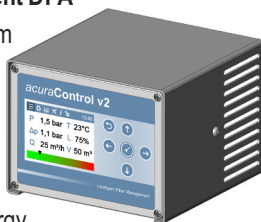
## Initial operation with *apuraControl*



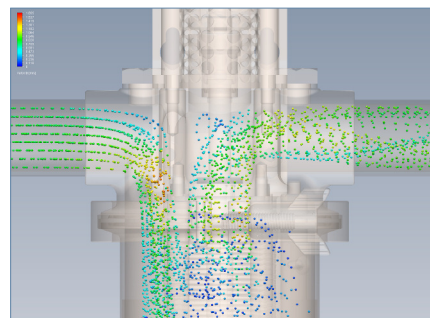
## DIFFERENTIAL PRESSURE GAUGE / DIGITAL FILTER MANAGEMENT



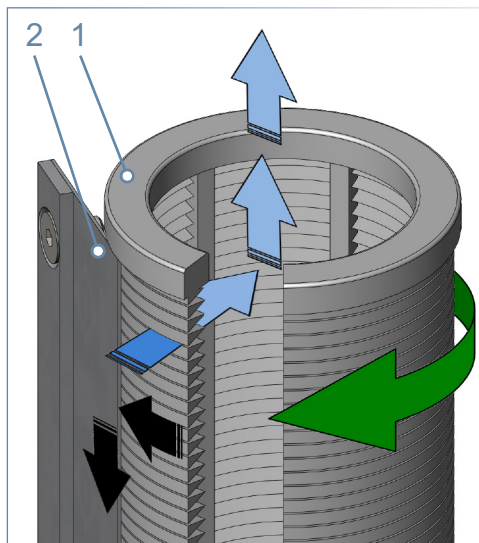
The proven **differential pressure measurement DFA** and the intelligent filter management system **apuraControl** can be installed ex works or afterwards. The electrical version (AU) can be equipped with a timer so that the drive does not run continuously. This minimizes wear and actively saves energy.



## Flow analysis



## CONSTRUCTION AND OPERATION OF THE FILTER



The filter systems are designed for extremely stable and robust applications. They consist essentially of the following components: Two-piece filter housing, filter element (1), holding plate with scraper (2) gear drive (AU/MA/PN). The filtration is through the wedge wire element (25 - 1000 µm) or sintered element (1 µm) from outside to inside, wherein the solids accumulate on the outside of the filter element. The rotating filter element will be cleaned by fixed scraper plate. The solids setting out to the bottom of the filter housing and are drained by the system pressure via a ball valve. Optionally, the draining of solids can also be carried out automatically by an electronic controller with differential pressure control and solenoid valve. Blocking of the filter element is impossible as expand the trapezoidal columns inward. The micron rating is determined by the gap width of the wire filter element or the pore size of the sintered element. The filter element can be replaced with the included opening lever set.