

## SINTERED FILTER ELEMENTS ISFE

### DESCRIPTION

The ISFE are sintered filter elements designed for removal of particles from steam, gases and liquids. These filters are produced in AISI 316L with a robust welded construction and are compatible with all ADCAPure filter housings.

### MAIN FEATURES

Robust construction.  
Compatible with ADCAPure filter housings.  
Good durability against aggressive gases.  
Porosity level above 50% to ensure high particle and dirt load capacity as well as high flow rates at low differential pressures.  
Regeneration by ultrasonic cleaning, back-flushing or solvent cleaning with hydrogen peroxide and other chemicals.

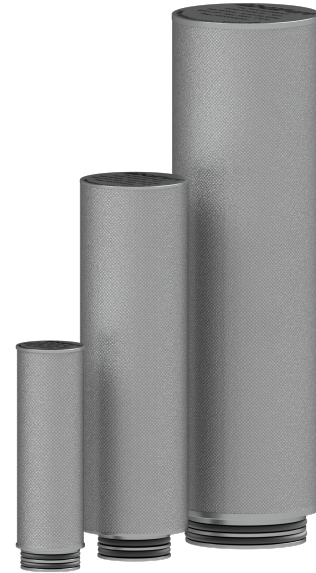
**OPTIONS:** Various retention rates and seal materials.  
Connections suitable for different third party filter housings.

**USE:** Steam, compressed air and other gases and liquids.

**AVAILABLE MODELS:** ISFE.

**RETENTION RATES:** 1, 5 and 25 micron.

**INSTALLATION:** See IMI – Installation and maintenance instructions.



LIMITING CONDITIONS	
Maximum operating temperature *	200 °C
Maximum differential pressure	5 bar

\* See "Ordering Codes" table for restrictions.

RETENTION RATES FOR STEAM AND AIR		
PORE SIZE (µm)	98% (µm)	100% (µm)
1	0,5	1
5	1	5
25	8	20

MATERIALS	
DESIGNATION	MATERIAL
Filter media	AISI 316L / 1.4404
End caps	AISI 316L / 1.4404; AISI 304 / 1.4301
* O-ring	** EPM; FEPM

\* Available spare parts. \*\* Others on request.

**MAXIMUM RECOMMENDED FLOW RATE CAPACITIES**

PORE SIZE ( $\mu\text{m}$ )	STEAM (kg/h)			COMPRESSED AIR ( $\text{m}^3/\text{h}$ )
	1 bar	3,5 bar	7 bar	–
1	136	295	454	22,7
5	181	363	680	27,2
25	227	454	–	31,8

Remarks: Values shown refer to maximum capacities with a filter element size 1030.

Properly sizing a filter depends on several factors, including flow rate, pressure, element retention rate and acceptable pressure drop across the filtration system. For assistance in selecting the appropriate housing and filter element, consult the manufacturer.

**FLOW RATE CAPACITY – COMPRESSED AIR ( $\text{m}^3/\text{h}$ ) AND STEAM (kg/h)**

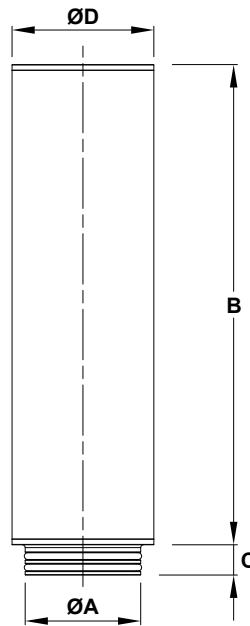
PORE SIZE ( $\mu\text{m}$ )	PRESSURE DROP (mbar)						
	50	100	200	300	400	500	600
1	25	50	100	150	200	250	300
5	80	170	330	500	–	–	–
25	250	500	–	–	–	–	–

Remarks: Values shown refer to approximate capacities with a filter element size 1030.

Reference values for compressed air at 1 bar and 20 °C.

Reference values for saturated steam at 2 bar and 121 °C.

Properly sizing a filter depends on several factors, including flow rate, pressure, element retention rate and acceptable pressure drop across the filtration system. For assistance in selecting the appropriate housing and filter element, consult the manufacturer.



**DIMENSIONS (mm)**

SIZE	$\text{ØA}$	B	C	$\text{ØD}$	FILTRATION SURFACE ( $\text{cm}^2$ )	WEIGHT (kg)
0310	30	75	11	35	60	0,2
0410	30	103	11	35	85	0,3
0420	37	103	14	45	95	0,4
0520	37	127	14	45	125	0,5
0525	37	127	14	55	160	0,5
0725	37	179	14	55	235	0,6
0730	61	177	16	75	341	1,3
1030	61	254	16	75	502	1,6
1530	61	378	16	75	778	2,3
2030	61	505	16	75	1054	2,8
3030	61	759	16	75	1646	3,9
3050	89	760	16	130	2956	5



ORDERING CODES – ISFE FILTER ELEMENT							
<b>FILTER ELEMENT MODEL</b>			<b>ISFE</b>	.	<b>X</b>	<b>0310</b>	<b>01</b>
ISFE – Hygienic steam filter, filter element			ISFE				
<b>FILTER SEALS</b>							
Without o-rings					<b>X</b>		
EPM – Tmax 150 °C (180 °C with steam)					<b>P</b>		
FEPM – Tmax 200 °C					<b>F</b>		
<b>FILTER ELEMENT SIZE ACCORDING TO HOUSING CONNECTIONS</b>							
<b>TW</b>	<b>THREADED</b>	<b>FLANGED</b>	<b>TC DIN (DIN 32676-A)</b>	<b>TC ISO (DIN 32676-B)</b>	<b>TC ASME BPE</b>		
1/4"	1/4"	–	DN 10	DN 08	1/2"	<b>0310</b>	
3/8"	3/8"	DN 10	–	DN 10	–	<b>0410</b>	
1/2"	1/2"	1/2" or DN 15	DN 15	DN 15	3/4"	<b>0420</b>	
3/4"	3/4"	3/4" or DN 20	DN 20	DN 20	1"	<b>0520</b>	
1"	1"	1" or DN 25	DN 25	DN 25	–	<b>0525</b>	
1 1/4"	1 1/4"	1 1/4" or DN 32	DN 32	DN 32	1 1/2"	<b>0725</b>	
1 1/2"	1 1/2"	1 1/2" or DN 40	DN 40	DN 40	–	<b>0730</b>	
2"L	2"L	2"L or DN 50L	DN 50L	DN 50L	2"L	<b>1030</b>	
2"H	2"H	2"H or DN 50H	DN 50H	DN 50H	2"H	<b>1530</b>	
2 1/2"	–	2 1/2", 4"L, DN 65 or DN 100L	–	–	–	<b>2030</b>	
3"L	–	3"L, 4"H, 6"L, 6"H, DN 80L, DN 100H, DN 150L or DN 150H	–	–	–	<b>3030</b>	
3"H	–	3"H or DN 80H	–	–	–	<b>3050</b>	
<b>RETENTION RATE</b>							
1 micron							<b>01</b>
5 micron							<b>05</b>
25 micron							<b>25</b>
<b>SPECIAL CONSTRUCTION / ADDITIONAL OPTIONS</b>							
Full description or additional codes have to be added in case of non-standard combination							<b>E</b>

## HOW TO ORDER

1 ADCAPure filter housing ISH10i with PTFE seals and clamp ferrules ASME BPE 2"L – Code: ISH10XTXXDX0050L  
 1 ISFE filter element with 5 micron retention rate and EPM seals for the above mentioned filter – Code: ISFE.P1030.05  
 Remark: We recommend a second filter element set as a spare part to ensure minimum downtime when replacing the one in use after saturation.