

## HYGIENIC STEAM FILTER ISH10I

### DESCRIPTION

The ISH10I high efficiency filters are used to remove contaminated particles from gases such as steam and compressed air. The optimized construction of these units offers low differential pressure at high flow rates.

All sizes are built in two halves and are joined by a sanitary clamp ferrule according to DIN 32676 Series A.

The replaceable filter elements are made of sintered austenitic stainless steel.

### MAIN FEATURES

Several retention rates available.

Good durability against aggressive gases.

Porosity level is more than 50% ensuring high particle and dirt load capacity as well as good flow rate at a low differential pressure.

Regeneration by ultrasonic bath.

### STANDARD SURFACE FINISH

Internal wetted parts:  $\leq 0,51$  micron Ra – SF1.

External:  $\leq 0,76$  micron Ra – SF3.

Other surface conditions see IS PV20.00 E – Technical information.

Ultrasonic cleaning.

**OPTIONS:** Different kinds of connections and dimensions.  
Air vent and condensate drain connections.  
Vertical installation design (ISV10I).

**USE:** Steam, compressed air and other gases  
(Group 2).

**AVAILABLE MODELS:** ISH10I.

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

**SIZES:** 1/2" to 2"; DN 10 to DN 50.

**CONNECTIONS:** ASME BPE, DIN and ISO clamp ferrules.  
Others on request.

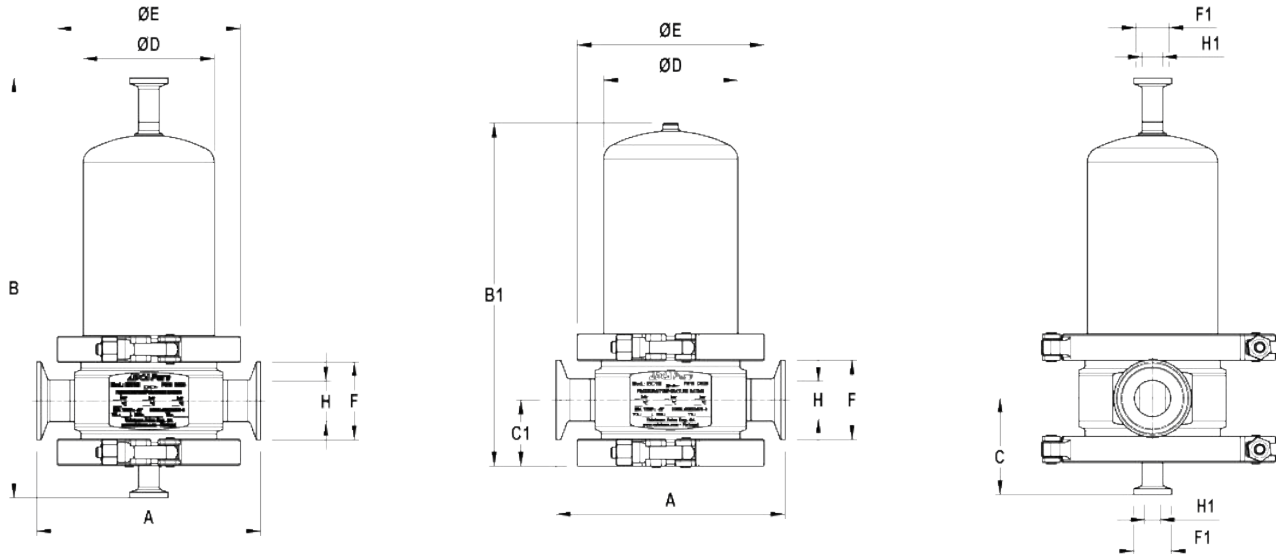
**INSTALLATION:** Horizontal installation always with the drain connection pointing downwards.  
See IMI – Installation and maintenance instructions.



ISV10I – Vertical inlet/outlet

#### CE MARKING – GROUP 2 (PED – European Directive)

Ps 16 bar	Category
1/4" to 2"L – DN 10 to DN 50L	SEP
2"H – DN 50H	1 (CE marked)



**DIMENSIONS (mm) ASME BPE**

SIZE *	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. (L)	WEIGHT (kg)
1/2"	140	204	154	55	34	70	104	25	25	9,4	9,4	0,31	3,3
3/4"	140	237	187	58	37	70	104	25	25	15,75	9,4	0,37	3,6
1"	159	272	222	63	42	85	119	50,5	25	22,1	9,4	0,84	5,3
1 1/2"	161	339	288	70	49	85	119	50,5	25	34,8	9,4	1,22	6,3
2"L	174	418	369	73	52	104	134	64	25	47,5	9,4	2,15	7,9
2"H	174	545	496	73	52	104	134	64	25	47,5	9,4	3,56	8,7

**DIMENSIONS (mm) DIN**

SIZE *	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. (L)	WEIGHT (kg)
DN 10	140	204	154	55	34	70	104	34	34	10	10	0,31	3,4
DN 15	140	237	187	58	37	70	104	34	34	16	10	0,37	3,7
DN 20	159	272	222	63	42	85	119	34	34	20	10	0,8	5,2
DN 25	174	272	222	63	42	85	119	50,5	34	26	10	0,81	5,2
DN 32	176	344	295	70	49	85	119	50,5	34	32	10	1,19	6,4
DN 40	189	344	295	73	52	104	134	50,5	34	38	10	1,64	7,6
DN 50L	189	418	369	73	52	104	134	64	34	50	10	2,32	7,8
DN 50H	189	545	496	73	52	104	134	64	34	50	10	3,64	8,6

Remark: Clamp ferrules according to DIN 32676-A (for pipes DIN 11866-A – DIN 11850-2).

**DIMENSIONS (mm) ISO**

SIZE *	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. (L)	WEIGHT (kg)
DN 08	140	204	155	55	34	70	104	25	25	10,3	10,3	0,35	3,3
DN 10	140	237	187	55	34	70	104	25	25	14	10,3	0,45	3,5
DN 15	140	242	192	58	37	70	104	50,5	25	18,1	10,3	0,46	3,7
DN 20	145	272	222	63	42	85	119	50,5	25	23,7	10,3	0,85	5,1
DN 25	145	282	232	63	42	85	119	50,5	25	29,7	10,3	0,89	5,1
DN 32	147	344	294	70	49	85	119	64	25	38,4	10,3	1,26	6,3
DN 40	160	344	295	73	52	104	134	64	25	44,3	10,3	1,95	7,6
DN 50L	173	433	384	78	57	104	134	77,5	25	56,3	10,3	2,69	8,4
DN 50H	173	560	511	78	57	104	134	77,5	25	56,3	10,3	3,71	9,2

\* Suffix "L" corresponds to low capacity design. Suffix "H" corresponds to high capacity.

Remarks: Clamp ferrules according to DIN 32676-B (for pipes DIN 11866-B – ISO 1127)..

Larger sizes on request

**LIMITING CONDITIONS**

Maximum allowable pressure		16 bar
Maximum allowable temperature		200 °C
Minimum allowable temperature		- 20 °C
Maximum operating pressure	EPM	8,5 bar @ 178 °C
	FLUORAZ	10 bar @ 200 °C
Minimum operating temperature		0 °C
Maximum differential pressure		5 bar
Maximum cold hydraulic test pressure		20,8 bar

Remark: maximum recommended pressure drop of 0,07 bar.

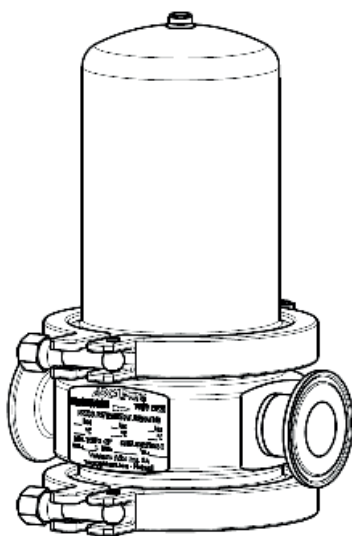
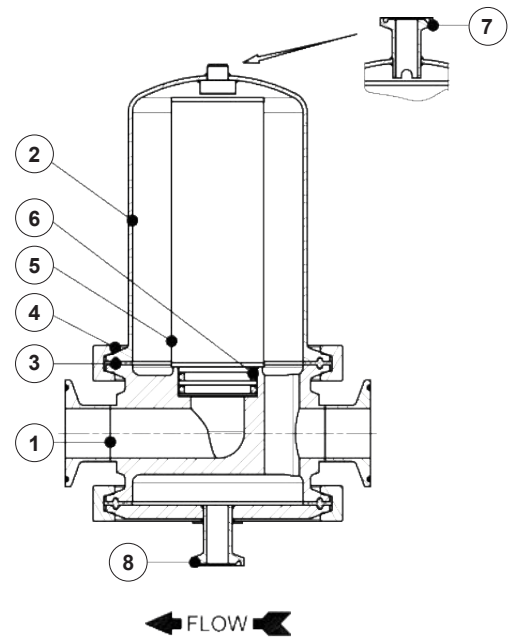
**MATERIALS**

POS. N°	DESIGNATION	MATERIAL
1	Filter housing	AISI 316L / 1.4404
2	Filter housing cover	AISI 316L / 1.4404
3	* Seal	PTFE / TFM® Envelope gasket
4	Closing ring	AISI 304 / 1.4301
5	* Filter element	Sintered AISI 316L
	Filter end caps	AISI 304 / 1.4301
6	* Filter seal o-rings (2)	EPDM, EPM, FLUORAZ
7	Air vent connection	AISI 316L / 1.4404
8	Drain connection	AISI 316L / 1.4404

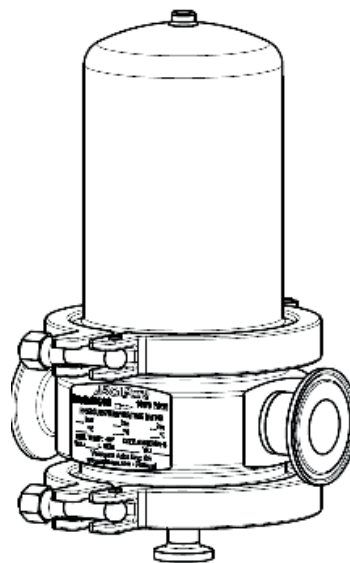
\* Available spare parts.

FDA / USP Class VI seals certificate on request.

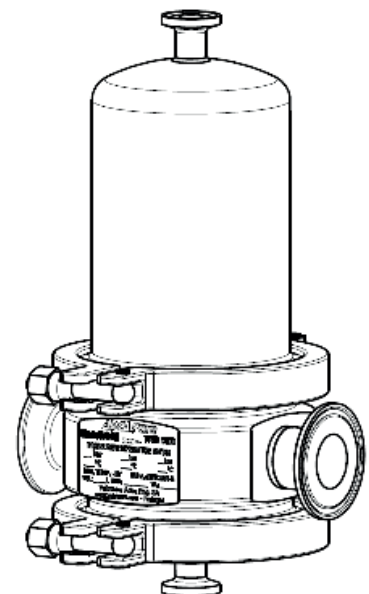
All filters have a serial number. In case of non-standard filters this number must be supplied if spare parts are ordered.



Filter without bottom drain or top vent.



Filter with condensate drain for clean steam.



Filter with both air vent and condensate drain connection.

ORDERING CODES – ISH10I FILTER HOUSING									
Filter model	ISH10I	.	T	D	X	.	50L		
ISH10I – AISI 316L / 1.4404 filter housing	ISH10I								
<b>Housing seal material</b>									
PTFE / TFM (envelope gasket)			T						
<b>Pipe connection</b>									
Clamp ferrule ASME BPE					D				
Clamp ferrule DIN (DIN 32676-A)					F				
Clamp ferrule ISO (DIN 32676-B)					E				
<b>Optional Connections</b>									
Without vent or drain connection						X			
With condensate drain						1			
With condensate drain and vent						2			
<b>Size</b>									
1/4" or DN 08									08
3/8" or DN 10									10
1/2" or DN 15									15
...									...
2"L or DN 50L									50L
2"H or DN 50H									50H
<b>Special / Extras</b>									
Full description or additional codes have to be added in case of non-standard combination									E

ORDERING CODES – FILTER ELEMENT									
Filter element model	ISFE	.	X	0310	.	01			
ISFE – AISI 316L / 1.4404 filter element	ISFE								
<b>Filter to housing sealing o-rings</b>									
Without sealing o-rings			X						
EPDM (up to 180 °C)			E						
EPM (up to 180 °C)			P						
FLUORAZ (up to 200 °C)			F						
<b>Filter size according to housing DN connection</b>									
1/2" ASME BPE	DN 10 DIN	DN 08 ISO		0310					
–	–	DN 10 ISO		0410					
3/4" ASME BPE	DN 15 DIN	DN 15 ISO		0420					
1" ASME BPE	DN 20 DIN	DN 20 ISO		0520					
–	DN 25 DIN	DN 25 ISO		0525					
1 1/2" ASME BPE	DN 32 DIN	DN 32 ISO		0725					
–	DN 40 DIN	DN 40 ISO		0730					
2"L ASME BPE	DN 50 L DIN	DN 50 ISO		1030					
2"H ASME BPE	DN 50H DIN	DN 50H ISO		1530					
<b>Retention rate</b>									
1 micron									01
5 micron									05
25 micron									25
<b>Special / Extras</b>									
Full description or additional codes have to be added in case of non-standard combination									E

Order example:

1 ADCAPure filter housing ISH10I with PTFE seals and clamp ferrules ASME BPE 2"L – Code: ISH10I.TDX.50L

1 ISFE filter element with 5 micron retention rate for the above mentioned filter – Code: ISFE.P1030.05

Remark: it is recommended to always have a second filter element, in order to ensure minimum downtime when replacing the one in use after saturation.