

## HYGIENIC STEAM FILTER ISH101

### DESCRIPTION

The ISH101 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 filter elements (replaceable) 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-Technical information.

Ultrasonic cleaning.

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

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

**AVAILABLE MODELS:** ISH101 – 1.4404 ( AISI 316L ).

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

**SIZES:** 1/2" to 2".  
DN10 to DN 50.

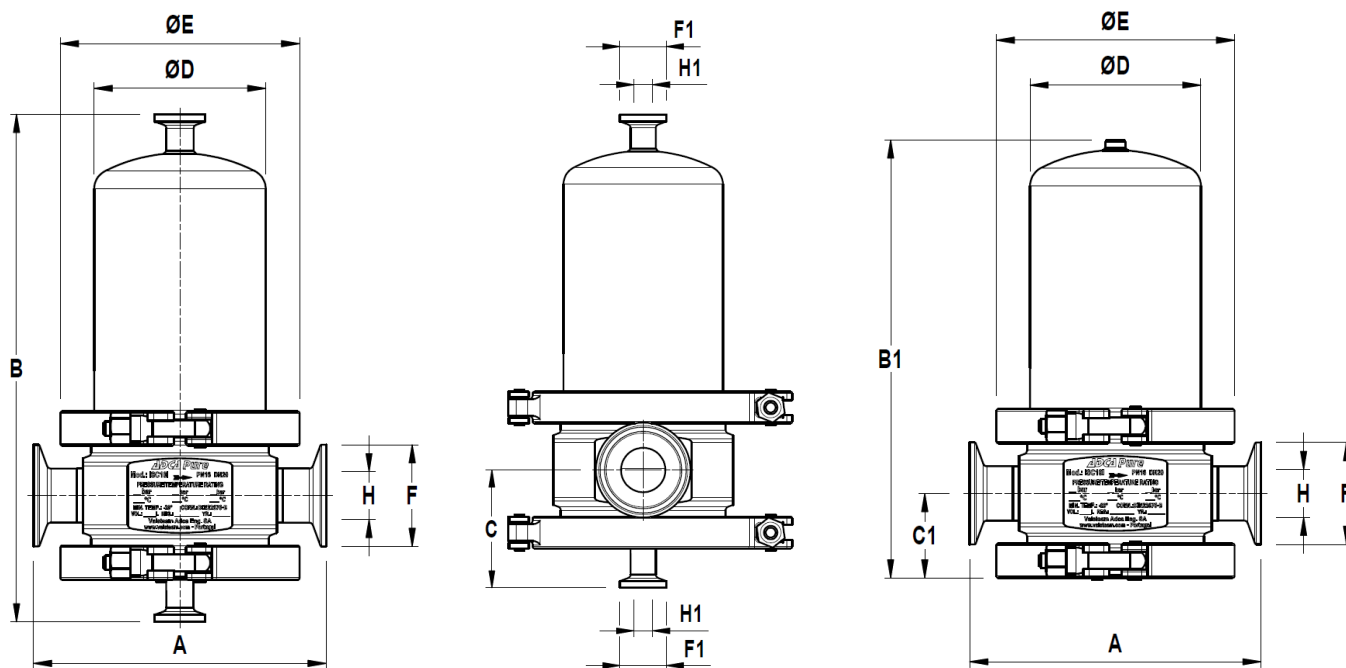
**PIPE CONNECTIONS:** Sanitary clamp ferrules.  
Welded ends and other connections on request.

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



Optional  
ISV101 – Vertical inlet/outlet

CE MARKING (PED - European Directive)	
Ps 16 bar	Category
1/4" to 2"L ; DN10 to DN50L	SEP
DN2"H; DN50H	1


**DIMENSIONS (mm) ASME BPE**

SIZE a)	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. * dm3	WGT ** Kg
1/2"	140	204	154	55	34	70	104	34	25	9,4	9,4	0,31	3,3
3/4"	140	237	187	58	37	70	104	34	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	344	295	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 DN a)	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. * dm3	WGT ** Kg
10	140	204	154	55	34	70	104	34	34	10	10	0,31	3,4
15	140	237	187	58	37	70	104	37	34	16	10	0,37	3,7
20	159	272	222	63	42	85	119	42	34	20	10	0,8	5,2
25	174	272	222	63	42	85	119	42	34	26	10	0,81	5,2
32	176	344	295	70	49	85	119	49	34	32	10	1,19	6,4
40	189	344	295	73	52	104	134	52	34	38	10	1,64	7,6
50L	189	418	369	73	52	104	134	52	34	50	10	2,32	7,8
50H	189	545	496	73	52	104	134	52	34	50	10	3,64	8,6

Clamp ferrules DIN 32676 Series A (for pipes DIN 11866 Series A - DIN11850 Series 2).

**DIMENSIONS (mm) ISO**

SIZE DN a)	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. * dm3	WGT ** Kg
8	140	204	155	55	34	70	104	25	25	10,3	10,3	0,35	3,3
10	140	237	187	55	34	70	104	25	25	14	10,3	0,45	3,5
15	140	242	192	58	37	70	104	50,5	25	18,1	10,3	0,46	3,7
20	145	272	222	63	42	85	119	50,5	25	23,7	10,3	0,85	5,1
25	145	282	232	63	42	85	119	50,5	25	29,7	10,3	0,89	5,1
32	147	344	294	70	49	85	119	64	25	38,4	10,3	1,26	6,3
40	160	344	295	73	52	104	134	64	25	44,3	10,3	1,95	7,6
50L	173	433	384	78	57	104	134	77,5	25	56,3	10,3	2,69	8,4
50H	173	560	511	78	57	104	134	77,5	25	56,3	10,3	3,71	9,2

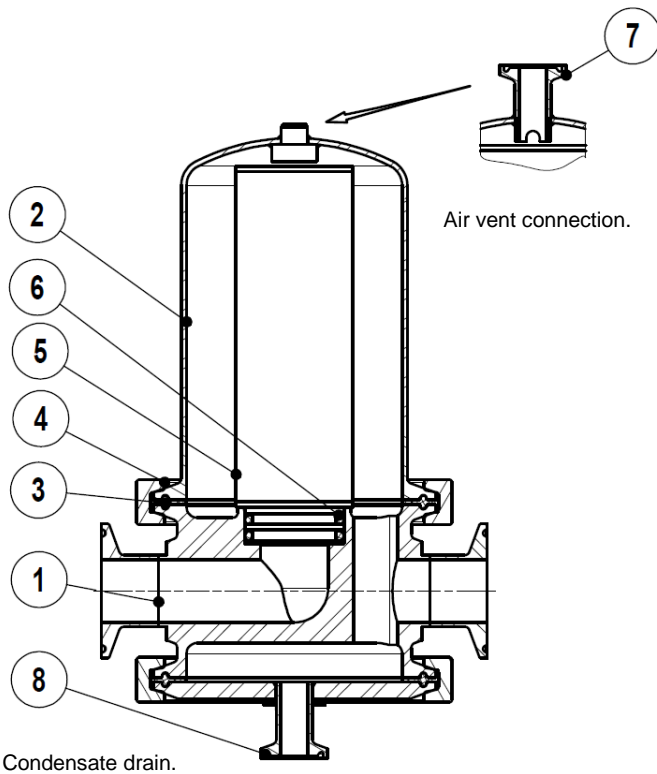
Clamp ferrules DIN 32676 Series B (for pipe DIN 11866 Series B - ISO 1127 Series 1).

Larger sizes on request. Consult factory for certified dimensions. Dimensions subject to change without notice.

a) Suffix L corresponds to low capacity design; suffix H corresponds to high capacity.

STEAM FILTER DATA INQUIRY	
Steam flow rate	Kg/h
Saturated steam operating pressure	bar
Allow able pressure drop (0,07 bar max. recommended)	bar
Pipe size	DN
Pipe connections	BPE Clamp ferrules, etc
Filter element retention rate	1, 5 or 25 micron

LIMITING CONDITIONS		
Maximum allow able pressure	1/2" to 2" DN10 to 50	16 bar
Maximum allow able temperature		200 °C
Minimum allow able temperature		-20 °C
Maximum operating pressure	EPM FLUORAZ	8,5 bar @ 178 °C 10 bar @ 200 °C
Minimum operating temperature		0 °C
Maximum differential pressure		5 bar
Max. cold hydraulic test pressure	1/2" to 2" DN10 to 50	20,8 bar

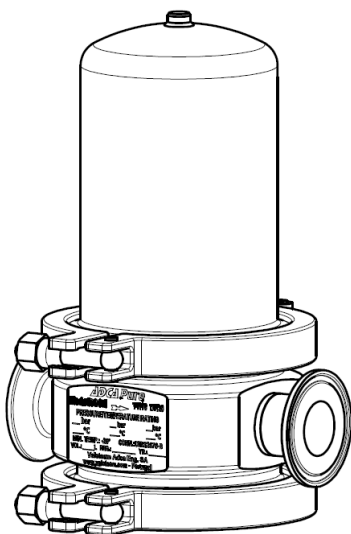


MATERIALS		
POS.	DESIGNATION	ISH10I
1	Filter housing	AISI 316L / 1.4404
2	Filter housing cover	AISI 316L / 1.4404
3	* Seal	PTFE/TFM® Envelope gasket
4	Closing ring	AIS 304 / 1.4301
5	* Filter element	Sintered AISI 316L
	Filter end caps	AISI 304 / 1.4301
6	* Filter seal o-rings (2)	EPDM, EPM, FLUORAZ
7	Air vent connection	AISI 316L / 1.4404
8	Drain connection	AISI 316L / 1.4404

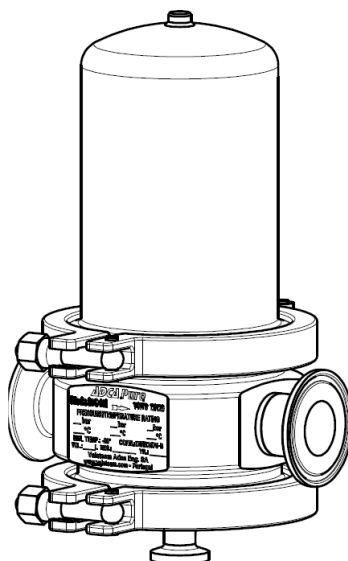
\* Available spare parts.

FDA/USP Class VI seals certificate on request.

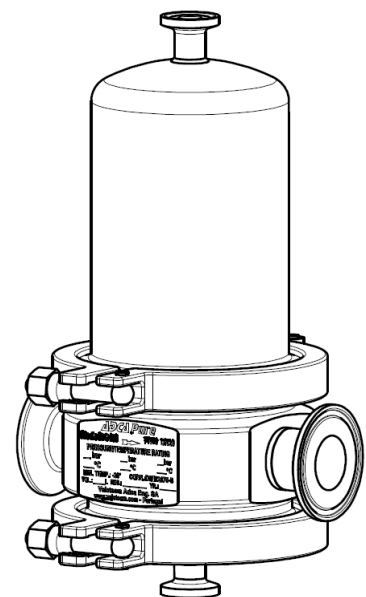
All filters have a serial number. In case of non-standard filter, this number must be supplied if spare parts are ordered.



Filter without bottom drain and 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	A	.	08			
ISH10I Filter housing AISI 316L - 1.4404	ISH10I								
<b>Housing seal material</b>									
PTFE/TFM (Envelope gasket)			T						
<b>Pipe connection</b>									
Clamp ferrule ASME BPE				D					
Clamp ferrule DIN (DIN32676-A)				F					
Clamp ferrule ISO (DIN32676-B)				E					
<b>Optional connections</b>									
Without vent and drain connection						(1)			
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			
3/4" or DN 20						20			
....						...			
2" L or DN 2"L						50L			
2" H or DN 50H						50H			
<b>Special / Extras a)</b>									E

a) Full description or additional codes have to be added in case of non-standard combination.

ORDERING CODES - FILTER ELEMENT									
Filter Element Model	ISFE	.	P	0310	.	01			
ISFE Filter element AISI 316L - 1.4404	ISFE								
<b>Filter to Housing Sealing O-rings</b>									
Without sealing o-rings			(1)						
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	DN10 DIN	DN8 ISO		0310					
/	/	DN10 ISO		0410					
3/4" ASME BPE	DN15 DIN	DN15 ISO		0420					
1" ASME BPE	DN20 DIN	DN20 ISO		0520					
/	DN25 DIN	DN25 ISO		0525					
1 1/2" ASME BPE	DN32 DIN	DN32 ISO		0725					
/	DN40 DIN	DN40 ISO		0730					
2"L ASME BPE	DN50L DIN	DN50L ISO		1030					
2"H ASME BPE	DN50H DIN	DN50H ISO		1530					
<b>Retention Rate</b>									
1 micron						01			
5 micron						05			
25 micron						25			
<b>Special / Extras b)</b>									E

b) Full description or additional codes have to be added in case of non-standard combination.

(1) Omitted

Order example:

1 Adcapure filter housing ISH10I PTFE seals DN 2" L w/clamp ferrules DN 2" ASME BPE Code: ISH10I.TD.50I

1 ISFE filter element with 5 micron retention rate for the above mention filter Code: ISFEP1030.05

Note: we recommend a second filter element as a spare part to ensure a minimum downtime when replacing the one in use after saturation.