

### 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 they 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 parts: ≤ 0,8 microns Ra

External : Satin bead blast finish – 1,6 microns Ra

Mechanical polished as option

OPTIONS: Different kind of connections and dimensions

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

AVAILABLE MODELS: ISH10I – 1.4404 ( AISI 316L )

RETENTION RATES: 1, 5 and 25 micron

SIZES: DN1/2" to DN 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.

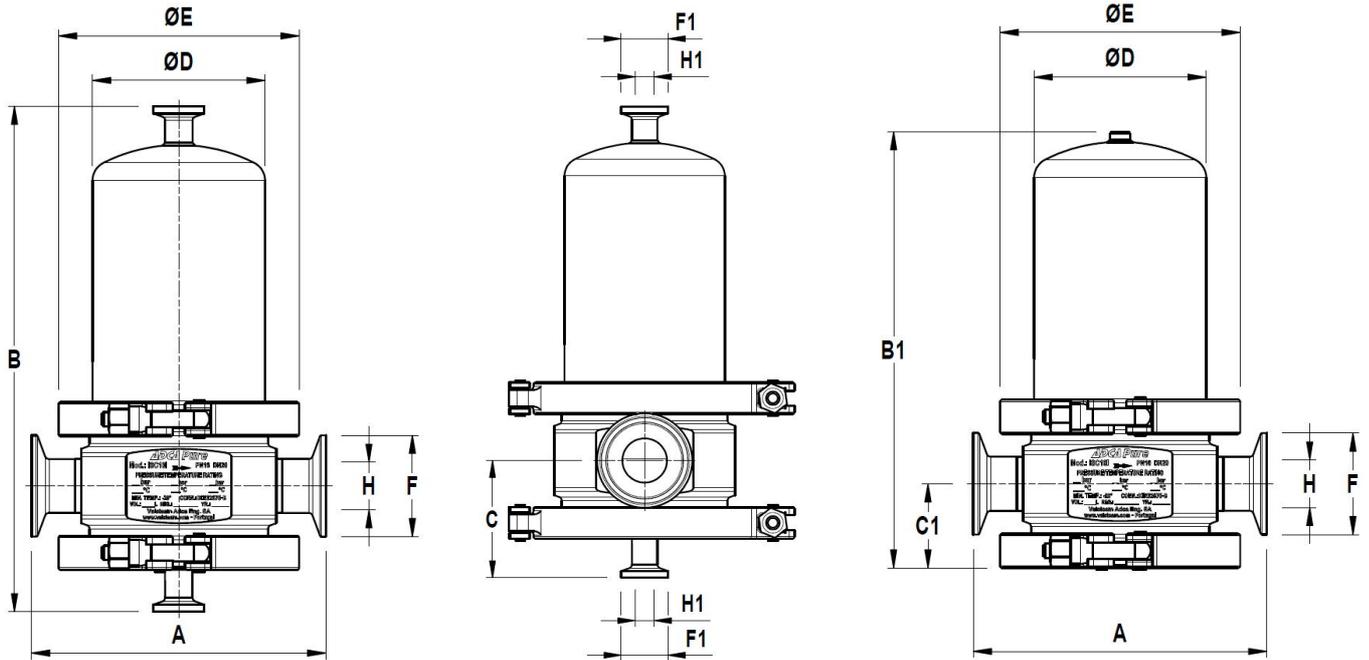


CE MARKING (PED - European Directive)	
PN 10	Category
DN1/2" to DN2"; DN8 to DN50	SEP

**CE Marking:** This product has been designed for use on water, steam, air and other gases which are in Group 2 of the European PED-Pressure Equipment Directive in use and it complies with those requirements.  
The product carries the CE mark when falling in category 1 and above.

LIMITING CONDITIONS		
Rating	Press. bar	Temp. °C
PN10	10	50
	8 *	175
	7,4	200

\*PMO-Max.operating pressure for saturated steam.  
Minimum operating temp.: -10°C.  
Design code: AD-Merkblatt



### DIMENSIONS (mm) ASME BPE

SIZE DN a)	A	B	B1	C	C1	D	E	F	F1	H	H1	VOL. * dm3	WGT ** Kg
1/2"	140	184	149	55	34	70	104	34	25	9,4	9,4	0,31	3,3
3/4"	140	217	182	58	37	70	104	34	25	15,75	9,4	0,37	3,6
1"	159	252	217	63	42	85	119	50,5	25	22,1	9,4	0,84	5,3
1 1/2"	161	319	284	70	49	85	119	50,5	25	34,8	9,4	1,22	6,3
2"L	174	398	363	73	52	104	134	64	25	47,5	9,4	2,15	7,9
2"H	174	525	490	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	184	149	55	34	70	104	34	34	10	10	0,31	3,4
15	140	217	182	58	37	70	104	37	34	16	10	0,37	3,7
20	159	252	217	63	42	85	119	42	34	20	10	0,8	5,2
25	174	252	217	63	42	85	119	42	34	26	10	0,81	5,2
32	176	319	284	70	49	85	119	49	34	32	10	1,19	6,4
40	189	324	289	73	52	104	134	52	34	38	10	1,64	7,6
50L	189	398	363	73	52	104	134	52	34	50	10	2,32	7,8
50H	189	525	490	73	52	104	134	52	34	50	10	3,64	8,6

Clamp ferrules DIN 32676 Series A (for pipes DIN 11866 Series A - DIN11 850 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	184	149	55	34	70	104	25	25	10,3	10,3	0,35	3,3
10	140	212	177	55	34	70	104	25	25	14	10,3	0,45	3,5
15	140	217	182	58	37	70	104	50,5	25	18,1	10,3	0,46	3,7
20	145	252	217	63	42	85	119	50,5	25	23,7	10,3	0,85	5,1
25	145	252	217	63	42	85	119	50,5	25	29,7	10,3	0,89	5,1
32	147	319	284	70	49	85	119	64	25	38,4	10,3	1,26	6,3
40	160	324	289	73	52	104	134	64	25	44,3	10,3	1,95	7,6
50L	173	408	373	78	57	104	134	77,5	25	56,3	10,3	2,69	8,4
50H	173	535	500	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.



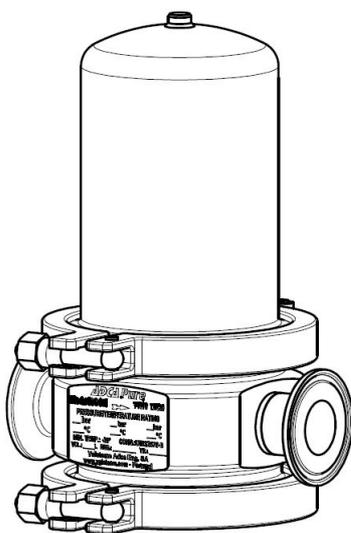
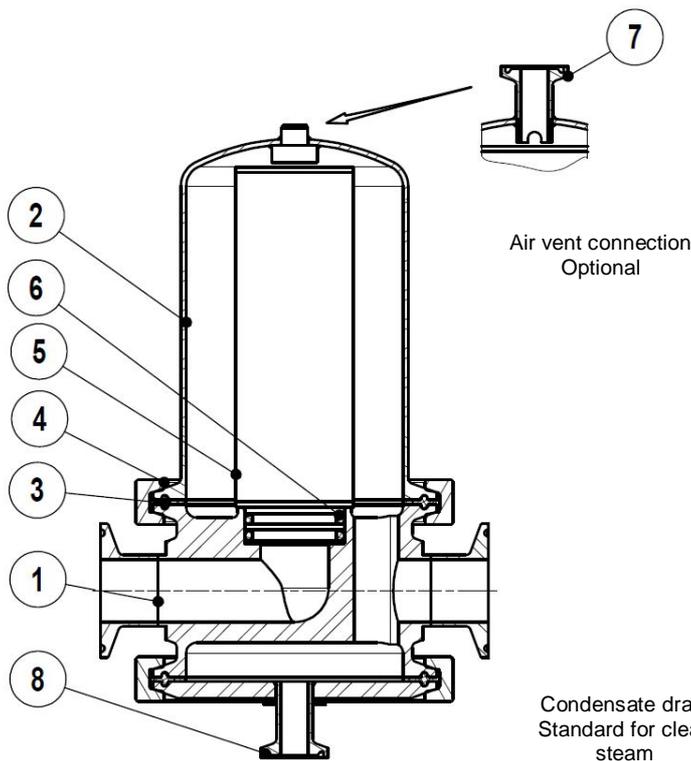
STEAM FILTER DATA INQUIRY	
Steam flow rate	Kg/h
Saturated steam operating pressure	bar
Allow able pressure drop (0,07 bar max. recommended)	bar
Pipe size	DN
Pipe connections	BPE Clamp ferrules, etc
Filter element retention rate	1, 5 or 25 micron

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

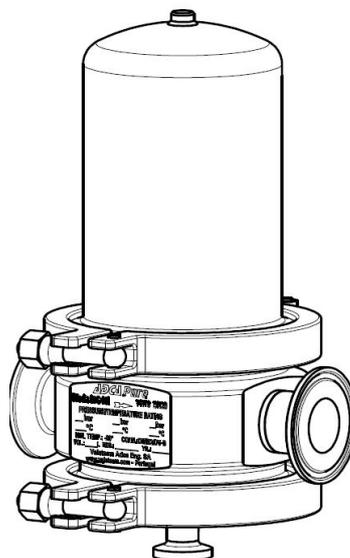
\* Available spare parts.

FDA/USP Class VI seals certificate on request.

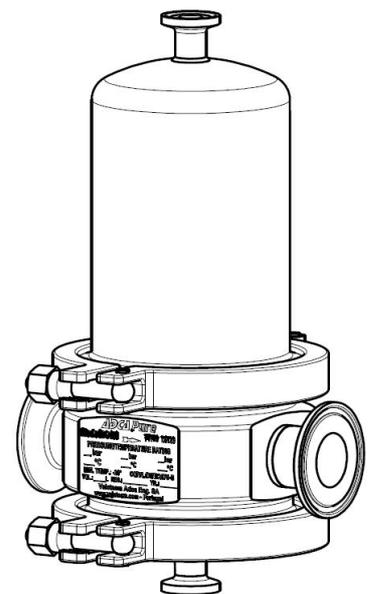
All filters have a serial number. In case of non-standard filter this number must be supplied if spare parts are ordered.



Filter without bottom drain for clean gases



Filter with condensate drain for clean steam



Filter with both air vent and condensate drain connection



ORDERING CODES ISH10I FILTER HOUSING							
Filter Model	ISH10I	.	P	A	.	08	
ISH10I Filter housing AISI 316L - 1.4404	ISH10I						
Housing seal material							
PTFE/TFM (Envelope gasket)				T			
Pipe connection							
Clamp ferrule ASME BPE					D		
Clamp ferrule DIN (DIN32676-A)					F		
Clamp ferrule ISO (DIN32676-B)					E		
Size							
DN 08 or DN 1/4"							08
DN 10 or DN 3/8"							10
DN 15 or DN 1/2"							15
DN 20 or DN 3/4"							20
....							...
DN 50L or DN 2" L							50L
DN 50H or DN 2" H							50H
Special / Extras a)							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						
Filter to Housing Sealing O-rings							
Without sealing o-rings				(1)			
EPDM (up to 180°C)				E			
EPM (up to 180°C)				P			
Fluoraz (up to 200°C)				F			
Filter Size According to Housing DN Connection							
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	
Retention Rate							
1 micron							01
5 micron							05
25 micron							25
Special / Extras 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: ISFE.P1030.05

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

## CULINARY STEAM FILTER ISC16 – ISC16I

### DESCRIPTION

The ISC16 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. Up to DN 3" / DN80 they are joined by a food industry fitting according to DIN 11851 and the larger sizes DN100 to DN200 by flat flanges fixed with bolts and nuts.

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 parts: ≤ 0,8 microns Ra

External : Satin bead blast finish – 1,6 microns Ra

Mechanical polished as option

OPTIONS: Different kind of connections and dimensions

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

AVAILABLE MODELS: ISC16 – 1.4301 ( AISI 304 )  
ISC16I – 1.4404 ( AISI 316L )

RETENTION RATES: 1, 5 and 25 micron

SIZES: DN1/4" to DN 3" threaded  
DN10 to DN 80 flanged  
DN100 to DN 200 flanged on request

PIPE CONNECTIONS: Threaded BSP or NPT  
Flanged EN PN16 or ANSI class 150lbs  
Welded ends and other connections on request.

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



CE MARKING (PED - European Directive)		
Ps 16 bar	Ps 12 bar	Category
DN10 to DN40 ; DN1/4" to DN 11/2"	/	SEP
DN50L to DN80L ; DN2"L to DN3"L	/	1
/	DN80H ; DN 3"H	2

**CE Marking:** This product has been designed for use on water, steam, air and other gases which are in Group 2 of the European PED-Pressure Equipment Directive in use and it complies with those requirements. The product carries the CE mark when falling in category 1 and above.

STEAM FILTER DATA INQUIRY	
Steam flow rate	Kg/h
Saturated steam operating pressure	bar
Allow able pressure drop (0,07 bar max. recommended)	bar
Housing material	1.4301 or 1.4404
Size	DN
Pipe connections	BSP, Flanged PN16,...
Filter element retention rate	1, 5 or 25 micron

LIMITING CONDITIONS		
Maximum allow able pressure	DN10-80L	16 bar
	DN80H	12 bar
Maximum allow able temperature	200 °C	
Minimum allow able 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	
Max. cold hydraulic test pressure	DN10-80L	20,8 bar
	DN80H	15,6 bar

APPROXIMATE DIMENSIONS (mm)											
SIZE DN a)	A Screwed	A Tube weld	A Flanged PN16	A Flanged 150lbs	B	C	D	E	F	VOL. * dm3	WGT ** Kg
08 - 1/4"	108	108	180	203	220	55	70	112	1/4"	0,6	1,8
10 - 3/8"	108	108	180	203	248	55	70	112	1/4"	0,7	1,9
15 - 1/2"	108	108	180	203	248	55	70	112	1/4"	0,7	2
20 - 3/4"	125	125	202	230	272	55	70	112	1/4"	0,8	2,2
25 - 1"	125	125	212	247	298	74	85	127	1/4"	1,3	2,8
32 - 1 1/4"	140	140	220	254	350	74	85	127	1/4"	1,6	3,2
40 - 1 1/2"	170	170	254	294	388	93	104	148	1/4"	2,8	4,6
50L-2"L	170	170	260	297	463	93	104	148	1/4"	3,2	4,7
50H - 2"H	170	170	260	297	590	93	104	148	1/4"	4,5	5,3
65 - 2 1/2"	216	216	306	356	740	107	129	178	1/4"	8,9	8,3
80L - 3"L	216	216	316	356	1002	111	129	178	1/4"	12,2	9,7
80H - 3"H	240	240	340	380	1027	113	154	210	1/4"	17,8	13,3

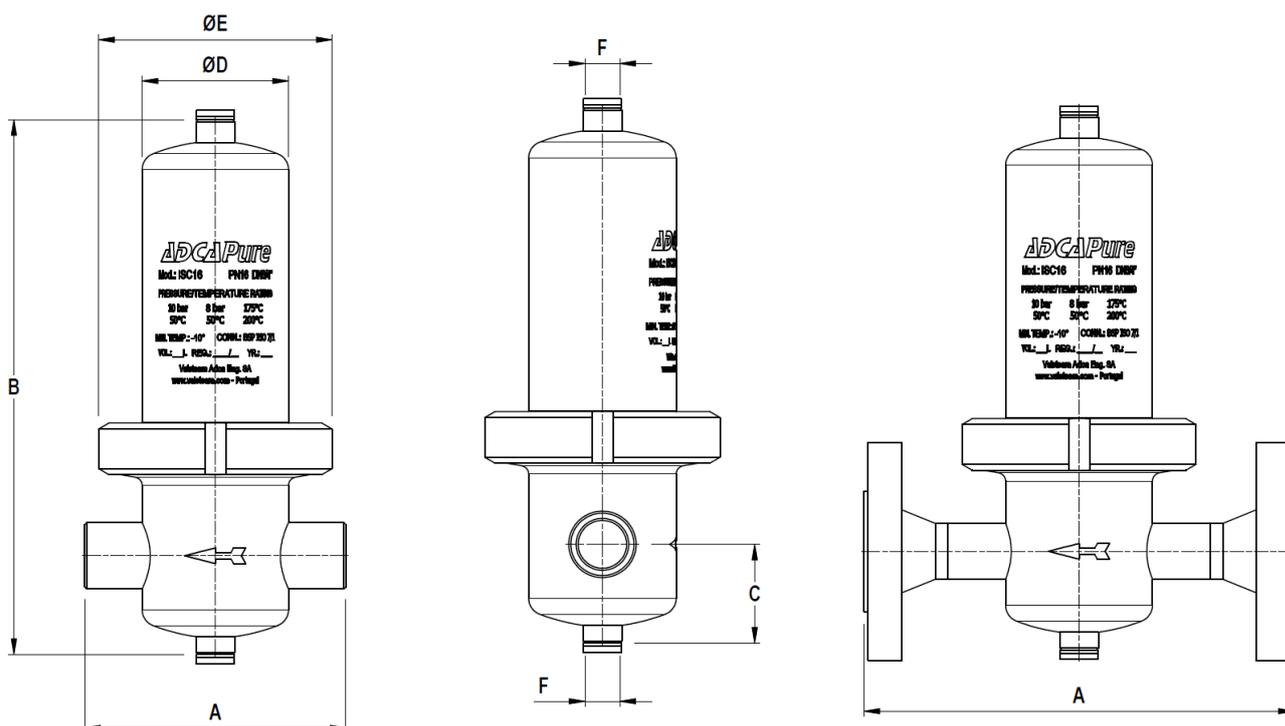
Larger sizes up to DN 200 on request.

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

\* Volume correspond to the class PN16 design.

\*\* Weight correspond to the class PN16 design.

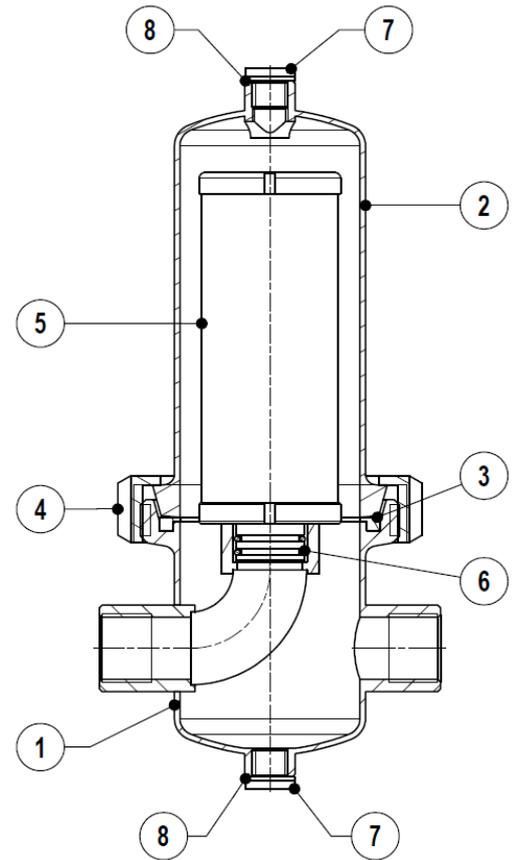
Consult factory for certified dimensions. Dimensions subject to change without notice.



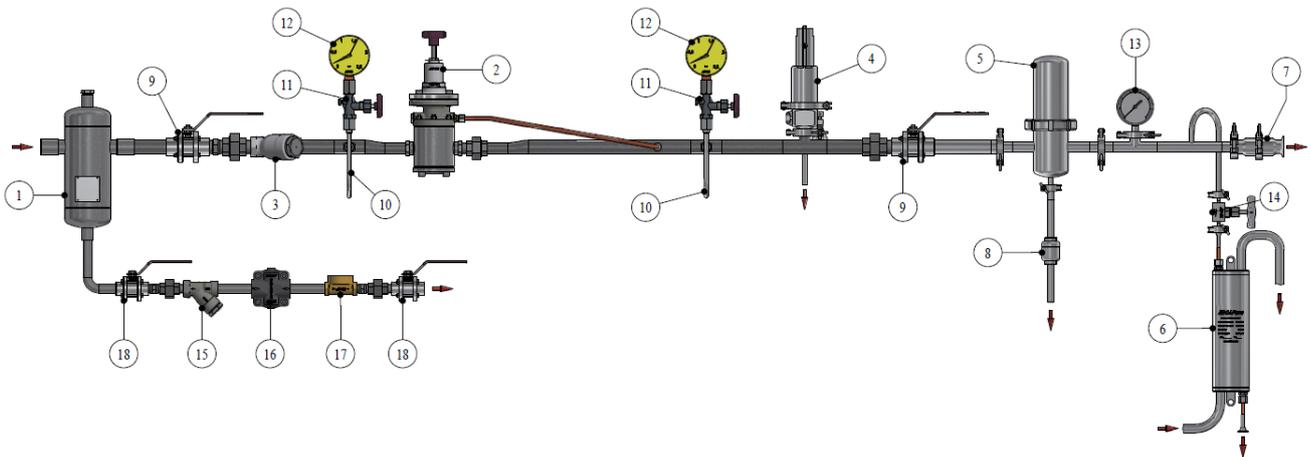
MATERIALS			
POS.	DESIGNATION	ISC16	ISC16I
1	Filter housing bowl	AISI 304 / 1.4301	AISI 316L / 1.4404
2	Filter housing cover	AISI 304 / 1.4301	AISI 316L / 1.4404
3	* Seal	EPM, FLUORAZ	EPM , FLUORAZ
4	Closing ring	AISI 304 / 1.4301	AIS 304 / 1.4301
5	* Filter element	Sintered AISI 316L	Sintered AISI 316L
	Filter end caps	AISI 304 / 1.4301	AISI 304 / 1.4301
6	* Filter seal o-rings (2)	EPM , FLUORAZ	EPM , FLUORAZ
7	Plug	AISI 304 / 1.4301	AISI 304 / 1.4301
8	Gasket	PTFE	PTFE

\* Available spare parts.

FDA seals certificate available if requested along with the order.



**TYPICAL INSTALLATION – FILTERED STEAM PRESSURE REDUCING STATION**



MATERIALS			
POS.	DESIGNATION	POS.	DESIGNATION
1	ADCA S16S Steam centrifugal humidity separator	10	ADCA GSU Gauge siphon
2	ADCA PRV47 Pilot operated pressure regulator	11	ADCA GC-400 Gauge cock
3	ADCA IS140 Y Strainer	12	ADCA MAN-100 Pressure gauge
4	ADCAPure SRV6 Safety valve	13	ADCAPure MAN10P Pressure gauge
5	ADCAPure ISC16 Culinary steam filter	14	ADCAPure NV400P Sanitary needle valve
6	ADCAPure SC32P Sample cooler	15	ADCA IS140 Y Strainer
7	Sanitary check valve	16	ADCA FLT17 Float and thermostatic steam trap
8	ADCA TSS22 Steam trap	17	ADCA SW12 Sight glass
9	ADCA M3S1 Three piece ball valve	18	ADCA M3S1 Three piece ball valve



ORDERING CODES ISC16 FILTER HOUSING							
Filter Model	ISC16	.	P	A	.	08	
ISC16 Filter housing AISI 304 - 1.4301	ISC16						
ISC16I Filter housing AISI 316L - 1.4404	ISC16I						
Housing seal material							
EPM ( up to 180 °C )			P				
FLUORAZ ( up to 200 °C )			F				
Pipe connection							
Threaded BSP ISO 7/1 Rp				A			
Threaded NPT ANSI B1.20.1				C			
Tube weld				H			
Flanged EN1092-1 PN16				L			
Flanged ANSI B16.5 150#				U			
Size							
DN 08 or DN 1/4"						08	
DN 10 or DN 3/8"						10	
DN 15 or DN 1/2"						15	
....						...	
DN 50L or DN 2" L						50L	
DN 50H or DN 2" H						50H	
...						...	
Special / Extras a)							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						
Filter to Housing Sealing O-rings							
Without sealing o-rings			( 1 )				
EPM ( up to 180 °C )			P				
FLUORAZ ( up to 200 °C )			F				
Filter Size According to Housing DN Connection							
DN 08 - 1/4"				0310			
DN 10 - 3/8"				0410			
DN 15 - 1/2"				0420			
DN 20 - 3/4"				0520			
DN 25 - 1"				0525			
DN 32 - 1 1/4"				0725			
DN 40 - 1 1/2"				0730			
DN 50 L - 2" L				1030			
DN 50H - 2" H				1530			
DN 65 - 2 1/2"				2030			
DN80 L - 3" L				3030			
DN 80H - 3" H				3050			
Retention Rate							
1 micron						01	
5 micron						05	
25 micron						25	
Special / Extras 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 ISC16 EPM seals DN 2" L threaded BSP DN 2"

Code: ISC16.PA.50L

1 ISFE filter element with 5 micron retention rate for the above mention filter

Code: ISFE.P1030.05

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