

## HYGIENIC STEAM FILTERS 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 and available with 1, 5 or 25 micron absolute rating.

### MAIN FEATURES

Several retention rates available.

Good durability against aggressive gases.

Porosity level above 50% to ensure high particle and dirt load capacity as well as good flow rate at a low differential pressure.

Regeneration by ultrasonic cleaning.

### STANDARD SURFACE FINISH

Internal wetted parts:  $\leq 0,51 \mu\text{m Ra} - \text{SF1}$ .

External:  $\leq 0,76 \mu\text{m Ra} - \text{SF3}$ .

Other surface conditions see TIS.GIA – General information ADCAPure.

Ultrasonic cleaning.

**OPTIONS:** Air vent and bottom drain connections.  
Other connections and dimensions.  
Vertical installation design (ISV10i).

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

**AVAILABLE MODELS:** ISH10i.

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

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

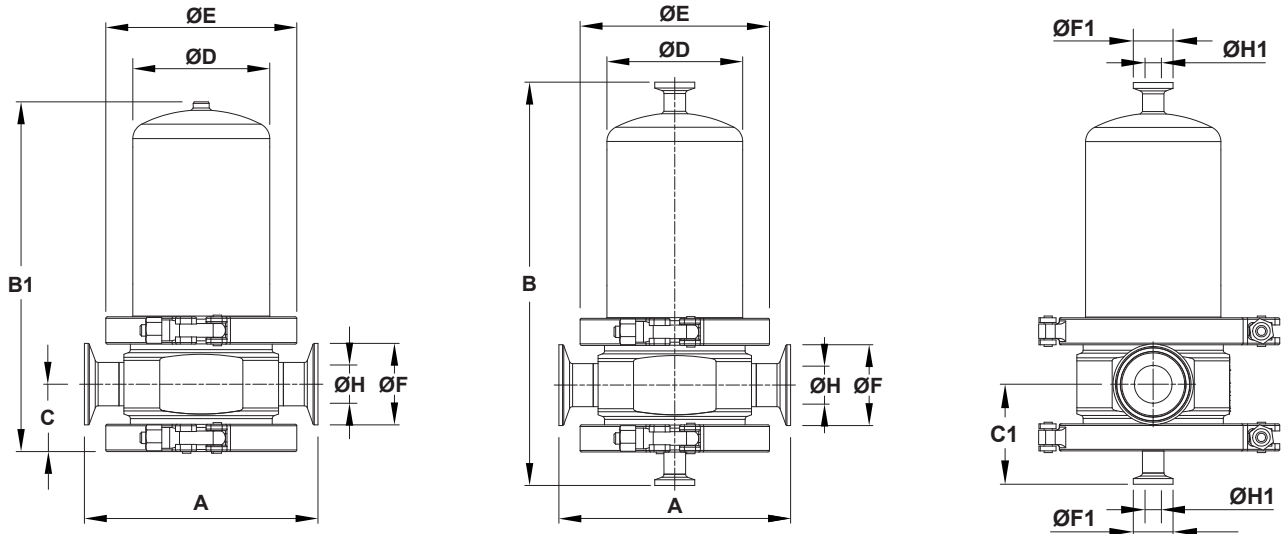
**CONNECTIONS:** ASME BPE, DIN and ISO clamp ferrules.  
Others on request.

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



**ISV10i**  
Vertical inlet/outlet

| CE MARKING – GROUP 2<br>(PED – European Directive) |               |
|--|---------------|
| Ps 16 bar  | Category      |
| 1/4" to 2"L – DN 10 to 50L                         | SEP           |
| 2"H – DN 50H                                       | 1 (CE marked) |



**DIMENSIONS – ASME BPE (mm)**

| SIZE * | A   | B   | B1  | C  | C1 | D   | E   | ØF   | ØF1 | ØH    | ØH1 | ISFE SIZE | ISFE QTY. | VOL. (L) | WGT. (kg) |
|--------|-----|-----|-----|----|----|-----|-----|------|-----|-------|-----|-----------|-----------|----------|-----------|
| 1/2"   | 140 | 204 | 154 | 34 | 55 | 70  | 104 | 25   | 25  | 9,4   | 9,4 | 0310      | 1         | 0,31     | 3,3       |
| 3/4"   | 140 | 237 | 187 | 37 | 58 | 70  | 104 | 25   | 25  | 15,75 | 9,4 | 0420      | 1         | 0,37     | 3,6       |
| 1"     | 159 | 272 | 222 | 42 | 63 | 85  | 119 | 50,4 | 25  | 22,1  | 9,4 | 0520      | 1         | 0,84     | 5,3       |
| 1 1/2" | 161 | 339 | 288 | 49 | 70 | 85  | 119 | 50,4 | 25  | 34,8  | 9,4 | 0725      | 1         | 1,22     | 6,3       |
| 2"L    | 174 | 418 | 369 | 52 | 73 | 104 | 134 | 63,9 | 25  | 47,5  | 9,4 | 1030      | 1         | 2,15     | 7,9       |
| 2"H    | 174 | 545 | 496 | 52 | 73 | 104 | 134 | 63,9 | 25  | 47,5  | 9,4 | 1530      | 1         | 3,56     | 8,7       |

**DIMENSIONS – DIN (mm)**

| SIZE * | A   | B   | B1  | C  | C1 | D   | E   | ØF   | ØF1 | ØH | ØH1 | ISFE SIZE | ISFE QTY. | VOL. (L) | WGT. (kg) |
|--------|-----|-----|-----|----|----|-----|-----|------|-----|----|-----|-----------|-----------|----------|-----------|
| DN 10  | 140 | 204 | 154 | 34 | 55 | 70  | 104 | 34   | 34  | 10 | 10  | 0310      | 1         | 0,31     | 3,4       |
| DN 15  | 140 | 237 | 187 | 37 | 58 | 70  | 104 | 34   | 34  | 16 | 10  | 0420      | 1         | 0,37     | 3,7       |
| DN 20  | 159 | 272 | 222 | 42 | 63 | 85  | 119 | 34   | 34  | 20 | 10  | 0520      | 1         | 0,8      | 5,2       |
| DN 25  | 174 | 272 | 222 | 42 | 63 | 85  | 119 | 50,5 | 34  | 26 | 10  | 0525      | 1         | 0,81     | 5,2       |
| DN 32  | 176 | 344 | 295 | 49 | 70 | 85  | 119 | 50,5 | 34  | 32 | 10  | 0725      | 1         | 1,19     | 6,4       |
| DN 40  | 189 | 344 | 295 | 52 | 73 | 104 | 134 | 50,5 | 34  | 38 | 10  | 0730      | 1         | 1,64     | 7,6       |
| DN 50L | 189 | 418 | 369 | 52 | 73 | 104 | 134 | 64   | 34  | 50 | 10  | 1030      | 1         | 2,32     | 7,8       |
| DN 50H | 189 | 545 | 496 | 52 | 73 | 104 | 134 | 64   | 34  | 50 | 10  | 1530      | 1         | 3,64     | 8,6       |

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

**DIMENSIONS – ISO (mm)**

| SIZE * | A   | B   | B1  | C  | C1 | D   | E   | ØF   | ØF1 | ØH   | ØH1  | ISFE SIZE | ISFE QTY. | VOL. (L) | WGT. (kg) |
|--------|-----|-----|-----|----|----|-----|-----|------|-----|------|------|-----------|-----------|----------|-----------|
| DN 08  | 140 | 204 | 155 | 34 | 55 | 70  | 104 | 25   | 25  | 10,3 | 10,3 | 0310      | 1         | 0,35     | 3,3       |
| DN 10  | 140 | 237 | 187 | 34 | 55 | 70  | 104 | 25   | 25  | 14   | 10,3 | 0410      | 1         | 0,45     | 3,5       |
| DN 15  | 140 | 242 | 192 | 37 | 58 | 70  | 104 | 50,5 | 25  | 18,1 | 10,3 | 0420      | 1         | 0,46     | 3,7       |
| DN 20  | 145 | 272 | 222 | 42 | 63 | 85  | 119 | 50,5 | 25  | 23,7 | 10,3 | 0520      | 1         | 0,85     | 5,1       |
| DN 25  | 145 | 282 | 232 | 42 | 63 | 85  | 119 | 50,5 | 25  | 29,7 | 10,3 | 0525      | 1         | 0,89     | 5,1       |
| DN 32  | 147 | 344 | 294 | 49 | 70 | 85  | 119 | 64   | 25  | 38,4 | 10,3 | 0725      | 1         | 1,26     | 6,3       |
| DN 40  | 160 | 344 | 295 | 52 | 73 | 104 | 134 | 64   | 25  | 44,3 | 10,3 | 0730      | 1         | 1,95     | 7,6       |
| DN 50L | 173 | 433 | 384 | 57 | 78 | 104 | 134 | 77,5 | 25  | 56,3 | 10,3 | 1030      | 1         | 2,69     | 8,4       |
| DN 50H | 173 | 560 | 511 | 57 | 78 | 104 | 134 | 77,5 | 25  | 56,3 | 10,3 | 1530      | 1         | 3,71     | 9,2       |

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

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

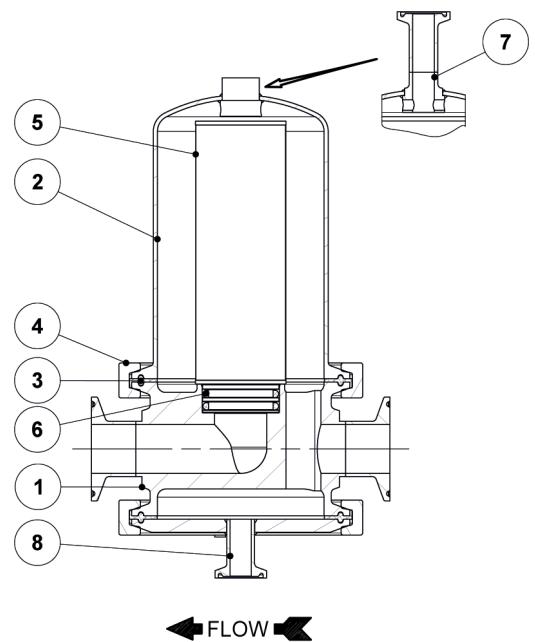
Other sizes on request.

| LIMITING CONDITIONS *                |                                  |        |
|--------------------------------------|----------------------------------|--------|
| Maximum allowable pressure           | 16 bar                           |        |
| Maximum allowable temperature        | 200 °C                           |        |
| Minimum allowable temperature        | -20 °C                           |        |
| Maximum operating temperature        | EPM filter element seals         | 150 °C |
|                                      | EPM filter element seals (steam) | 180 °C |
|                                      | Fluoraz® filter element seals    | 200 °C |
| Minimum operating temperature        | 0 °C                             |        |
| Maximum cold hydraulic test pressure | 28 bar                           |        |
| Maximum differential pressure        | 5 bar                            |        |

\* Other limits on request. Maximum operating conditions may be limited by the filter housing end connections due to normative restrictions.  
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/FPM Envelope |
| 4         | Safety clamp          | AISI 316 / 1.4401    |
| 5         | * Filter element      | Sintered AISI 316L   |
|           | Filter end caps       | AISI 304 / 1.4301    |
| 6         | * Filter seal o-rings | ** EPM; Fluoraz®     |
| 7         | Air vent connection   | AISI 316L / 1.4404   |
| 8         | Drain connection      | AISI 316L / 1.4404   |

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



| OPTIONS  |                                       |
|--|---------------------------------------|
| BOTTOM DRAIN CONNECTION FOR CLEAN STEAM APPLICATIONS | AIR VENT AND BOTTOM DRAIN CONNECTIONS |
|  |                                       |

| ORDERING CODES – ISH10i FILTER HOUSING  |        |   |   |   |   |   |     |  |   |
|---|--------|---|---|---|---|---|-----|--|---|
| <b>Filter model</b>   | ISH10I | . | T | D | X | . | 08  |  |   |
| ISH10i – AISI 316L / 1.4404 filter housing  | ISH10I |   |   |   |   |   |     |  |   |
| <b>Housing seal material</b>  |        |   |   |   |   |   |     |  |   |
| PTFE/FPM  |        |   | 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>Drain and vent connections</b>   |        |   |   |   |   |   |     |  |   |
| Without vent or drain connection  |        |   |   |   | X |   |     |  |   |
| With bottom drain connection  |        |   |   |   | 1 |   |     |  |   |
| With bottom drain and vent connection   |        |   |   |   | 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 construction / Additional options</b>  |        |   |   |   |   |   |     |  |   |
| Full description or additional codes have to be added in case of non-standard combination |        |   |   |   |   |   |     |  | E |

| ORDERING CODES – FILTER ELEMENT   |            |            |   |      |   |    |    |  |   |
|---|------------|------------|---|------|---|----|----|--|---|
| <b>Filter element model</b>   | ISFE       | .          | X | 0310 | . | 01 |    |  |   |
| ISFE – AISI 316L / 1.4404 filter element  | ISFE       |            |   |      |   |    |    |  |   |
| <b>Filter seals</b>   |            |            |   |      |   |    |    |  |   |
| Without o-rings   |            |            | X |      |   |    |    |  |   |
| EPM   |            |            | P |      |   |    |    |  |   |
| Fluoraz®  |            |            | F |      |   |    |    |  |   |
| <b>Filter element size according to housing connections</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 50L DIN | DN 50L 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 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.