

## CULINARY STEAM FILTER ISC20I

### DESCRIPTION

The ISC20I 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 a bottom cover with drain connection, 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: ≤ 0,76 micron Ra – SF3.

External : Satin bead blast finish – 1,6 micron Ra.

Other surface conditions see IS PV20.00-Technical information.

**OPTIONS:** Different kind of connections and dimensions.

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

**AVAILABLE MODELS:** ISC20I – 1.4404 ( AISI 316L ).

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

**SIZES:** 1/4" to 2" threaded.  
DN10 to DN 80 flanged.

**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.

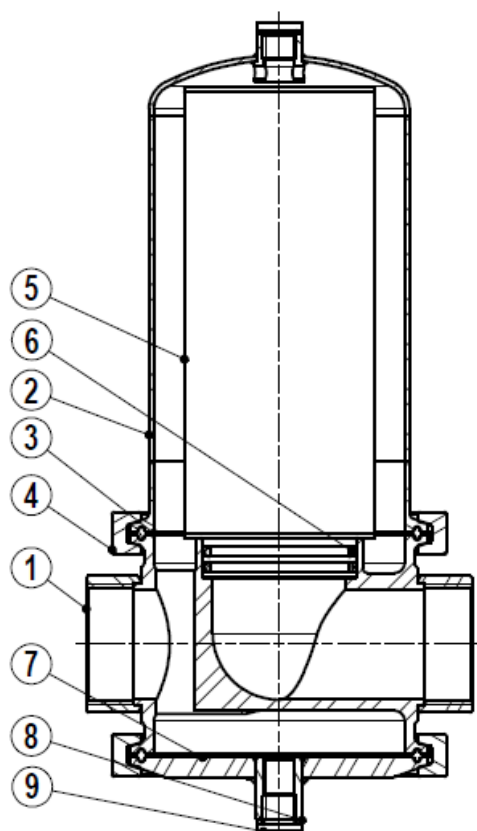


| CE MARKING (PED - European Directive) |           |          |
|---------------------------------------|-----------|----------|
| Ps 16 bar                             | Ps 12 bar | Category |
| 1/4" to 1 1/2" ; DN10 to DN40         | /         | SEP      |
| 2"L to 2 1/2" ; DN50L to DN65 ;       | /         | 1        |
| /                                     | 3" ; DN80 | 2        |



| STEAM FILTER DATA INQUIRY                               |                       |
|---------------------------------------------------------|-----------------------|
| Steam flow rate                                         | Kg/h                  |
| Saturated steam operating pressure                      | bar                   |
| Allow able pressure drop<br>(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       | DN10-65 | 16 bar           |
|                                   | DN80    | 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 | DN10-65 | 20,8 bar         |
|                                   | DN80    | 15,6 bar         |



| MATERIALS |                           |                           |
|-----------|---------------------------|---------------------------|
| POS.      | DESIGNATION               | ISC20I                    |
| 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         | Bottom cover              | AISI 316L / 1.4404        |
| 8         | Plug                      | AISI 304 / 1.4301         |
| 9         | Gasket                    | PTFE                      |

\* 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.



| ORDERING CODES ISC20I FILTER HOUSING     |        |   |   |   |   |     |   |
|------------------------------------------|--------|---|---|---|---|-----|---|
| Filter Model                             | ISC20I | . | T | A | . | 08  |   |
| ISC20I Filter housing AISI 316L - 1.4404 | ISC20I |   |   |   |   |     |   |
| Housing seal material                    |        |   |   |   |   |     |   |
| PTFE/TFM (Envelope gasket)               |        |   | T |   |   |     |   |
| 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                                     |        |   |   |   |   |     |   |
| 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 |   |
| ...                                      |        |   |   |   |   | ... |   |
| 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 |      |   |     |      |   |    |   |
| 1/4" - DN 08                                   |      |   |     | 0310 |   |    |   |
| 3/8" - DN 10                                   |      |   |     | 0410 |   |    |   |
| 1/2" - DN 15                                   |      |   |     | 0420 |   |    |   |
| 3/4" - DN 20                                   |      |   |     | 0520 |   |    |   |
| 1" - DN 25                                     |      |   |     | 0525 |   |    |   |
| 1 1/4" - DN 32                                 |      |   |     | 0725 |   |    |   |
| 1 1/2" - DN 40                                 |      |   |     | 0730 |   |    |   |
| 2"L - DN50L                                    |      |   |     | 1030 |   |    |   |
| 2"H - DN 50H                                   |      |   |     | 1530 |   |    |   |
| 2 1/2" - DN 65                                 |      |   |     | 2030 |   |    |   |
| 3"L - DN 80L                                   |      |   |     | 3030 |   |    |   |
| 3"H - DN 80H                                   |      |   |     | 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 Adcapture filter housing ISC20I PTFE/TFE seals DN 2" L threaded BSP DN 2" Code: ISC20I.TA.50L

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.