

# STAINLESS STEEL STERILE FILTER HOUSING - SF

(Sanitary applications)

## DESCRIPTION

SF stainless steel sterile filter housings have been specifically developed for removing of impurities from compressed air <sup>(1)</sup> system. To meet the required compressed air quality appropriate filter element must be installed into filter housing. SF filter housing is also designed for sterilisation. Before use if needed for the application, sterilize the filters.

## APPLICATIONS <sup>(2)</sup>

- Packing industry
- Biotechnology
- Breweries
- Chemical industry
- Diaries
- Fermentation processes
- Food & beverage industry
- Pharmaceutical industry
- Hospitals

<sup>(1)</sup> For any other technical gas please contact us or your local dealer

<sup>(2)</sup> SF process filter housing can be used in variety of applications. For applications not listed please contact us or your local dealer.



## TECHNICAL SPECIFICATION

|                                   |                    |                   |
|-----------------------------------|--------------------|-------------------|
| Operating temperature             | Up to - 150 °C*    | Up to - 302 °F    |
| Short duration (15min) temp limit | Up to 200 °C*      | Up to 392 °F      |
| Operating pressure                | 0 – 10 (16) bar(g) | 0 – 145 (232) psi |

\*Actual operating temperature depends on sealing material. For temperatures below 0°C contact manufacturer.

## MATERIALS

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Housing material | Stainless steel (quality 1.4404; on request 1.4301) |
| Sealing          | EPDM (Optional FKM or SILICONE)                     |
| Housing finishes | Polished down to grade Ra0,8 (externally)           |
| Lubricant        | (Optional Shell cassida grease RLS 2)               |

## SIZES

| FILTER HOUSING | PIPE SIZE   | FILTER ELEMENT | OPERATING PRESSURE [bar] | FLOW CAPACITY        |        | DIMENSIONS [mm] |     |       |     |      | VOLUME [l] | WEIGHT [kg] |
|----------------|-------------|----------------|--------------------------|----------------------|--------|-----------------|-----|-------|-----|------|------------|-------------|
|                |             |                |                          | [Nm <sup>3</sup> /h] | [scfm] | A               | B   | C     | D   | E    |            |             |
| SF 0006        | DN10/ Ø17,2 | 1x0310-VSF     | 16                       | 75                   | 44     | 218             | 125 | 76,1  | 69  | 1/8" | 0,7        | 1,6         |
| SF 0009        | DN10/ Ø17,2 | 1x0410-VSF     | 16                       | 105                  | 62     | 246             | 125 | 76,1  | 69  | 1/8" | 0,8        | 1,7         |
| SF 0012        | DN15/ Ø21,3 | 1x0420-VSF     | 16                       | 150                  | 88     | 251             | 120 | 76,1  | 69  | 1/8" | 0,8        | 1,7         |
| SF 0018        | DN15/ Ø21,3 | 1x0520-VSF     | 16                       | 225                  | 132    | 275             | 120 | 76,1  | 69  | 1/8" | 0,9        | 1,8         |
| SF 0032        | DN25/ Ø33,7 | 1x0530-VSF     | 16                       | 315                  | 185    | 303             | 169 | 114,3 | 86  | 1/4" | 2,4        | 3,1         |
| SF 0048        | DN32/ Ø42,4 | 1x0730-VSF     | 16                       | 600                  | 353    | 363             | 169 | 114,3 | 86  | 1/4" | 2,9        | 3,4         |
| SF 0072        | DN40/ Ø48,3 | 1x1030-VSF     | 16                       | 900                  | 530    | 446             | 169 | 114,3 | 86  | 1/4" | 3,8        | 3,6         |
| SF 0108        | DN50/ Ø60,3 | 1x1530-VSF     | 16                       | 1.260                | 742    | 587             | 183 | 114,3 | 96  | 1/4" | 5,1        | 4,9         |
| SF 0144        | DN65/ Ø76,1 | 1x2030-VSF     | 16                       | 1.680                | 989    | 763             | 195 | 139,7 | 120 | 1/4" | 10,2       | 8,4         |
| SF 0192        | DN80/ Ø88,9 | 1x3030-VSF     | 16                       | 2.400                | 1.413  | 1015            | 195 | 139,7 | 120 | 1/4" | 13,5       | 10,2        |
| SF 0432        | DN100       | 3x2030-VSF     | 10                       | 5.040                | 2.966  | 1012            | 410 | 219,1 | 183 | 1/2" | 33         | 44          |
| SF 0576        | DN100       | 3x3030-VSF     | 10                       | 6.720                | 3.955  | 1266            | 410 | 219,1 | 183 | 1/2" | 43         | 45          |
| SF 0768        | DN150       | 4x3030-VSF     | 10                       | 9.600                | 5.650  | 1305            | 480 | 273   | 225 | 1/2" | 70         | 70          |
| SF 1152        | DN150       | 6x3030-VSF     | 10                       | 13.440               | 7.910  | 1418            | 540 | 323,9 | 256 | 1"   | 103        | 80          |
| SF 1536        | DN200       | 8x3030-VSF     | 10                       | 17.200               | 10.124 | 1568            | 660 | 406,4 | 306 | 1"   | 180        | 135         |
| SF 1920        | DN200       | 10x3030-VSF    | 10                       | 21.120               | 12.431 | 1568            | 660 | 406,4 | 306 | 1"   | 180        | 135         |

Flow capacity at 7 bar(g), 20°C

## PRESSURE EQUIPMENT DIRECTIVE PED 2014/68/EU (Fluid group 2)

|                   |                      |
|-------------------|----------------------|
| SF 006 - SF 048   | Not required         |
| SF 072 – SF192    | Category 1, Module A |
| SF 432 - SF 1152  | Category 2, Module H |
| SF 1536 - SF 1920 | Category 2, Module H |

## CORRECTION FACTORS

To calculate the correct capacity of a given filter based on actual operating conditions, multiply the nominal flow capacity by the appropriate correction factor(s).

CORRECTED CAPACITY = NOMINAL FLOW CAPACITY x C<sub>OP</sub>

## OPERATING PRESSURE

| [bar]           | 2    | 3   | 4    | 5    | 6    | 7   | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
|-----------------|------|-----|------|------|------|-----|------|------|------|------|------|------|------|------|------|
| [psi]           | 29   | 44  | 58   | 72   | 87   | 100 | 115  | 130  | 145  | 160  | 174  | 189  | 203  | 218  | 232  |
| C <sub>OP</sub> | 0,38 | 0,5 | 0,63 | 0,75 | 0,88 | 1   | 1,13 | 1,25 | 1,38 | 1,50 | 1,63 | 1,75 | 1,88 | 2,00 | 2,13 |

## MAINTENANCE

Replace filter element at least every 12 months or follow the instructions for specific filter element. Change the sealing when you disassemble filter housing. Once per year make a visual check of filter housing and make sure there is no visual damage.

## INFORMATION IN THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE

|                                                                                     |                                                                                                                              |  |
|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>Our quality management system is certified by BUREAU VERITAS in conformity with ISO 9001:2008<br/>Reg. number: 200285</p> |  |
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