



Donaldson.
FILTRATION SOLUTIONS

Process Filtration From Pure to Sterile

PG-EG 0432 – 1920
Multiple Housing

MAIN FEATURES & BENEFITS:

- Inside and outside etched, passivated and electropolished $Ra < 0,8 \mu m$
- Flange connection for safe operation
- Complete stainless steel 304 or 316L construction



INDUSTRIES:



- Food and Beverage



- Dairy



- Chemical



- Pharmaceutical

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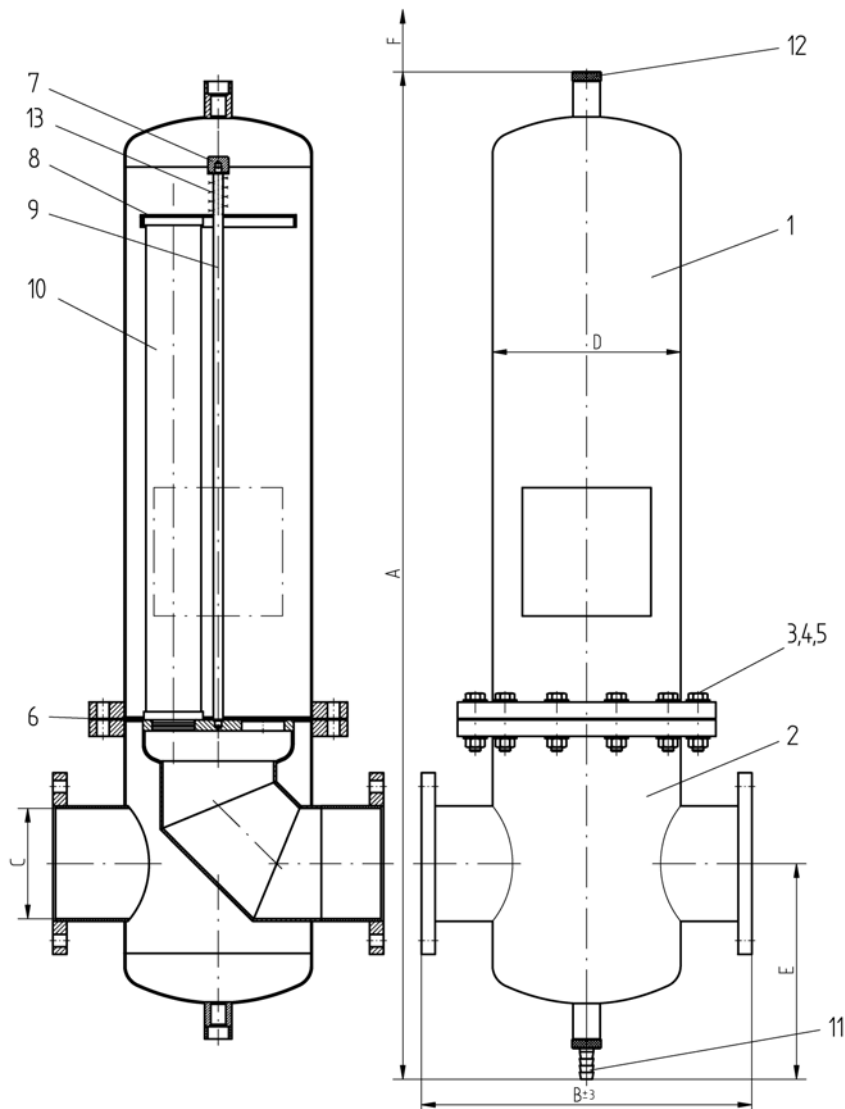
Donaldson®
Ultrafilter

TECHNICAL DATA

| Pos. | Name |
|------|--------------------|
| 13 | spring |
| 12 | pharma plug |
| 11 | pharma valve |
| 10 | filter element |
| 9 | anchor bolt |
| 8 | bracket plate |
| 7 | bracket bolt |
| 6 | gasket |
| 5 | nut |
| 4 | washer |
| 3 | hexagon bolt |
| 2 | lower housing bowl |
| 1 | upper housing bowl |

| | |
|--|--|
| max. operating pressure for liquids: | 10 bar at min./max. operating temperature *) -25°C / +150°C |
| test pressure: | 18,3 bar (1.4301) 16,8 bar (1.4404) |
| material housing: | 1.4301 (1.4404 optional) |
| material attached parts: | 1.4301 |
| surfaces: | etched, passivated and electropolished inside and outside Ra < 0,8µm |
| classification acc. to 97/23/EC for fluids group 2 | 0432 – 0768: Kat. II 1152 – 1920: Kat. III |

*) with standard gasket



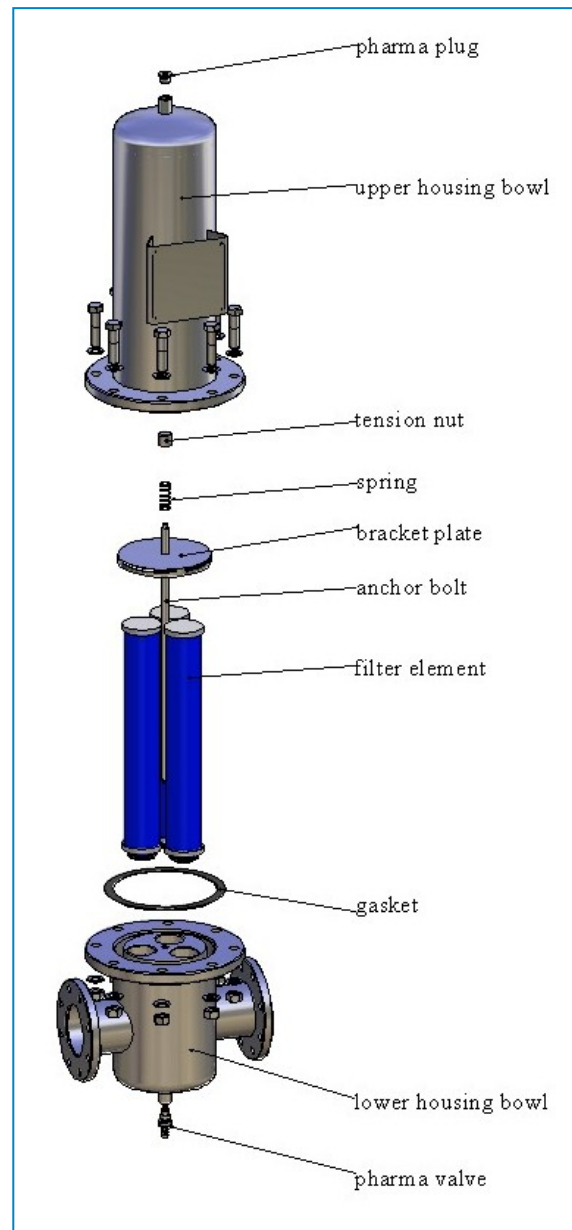
DIMENSIONS HOUSING AND FLANGE CONNECTIONS ACC. TO DIN 2576

| housing type | volume l | weight kg | A mm | B ±2 mm | C | ØD | E mm | F mm | element |
|--------------|----------|-----------|------|---------|--------|-------|------|------|-----------|
| 0432 | 36 | 43 | 1155 | 410 | DN 100 | 219,1 | 275 | 580 | 3x 20/30 |
| 0576 | 45 | 44 | 1410 | 410 | DN 100 | 219,1 | 275 | 850 | 3x 30/30 |
| 0768 | 77 | 70 | 1475 | 480 | DN 150 | 273 | 315 | 850 | 4x 30/30 |
| 1152 | 110 | 80 | 1530 | 540 | DN 150 | 323,9 | 325 | 850 | 6x 30/30 |
| 1536 | 190 | 135 | 1665 | 660 | DN 200 | 406,4 | 375 | 850 | 8x 30/30 |
| 1920 | 190 | 135 | 1665 | 660 | DN 200 | 406,4 | 375 | 850 | 10x 30/30 |

DIRECTIVES

All PG-EG multiple housings are designed in accordance with

- FDA CFR Code of Federal Regulations Title 21
- Framework regulation 1935/2004/EC
- Pressure Equipment Directive 97/23/EC



PRODUCT DESCRIPTION

PG-EG housings were developed for the purification of pressurised air and other technical gases. Combined with the different Donaldson filter elements they provide an optimised solution for nearly any application.

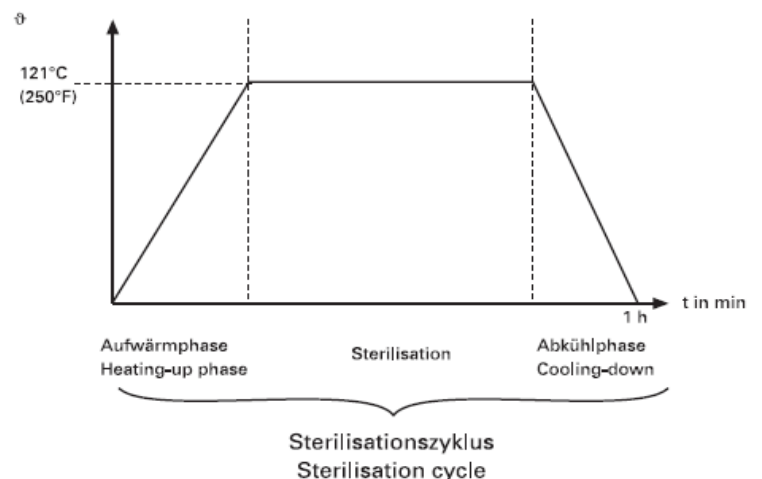
The PG-EG multiple series is available in 6 different housing sizes with operating flow rates from 540 to 2700 m³/h (at 1 bar absolute). The housings are equipped with flange connections, the surface is electropolished to Ra < 0,8 µm.

APPLICATION DATA STEAM STERILISATION

| PG-EG housing | | Steam sterilisation @ 121 °C | | | Steam sterilisation @ 141 °C | | |
|---------------|----------------|------------------------------|---------------------------|--|------------------------------|---------------------------|--|
| type | filter element | necessary steam flow [kg/h] | flow velocity steam [m/s] | P-EG filterhousing with P-GS filter elements | necessary steam flow [kg/h] | flow velocity steam [m/s] | P-EG filterhousing with P-GS filter elements |
| 0432 | 3x 20/30 | 22 | 0,59 | 0018 | 27 | 0,43 | 0009 |
| 0576 | 3x 30/30 | 22,4 | 0,60 | 0018 | 27,54 | 0,44 | 0009 |
| 0768 | 4x 30/30 | 35,7 | 0,44 | 0036 | 43,7 | 0,32 | 0018 |
| 1152 | 6x 30/30 | 40,8 | 0,51 | 0036 | 50 | 0,36 | 0018 |
| 1536 | 8x 30/30 | 69 | 0,49 | 0072 | 84,2 | 0,35 | 0027 |
| 1920 | 10x 30/30 | 69 | 0,49 | 0072 | 84,2 | 0,35 | 0027 |

STEAM STERILISATION

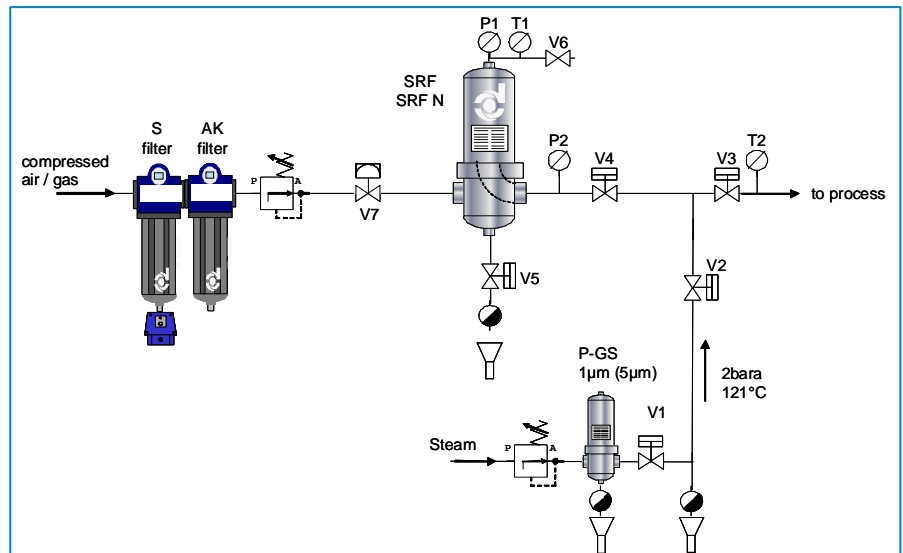
Air and gas filter elements can be effectively steam sterilised inside the PG-EG housing. The sterilisation time necessary to reach sterility in the filter depends on the steam temperature. The following are recommended values that have to be adjusted to the specific installation.



| g | sterilisation time | heating and cooling phase | time for one single cycle |
|--------------|--------------------|---------------------------|---------------------------|
| 121 °C | 30 Min. | 30 Min. | 60 Min. |
| 131 – 134 °C | 20 Min. | 40 Min. | 60 Min. |
| 141 °C | 10 Min. | 50 Min. | 60 Min. |

Example for a correct steam-in-place installation providing sufficient condensate removal and steam filtration. Steam temperature and pressure are monitored throughout the sterilisation procedure.

Detailed information are available in the Donaldson sterilisation guide.



Technical alterations reserved 08/2009

- For detailed information on PG-EG multiple housings, please contact your Donaldson Sales Engineer and visit our website at www.donaldson.com

(Rev. 05 – 07/11)

