



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

Donaldson Filtration Deutschland GmbH  
Büssingstr. 1  
42781 Haan  
Germany

Web: [www.donaldson.com](http://www.donaldson.com)

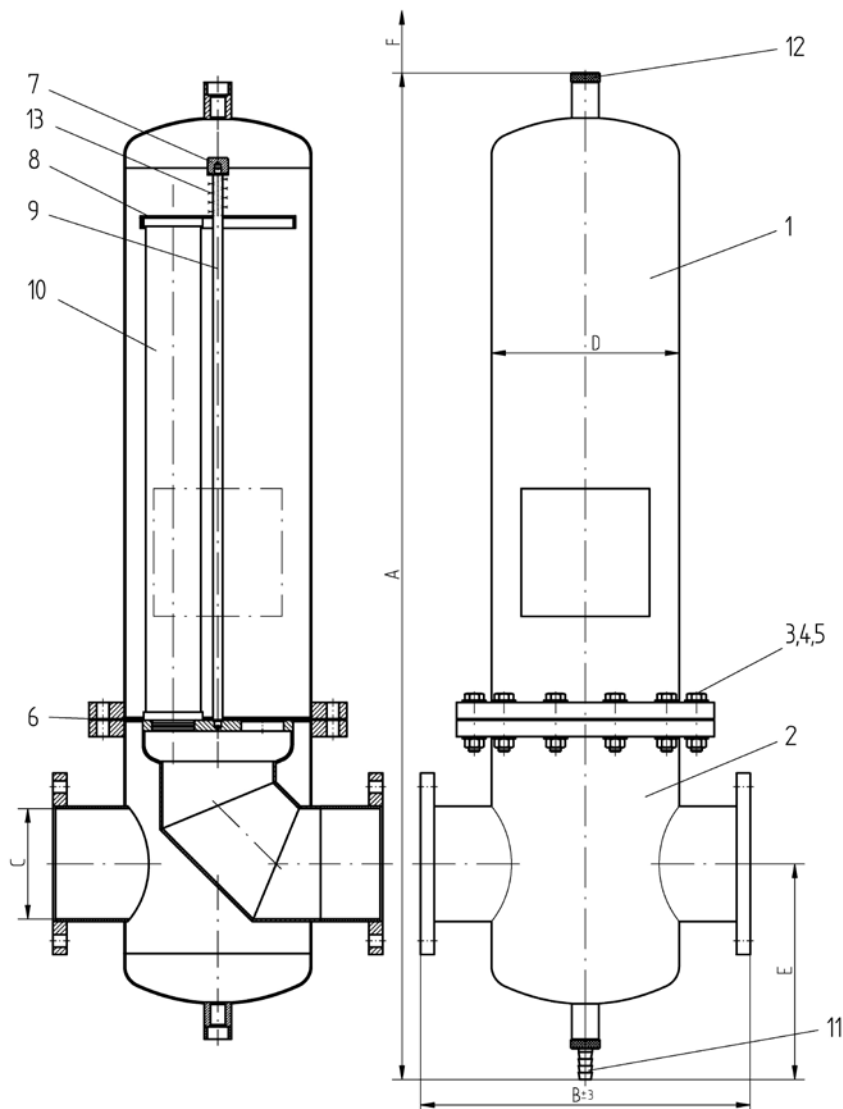
Donaldson®  
**Ultrafilter**

## 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:	1.4404 (1.4301 optional)
material attached parts:	1.4404
surfaces:	etched, passivated and electropolished inside and outside Ra < 0,8µm
classification acc. to 2014/68/EU for fluids group 2	0432 – 0768: Kat. II 1152 – 1920: Kat. III

\*) with standard gasket



## DIMENSIONS HOUSING AND FLANGE CONNECTIONS ACC. TO DIN 2576

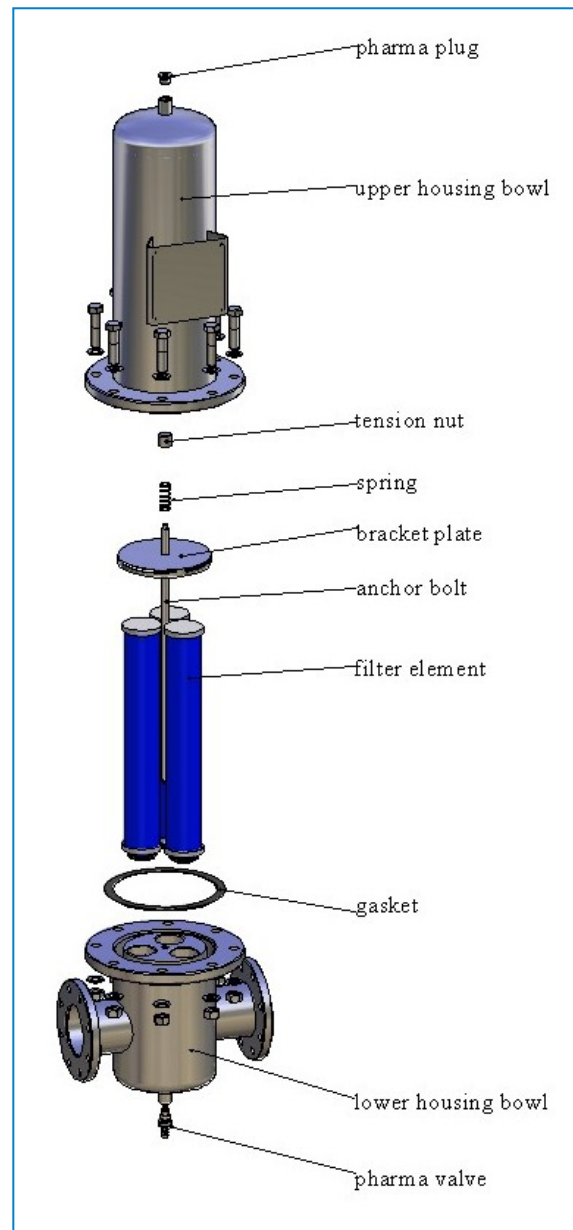
housing type	volume l	weight kg	A mm	B ±2 mm	C	ØD	E mm	F mm	element
0432	36	43	1155	410	DN 100	219.1	275	580	3x 20/30
0576	45	44	1410	410	DN 100	219.1	275	850	3x 30/30
0768	77	70	1475	480	DN 150	273	315	850	4x 30/30
1152	110	80	1530	540	DN 150	323.9	325	850	6x 30/30
1536	190	135	1665	660	DN 200	406.4	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 2014/68/EU

FDA



**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.

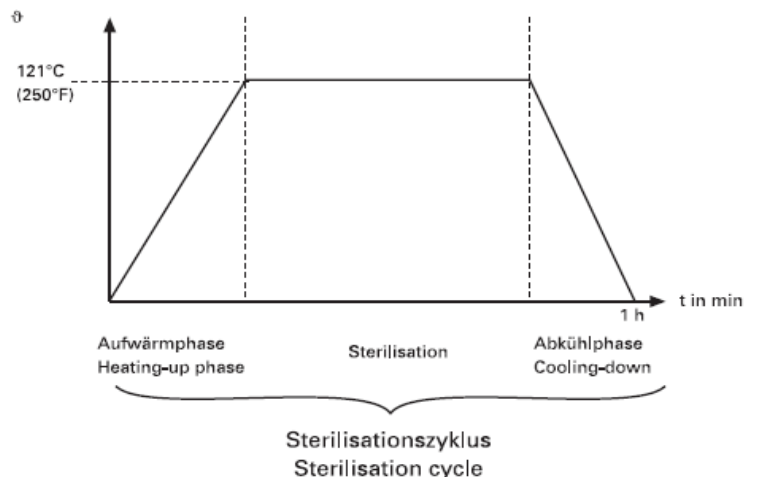
The PG-EG multiple series is available in 6 different housing sizes with operating flow rates from 540 to 2700 m<sup>3</sup>/h (at 1 bar absolute). The housings are equipped with flange connections, the surface is electropolished to Ra < 0,8 µm.

**APPLICATION DATA STEAM STERILISATION**

PG-EG housing		Steam sterilization @ 121 °C			Steam sterilization @ 141 °C		
type	filter element	necessary steam flow [kg/h]	flow velocity steam [m/s]	P-EG filter housing with P-GS filter elements	necessary steam flow [kg/h]	flow velocity steam [m/s]	P-EG filter housing 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**

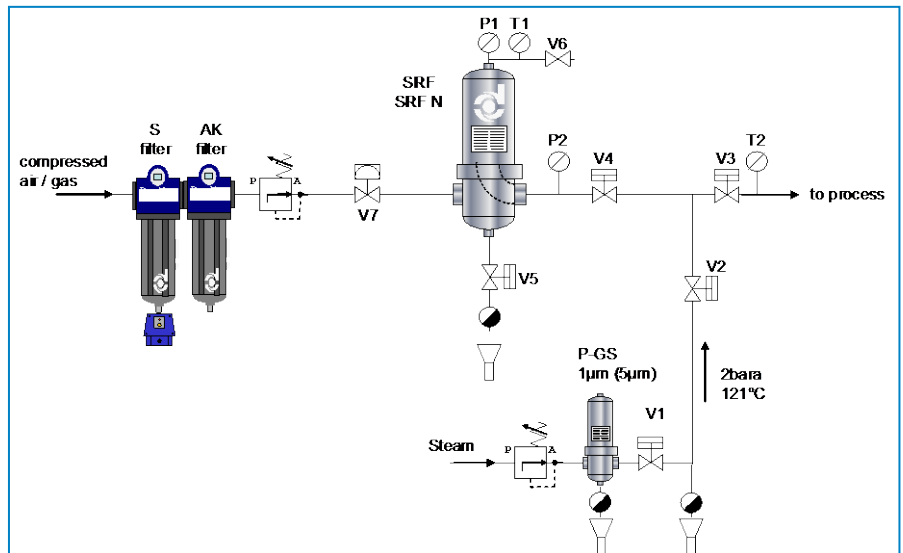
Air and gas filter elements can be effectively steam sterilised inside the PG-EG housing. The sterilisation time necessary to reach sterility in the filter depends on the steam temperature. The following are recommended values that have to be adjusted to the specific installation.



g	sterilization 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 is 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](http://www.donaldson.com)!

