



Donaldson.
FILTRATION SOLUTIONS

Process Filtration From Pure to Sterile

PG-EG 0006 – 0192

Single housings

MAIN FEATURES & BENEFITS:

- **Electro polished Ra < 0,8 µm**
- **Complete stainless steel 1.4404 construction**
- **Design in compliance with**
 - FDA CFR-Code of Federal Regulations Title 21
 - Pressure Equipment Directive 97/23/EC
 - 3-A Sanitary Standards (Version Superplus) for USA
 - Framework regulation 1935/2004/EC



INDUSTRIES:



- **Food and Beverage**



- **Dairy**



- **Chemical**



- **Pharmaceutical**

Donaldson Filtration Deutschland GmbH
Büssingstr. 1
42781 Haan (Germany)
Phone: +49 (0) 2129 569 0
Fax: +49 (0) 2129 569 100
E-mail: IFS-de@donaldson.com
Web: www.donaldson.com

Donaldson.
Ultrafilter

PRODUCT DESCRIPTION

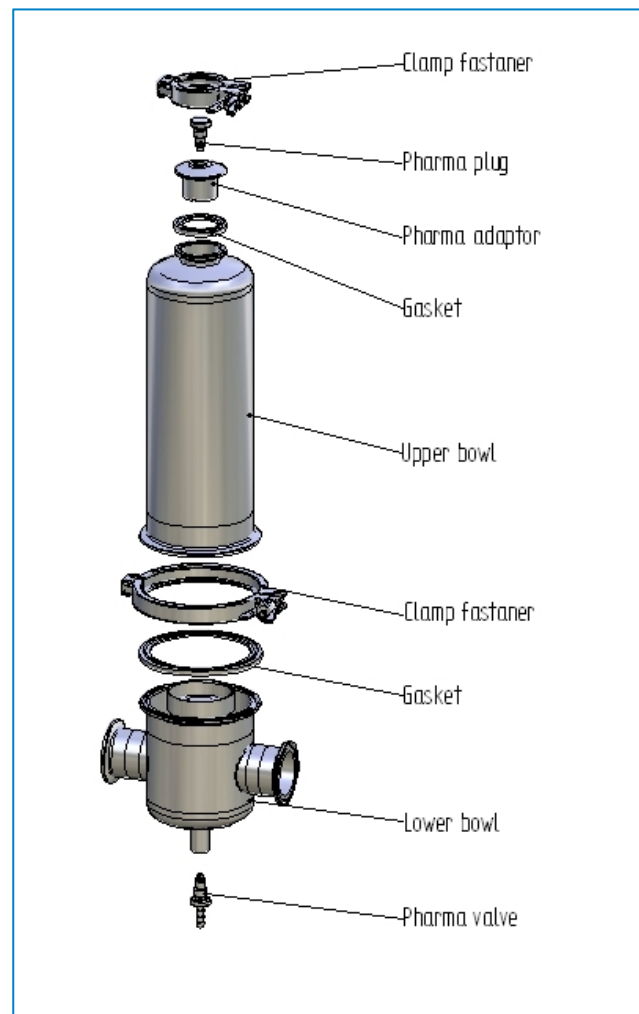
PG-EG housings were developed for the purification of pressurised air and other technical gases. Combined in the different Donaldson filter elements they provide an optimised solution for nearly any application.

The PG-EG single series is available in 6 different housing sizes with operating flow rates from 7,5 to 360 m³/h (at 1 bar abs.). The housings are equipped with triclamp connections, additional connection types are available on request. The surface is electropolished to $R_a < 0,8 \mu\text{m}$.

DIRECTIVES

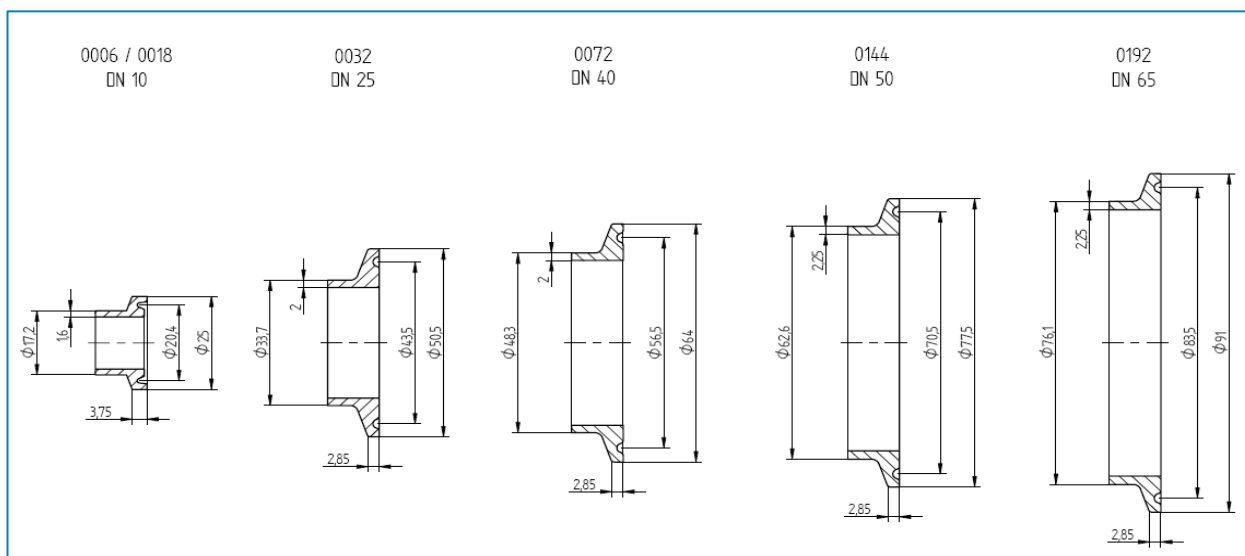
All PF-EG single housings are designed in accordance with

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



DIMENSIONS HOUSING AND CLAMP CONNECTION

Housing	Volume	Weight	A	B ±2	C	ØD	E	ØF	G	Element
type	l	kg	mm	mm		mm	mm	mm	mm	
0006	0,6	1,5	266,5	120	DN 10	70	95,5	25	150	03/10
0018	0,8	1,7	318,5	120	DN 10	70	95,5	25	200	05/20
0032	1,8	2,1	378,5	162	DN 25	104	123	50,5	230	05/30
0072	3,2	2,9	505,5	164	DN 40	104	123	64	360	10/30
0144	5,4	4,5	788,5	206	DN 50	104	138	75,2	610	20/30
0192	7,4	5,7	1042,5	206	DN 65	104	138	91	860	30/30



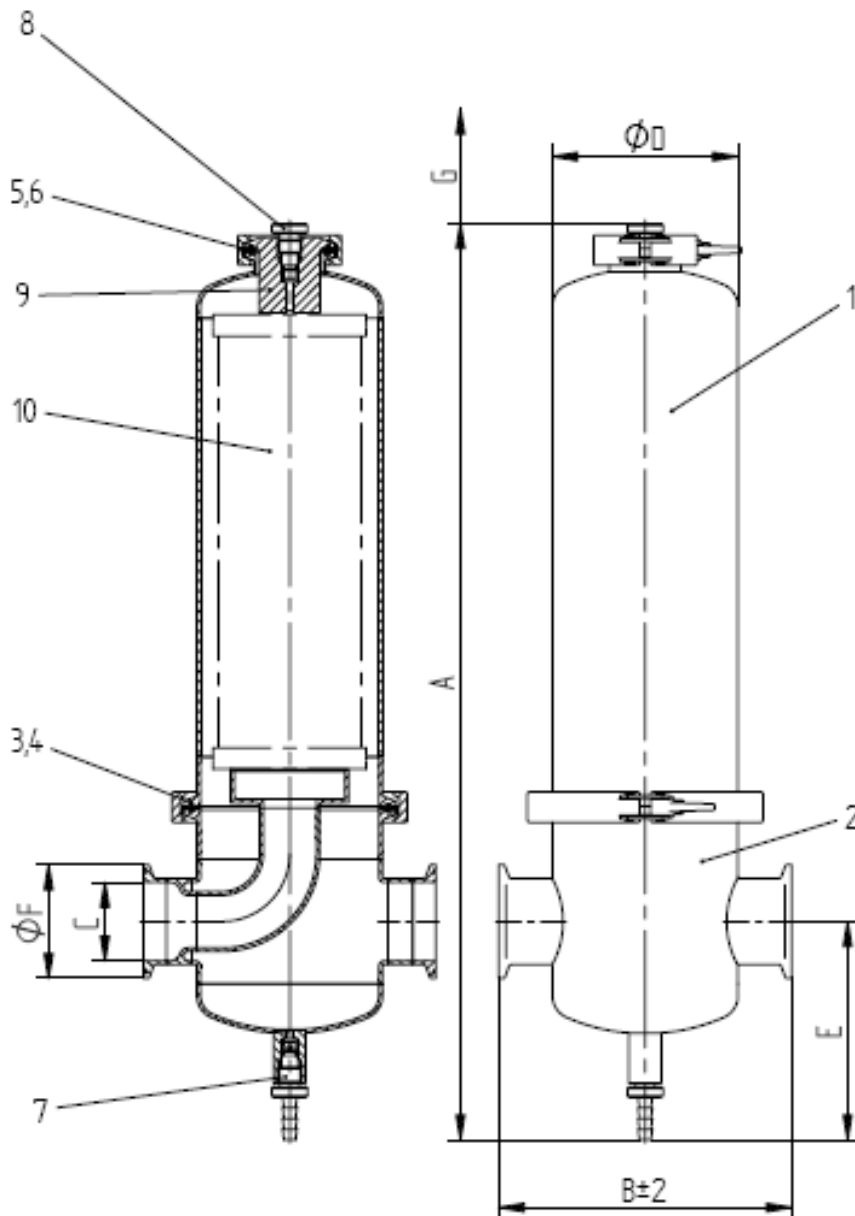
STEAM STERILISATION

PG-EG Housing		Necessary Steam Flow		Flow Velocity Steam		P-EG Filter Housing with P-GS Filter Elements
type	filter element	121°C [kg/h]	141°C [kg/h]	121°C [m/s]	141°C [m/s]	
0006	03/10	0,76	0,94	1,24	0,67	Filter housing 0006 Filter element 03/10
0018	05/20	0,87	1,1	1,42	0,76	
0032	05/30	1,1	1,3	0,39	0,27	
0072	10/30	1,5	1,8	0,24	0,17	
0144	20/30	2,3	2,8	0,24	0,16	
0192	30/30	2,9	3,6	0,18	0,13	

TECHNICAL DATA

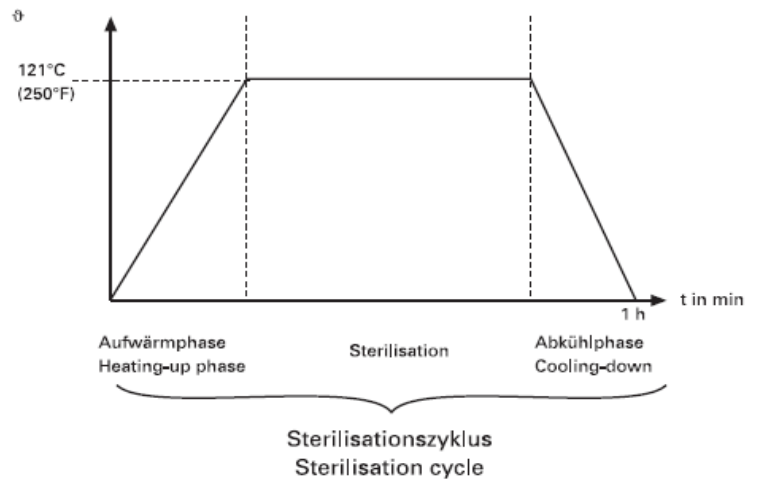
Pos.	Name
10	filter element
9	clamp adapter
8	pharma plug
7	pharma valve
6	clamp fastener
5	clamp gasket
4	clamp fastener
3	clamp gasket
2	lower bowl
1	upper bowl

Max. operating pressure	16 bar
Max. operating temperature with standard gasket	-25 / +150°C
Design Temperature:	-200°C / +200°C
Test pressure:	27 bar
Material:	1.4404
Surfaces:	etched, passivated and electropolished inside and outside Ra < 0,8µm
Classification acc. To 97/23/EC	for fluids group 2 PG-EG 0006-0032 Art. 3, par. 3 PG-EG 0072-0192 Kat. I



STEAM STERILISATION

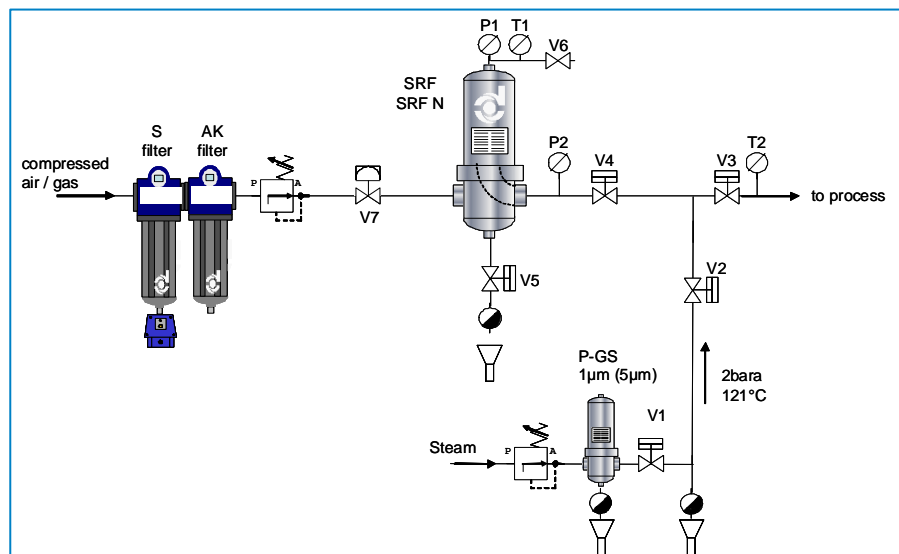
Air and gas filter elements can be effectively steam sterilised inside the PG-EG housing. The sterilisation time necessary to reach sterility in the filter depends on the steam temperature. The following are recommended values that have to be adjusted to the specific installation



θ	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.



GASKET SETS

For all housing types of the PG-EG single series a gasket set is available. Spare parts for the housings are available on request.

	Set	Content	Material
1	Gasket Set PG-EG 0006-0018	1x Clamp gasket housing DN65 1x Clamp gasket vent DN10 2x Clamp gasket connection DN 10	EPDM
2	Gasket Set PG-EG 0032	1x Clamp gasket housing DN100 1x Clamp gasket vent DN25 2x Clamp gasket connection DN25	EPDM
3	Gasket Set PG-EG 0072	1x Clamp gasket housing DN100 1x Clamp gasket vent DN40 2x Clamp gasket connection DN40	EPDM
4	Gasket Set PG-EG 0144	1x Clamp gasket housing DN100 1x Clamp gasket vent DN50 2x Clamp gasket connection DN50	EPDM
5	Gasket Set PG-EG 0192	1x Clamp gasket housing DN100 1x Clamp gasket vent DN65 2x Clamp gasket connection DN65	EPDM

Technical alterations reserved 08/2009

- For information on integrity test equipment or integrity test services, please contact your Donaldson Sales Engineer and visit our website at www.donaldson.com!

