

STERILE

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Up

STERILE AIR AND GAS FILTRATION

SERIES SG FILTERS

Demands for the sterilisation of compressed air and gas in the food, beverage, dairy, brewery and pharmaceutical industries are continuously increasing. Complete retention of micro-organisms such as bacteria, viruses and bacteriophages, the largest surface area, low pressure differential and cost effectiveness are standard requirements that a sterile filter must achieve.

As a solution for this application, the SG series cartridge was developed with an absolute retention of 0.01µm in gas and compressed air. With the help of the pleated depth media and with a voids volume of 95% (PTFE:85%;PVDF:67%), the flow rate was increased several times while maintaining a low differential pressure.

The high particle adsorption capacity increases the life of the SG series sterile filter while at the same time reducing filtration costs. Heat stabilised Polypropylene together with an internal stainless steel core result in high mechanical stability. The PTFE impregnated medium protects against the wetting of the filter medium with water / condensate on the inlet of the filter.

Series SG sterile filter cartridges revolutionise sterile air filtration. They offer the best opportunity for cost effective and reliable sterile filtration.

The **PMT™** sterile filter series SG is equipped with a **PMT™** pleated hydrophobic PTFE impregnated Borosilicate micro-fibre cartridge. The design of the cartridge and filter housing aids in quick replacement of the filter cartridges.

Standard equipment includes;

- * Stainless Steel filter housing
- * Pleated hydrophobic PTFE impregnated Borosilicate micro-fibre cartridge
- * Stainless Steel glycerine filled and temperature resistant pressure gauge

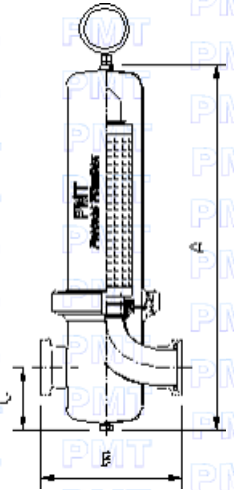
The **PMT™** sterile filter housing is designed for upstream sampling, condensate draining during sterilisation and gas venting. (*Valves are an optional extra*).

HOUSING:

Material	Stainless steel 304
Surface finish	High external polish
Vent & drain connection	¼" BSP plug
Max operating pressure	16 bar
Connections	DN10-DN80 DIN11851
Seals	EPDM standard
	Others on request

CARTRIDGE:

Filter media	Pleated, PTFE impregnated Borosilicate micro-fibre (hydrophobic)
Inner core	2½" & 5" heat stabilised polypropylene
Outer Core	KC, 10" – 30" stainless steel
Retention rate	Heat stabilised Polypropylene
Operating temp	0.01µm
Sterilisation	80°C
	Sat. steam - 130°C & 30 min. 0.5 bar max ΔP.
	Autoclave - 130°C & 30 min.
Biological safety	Acc. USP plastics class VI and BS5736
Validation	Aerosol challenge test



FILTER TYPE	Capacity 7 barg DP 0.12 bar m ³ /h	Connection DIN11851 DN	Dimensions			Cartridge Length mm / Inch	Filter Area m ²	Cartridge Type	Max Pressure Housing Barg
			A	B	C				
P05SG	110	10	256	115	50	65 / 2½	0.09	SG09T	16
P07SG	150	15	256	115	55	65 / 2½	0.09	SG09T	16
P09SG	200	20	256	115	55	65 / 2½	0.09	SG09T	16
P11SG	290	25	312	155	75	125 / 5	0.18	SG13T	16
P12SG	380	32	312	155	75	125 / 5	0.18	SG13T	16
P13SG	500	40	312	155	75	125 / 5	0.18	SG13T	16
P13KCS G	500	50	486	190	80	125 / 5	0.2	SG13KCT	16
P14SG	780	50	486	190	80	250 / 10	0.4	SG14T	16
P15SG	1,150	50	792	190	80	500 / 20	0.8	SG18T	16
P18SG	1,450	65	792	220	110	500 / 20	0.8	SG18T	16
P19SG	1,950	80	1,056	220	110	750 / 13	1.2	SG19T	16

Working pressure bar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Conversion factor	0.4	0.5	0.65	0.75	0.85	0.93	1.0	1.13	1.25	1.38	1.5	1.6	1.75	1.88	2	2.13