

# Medical Sterile Filters



**16 models specifically designed and manufactured to exceed the requirements of UK Health Technical Memorandum 02-01 for medical gas pipeline systems.**

The Alpha Series medical sterile filters offer connections from 1/4" to 3", flows of up to 1500 SCFM (2550 Nm<sup>3</sup>/h) and feature the Walker E-Coat™ finish for corrosion protection. The optimised modular design allows for multiple close coupling and is easy to install and maintain. The range is manufactured from cast aluminium alloy offering enhanced strength and robustness.

**Intelligent, unique design for optimised performance**

Medical sterile elements are guaranteed for a minimum of 100 sterilisations at 120°C (248°F), each element must be autoclaved before commencement of duty.

**Elements are 100% integrity tested**

Elements are constructed with stainless steel endcaps for compatibility with autoclave sterilisation. 100% integrity tested, each element is supplied with an Air Sterilisation certificate to guarantee the highest quality to our customers.

**Tested and validated to international standards**



## Applications include

Dental

Medical

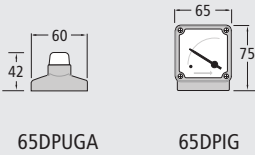
Veterinary



# Technical Specification

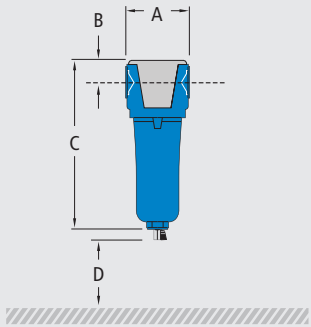
filter model	pipe size	flow rate*		dimensions (mm)				weight Kg	element model
		Nm <sup>3</sup> /h	SCFM	A	B	C	D		
A019 MS	¼	25.5	15	50	18	152	75	0.5	E0305 SR
A028 MS	¼	42.5	25	70	25	191	85	0.8	E0407 SR
A038 MS	⅜	59.5	35	70	25	191	95	0.8	E0407 SR
A058 MS	½	85.0	50	70	25	232	135	0.9	E0413 SR
A059 MS	½	119	70	100	35	276	155	2.0	E0613 SR
A078 MS	¾	144	85	100	35	276	155	2.0	E0613 SR
A109 MS	1	297	175	100	35	396	275	2.4	E0625 SR
A128 MS	1¼	476	280	122	42	460	320	3.3	E0730 SR
A158 MS	1½	545	320	122	42	460	320	3.3	E0730 SR
A159 MS	1½	680	400	146	52	482	325	4.9	E0830 SR
A208 MS	2	765	450	146	52	482	325	4.9	E0830 SR
A209 MS	2	1190	700	146	52	785	630	7.0	E0860 SR
A254 MS	2½	1445	850	210	66	595	410	9.6	E1140 SR
A340 MS	3	1530	900	210	66	595	410	9.6	E1140 SR
A360 MS	3	2125	1250	210	66	815	630	11.6	E1160 SR
A390 MS	3	2550	1500	210	66	975	785	13.1	E1175 SR

\* Rated flow at 7 barg, reference conditions 1 bar (a) 20°C



65DPUGA

65DPIG



A019 MS to A390 MS

	SR	
DOP efficiency**	>99.9999%	
Particle removal	0.01 micron	
Maximum operating temperature (recommended)	120°C (50°C)	248°F (122°F)
Pressure loss - clean	100 mbar	1.5 psi
Pressure loss - change element	400 mbar	6 psi
Maximum autoclave temperature	134°C	273°F
Maximum working pressure	16 barg	232 psig
Element end cap material	stainless steel	

\*\* as specified in HTM 02-01 medical gas pipeline systems

### pressure correction factors

for maximum flow rate, multiply model flow rate by the correction factor corresponding to the minimum operating pressure

Operating pressure barg (psig)	4 (58)	5 (72)	6 (87)	7 (100)	8 (115)	10 (145)	12 (174)	14 (203)	16 (232)
7 barg - correction factor	0.76	0.84	0.92	1.00	1.07	1.19	1.31	1.41	1.51

### technical notes

- 1 Filter element endcaps are stainless steel.
- 2 Direction of air flow is outside to in through the filter element.
- 3 Pop up indicators (65DPUG) are fitted to models A028 MS, A038 MS and A058 MS as standard. Differential pressure indicators (65DPIG) are fitted to models A059 MS to A390 MS as standard.
- 4 Manual drain valves are fitted to all models. Models A059 MS to A390 MS can be adapted to use ¼" drains with a reducer.
- 5 Medical sterile filter elements must not operate in water or oil saturated conditions.
- 6 Maximum steam sterilising temperature refers to the filter element ONLY. Grade SR filter elements can be steam sterilised 100 times. Each element must be autoclaved before commencement of duty.
- 7 Pre filtration should be used in conjunction with 0.01 micron sterile filters.
- 8 Threaded filters are manufactured from cast aluminium alloy and are PED 97/23/EC compliant for group 2 gases.
- 9 Threaded connections are Rp (BSP parallel) to ISO 7/1 or NPT to ANSI B2.1 if supplied within North America.
- 10 For NPT connections, add the suffix N e.g. A018MSN.
- 11 Filter elements should be changed every 6 months / 1000 hours (whichever comes first).
- 12 Filters are suitable for use with mineral and synthetic oils, plus oil-free compressed air applications.