Medical Vacuum Filters | MV series

M-Plus Filtration manufacture a comprehensive range of medical vacuum filters for centralized hospital vacuum plant installations as specified in the UK standard HTM02-01*.

The M-Plus ranges of medical vacuum filters are designed to protect these installations from liquid, solid and bacterial contamination. Liquids are collected in a transparent drain flask which can be easily removed for sterilization.

- Manual drain valves are fitted to all models.
- Sterilisable glass drain flasks are supplied as standard
  - 100ml for models MV020 to MV120
  - 150ml for models MV185 to MV335
  - 250ml for models MV420 to MV500

Corrosion Protection

M-PLUS filter housing adopts aluminium alloy die-cast, have tight construction and long time use. The internal and external of housing undergo cleaning, degreasing, anodic oxidation treatment before painting. Increasing anti-corrosion and durability.

*HTM02-01 is Health Technical Memorandum 02-01 : Medical gas pipeline systems

Filter elements

Performance guarantee

We use high efficiency borosilicate glass microfibre media to remove all dirt particles. All elements include stainless steel metalwork and are fitted with an external pre filter layer of 80 p.p.i., open cell reticulated polyester foam. These filters are a proven success and now include such features as differential pressure indicators which are a specific requirement of the HTM02-01 medical gas pipeline specification.

Filter Models MV020-MV500 incorporates the unique M-Plus designed 'push-on' filter element. This reduces maintenance time and allows the filter to be located in the most confined spaces.

The efficiency of the installed filter elements exceeds the 0.005% penetration specified in HTM02-01 for infectious disease unit, when tested in accordance with BS3928.

Technical Specifications

Model	IN-OUT	Free Air Capacity at atmospheric			Rarified Air Capacity at 500mm Hg Vacuum			Dimensions (mm)				Weight	Element model
	Ø	Nl/min	Nm³/hr	SCFM	Nl/min	Nm³/hr	SCFM	A	B	C	D	(Kg)	
MV020	G 1/2"	200	12	7	600	36	21	194	89	60	120	1.1	EV020
MV055	G 3/4"	550	33	19	1,650	99	58	251	120	100	120	2.4	EV055
MV120	G 1"	1,200	72	42	3,600	216	126	351	120	100	120	2.9	EV120
MV185	G 1.1/2"	1,850	111	65	5,550	333	195	351	120	100	150	3.1	EV185
MV275	G 2"	2,750	165	96	8,250	495	288	441	162	109	150	6.6	EV275
MV335	G 2"	3,350	201	118	10,050	603	354	770	162	109	150	10.8	EV335
MV420	G 3"	4,200	252	147	12,600	756	440	509	200	123	200	12.5	EV420
MV500	G 3"	5,000	300	177	15,000	900	531	786	200	123	200	17.5	EV500

Specifications		
Particle removal efficiency	>99.995% @ 0.01 micron HTM 02-01 specifies >99.995% in accordance with BS 3928 Test particle size: 0.02 to 2 micron	
Maximum temperature	80°C (176°F)	
Minimum temperature	1.5°C (34.7°F)	
Pressure loss - clean & dry	≤3 kPa	(30 mbar / 0.44 psi)
Maximum working pressure	7 barg	100 psig
Maximum working vacuum	Full vacuum	
Element end cap	Black	
Flow direction	Outside to inside	
Element changed	At least 6 months