

OIL-X EVOLUTION

High Efficiency Medical Vacuum Filters



OIL-X EVOLUTION MV Medical Vacuum Filters are designed for critical applications involving the removal of liquid, solid and bacterial contamination from the suction side of vacuum pump systems, preventing damage to the pump and the potential biological infection of the surrounding environment.

The vacuum removal systems found throughout hospitals in areas such as general wards, operating theatres, dental departments, pathology departments, pharmacy laboratories, and mortuary / post mortem rooms will usually be connected to either a large centralised vacuum plant or a smaller, localised vacuum pump or network.

Parker domnick hunter MV Medical Vacuum filters can be installed to protect these systems no matter where they are located.



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Benefits:

- Filtration Performance exceeds requirements of HTM2022. MV Filter efficiency tested with a bacterial challenge test and BS3928 sodium flame test
- Filtration performance independently verified by Lloyds Register
- Low cost of ownership
- Airflow management system and deep pleat element technology provides minimal pressure losses
- Deep pleat element technology also provides higher dirt holding capacity when compared to traditional filter elements
- Multiple port sizes for a given flow rate provides increased flexibility during installation
- Corrosion protected
- Internally and externally epoxy coated
- Small, compact & lightweight
- Easily removable, sterilisable drain flask
- Quick, easy maintenance
- 10 Year Housing Guarantee
- Optional DP monitor



ENGINEERING YOUR SUCCESS.

Technical Data

Stated flows are for operation at 1 bar (abs) (750 Torr) with reference to 20°C, 1 bar (a), 0% relative water vapour pressure. Filter efficiency: Exceeds the <0.005% penetration requirements of medical gas systems : design, installation and verification, Health Technical Memorandum 2022, for bacteria removal filters, achieving <0.0001% penetration when tested to BS3928 : 1969. Bacterial removal efficiency with Brevundimonas diminuta >99.9999998%.

Model	Pipe Size	Free Air capacity at Atmospheric				Replacement Element Kit	Max Operating Vacuum		Max Recommended Operating Temp.		Min Recommended Operating Temp.	
		L/s	L/min	m³/hr	cfm		Torr	Ins Hg (abs)	°C	°F	°C	°F
MV010A	1/4"	1	60	3.6	2	010MV	1	0.04	100°C	212°F	1.5°C	35°F
MV010B	3/8"	1	60	3.6	2	010MV	1	0.04	100°C	212°F	1.5°C	35°F
MV010C	1/2"	1	60	3.6	2	010MV	1	0.04	100°C	212°F	1.5°C	35°F
MV015B	3/8"	3	160	9.6	6	015MV	1	0.04	100°C	212°F	1.5°C	35°F
MV015C	1/2"	3	160	9.6	6	015MV	1	0.04	100°C	212°F	1.5°C	35°F
MV020C	1/2"	4	250	15	9	020MV	1	0.04	100°C	212°F	1.5°C	35°F
MV020D	3/4"	4	250	15	9	020MV	1	0.04	100°C	212°F	1.5°C	35°F
MV020E	1"	4	250	15	9	020MV	1	0.04	100°C	212°F	1.5°C	35°F
MV025D	3/4"	8	450	27	16	025MV	1	0.04	100°C	212°F	1.5°C	35°F
MV025E	1"	8	450	27	16	025MV	1	0.04	100°C	212°F	1.5°C	35°F
MV030E	1"	15	900	54	32	030MV	1	0.04	100°C	212°F	1.5°C	35°F
MV030F	1 1/4"	15	900	54	32	030MV	1	0.04	100°C	212°F	1.5°C	35°F
MV030G	1 1/2"	15	900	54	32	030MV	1	0.04	100°C	212°F	1.5°C	35°F
MV035F	1 1/4"	25	1500	90	53	035MV	1	0.04	100°C	212°F	1.5°C	35°F
MV035G	1 1/2"	25	1500	90	53	035MV	1	0.04	100°C	212°F	1.5°C	35°F
MV040G	1 1/2"	33	2000	120	71	040MV	1	0.04	100°C	212°F	1.5°C	35°F
MV040H	2"	33	2000	120	71	045MV	1	0.04	100°C	212°F	1.5°C	35°F
MV045H	2"	42	2500	150	88	045MV	1	0.04	100°C	212°F	1.5°C	35°F
MV050I	2 1/2"	58	3500	210	124	050MV	1	0.04	100°C	212°F	1.5°C	35°F
MV050J	3"	58	3500	210	124	050MV	1	0.04	100°C	212°F	1.5°C	35°F
MV055I	2 1/2"	83	5000	300	176	055MV	1	0.04	100°C	212°F	1.5°C	35°F
MV055J	3"	83	5000	300	176	055MV	1	0.04	100°C	212°F	1.5°C	35°F

Product Coding and Selection

GRADE	MODEL	PIPE SIZE	CONNECTION TYPE	DRAIN	INCIDENT MONITOR OPTION
MV	3 digit code shown above	Letter denotes pipe size	B = BSPT N = NPT	V = Vacuum Flask	X = Non I = Differential Pressure monitor
MV	010	A	B	V	X

Filter Selection

- (1) To find the capacity of an MV filter at a known vacuum condition, multiply the filter Free Air Capacity in the table shown by correction factor C1.
- (2) To select a filter to match system flow conditions, multiply the system flow by the correction factor C2 that corresponds to vacuum in the pipe.

Models MV015 - MV055 only.

Model	Pipe Size	Height (H)		Width (W)		Depth (D)		Weight	
		mm	ins	mm	ins	mm	ins	kg	lbs
MV010A	1/4"	181	7.2	76	3.0	64	2.5	0.4	0.88
MV010B	3/8"	181	7.2	76	3.0	64	2.5	0.4	0.88
MV010C	1/2"	181	7.2	76	3.0	54	2.5	0.4	0.88
MV015B	3/8"	235	9.3	97	3.8	84	3.3	1	2.2
MV015C	1/2"	235	9.3	97	3.8	84	3.3	1	2.2
MV020C	1/2"	235	9.3	97	3.8	84	3.3	1	2.2
MV020D	3/4"	235	9.3	97	3.8	84	3.3	1	2.2
MV020E	1"	235	9.3	97	3.8	84	3.3	1	2.2
MV025D	3/4"	275	10.8	129	5.1	115	4.5	2.2	4.84
MV025E	1"	275	10.8	129	5.1	115	4.5	2.2	4.84
MV030E	1"	364	14.3	129	5.1	115	4.5	2.6	5.72
MV030F	1 1/4"	364	14.3	129	5.1	115	4.5	2.6	5.72
MV030G	1 1/2"	364	14.3	129	5.1	115	4.5	2.6	5.72
MV035F	1 1/4"	432	17.0	170	6.7	156	6.1	4.5	9.9
MV035G	1 1/2"	432	17.0	170	6.7	156	6.1	4.5	9.9
MV040G	1 1/2"	524	20.6	170	6.7	156	6.1	5.25	11.55
MV040H	2"	524	20.6	170	6.7	156	6.1	5.25	11.55
MV045H	2"	524	20.6	170	6.7	156	6.1	5.25	11.55
MV050I	2 1/2"	641	25.3	205	8.1	181	7.1	10	22
MV050J	3"	641	25.3	205	8.1	181	7.1	10	22
MV055I	2 1/2"	832	32.8	205	8.1	181	7.1	12	26.4
MV055J	3"	832	32.8	205	8.1	181	7.1	12	26.4

Vacuum Filter Conversion Factors

Vacuum					
mbar (abs)	Torr	mm Hg (abs)	ins Hg (abs)	C1	C2
1000	750	750	29.5	1.0	1.0
900	675	675	26.6	0.9	1.1
800	600	600	23.6	0.8	1.3
700	525	525	20.7	0.7	1.4
600	450	450	17.7	0.6	1.7
500	375	375	14.8	0.5	2.0
400	300	300	11.8	0.4	2.5
300	225	225	8.9	0.3	3.3
200	150	150	5.9	0.2	5.0
100	75	75	3.0	0.1	10.0

