

medical vacuum filters

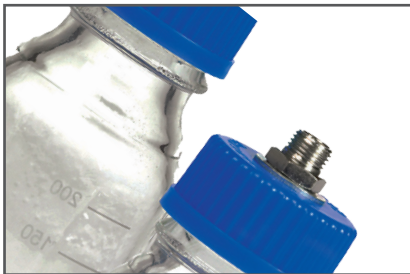
FEATURES

- designed to eliminate solid, liquid and bacterial contamination from medical vacuum systems
- meets ISO 7396-1, HTM 02-01 and 2018 revision of NFPA 99 (5.1.3.7.4)
- 17 models with connections from ¼" to 3" NPT and rated flows from 2 to 156 scfm
- modular design allows close coupling of filters to simplify installation and maintenance
- housing manufactured from cast aluminum alloy providing enhanced strength and feature an E-Coat™ finish for optimum corrosion protection
- unique design provides maximum filtration performance while minimizing pressure drop for optimum energy efficiency
- drop fit element engages the bowl to prevent vibration, improving stability and drainage
- applications include dental, medical and veterinary



complete package

manual valve and sterilizable glass drain flask are included as standard



unique element design

constructed with an oleophobic borosilicate microfiber media with an open cell reticulated foam prefilter



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SPECIFICATIONS

| filter model | inlet & outlet ⁽¹⁾ | | exhaust flow rate (vacuum displacement) ⁽²⁾ | | dimensions (inches) | | | | | approx. weight | replacement element kit |
|--------------|-------------------------------|------|--|------|---------------------|-------|------|-------|------|----------------|-------------------------|
| | NPT | scfm | Nm ³ /h | A | B | C | D | E | lbs | | |
| NMV 0025 | ¼" | 2.1 | 3.5 | 2.76 | 0.98 | 6.65 | 3.00 | 9.29 | 1.3 | E 0025 MV | |
| NMV 0035 | ⅜" | 2.9 | 5.0 | 2.76 | 0.98 | 6.65 | 3.00 | 9.29 | 1.3 | E 0035 MV | |
| NMV 0050 | ½" | 4.1 | 7.0 | 2.76 | 0.98 | 8.31 | 3.00 | 10.93 | 1.5 | E 0050 MV | |
| NMV 0070 | ½" | 7.1 | 12 | 3.94 | 1.34 | 9.69 | 3.00 | 13.82 | 3.5 | E 0090 MV | |
| NMV 0085 | ¾" | 8.8 | 15 | 3.94 | 1.34 | 9.69 | 3.00 | 13.82 | 3.5 | E 0090 MV | |
| NMV 0125 | ¾" | 14.7 | 25 | 3.94 | 1.34 | 14.41 | 3.00 | 18.55 | 4.4 | E 0135 MV | |
| NMV 0135 | 1" | 19.4 | 33 | 3.94 | 1.34 | 14.41 | 3.00 | 18.55 | 4.4 | E 0135 MV | |
| NMV 0175 | 1" | 26.5 | 45 | 3.94 | 1.34 | 14.41 | 3.00 | 18.55 | 4.4 | E 0175 MV | |
| NMV 0280 | 1 ¼" | 35.3 | 60 | 4.80 | 1.65 | 16.50 | 3.00 | 20.97 | 6.2 | E 0325 MV | |
| NMV 0325 | 1 ½" | 41.2 | 70 | 4.80 | 1.65 | 16.50 | 3.00 | 20.97 | 6.2 | E 0325 MV | |
| NMV 0400 | 1 ½" | 55.9 | 95 | 5.75 | 2.05 | 17.01 | 3.00 | 21.85 | 9.2 | E 0450 MV | |
| NMV 0450 | 2" | 70.6 | 120 | 5.75 | 2.05 | 17.01 | 3.00 | 21.85 | 9.2 | E 0450 MV | |
| NMV 0700 | 2" | 103 | 175 | 5.75 | 2.05 | 29.06 | 3.00 | 33.91 | 13.9 | E 0700 MV | |
| NMV 0850 | 2 ½" | 112 | 190 | 8.27 | 2.64 | 20.94 | 3.00 | 26.38 | 18.7 | E 1000 MV | |
| NMV 1000 | 3" | 118 | 200 | 8.27 | 2.64 | 20.94 | 3.00 | 26.38 | 18.7 | E 1000 MV | |
| NMV 1250 | 3" | 132 | 225 | 8.27 | 2.64 | 29.53 | 3.00 | 34.96 | 23.1 | E 1250 MV | |
| NMV 1500 | 3" | 156 | 265 | 8.27 | 2.64 | 35.75 | 3.00 | 41.18 | 26.4 | E 1500 MV | |

| specifications | NMV 0025 TO 0050 | NMV 0070 TO 1500 |
|--|---|------------------|
| vacuum indicator/gauge | NDV 50 | NDV 1500 |
| condensate drain (included) ⁽³⁾ | MLF 100 | MLF 250 |
| design operating pressure range | full vacuum to 7 psig | |
| filter housing material | cast aluminum with E-Coat™ & powder top coat finish | |

| element performance | MV |
|--|------------------------|
| DOP particle removal efficiency ⁽⁴⁾ | > 99.995% |
| pressure drop - clean | 0.44 psid |
| pressure drop - recommended replacement | 1.5 psid |
| design operating temperature range | 35 to 140°F |
| flow direction through element | outside to inside |
| maximum element life | 6 months or 1000 hours |

| vacuum correction factors | | | | | | | | | |
|-----------------------------|------|------|------|------|------|------|------|------|------|
| operating vacuum (psia) | 14.7 | 13.0 | 11.6 | 10.2 | 8.7 | 7.3 | 5.8 | 3.3 | 2.9 |
| operating vacuum (inch Hg) | 29.9 | 26.6 | 23.6 | 20.7 | 17.7 | 14.8 | 11.8 | 8.9 | 5.9 |
| operating vacuum (mbar abs) | atm | 900 | 800 | 700 | 600 | 500 | 400 | 300 | 200 |
| operating vacuum (Torr) | 760 | 675 | 600 | 525 | 450 | 375 | 300 | 225 | 150 |
| correction factor | 1.00 | 0.93 | 0.86 | 0.79 | 0.71 | 0.64 | 0.57 | 0.50 | 0.43 |

- (1) inlet and outlet connections are NPT threaded to ANSI B2.1
- (2) free air conditions when operating at atmospheric pressure. For vacuums refer to the vacuum correction factor table above
- (3) includes manual valve and sterilizable glass drain flask
- (4) as specified in HTM 02-01 medical gas pipeline systems
- (5) technical specifications subject to change without notice. Direct inquiries to support@n-psi.com or contact 704.897.2182

