COVIDIEN
*positive results for life™*

# DAR™ FILTERS

Nellcor™
Puritan Bennett™
BIS™
Mallinckrodt™
DAR™
Shiley™

## Better Performance, Better Protection

Filters help protect the safety of patients by removing bacteria and viruses before they enter the airway. If the airway is not adequately protected with a filter, there could be a greater chance the patient will develop a hospital-acquired infection.

Equally important, filters reduce the numbers of pathogens in the air that a patient exhales. This filtration of exhaled air helps protect the safety of:

- Staff
- Patients and visitors
- Equipment

Ventilator filters can be either **electrostatic** or **mechanical**.

The **electrostatic filter** uses positive and negative charges to attract and capture particles.

The **mechanical filter** uses a multilayered, pleated filtration medium. This medium provides greater filtration efficiency compared to electrostatic filters.[1]

DAR™ mechanical filters feature a pleated filter medium that significantly increases bacterial filtration efficiency.[2] These high-performing filters can reach an **NaCl efficiency of greater than 99.97%**.[3]

### ELECTROSTATIC FILTERS

ELECTROSTATIC FILTER, LARGE

ELECTROSTATIC FILTER, SMALL

ELECTROSTATIC FILTER, SMALL, ANGLED PORT

### MECHANICAL FILTERS

MECHANICAL FILTER, LARGE

MECHANICAL FILTER, COMPACT

MECHANICAL FILTER, SMALL

| ELECTROSTATIC FILTERS | | | |
|---|---|---|---|
| | **Large** | **Small** | **Small, Angled Port** |
| Catalog Number | 350U5865 (Without end-tidal $CO_2$ sampling port) | 350U5879 | 350U19006 |
| Quantity/Box | 50 | 50 | 50 |
| Recommended Tidal Volume | 300-1500 mL | 150-1200 mL | 150-1200 mL |
| Resistance to Flow at (ISO 9360) | | | |
| 30 L/min | 0.7 cm $H_2O$ | 0.7 cm $H_2O$ | 0.8 cm $H_2O$ |
| 60 L/min | 1.6 cm $H_2O$ | 2.1 cm $H_2O$ | 2.2 cm $H_2O$ |
| 90 L/min | 2.8 cm $H_2O$ | 3.6 cm $H_2O$ | 3.8 cm $H_2O$ |
| Filtration Efficiency | | | |
| Bacterial | ≥99.999% | ≥99.99% | ≥99.99% |
| Viral | ≥99.99% | ≥99.99% | ≥99.99% |
| NaCl | ≥99.592%* | ≥97.100%* | ≥97.100%* |
| Internal Volume | 99 mL | 37 mL | 45 mL |
| Weight | 35 g | 19 g | 20 g |
| Type of Filtration | Electrostatic | Electrostatic | Electrostatic |

| MECHANICAL FILTER | | | | |
|---|---|---|---|---|
| | **Small** | **Compact** | **Large** | **Large** w/o gas sampling port |
| Catalog Number | 351U5979 | 351U5878 | 351U5410 | 351U5856 |
| Quantity/Box | 50 | 50 | 50 | 50 |
| Recommended Tidal Volume | 150-1200 mL | 200-1500 mL | 300-1500 mL | 300-1500 mL |
| Resistance to Flow at (ISO 9360) | | | | |
| 30 L/min | 1.2 cm $H_2O$ | 0.7 cm $H_2O$ | 0.8 cm $H_2O$ | 0.8 cm $H_2O$ |
| 60 L/min | 2.7 cm $H_2O$ | 1.9 cm $H_2O$ | 2.0 cm $H_2O$ | 2.0 cm $H_2O$ |
| 90 L/min | --- | 3.4 cm $H_2O$ | 3.2 cm $H_2O$ | 3.2 cm $H_2O$ |
| Filtration Efficiency | | | | |
| Bacterial | ≥99.99999% | 99.9999% | ≥99.99999% | ≥99.99999% |
| Viral | ≥99.997% | ≥99.99% | ≥99.99999% | ≥99.99999% |
| NaCl | ≥99.512%* | ≥99.747%[3] | ≥99.978%* | ≥99.978%* |
| Internal Volume | 42 mL | 66 mL | 92 mL | 92 mL |
| Weight (approx.) | 24 g | 39 g | 47 g | 47 g |
| Type of Filtration | Mechanical | Mechanical | Mechanical | Mechanical |

*Internal testing Mirandola (various 2005-2008).

REFERENCES
1. Cann C, Hampson MA, Wilkes AR, Hall JE. The pressure required to force liquid through breathing system filters. *Anaesthesia.* 2006;61(5):492-497.
2. Wilkes AR. Measuring the filtration performance of breathing system filters using sodium chloride particles. *Anaesthesia.* 2002;57(2):162-168.
3. Nelson Laboratories Inc. Sodium chloride aerosol testing of breathing system filters (BSF). Lab No. 399951A. 1 Amended. January 2008.



10-AW-7022 DR04710

COVIDIEN

6135 Gunbarrel Avenue
Boulder, CO
80301

800-635-5267

www.covidien.com