

ME™-Series For Medical Applications

Remove Water Vapor From Breath Samples for Patient Monitoring

- Removes only water vapor
- Selective membrane technology
- Eliminate water interference in Infrared CO₂ monitoring
- Remove up to 90% of the water
- Low dead volume
- Proven results in capnography, anesthesia monitoring, and metabolic testing

The most common source of problems in medical gas analysis is water vapor in the gas sample. It can cause condensation in sample lines and measurement cells as well as interference with CO₂ monitoring. Perma Pure ME™-Series Moisture Exchangers selectively remove only the water vapor from the sample, virtually eliminating this source of medical gas analyzer failure.



Since breath is saturated with water vapor, liquid water will begin to condense as soon as the temperature of the breath begins to fall. Various devices are used to remove this condensate from the expired breath sample, such as hydrophobic filters and water traps. Although these devices remove liquid water, they do not remove water vapor. They also add dead

volume to the sample circuit, and must be drained or replaced when filled with water. Since water vapor is not removed by any of these devices, the problems may be reduced but are not eliminated. ME-Series dryers use Nafion® membrane tubing technology to bring the humidity level to ambient conditions. They will remove up to 90% of the water while leaving the oxygen, carbon dioxide, and anesthesia gases unaffected.

Medical gas analyzers are designed to minimize problems associated with water; nevertheless, accumulation of water inside the system remains the primary cause of analyzer failure. Placing a disposable ME-Series dryer in the sample line between the patient and the analyzer dramatically reduces the humidity of the sample, virtually eliminating any of these problems.




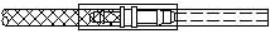



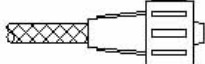
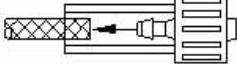
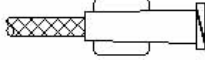
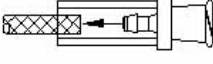
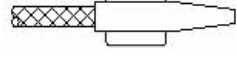
PERMA PURE

The patented ME™-Series moisture exchangers are constructed with injection-molded fittings for a gas-tight seal, while a polypropylene braid surrounding the Nafion membrane provides strength and protection. This design produces a rugged sample line that rapidly removes water vapor from a breath sample.

The ME-Series is available in a variety of tube diameters, lengths and fitting combinations to accommodate a wide range of flow rates.

Model	ID		OD	
	In.	mm.	In.	mm.
ME-050	0.042	1.07	0.053	1.35
ME-060	0.052	1.32	0.063	1.60
ME-070	0.060	1.52	0.072	1.73
ME-110	0.086	2.18	0.108	2.74

Standard lengths are 6", 12" and 24"

Type	Description	Illustration
TT	Thermoplastic tube* with stainless steel coupling (specify length of tube)	
BT	Thermoplastic tube* with nylon barb coupling (specify length of tube)	
B	Nylon barbed fitting	
MB	1/16" Molded barb fitting (not available in ME-070 series)	
ST	Stainless steel tube in molded polypropylene header (specify length of tube)	
ML	Molded male locking luer fitting (Not available in ME-110)	
BML	Male locking luer with push-in barb attached with heat shrink	
FL	Molded female luer fitting (Not available in ME-110)	
BFL	Female locking luer with push-in barb attached with heat shrink	
MS	Molded male slip luer fitting (Not available in ME-110)	



PERMA PURE LLC

A HALMA COMPANY

8 Executive Drive • P.O. Box 2105 • Toms River, NJ 08754