

ISO 9001 : 2000 CERTIFIED

**Datasheet 20150522** 

# Whisper 0 LCMS N<sub>2</sub> Generator Membrane

# **Description**

The **Whisper 0** is a nitrogen generator specially designed for the LC-MS applications. Using the latest membrane technology it is able to provide nitrogen at 8 bar pressure and 98.5% purity.

The Whisper exist in different flow: 8, 40, 80 and 120 l/min (need an external compressed air).

#### Benefits of Whisper are:

- better results from analytical instruments
- better lab efficiency
- cost saving and improved safety

#### **Functioning principle:**

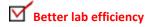
The external compressed air is filtered by a coalescent filter to remove the condensed water, active charcoal filter to remove hydrocarbons and finally by a particle filter. Then the air is dried by a specific dryer column and then the membrane will separate the nitrogen from the other gases.

At the end of the process, the pressure is regulated to be used at the outlet of the instrument. Once the pressure is reached a pneumatic control valve will stop the compressor until new nitrogen is requested.











# **Applications**



The **Whisper** has been developed to meet specific requirements in terms of flow, purity and pressure in LC-MS applications. It can be used for the evaporation of solvents in samples being analysed.

The simple high efficiency membrane technology allows the separation of nitrogen from other components of the compressed air inlet.

Applications for the Whisper LCSM:

- LC-MS
- Evaporation of solvents

# **Specifications**

Flow rates: 8NI/min - 40NI/min - 80NI/min - 120NI/min for Whisper 0

Delivery pressure: Up to 8 bar (inlet pressure 9 to 11 bar - pressure drop 0.8 bar - for Whisper 0)

Nitrogen: > 98% to 99.5% depending of pressure and flow rate

Particle filtration level : < 0.01 um Sound level : No noise

Fittings: Inlet Quick connect for tube 10mm (OD) / outlet quick connect for tube 6 mm (OD)

Power requirements : No need of electricity

| Models                   | Mini<br>Whisper 0-8L | Whisper<br>0-40L | Whisper<br>0-80L | Whisper<br>0-120L |
|--------------------------|----------------------|------------------|------------------|-------------------|
| N2 flow rate [NI/min]    | 8                    | 40               | 80               | 120               |
| Net weight [Kg]          | 15                   | 15               | 18               | 21                |
| Shipping weight [Kg]     | 20                   | 20               | 23               | 26                |
| Dimensions WxDxH [cm]    | 74x40x28             | 48x26x115        | 48x26x115        | 48x26x115         |
| Shipping dim WxDxH [cm]  | 50x40x90             | 40x40x120        | 40x40x120        | 40x40x120         |
| Compressor included      | No                   | No               | No               | No                |
| Power consumption [Watt] | 0                    | 0                | 0                | 0                 |

## Options – Accessories – Spare parts

Models:

6900 24 002 N2-MiniWhisper 0-8NI/min 99%

6900 24 004 N2-Whisper 0-40Nl/min 98.5% 6900 24 006 N2-Whisper 0-80Nl/min 98.5% 6900 24 008 N2-Whisper 0-120Nl/min 98.5%

Consumables:

6700 18 900 Set of dust filter / coalescent filter / active charcoal filter kit (for Whisper-C & Whisper 0)

## Performance table purity vs. flow rate:

#### Whisper-40 @ 8bar inlet pressure at 25°C

| 98%      | 97%      | 96%      | 95%      | 94%      |
|----------|----------|----------|----------|----------|
| 45 l/min | 57 l/min | 69 l/min | 81 l/min | 93 l/min |

#### Whisper-80 @ 8bar inlet pressure at 25°C

| 98%      | 97%       | 96%       | 95%       | 94%       |
|----------|-----------|-----------|-----------|-----------|
| 90 l/min | 114 l/min | 138 l/min | 162 l/min | 186 l/min |

#### Whisper-120 @ 8bar inlet pressure at 25°C

|   | William Cr. 11 | o e obai ii |           |           |           |
|---|----------------|-------------|-----------|-----------|-----------|
|   | 98%            | 97%         | 96%       | 95%       | 94%       |
| ĺ | 135 l/min      | 171 l/min   | 207 l/min | 243 l/min | 279 l/min |

