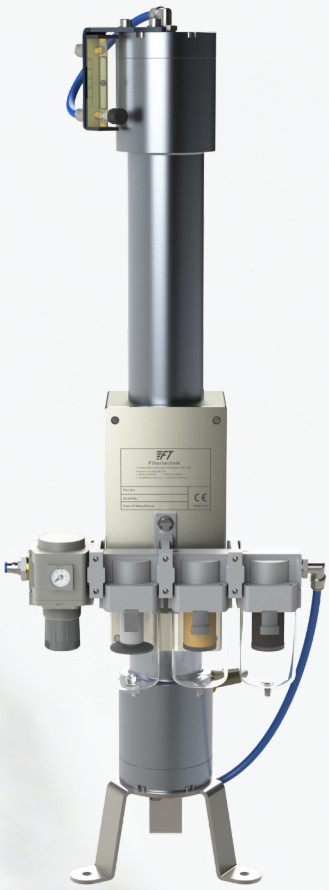
# N2-Dry

## Nitrogen dehydration for Fuels & Oils



The Filtertechnik N2-Dry system utilises a feed from a standard site compressed air supply (or a supply from a small compressor if site air isn't available) and passes it through a specially designed nitrogen separation membrane.

Nitrogen is produced by channelling the air supply (78% nitrogen, 21% oxygen, 1% other gasses) through a specially developed, continuous-use membrane that splits nitrogen from oxygen and other gasses. Using the principle of Selective Permeability, the oxygen passes through this specially developed membrane whilst the nitrogen is retained within the core. This process effectively splits the nitrogen from the oxygen. The nitrogen then exits through a port at the end of the membrane housing, and the enriched oxygen through another located on the side. A needle valve on the nitrogen outlet controls the flow and the purity of the nitrogen being generated.

The benefit of using a nitrogen-generating membrane over a nitrogen source such as a compressed gas cylinder is that no additional nitrogen is being introduced into the local atmosphere. Therefore, the overall composition of the resident air in the room is not changed. However, it is recommended that the N2-Dry system only be installed in rooms with adequate ventilation.

## Technical specifications

| | |
|---|---|
| **Part number** | N2-Dry-01 |
| **Dimensions** | 1000mm (H) x 360mm (W) x 290mm (D) |
| **Weight** | 11.5 Kg |
| **Air inlet connection** | 10mm Push Fit |
| **Nitrogen outlet connection** | 10mm Push Fit |
| **Supply air pressure range** | 5-15 Bar / 73-217 psi |
| **Supply airflow range** | 53-91 L/min |
| **Optimum supply airflow** | 73 L/min |
| **Optimum nitrogen output** | 26 L/min (97% @ 5 Bar / 25°C) |
| **Ambient temperature range** | 5–60°C |
| **CE marking** | Yes |
| **Seal material** | NBR |

1. Water and dissolved gas
2. Site air supply
3. Enriched oxygen
4. Dry nitrogen
5. Nitrogen
6. Breather element
7. Moisture rich oxygen

