ÖZAK Nitrogen Generators Laboratory Series

The economical, reliable and practical solution for nitrogen gas needs.



Nitrogen is used as a clean, dry, inert gas primarily for removing oxygen from products and/or processes.

ÖZAK Laboratory series is a portable plug-and-run type nitrogen generator complete with all auxiliary equipment such as compressor, dryer etc mounted on a common chassis with wheels. It is developed for anyone who needs a portable, low cost nitrogen supply. Laboratories, air conditioning installers, small food packers to name a few.

Features

 ✓ Operates on PSA (Pressure Swing Adsorption) principle

nitrogen gas supplies such as cylinder or liquid.

- ✓ Proprietary design
- √ Simple operator interface
- ✓ Optimum instrumentation
- ✓ Best quality robust components
- √ Low noise
- √ Oil-free compressor

Benefits

- ✓ High nitrogen purities (up to %99.999) can be achieved economically
- ✓ High efficiency, low nitrogen cost, compact sizes
- ✓ Easy to use
- ✓ No unnecessary electronics that complicate to use and maintain
- ✓ Years of uninterrupted service with zero service calls
- ✓ Can be use in silent rooms
- ✓ No change of carbon filter elements



Technical Data

Air separation principle : Pressure Swing Adsorption

Nitrogen supply pressure : ≤ 8 bar

Power requirement : 220 VAC (Other voltages

optional)

Power consumption : 0,40 / 0,75 / 1,5 kW

(LAB-0,5 / LAB-1 / LAB-2)

Nitrogen storage tank volume : 20 lt

Operating environment : Should be installed in a covered

and well-ventilated area

• Operating temperature : +5/+40°C

Standard Instrumentation

Oxygen content is continuously measured and displayed.

- If oxygen content is higher than a user programmable preset value, then generated nitrogen is diverted to waste so that the product does not become contaminated.
- Stop automatically when the nitrogen storage tank pressure rises to a preset value. Shall start automatically when the pressure drops. This pressure set value can be adjusted by the user.
- Nitrogen purity can be adjusted manually by the user.
- **Displays:** Percent oxygen, pressure in the three tanks, Operating hours, On/Off indicator, Nitrogen tank full indicator

Optional Instrumentation and accessories

- Automatic purity control
- Nitrogen flow rate indicator.
- We can provide for any extra instrumentation which is technically possible (touchpad operator panel, remote access and diagnostic, recording process parameters etc.). Please advise us of your extra requirements.

Weights, Dimensions and Capacities:

| | NITROGEN PURITY / PRODUCTION CAPACITY (Nm³/h) | | | | | | | | |
|---------|---|------|------|-------|-------|--------|---------|--------------------|-------------|
| | %95 | %98 | %99 | %99,5 | %99,9 | %99,99 | %99,999 | Dimensions (cm) | Weight (kg) |
| LAB-0,5 | 1,20 | 0,79 | 0,63 | 0,53 | 0,39 | 0,28 | 0,17 | 125 x 90 x 85 | 110 |
| LAB-1 | 2,41 | 1,57 | 1,26 | 1,05 | 0,79 | 0,55 | 0,35 | 130 x 90 x 85 | 120 |
| LAB-2 | 4,82 | 3,14 | 2,51 | 2,10 | 1,58 | 1,10 | 0,70 | 140 x 100 x 100 | 180 |

- Measured at 8 bar adsorption pressure and 20°C ambient temperature.
- Reference conditions for nitrogen flow rates: 25°C and 1 atm
- Dimensions and weights are approximate. May vary depending on the components used
- We reserve the right to revise the specs as needed







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