

CPF

Catalytic Purification Filter

Carrier-gas purification from excess content of oxygen. Filter is used for purification of nitrogen and helium from oxygen, for example, during work with electronic capture detector (ECD), thermal conductivity detector (TCD) or during work on capillary columns (to avoid malfunction of column or to increase sensitivity of detector). Filter can be used for purification from oxygen and other gases (including argon and hydrogen). Regeneration of catalyst in the filter is done via hydrogen purging. Work of the filter is fully automated.

Air purification from organic impurities. Filter is used for purification of air from organic impurities, for example, during work with flame detectors and when using air as carrier-gas. Filter can be used for purification from hydrocarbon impurities and other gases, for example, purification of nitrogen from hydrocarbons. Regeneration of the filter catalyst is done via pure air purging. Work of the filter is fully automated.

Filters are performed in three modifications

- Purification of nitrogen,
- Purification of air,
- Simultaneous purification of nitrogen and air.

Technical Specifications

- Range of temperatures — from 150 to 700°C. Stability of temperature maintenance in reactor zone — no more than $\pm 2^\circ\text{C}$. Setting and control of temperature are done according to technical specification,
- Preparation period no more than 30 min,
- Electric power from single-phase network AC power with voltage from 187 to 242 V, frequency (50 ± 1) Hz, work mode – continuous,
- Power consumption no more than 300 VA,
- Overall dimensions (width x depth x height) no more than 160x150x340 mm,
- Weight, no more than 3,5kg.

