Extraction of Gases from Liquids by Vacuum Degassing
The gas extractor is a fully automated vacuum degassing unit for extracting gas from oil and other highly viscous liquids according to international standards.

The determination of the total gas content is performed by fast and precise determination of the pressure increasing.

The gas extractor provides the basis for identification of gas compounds and can be linked easily with standard gas chromatographs.

The gas extractor is equipped with a powerful four stage membrane pump. The vacuum can be generated without mercury (substitution of Toepler pump).

The system can be upgraded with an autosampler for different sizes of syringes for oil samples.
Applications

- Insulating oil
- Mineral oil
- Lubrication fluids
- Engine oil
- Gear oil
- Hydraulic fluids
- Biodiesel

Principle

- Evacuation of the degassing vessel
- Automatic dosing of the oil sample
- Determination of the pressure increasing for calculating the total gas content
- Separation of the extracted gas via vacuum pump
- Automatic transfer of the gas sample into the gas chromatograph
- Removal of oil sample after analysis by means of inert rinsing gas

Advantages

- Complete measuring device for vacuum degassing
- Extraction of gases from oils according to international standard regulations
- Working without mercury
- Fast determination of the total gas content
- Suitable for linking with a gas chromatograph
- Basis for quantitative determination of the dissolved gases
- Powerful four stage membrane pump
- Digital pressure measurement
- Valve for automatic oil feed and drain
- Automatic procedure with vacuum-tight solenoid valves and fittings
- Uncontaminated degassing and transfer to gaschromatograph
- Completed data acquisition- and date evaluation system
Specifications

Type: vacuum degassing with oil- and mercury free pump
Vacuum pump: four stage membrane pump, chemical resistant construction, compact design as mounted pump
Pump rate: 2.0 m³/h
Vacuum sensor: measuring range: 0.01 – 170 mbar, regardless of the gas
Accuracy: 2% FS
Start vacuum: < 0.8 mbar
Working range: 0 - 150 mbar
Resolution: 0.01 mbar
Sample volume: > 0.05%
Total gas content: < 5 min
Conditioning time: < 2 min
Typical degassing time: 115 – 230 V, 50 – 60 Hz
Power supply: 200 W
Power input: 330 x 520 x 495 mm
Dimensions (width x height x depth):
Gas transfer to GC: manually or automatically

Modifications

- linking of the gas extractor with the gas chromatograph by the TOP TOGA GC
- Autosampler for automatic oil dosing
- Automatic oil degassing in the online DGA on basis of the gas extractor

We are here for you

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