

# GAS RELEASE SYSTEM

## Accessories for centrifuge series Digtor 22 C

The petroleum testing laboratories environment presents a number of risks inherent to the type of sample. The devices used for the analysis of samples should ensure minimal risk conditions in the work environment, a critical premise in the development of devices for this application at Ortoalresa.

Centrifugation processes for the determination of water and sediment in petroleum, require an organic solvent which, reacting with the sample and the caloric intake of the equipment, generates aerosols. In order to remove this gas from the centrifuge and take it to a safe area, Ortoalresa has designed the GRS (Gas Release System) as an accessory for all of the Digtor 22 C series centrifuges. This accessory creates low pressure intake or vacuum suction, inside the centrifuge chamber, concretely on its top, when locked, that allows the suction of the atmosphere high in aerosols. This atmosphere is piped through the GRS up to its exit, where it can be treated in isolation. The whole circuit is continuously monitored by the equipment, that will manage the right moment to operate the system. Moreover, it only requires the presence of a compressed air supply of 2 bar pressure, in order to create a 10l/min suction, sufficient to perform the suction of the centrifuge inside chamber volume every 5 min.

GRS main functions are:

- Decreasing gas concentration during operation, and therefore the risk of explosion.
- Eliminating the user's health risk by inhalation of produced vapors
- Avoiding gas dispersion into laboratory environment.

### Easy to use

- It only requires a compressed air supply.
- It has 4 connections: A compressed air inlet, an air inlet for air removed from the equipment, an atmosphere outlet to a safe area, and the control input from the equipment.
- Operation pilot light.
- Air inlet pressure regulator.
- Inlet pressure gauge.
- Operation controlled by core equipment.

### Features

- Setting up at a 2 bar pressure, creates a 10 l/min suction.
- 0.2 bar gauge accuracy.
- Max 8 bar inlet pressure.
- Fast inlet and outlet connections.
- Suction capacity: minimum twice total chamber volume in 10 min.

### Safety

- Hazardous gases input is not required.
- Low noise level <40 dB.
- Powered only by rotor in motion and lid blocked.
- Low power consumption.

EU Directives: 2011/65/EU, 2012/19/EU, 2014/30/EU, 2014/35/EU.  
Standards: EN 61010-1, EN 61010-2-020, EN 61326-1, EN 61010-2-010.

### Versions

	Dimensions (mm) (w x d x h)			Net Weight (Kg)	Voltage (V)	Frequency (Hz)	Consumption (W)
CP 001	140	220	120	2	220-240	50-60	20
CP 004	140	220	120	2	110-120	50-60	20

