

# AIR RELEASE PROPERTIES OF PETROLEUM OILS



K88500 Air Release Value Apparatus

## Test Method

The ability of a turbine, hydraulic, or lubricating oil to separate entrained air is a key performance characteristic in applications where agitation causes a dispersion of air bubbles in the oil. To determine air release properties, the sample is heated to a specified test temperature and blown with compressed air. After the air flow is stopped, the time required for the air entrained in the oil to reduce in volume to 0.2% is the air bubble separation time.

## Air Release Value Apparatus

- Conforms to ASTM D3427, IP 313 and related specifications
- High accuracy temperature control with digital setpoint and display
- Digital control panel leads user from start to finish of test operation
- Automatic calculation of final sample density for determination of air release value
- Redundant overtemperature protection circuitry assures safe operation

The Koehler Air Release Value Apparatus consists of a test vessel and air flow control equipment for delivering heated air at the specified flow rate to a lubricating oil sample maintained at constant temperature. Microprocessor-based control panel guides user from start to finish of test operation and provides density calculation and timing operation for measuring the air release value of the test sample. The system includes drying oven for warming test oil at temperatures of up to 100°C; circulating bath with digital temperature controller and air bath for sinker; compressed air heater with digital temperature controller, overtemperature and overpressure protection circuitry; pressure gauge; thermometer. Optional Windows® software automatically measures the time for air release.

## Specifications

Conforms to the specifications of:  
ASTM D3427; IP 313; ISO 9120;  
DIN 51381; NF E 48-614  
Temperature Range:  
ambient to 75°C (167°F)  
Electrical Requirements: **CE**  
115V 60Hz, 3.0A  
230V 50Hz, 1.5A  
230V 60Hz, 1.5A

## Dimensions

lxwxh,in.(cm)  
24x28x38¼ (61x71x97)  
(Air Release Value Apparatus only)  
Net Weight for complete system:  
225 lbs (103kg)

## Included Accessories

ASTM 12C Thermometer  
Sinkers, 5mL and 10mL  
Drying oven  
Pressure gauge  
Circulating Bath  
Air Bath for Sinker  
Balance  
Platinum Wire  
Jacketed Test Vessel

## Shipping Information

Shipping Weight for complete system:  
300 lbs (136kg)  
Dimensions: 50.7 Cu. ft.

## Ordering Information

Catalog No.		Order Qty
K88500	Air Release Value Apparatus, 115V 60Hz	1
K88501	Air Release Value Apparatus, 230V 50Hz	
K88502	Air Release Value Apparatus, 230V 60Hz	