Sulfur-in-Oil Analyzer
SLFA-60

Technical Specifications

Measurement Specifications

- Measurement principle: Energy Dispersive X-ray Fluorescence Analysis Method (EDXRF)
- Measurement sample: Sulfur in Petroleum products such as heavy oil, naphtha, and crude oil, light oil
- Measurement range: 0 - 9.9999 %
- Repeatability: ± 50 ppm or less per C/H (with a 1 % sulfur sample)
- Lower detection limit: 20 ppm or less (three times the standard deviation with a 0 % sample)
- Number of calibration curves: 5 lines × 3 sets (Total 15 lines)
- Calibration curve order: Linear or quadratic (both automatic selection and manual settings available)
- Calibration sample requirement: 4 - 10 ml
- Measurement time: 10 - 600 sec
- Spectrum measurement: Energy Axis: 0 - 10 keV, spectrum analysis to verify instrument performance

External output: USB connect with PC, USB memory

Ambient Conditions

- Temperature: + 5°C ~ + 40°C (± 4°F ~ + 104°F)
- Humidity: 80% max relative humidity in temperature range + 5°C ~ + 30°C (+ 41°F ~ + 86°F), linear decrease to 50% relative humidity in temperature range + 31°C ~ + 40°C (+ 88°F ~ + 104°F)

Power and Housing

- Power supply: AC 100 - 240 V ± 10 %, 50/60 Hz
- Power consumption: 80 VA
- Dimensions (W x D x H): 230 x 400 x 140 mm (9 x 15.75 x 5.5 in.)
- Weight: 9 kg (20 lbs.)

Conformity Standards

- ASTM D4294 (USA) · ISO 8754 · JIS K2541/B7995

Please read the operation manual before using this product to assure safe and proper handling of the product.
HORIBA introduces the new standard of transportable sulfur-in-oil analyzers, the SLFA-60. This instrument introduces new software and hardware features to meet the growing changes in the petroleum industry. The instrument has expanded storage of calibration curves and data can be exported using USB output. The measurement range has increased to 0-9.9999 wt% to cover high sulfur crudes and shale oil markets.

- **Simple operation**
- **Easy maintenance**
- **Lightweight**
- **Compact**
- **Robust construction**

### Expanded Measurement Range (0-9.9999wt%)

This new model can measure a wider range of sulfur content. It has an expanded range to measure from 0-9.9999 wt% sulfur, due to the higher sulfur concentrations of crude and shale oil markets.

### Large printouts

Printouts show important information, including sample ID, X-ray spectrum, date and time, measurement average value, standard deviation and calibration curve graph.

### Measurement Procedure

1. Pour the sample into the sample cell
2. Place the sample cell on the sample holder
3. Set to the measurement condition
4. Press the “MEAS” button to start the measurement
5. Instrument displays the results and data output

### Data output

The printout is available in an 80 mm wide format for easy comprehension.

### Calibration

New Software features allow up to 15 separate calibration curves. There are three sets and each set represents 5 separate calibration curves. The Software also allows the users to choose between linear or quadratic curves. Calibration curves are restored manually without having to recalibrate as long as coefficients value/calibration data are on hand.

### Original Sample Cell

To ensure accuracy and reliability of the analysis, HORIBA has maintained its original sample cell. By using the sample jig tool provided, you can easily seal the sample so that it is leak free.

### Safety mechanism

The SLFA-60 has a protective membrane covering the cell window to prevent the detector and X-ray tube from accidental sample leakage. This protective membrane unit is simple to assemble and replace.

### Large screen display for easy viewing

The screen will display real-time data to check the measurement conditions.

### USB memory

Your measurements can be recorded three different ways: by printout, exported to a USB memory device, or exported to an external PC through a USB interface, making it possible track and analyze the information throughout the lifetime of the unit.