

Low Temperature Grease Flow Tester



Low Temperature Flow Tester

The Low Temperature Flow Tester, K95300, has been developed for testing lubricating greases in low temperature environments. The test is performed in accordance with DIN 51805 and can also be customized.

Low Temperature Flow is measured according to the method of Kesternich (DIN 51805). The K95300 test system is an instrument for the determination of the flow pressure of lubricating grease at temperatures down to -50°C. Due to the special design of the cooling system, the K95300 can cool down in high speed and reach temperatures of -50°C without an expensive external cooling device.

The core components are in accordance with medical standards to ensure highest precision and accuracy even in very low-pressure ranges. An easy to use touch screen interface helps to operate and use the machine in a quick and professional way.

Measurement Principle

A layer of the grease to be tested is put on a glass plate without air bubbles. The measuring nozzle is simply pressed a few times onto the layer of lubrication grease until it is filled with grease. The nozzle is inserted into the thermostatically controlled metal block of the tester and the chamber is air sealed and thermally isolated to ensure best performance.

After the preparation time, the pressure above the sample nozzle is increased in steps until a sudden pressure decrease is observed, indicating that the grease is pressed through the nozzle. The test is stopped and the last pressure value is displayed as the flow pressure according to Kesternich.

The grease removal container is installed under the tester and is easy to clean and replace.

Test Method

This test method is used to assess the flow ability of grease in cold environments. Low temperature flow properties are important grease parameters when it comes to central lubrication systems, vehicles and machineries in harsh environments.

Specifications

Conforms to the specifications of: DIN 51805
Pressure Range: 0 to 3.000 mBar
Pressure Resolution: <1 mBar
Temperature Range: ambient to -50°C
Temperature Resolution: <1°C
PLC: Touch PLC
Internal Generated Air Pressure
Interface: Ethernet
Voltage: 110 – 230V / 50 – 60Hz
Power: 350 W Max.

Software

A touch screen with integrated PLC controls the system and allows easy adjustment of test parameters and quick setups. Below are some of the key functions:

- Pre-defined pressure settings according to DIN 51805, customized setup possible
- Pre-defined selection of most used temperatures or free selection possible
- Pre-defined increase time of 30 s or custom
- User selectable starting pressure
- Help function directly embedded in the HMI
- Remote monitoring / control via app.

Included Accessories

Basic Machine
Multi Range Power Supply
PLC and HMI Software
1 Testing Sleeve
3 Unloading Containers
Tooling Set
Documentation

Dimensions HxWxD

230 x 320 x 440 mm (9 x 12.6 x 17.3 in.)
Weight: 25 kg (55 lb)

Ordering Information

Catalog No.

K95300 Low Temperature Grease Flow Tester,
110-230V, 50/60Hz



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