



## JUNG CHECK

## Falling Ball Viscosity Measuring Device

The JUNG CHECK Falling Ball Viscosity Measuring Device provides a reliable and effective analysis method to define whether the viscosity of lubricating and hydraulic oils corresponds to the general oil viscosity standards or not. The regular monitoring process of the oil viscosity is of great importance as even small deviations from these standards can be potentially harmful for effective operation of the engine system.



## Features:

- Measuring range: 10 999 mm<sup>2</sup>/s
- Measuring time: about 5 min.
- Accuracy: +/- 3 %

## **Benefits:**

- Quick determination of oil quality
- No supplementary chemicals required
- Accurate test results

The practical design of the device containing a metal tube with a built-in thermometer enables easy measurement of the falling time of a metal ball in the oil-filled tube and the corresponding temperature. Thereby, the time required for a ball to fall through the oil is directly related to the viscosity of the oil.

To cover the total measuring range three different balls of various sizes are provided:

standard ball	(16.20 mm)	60 mm²/s	$(1s = 1.0 \text{ mm}^2/\text{s})$
complementary ball	(15.87 mm)	270 mm <sup>2</sup> /s	$(1s = 4.5 \text{ mm}^2/\text{s})$
complementary ball	(14.29 mm)	1000 mm <sup>2</sup> /s	$(1s = 65.0 \text{ mm}^2/\text{s})$

The above-referenced falling time is based on a density of 0.9875 g/ml and is applicable with common accuracy for fluids having viscosity of more than  $10 \text{ mm}^2$ /s at current measuring temperature. For different densities the specific formula (available in the manual) and a V-T diagram (provided by the lube oil supplier) should be used.