

Falling Ball Viscometer HÖPPLER® KF 3.2

Order code: **5401.1012827**



Information about product price on demand

Parameters

Quantitative unit

ks

Höppler-type falling sphere viscometer for simple but accurate measurement of dynamic viscosity of transparent Newtonian fluids. The sphere rolls and slides inside an inclined cylindrical tube filled with the fluid to be tested. The viscosity is measured in mPa s and is derived directly from the time the sphere takes to fall a specified distance through the fluid in the measuring tube. The tube can then be turned upside-down so that time the sphere takes to fall back can also be measured. The tube is situated inside a water bath, which can be filled with water at a specific temperature in order to measure how viscosity depends on temperature.

Includes:

- Falling sphere viscometer with 6 spheres and 1 ball gauge
- Thermometer 0 - 100° C
- Cleaning set
- Test certificate with accurate values for sphere constant K and density ρ for converting duration of fall to actual viscosity.

Technical data:

- Measuring range: 0,6 mPa s to $7 \cdot 10^4$ mPa s (as per DIN 53015) $> 7 \cdot 10^4$ mPa s (for sphere fall time > 300 s)

- Measurement precision: 0,5 - 2% (depending on spheres used)
- Spheres:
 - #1, #2: Borosilicate glass
 - #3, #4: Ni-iron
 - #5, #6: Steel
- Diameter of spheres: 11,00 - 15,81 mm
- Diameter of measuring tube: 15,95 mm
- Fall times for spheres: 30 - 450 s
- Length of measured distance: 100 mm in both directions
- Operating angle: 10° to vertical
- Additional working angles: 70°, 60°, 50° to horizontal
- Volume when full: 40 ml
- Permissible temperature range: -60°C to +150°C
- Dimensions: 180 × 220 × 330 mm
- Weight: 3,1 kg

Additionally required:

- 5401.U11902 Digital Stopwatch

Additionally recommended:

- 5401.U10146 Silicon Tubing (2×)
- 5401.U144002230 Immersion / Circulation Thermostat (230 V, 50 / 60 Hz)