For Tests acc. to KÖNIG and PERSOZ



Pendulum
Damping Tester
Model 299/300

Automatic
Pendulum Excursiun

Automatic
Pendulum Alignment



testing equipment for quality management



# **Technical Description**

SNV 37 112 SIS 18 41 86 NEN 5319

**VDA 621 - 410** 

DIN 53 157 DIN ISO 1522 ASTM D 4366 NF T 30 016 BS 3900 : E5

## **Purpose and Application**

Pendulum damping tests with the **Pendulum Damping Tester, Model 299/300,** assess the mechanical damping properties of paints, varnishes and similar coatings.

## **Test Principle**

The oscillations of a standardised pendulum placed on the test surface are damped in proportion to the "softness" of the coating.

## **Design and Function**

The stand appliance consists of a support and a base plate with levelling screws. The support holds a specimen holder for test panels measuring up to 250 x 100 x 15 mm. The instrument is protected against dust and draught by an acrylic glass hood which has openings for positioning the specimens. The pendulum damping tester is operated from a control terminal located outside the housing.

As optional accessories two different pendulums with yokes, made of rust-resistant steel, are available:

- Pendulum in accordance with König, conforming to DIN 53 157
- Pendulum in accordance with Persoz, conforming to NF T 30-016

The pendulum is automatically adjusted, avoiding time-consuming fine-setting of the light barrier.

Two different measuring modules are available:

#### Basic version

The excursion of the pendulum is effected manually by way of a lever mechanism. The pendulum is actuated by way of cable release

#### • Automatic version

The excursion and actuation of the pendulum are effected automatically.

The automatic version offers the following additional advantages:

- user-friendly operation
- · consistent test results
- simple change of pendulum type

In both versions the pendulum type is entered on the **control terminal**. Readings on the 4-digit LC display show alternatively

- the number of oscillations
- the length of test, or
- ♦ the period of oscillation

### **Reference Class:**

Both versions (manual/automatic) of Model 299/300 are supplied with a <u>Manufacturer's Certificate M</u> in accordance with DIN 55 350-18 that includes among others the following information:

Actual and setting values for the oscillation quantities of the pendulum, evenness of the calibrating plate, product identification, test equipments used with calibration status, date, name of inspector.

By means of one calibrated König and Persoz pendulum each the actual values of the number of oscillations, the duration of oscillation as well as the period are determined for the basic instrument and compared with the setting values.

## **Technical Data**

#### Basic Instrument:

Dimensions: Height: 700 mm

Width: 325 mm Depth: 345 mm

Net weight: approx. 17 kg

Measuring Module (basic version):

Dimensions: Height: 60 mm

Width: 235 mm Depth: 70 mm

Net weight: approx. 0.5 kg

Measuring Module (automatic version):

Dimensions: Height: 65 mm

Width: 235 mm Depth: 107 mm

Net weight: approx. 0.75 kg

**Control Terminal:** 

Dimensions: Height: 35 mm

Width: 167 mm Depth: 65 mm

Net weight:

Supply voltage:

Power consumption:

25 VA

230 VAC ± 10 %
25 VA

Order Information	
Order No.	Product Name
0085.00.31	Pendulum damping tester, Model 299/300 without pendulum and measuring module

Scope of delivery includes:

- Protective acrylic glass hood
- Calibrating plate with Manufacturer's Test Certificate
- ♦ Box level
- Operating instructions

Accessories	
Order No.	Product Name
0432.01.32	Pendulum for measurements in acc. with König, incl. case and with Manufacturer's Test Certificate
0432.02.32	Pendulum for measurements in acc. with Persoz, incl. case and with Manufacturer's Test Certificate
0459.01.32	Measuring module for basic version, incl. control terminal (manual pendulum excursion), with Manufacturer's Test Certificate
0460.01.32	Measuring module for automatic version, incl. control terminal (automatic pendulum excursion), with Manufacturer's Test Certificate

#### Remark

Older types of pendulum damping tester equipment can also be retrofitted with a new measuring module.

Subject to technical modification. Group 14 - TBE 299/300 – VIII/2007

