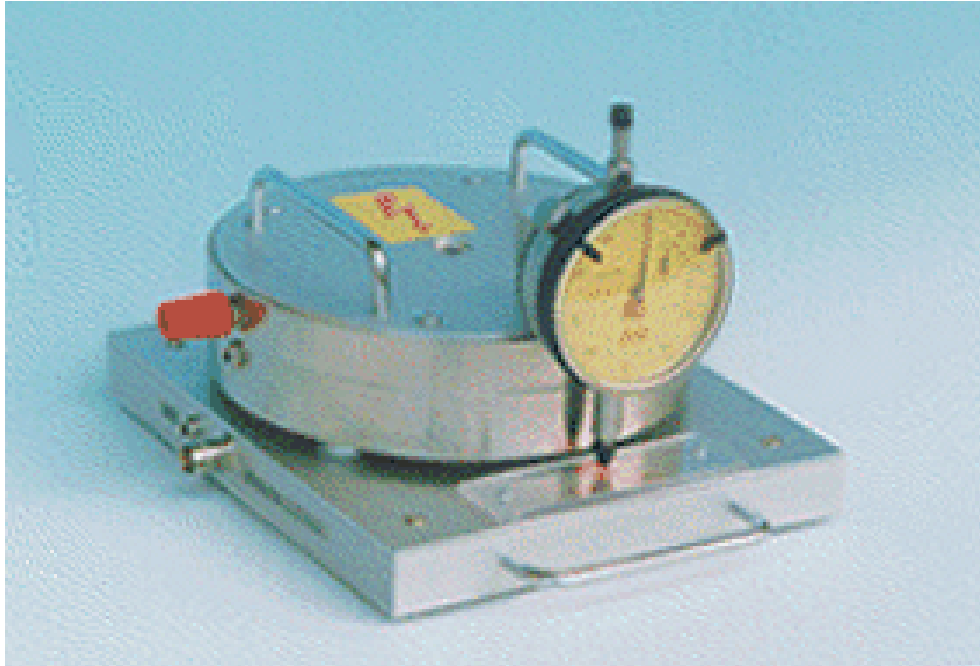

TEST CELL FOR SOLID DIELECTRIC MATERIALS

LDZ-5/S1



Field of application

The test cell LDZ-5/S1 for solid dielectric materials is designed according to the national and international standards DIN 53483 part 2 and VDE 0303 part 30 and IEC.

The LDZ-5/S1 is applicable in connection with the Dielectric Analyzer DIANA or the DSP-based Dissipation Factor & Capacitance Measuring System LDV-5. It is intended for measurement the capacitance (C_x), the loss factor ($\tan \delta$) and the relative permittivity (ϵ_r) of solid insulating materials. Due to the arrangement of the electrodes it is additional possible to measure the resistivity of the insulating material and the surface resistance in connection with a suitable measuring instrument, such as the Digital TERA-Ohmmeter DT-08.

The test cell for solid dielectric materials LDZ-5/S1 consists of two parallel plate electrodes. The measuring electrode is shielded by a guard electrode for the elimination of stray capacitances. At the front a gauge is fixed for the measurement of the thickness of the insulating material.

Due to the compact design the test cell can be placed inside the HV test box of the Dielectric Analyzer DIANA.

Technical parameters

Diameter measuring electrode	100 mm
Width guard gap	1 mm
Width guard electrode	20 mm
Diameter high voltage electrode	142 mm
Electrode material	Stainless steel, polished
Connections	<ul style="list-style-type: none">• BNC for the measuring electrode• Lab socket for the high voltage electrode• Lab socket for the guard electrode
Maximum test voltage	2 kV AC r.m.s. (depend on the thickness of the test sample)
Dimensions (l x h x w)	approx. 170 mm x 135 mm x 210 mm
Weight (total)	approx. 4.2 kg
Weight of the high voltage electrode alone	approx. 2.0 kg

Storage and transport conditions

Storage temperature	- 15 °C to + 55 °C
Storage humidity	≤ 90 %

Operation conditions

Operation temperature	+ 5 °C to + 40 °C
Operation humidity	≤ 85 %
Protection class	IP 00