

Sensor tester

Type 5495C...

Test device for checking the sensitivity of cavity pressure and temperature sensors

Battery-powered test device that measures the insulation resistance, pressure sensitivity and temperature of installed cavity pressure and temperature sensors. It can also be used to check the input of a charge amplifier.

- Simple on-site validation of installed cavity pressure and temperature sensors
- User friendly application with wireless controlled test pin
- Digital display of the measurement results in pC/bar and °C
- Analysis possibilities of p- and T-sensors as well as p/T sensors
- The measuring chain can be fully tested by defined charge generation
- Operation via touch screen

Description

The test device was developed for inspecting Kistler cavity pressure and temperature sensors that are installed in a mold. It is used for measuring the insulation resistance as well as the charge sensitivity and temperature. The absolute temperature value can also be displayed. The sensor tester can generate a defined charge, so the measuring chain of sensor, cable and charge amplifier can be fully tested. The sensor tester is available as a single device and as a test set with complete accessories for single- and multi-channel measurement.



5495C_003-453e-05.20



Technical data

Dimensions (LxWxH)	mm	200x105x34
Weight	g	570
Display:		
Active resistive touch surface	mm	95.04x53.86
Screen size	"	4.3
Resolution	Pixel	800x480
Colors		262.144

Connections:

BNC socket for measuring channel for charge measurement

Series 102 Fischer connector for thermocouple type J, K, N

15-pin D-Sub socket for external temperature amplifier

Antenna connection

Ext. power supply voltage: 2.5 mm jack ¹⁾

Power supply:

Battery capacity 6.200 mAh

Power supply 5 VDC >4A

Power consumption handheld (with battery charge) W >12

Power consumption test pin (with battery charge) 6-7

Operating time (battery) h >8

Measuring ranges

(automatic range switching):

Permitted test force for

Sensors with diaphragm N 30 ... 60

Standard sensors N 60 ... 120

Temperature

Thermocouple J, K, N °C 0 ... 150

With Type 2205A... °C 0 ... 400

Measurement error:

Charge input % <0.5

Charge generation % <5

Temperature measurement, relative °C <2.0

Temperature measurement, absolute (Type 2205A...) °C <1.0

Equipment list

Name	Type	5495C0	5495C1	5495C2	5495C3
Sensor tester (basic device)	5495C0	x	x	x	x
Pressure test pin	Z22016AWD		x	x	x
Active antennas (x2)	65022275		x	x	x
Case	22009601		x	x	x
Power supply	65022292		x	x	x
Adapter for 1 mm sensors	65014618			x	x
Adapter for diaphragm sensors	55124493			x	x
Connecting cable for 4-channel connector type 1722A4...	KIG4895A0,5				x
Connecting cable for 8-channel connector type 1722A8...	KIG4896A0,5				x
Extension cable coaxial, Fischer-BNC	1667B2				x
Cable for charge generation BNC pos. – Qout-plug	Z22116A1WD				x
Kistler USB Memory Stick 8GB	22000444		x	x	x

All parts in the equipment list can be ordered individually.

Application

The following sensor types can be analyzed:

- Cavity pressure
- Temperature
- Cavity pressure and temperature combined

It is also possible to check the charge inputs of a charge amplifier.

Cavity pressure:

After connecting a cavity pressure sensor to the test device, a function test (proper wiring, etc.) as well as an insulation measurement of the measuring chain can be performed.

Using the pressure test pin (included in the test set), it is also possible to determine the sensitivity of direct and indirect cavity pressure sensors.

Temperature:

If the sensor tester is connected to a temperature sensor, a function test of the measuring chain can be performed either with or without an external temperature amplifier.

Connections:

- BNC socket for measuring charge sensitivity



- Socket for active antenna and charge generation



- Series 102 Fischer connector for thermocouple type J, K, N



- 15-pin D-Sub socket for external temperature amplifier



- Power supply socket



- USB port and SD Slot ¹⁾

¹⁾ No function in the C-version.

Ordering key

Type 5495C

Sensor tester Basic device	0
Sensor tester with test set Test pin, antennas, case, power supply	1
Sensor tester with test set, adapter Test pin, antennas, case, power supply, Adapter for 1mm sensors and sensors with diaphragm	2
Sensor tester with test set, adapter and cable Test pin, antennas, case, power supply, Adapter for 1mm sensors and sensors with diaphragm, Connecting cable for 4- and 8-channel connector, Extension cable coaxial, Fischer-BNC	3

Details see above in the equipment list.