





# **User Manual**

PCE-VTS 50, PCE-HTS 50 Force Test Stand



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski, pyccкий, 中文) can be found by using our product search on: www.pce-instruments.com

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## 1 Safety notes

Please read this manual carefully and completely before you use the device for the first time. The device may only be used by qualified personnel and repaired by PCE Instruments personnel. Damage or injuries caused by non-observance of the manual are excluded from our liability and not covered by our warranty.

- The device must only be used as described in this instruction manual. If used otherwise, this can cause dangerous situations for the user and damage to the meter.
- The instrument may only be used if the environmental conditions (temperature, relative humidity, ...) are within the ranges stated in the technical specifications. Do not expose the device to extreme temperatures, direct sunlight, extreme humidity or moisture.
- Do not expose the device to shocks or strong vibrations.
- The case should only be opened by qualified PCE Instruments personnel.
- Never use the instrument when your hands are wet.
- You must not make any technical changes to the device.
- The appliance should only be cleaned with a damp cloth. Use only pH-neutral cleaner, no abrasives or solvents.
- The device must only be used with accessories from PCE Instruments or equivalent.
- Before each use, inspect the case for visible damage. If any damage is visible, do not
  use the device.
- Do not use the instrument in explosive atmospheres.
- The measurement range as stated in the specifications must not be exceeded under any circumstances.
- Non-observance of the safety notes can cause damage to the device and injuries to the user.
- It is recommended to wear eye protection during a compression or tensile test due to possible splinters from torn samples.

We do not assume liability for printing errors or any other mistakes in this manual.

We expressly point to our general guarantee terms which can be found in our general terms of business.



## 2 Specifications

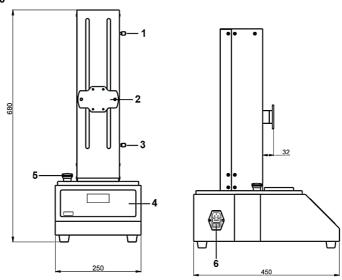
Force range	500 N / 50 kg / 110 lb
Travel distance	270 mm / 10.6"
Resolution of distance display	0.02 mm
Speed	1 500 mm/min
Resolution	1 mm/min
Speed accuracy	2 %
Power supply	220 240 V AC, 1.5 A
Fuse	2 A
Environmental conditions	20 °C ±10 °C, 15 80 % RH,
	non-condensing
Dimensions	45 x 26 x 68 cm / 17.7 x 10.2 x 26.7"
Weight	35 kg / 77 lb

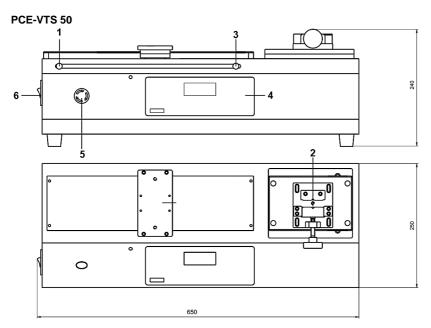
## 3 Scope of delivery

- 1 x motorised tension-compression test stand PCE-VTS 50 or PCE-HTS 50
- 1 x pulse cable for PCE-PFG series
- 4 x rubber foot
- 2 x Allen key
- 1 x power cable
- 1 x user manual



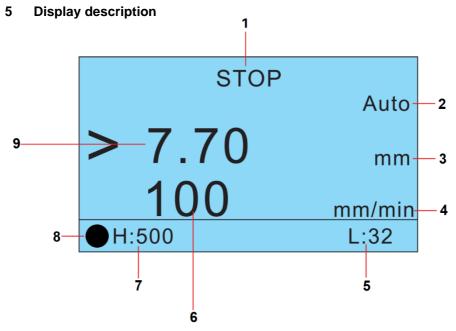
# 4 Instrument description and dimensions PCE-VTS 50







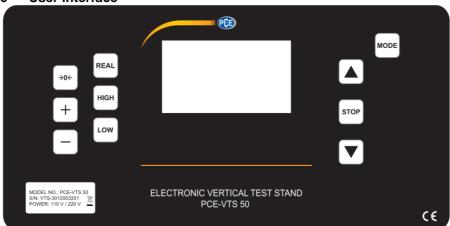
No.	Description
1	Upper limit (limit switch)
2	Travel distance
3	Lower limit (limit switch)
4	User interface
5	Emergency switch
6	Cold-device connection for power supply



No.	Description
1	Status
2	Measuring mode
3	Unit
4	Unit for travel speed
5	Lowest set speed
6	Set speed
7	Highest set speed
8	Indicator whether lowest or highest speed has been selected
9	Travel distance



## 6 User interface



Key	Description
MODE	Switch between manual and automatic mode
STOP	Stop automatic mode
	Start upward travel (PCE-VTS 50) or travel to the left (PCE-HTS 50)
	Start downward travel (PCE-VTS 50) or travel to the right (PCE-HTS 50)
LOW	Switch to low speed (1 99 mm/min)
REAL	Switch to full speed range
HIGH	Switch to high speed (100 500 mm/min)
<b>→0</b> ←	Reset displayed travel distance
+	Increase speed
_	Reduce speed



#### 7 Automatic and manual mode

In manual mode, the force gauge moves by pressing the arrow key for the direction of travel. In automatic mode, this is initiated via a keystroke. The force gauge stops as soon as it receives a stop commans, for example by pressing a key or from the limit switch.

#### 8 Set travel distance

For the travel distance, both the upper and the lower limit can be set individually. When the slide reaches the limit, the motor stops directly.

### 9 Establish connection with a force gauge

To establish a connection with a force gauge of the PCE-PGF series, use the pulse cable included in the delivery. As soon as a pulse is sent from the force gauge, the force test stand stops. All settings for this can be found in the PCE-PFG series manual.

#### 10 Contact

If you have any questions, suggestions or technical problems, please do not hesitate to contact us. You will find the relevant contact information at the end of this user manual.

## 11 Disposal

For the disposal of batteries in the EU, the 2006/66/EC directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose.

In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law.

For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations.

If you have any questions, please contact PCE Instruments.











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