

## Product Information

### Simulation of Spring Forces on Pharmaceutical Products

CTA: 210197 210198



Electromechanical servo testing actuator 1 kN with temperature chamber



Test fixture with specimen

#### Application

Through the simulation of spring forces with the electro-mechanical servo testing actuator 1 kN, development efforts and costs are significantly reduced since the use of real springs is eliminated. High product safety is ensured through the load capacity of the springs, even with changes in viscosity, and possible recalls due to incomplete injections is avoided. The high resolution of the crosshead movement and superb speed accuracy, even at very slow test speeds and short test travel, deliver reliable test results.

#### Testing system

- A powerful wear-free AC motor enables a high cross-head speed of 30,000 mm/min over the entire force range up to 1 kN.
- Optional temperature conditioning device allows for the simulation of spring forces under temperature.

#### Advantages and features

- With the simulation of spring forces, the costly use of real springs during development of devices can be eliminated, and development efforts can be reduced.
- The functional capability of spring loaded devices, even with changes in viscosity during storage, can already be tested in the development phase. This ensures product safety and helps avoid possible recalls due to incomplete injections.
- Through the simulation of autoinjector spring characteristics development costs can be reduced

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#### Necessary accessories

Description	Item number
testXpert III, Graphical Sequence Editor spring simulation of syringes	<b>1041585</b>
Test fixture, syringes and carpules	<b>082865</b>
Carpule mounting 1.5 ml	<b>082866</b>
Carpule mounting 3 ml	<b>082868</b>