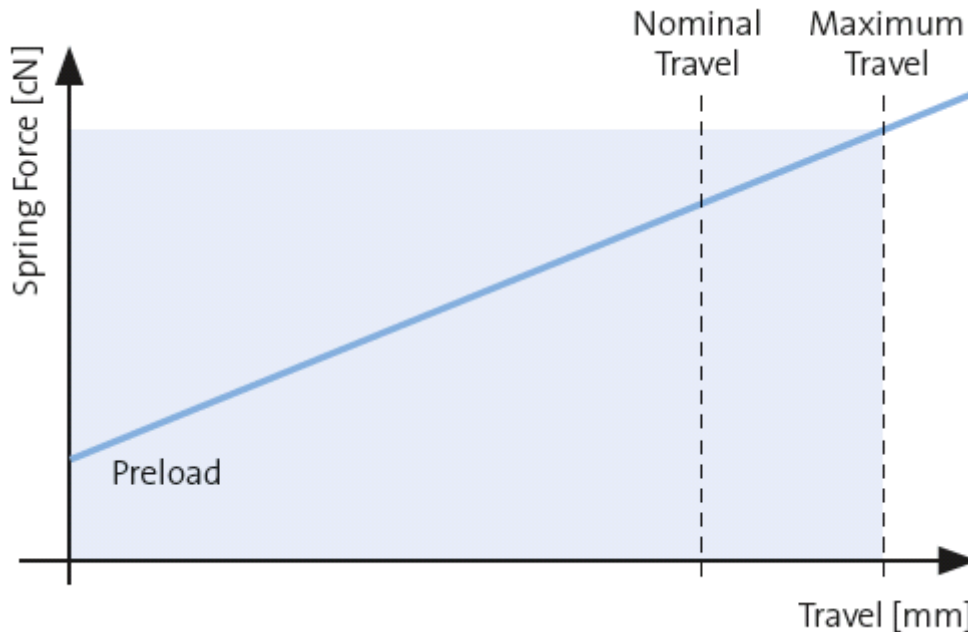




Spring Forces

The spring force increases proportional to the spring travel. This linear function is shown in the force-travel-diagram below.



During the assembly of the probe, the spring is already compressed by a certain travel. The resulting spring force is called preload. The preload makes sure that there is a certain force right from the beginning of the contacting process. It also makes sure that the plunger is completely pushed back after the contact. The nominal spring force is the spring force at the recommended working travel. The recommended working travel should not be exceeded significantly; otherwise the life time of the probe could be considerably reduced.

A heavier spring will give better penetration of dirt or flux but the total number of probes on the fixture must also be considered.

At Peak Test Services, our spring pressures are defined by the final part of our part number, for example:

$$-1 = 1.5\text{N}^*$$

$$-2 = 3.0\text{N}^*$$

**Example purposes only – each series has a variety of spring pressures available.*