droopStop FSpringPreload	Preload in the droop stop at xDroopStop = 0.
droopStop xSpringGap	Alternative to preload; droop stop gap at xDroopStop = 0.
kTriSpring	The linear stiffness of the tri spring.
kAntiRollBar	The linear stiffness of anti-roll bar.
IInerterL/R	The inertance of the corner inerter.
ITriInerter	The inertance of the tri inerter.

Installation compliances can be specified for the following:

Parameter	Definition
torsionBar	Compliance which can be expressed in terms of aRocker.
antiRollBar	Compliance which can be expressed in terms of anti roll bar twist.
spring	Compliance which affects the apparent stiffness of the corner springs.
triSpring	Compliance which affects the apparent stiffness of the tri spring.

Compliance is effectively added a spring in series.

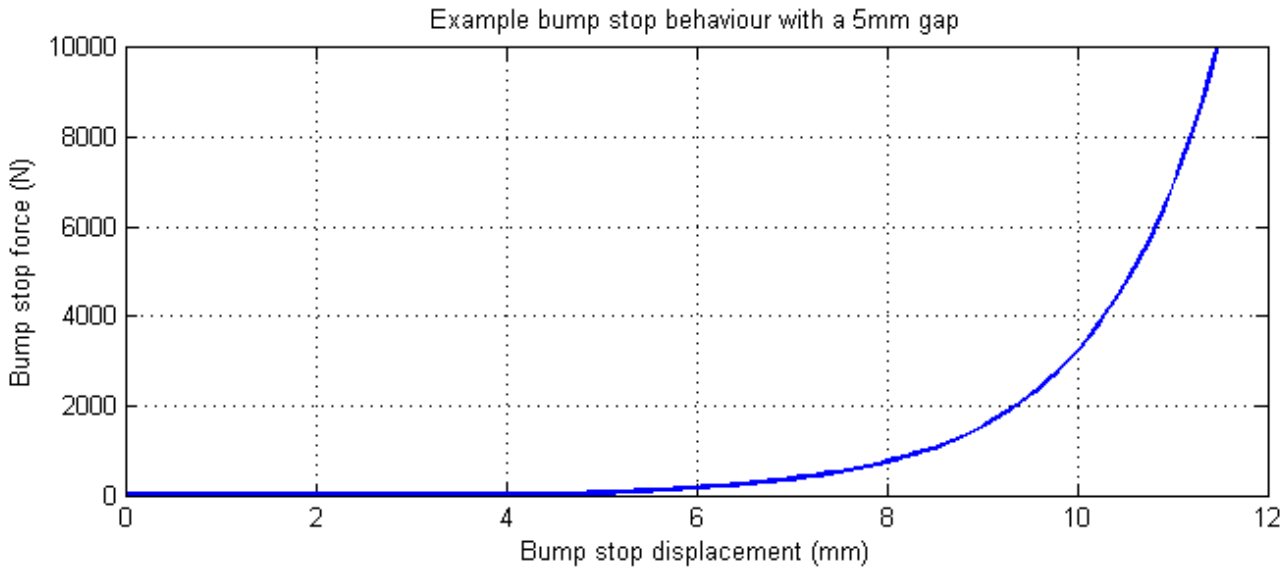
Parameters for Non-Linear Components

Bump Stops

The bump stops, which have strongly non-linear behaviour, require special treatment. The equation which generates bump-stop force is as follows:

$$F = p_{\text{linear}}(x - x_{\text{gap}}) + p_{\text{exponentialScaling}} e^{p_{\text{exponential}}(x - x_{\text{gap}})}.$$

A typical force displacement profile for this component is shown below.



While this is somewhat imprecise our experience has shown that this functional form can capture most bump stop force-displacement profiles to acceptable accuracy. In order to use these bump stops the user should fill in the three parameters in the table below.

Parameter	Definition
pLinear	The linear component of bump stop stiffness.
pExponential	The exponential component of bump stop stiffness.
pExponentialScaling	Scaling applied to the exponential component.
xFreeGap	The free gap between the bump stop and the bump stop plattens in the design position.

Dampers

As well as linear dampers, users can also define non-linear dampers, either through a custom look-up of force vs. speed, or through our