

GAS SPRINGS VS. DAMPERS

Confusion exists regarding gas struts, dampers, gas springs, gas shocks, and many other words used on somewhat interchanged basis. These terms in fact do distinguish different products. The fact that these products often look similar externally lends to the confusion.

Gas pressure internal to the strut provides a push or pull force depending on configuration, but also contain a dampening circuit typically to control the speed of motion through one or both directions of travel. Gas struts are often referred to as Gas springs, gas pistons, gas shocks, among other names. On the contrary, Dampers provide no push or pull force only controls the speed of movement through the stroke. Larger dampers are often referred to as shock absorbers as the high loads are “shocks”.

Some basic parameters that apply to all of these products are:

Length:

From center of mounting to center of mounting point for the product. Typically extended or compressed length specified.

(EL in diagram corresponds to extended length)

Stroke:

The amount of travel available in the product.

(S in diagram)

Diameter:

The device may have one or more diameters specified depending on the configuration. (Dr in diagram corresponds to rod diameter, and Db correspond to body diameter).

