

Hydropneumatic Struts

General Kinetics hydropneumatic suspension elements integrate a nitrogen spring within a monotube damping unit. The single unit offers packaging advantages when compared to discrete springs and dampers/struts.

The nitrogen charge is contained in a hollow piston rod, separated from the damping fluid by a floating piston. This assures optimal damping under all conditions. We manufacture hydropneumatic elements which function as a shock absorber/spring combination and strut elements which also allow for suspension geometry control. When integrated into an on-board hydraulic system, hydropneumatic suspensions facilitate the service of individual wheelstations for maintenance or to mitigate battle damage. Hydropneumatic struts can also be configured with one or more of the following options depending on your needs:

- Hydraulic Recoil Cutoff to limit suspension extension
- Compression Bumper/Cutoff to limit jounce
- Spherical Bearings

Applications

- Commercial off-road construction vehicles
- Light armored vehicles
- Armored Personnel Carriers