LOCKING GAS SPRING

Locking Gas Springs:

Locking gas springs allow the user to lock the unit in any position during operation of the gas spring. This is achieved by depressing a control pin, inside the shaft, that actuates a valve inside the assembly. When the control pin is depressed, the valve inside of the tube allows gas on the flexible gas spring and oil in the rigid gas springs to flow through the valve. When the control pin is released, the valve closes and prevents the flow of gas or oil locking the shaft in place. Locking gas springs can be manufactured with several different functions

Elastic (Flexible) Locking Gas Springs:

This type of lockable gas spring will allow some small movement of the shaft when a load is applied in either direction. The amount of movement will be proportional to the load applied. When the load is removed the shaft will return to the position at which it was locked. Locking gas springs are designed to mount vertically but they can also be manufactured to be mounted horizontally.

Locking Gas Springs Rigid in Extension:

As the name implies this type of lockable gas spring will be rigid in the locked position when force is applied in the extension direction. In compression there will be some small movement of the shaft based on the amount of load applied. When the load is removed the shaft will return to the position at which it was locked. The gas spring can be mounted vertically or horizontally.

Locking Gas Springs Rigid in Compression:

This type of lockable gas spring is the reverse of the extension locking gas spring. When the mechanism is locked the gas spring will resist force trying to compress the shaft. In the extension direction there will some small movement of the shaft based on the amount of load applied. When the load is removed the shaft will return to the position at which it was locked. The gas spring can be mounted vertically or horizontally.





