

 HAHN Gasfedern GmbH	Technical Instruction	Seite 1/1
	Operation of Valves on HAHN Gas and Tension Springs	TechnischeVorschrift Ventile englisch 0101.doc

General information

Gas and tension springs can on request be fitted with a valve. This valve allows the user to reduce the spring's extension force by decreasing the quantity of gas. The thus adjusted gas or tension spring can either be employed in the respective application or returned to HAHN-Gasfedern to measure the set pressure. Subsequent deliveries then can be carried out according to the sample's force (this way, saving the cost of a valve).

Decreasing the extension force

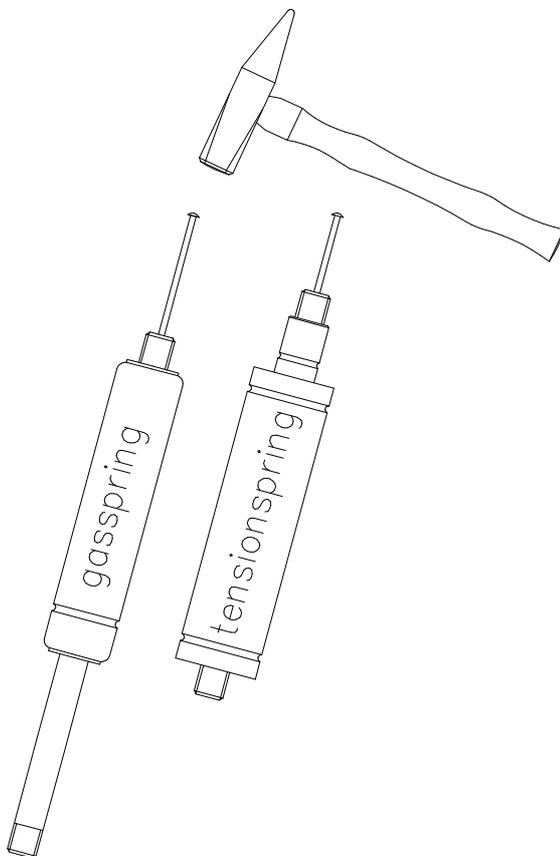
Gas springs including a valve are always fitted with a screw-on connection part on the cylinder side (exception: type 20 40). On tension springs the valve section is on the piston rod end.

The connection part covering the valve is screwed off. In the threaded stud's center is a drilling of Ø2,5mm. A drill or blunt pin of less than Ø2,5mm is inserted. With a 200-gramme-hammer or some similar tool this pin is hit with light, elastic strokes. A prolonged pressing of the pin is to be avoided to prevent too much nitrogen to escape (Caution: Gas and oil leak from the valve, pay attention to safety rules).

The valve is a sensitive part that may be damaged if hit too strongly. The pressing of the valve plunger for too long a time may lead from uncontrolled pressure reduction to a total loss of gas.

When adjusting a pair of gas springs we recommend to count the strokes to reach approximately the same extension force on both parts. Not more than five strokes should be carried out at a time. After these the spring(s) should be checked on leakage by inserting a drop of oil into the valve drilling; the appearance of bubbles suggest that the valve is leaking. In that case, the valve is pressed briefly again (to close properly afterwards) and once more checked on leakage.

After completion the gas spring can be tested on the application. If need be, the above process has to be repeated. Should the spring(s) prove to be too weak for the application, they can be returned to HAHN-Gasfedern for re-charging.



Heel of the hand is normally enough!