

# **KALLER<sup>®</sup>**

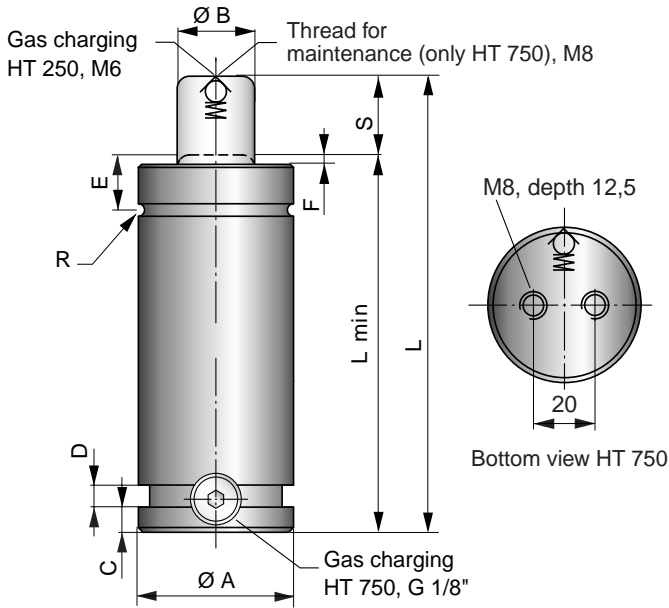
## **GAS SPRINGS**



**HT 250 & HT 750**

**Gas springs for High Temperature**

## Dimensions



KALLER High Temp is a series gas springs especially developed for the plastic and rubber industry where the surrounding temperature often reaches values above 100°C.

Dimensions and available mounts correspond to those of our standard TU 250 resp. TU 750.

The 250 model is also available in threaded versions HTM 250 and HTI 250.

Order No.	S Stroke	Force in N at 120 bar/+20°C		L ± 0,25	L min
		Initial	Max.		
HT 250-010	10	2100	3300	70	60
HT 250-013	12,7		3100	75,4	62,7
HT 250-016	16		3000	82	66
HT 250-025	25		2900	100	75
HT 250-038	38,1		2900	126,2	88,1
HT 250-050	50		2800	150	100
HT 250-064	63,5		2800	177	113,5
HT 250-080	80		2800	210	130
HT 250-100	100		2800	250	150

HT 750-013	12,7	5900	11000	120,4	107,7
HT 750-025	25		10300	145	120
HT 750-038	38,1		10000	171,5	133,1
HT 750-050	50		10000	195	145
HT 750-064	63,5		9900	222	158,5
HT 750-080	80		9800	255	175
HT 750-100	100		9800	295	195
HT 750-125	125		9800	345	220
HT 750-160	160		9700	415	255
HT 750-200	200		9700	495	295
HT 750-250	250		9700	595	345
HT 750-300	300		9700	695	395

Model	Ø A ± 0,1	Ø B	C	D	E	F	R
HT 250	37,9	15	4	4	12,5	2	1
HT 750	50,2	25	8	7	17,5	3	2

## Initial force

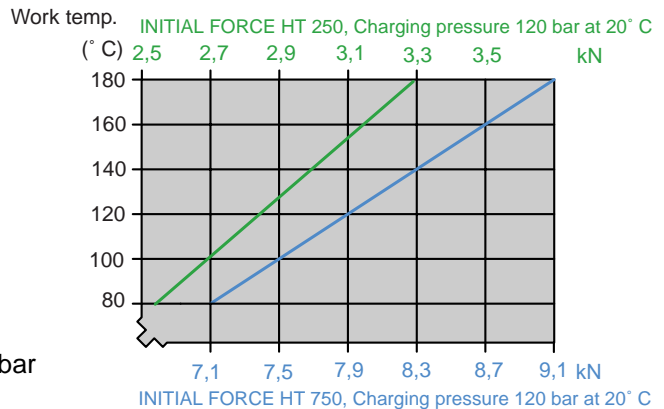
Calculation of filling pressure for HT to achieve desired initial force at working temperature,  $T_w$ :

X = Desired initial force in N  
 $T_w$  = Working temperature (in °C)

$$\text{Filling pressure} = 120 \cdot \frac{X}{\text{Initial force at 120 bar and } 20^\circ\text{C}} \cdot \frac{293}{(T_w + 273)}$$

Example: A HT 250 spring to have a desired initial force of 1800 N at 150 °C

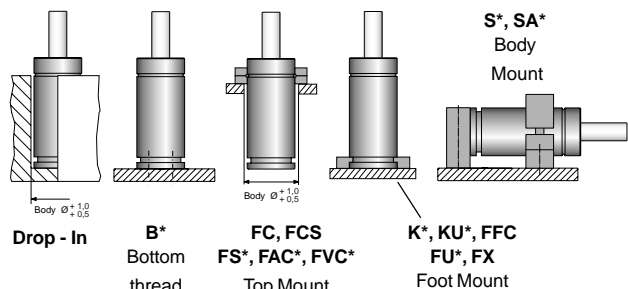
$$\text{Filling pressure (at } 20^\circ\text{C)} = 120 \cdot \frac{1800}{2100} \cdot \frac{293}{(150 + 273)} = 71 \text{ bar}$$



## Basic Information

Pressure medium .....	Nitrogen
Max. charging pressure .....	120 bar
Min. charging pressure .....	50 bar
Operating temperature .....	+20 -- +180°C
Force increase by temperature .....	±0,3%/°C
Recommended max strokes/min .....	20 (at 150° C)
Surface Tube .....	Nickel plated
Surface Rod .....	Chromium plated

## Mounting possibilities



\* = Not available for HT 250