

KALLER®

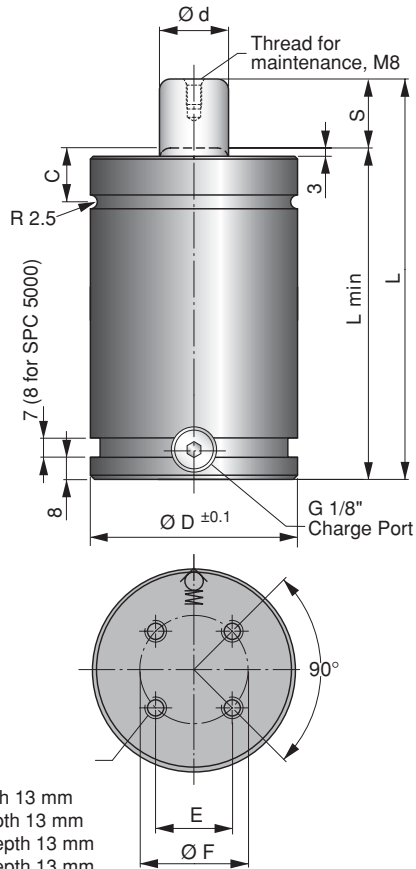


New!



Speed Control™ - SPC Gas Springs

Speed Control™ - SPC Gas Springs



SPC 750 M8 (4x), depth 13 mm
 SPC 1500 M8 (4x), depth 13 mm
 SPC 3000 M10 (4x), depth 13 mm
 SPC 5000 M10 (4x), depth 13 mm

Patent No. SE 517269. Other patents pending.

KALLER Speed Control™ – SPC gas springs have been engineered to reduce or eliminate blank holder bounce commonly associated with increased return stroke speeds from link drive presses.

SPC gas springs have built in return stroke **speed dampening**, which decelerates the last 30 mm of piston rod stroke to 0.4 m/s, helping to bring the blank holder to a smooth stop.

Speed Control™ – SPC:

- Eliminates blank holder bounce
- Increases productivity by increasing part transfer efficiency
- Easily retrofitted to existing dies
- Stroke lengths 125 to 300 mm
- Linkable using hose-system

Millimeters to Inches: $\text{mm} \div 25.4 = \text{inches}$
 Kilograms to Pounds: $\text{Kg} \div 0.45 = \text{pounds}$
 Pounds Force to DecaNewtons: $\text{LbF} \times 0.4448 = \text{decaNewtons}$

Dimensions - SPC 750 to SPC 5000

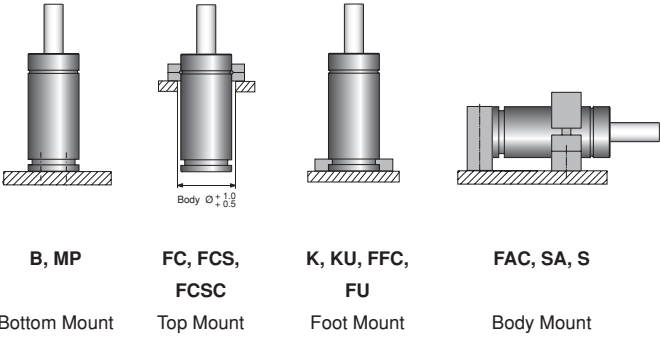
Order No.	S Stroke	Pounds Force (lbF) at 150 bar/2175 psi		L ±0.25	L min	C	Rod Ø d	Cylinder Ø D	E	Ø F	Gas volume (l)	Weight (kg)
		Initial	End force *									
SPC 750-125	125	1665	1960	360	235	21	25	75.2	28.3	40	0.44	6.10
SPC 750-160	160			430	270						0.55	6.60
SPC 750-200	200			510	310						0.67	7.15
SPC 750-250	250			610	360						0.83	7.85
SPC 750-300	300			710	410						0.98	8.60
SPC 1500-125	125	3375	4275	370	245	24	36	95.2	42.4	60	0.73	9.2
SPC 1500-160	160			440	280						0.91	10.3
SPC 1500-200	200			520	320						1.11	11.4
SPC 1500-250	250			620	370						1.36	12.9
SPC 1500-300	300			720	420						1.62	14.4
SPC 3000-125	125	6750	8550	390	265	25.5	50	120.2	56.6	80	1.15	10.7
SPC 3000-160	160		8550	460	300						1.43	11.4
SPC 3000-200	200		8550	540	340						1.74	12.1
SPC 3000-250	250		8775	640	390						2.14	13.1
SPC 3000-300	300		8775	740	440						2.53	14.0
SPC 5000-125	125	11250	14400	405	280	27.5	65	150.2	70.7	100	1.90	26.6
SPC 5000-160	160		14625	475	315						2.33	28.9
SPC 5000-200	200		14850	555	355						2.82	31.7
SPC 5000-250	250		14850	655	405						3.43	35.0
SPC 5000-300	300		14850	755	455						4.05	38.6

* = at full stroke

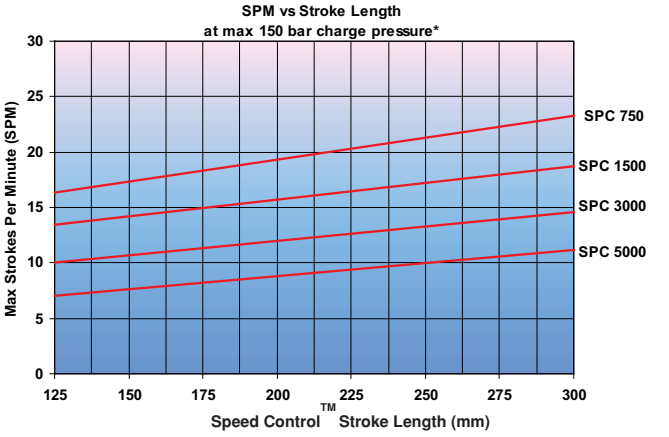
Basic Information

Initial force range 740-5000 daN/1665-11250 lbf
 Pressure medium Nitrogen
 Max. charging pressure 150 bar/1275 psi
 Min. charging pressure 25 bar/360 psi
 Operating temperature 0 to 80°C/0-176°F
 Force increase by temperature..... ±0.3%/°C
 Recommended max strokes/min See performance chart
 Dampening length ≈ 30 mm
 Dampening speed 0.4 m/s
 Rod surface Nitrided
 Tube surface Black oxide
 Repair Kits SPC750, SPC1500, SPC3000, SPC5000

Mounting Possibilities

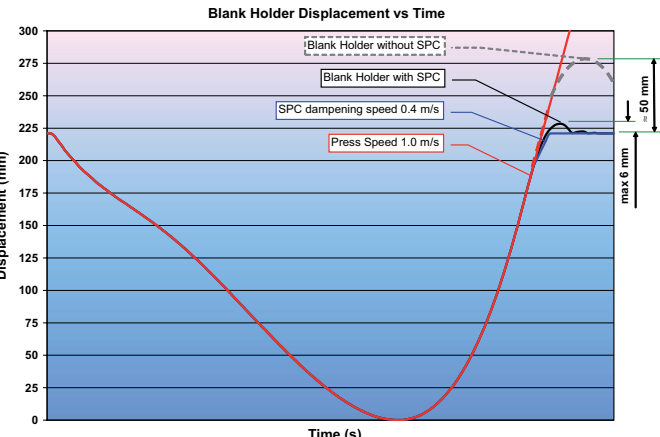


Performance



*At ambient room temperatures with free air flow

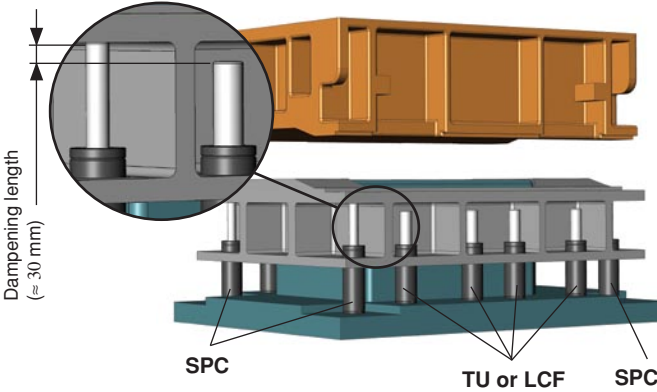
Function Example



Speed Control™ gas springs gave a 90% reduction of blank holder bounce!

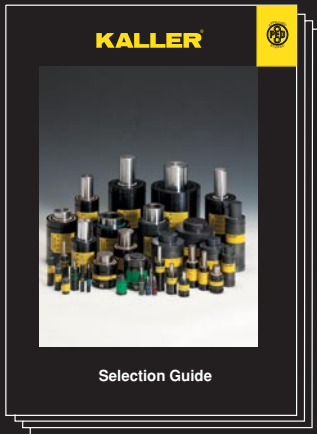
Installation Concept

Alternative 1 - Replace all springs with SPC
 Alternative 2 - Corner Concept (see below)



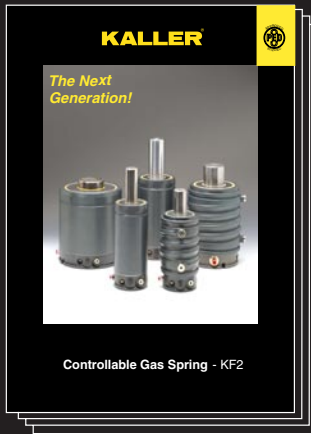
KALLER®

The Safer Choice



Gas Springs

Kaller developed the first nitrogen gas spring for press tools and today offers a comprehensive selection of high quality gas springs for use in different tool & die applications.



Controllable Gas Springs-KF2

Kaller controllable springs are a family of gas springs, for use in press tools, that can be locked in their bottom position and where the return stroke of the spring can be controlled.



Flange Stripper Unit

Kaller Flange Stripper Unit is used in flanging dies for stripping/lifting a flanged part after forming. It provides 200 daN of stripping force, can be top or bottom mounted and is self guiding.



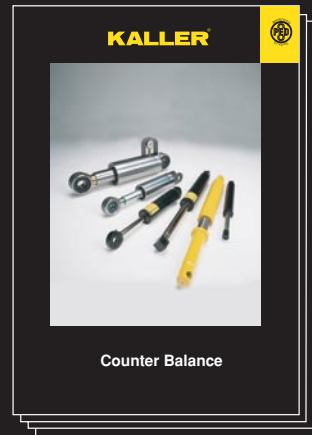
Flex Cam™

The Flex Cam is used for piercing, cutting, forming and flanging operations. The system allows for a flexible distribution of forces with optimal direction and velocity. By using a Flex Cam, fewer tools are required in production.



Roller Cam

Kaller Roller Cam is used for piercing, trimming, flanging and restriking. The Roller Cam can be mounted in both vertical and horizontal angles.



Counter Balance

Kaller Counter Balance gas springs can be used to lift, lower, assist, balance, and hold in a multitude of applications.



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