

SPC Gas Springs



DIMENSIONS

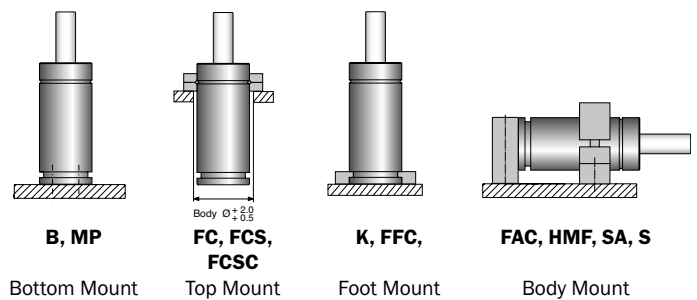
Order No.	S Stroke	Force in N at 150 bar/+20°C		L ±0.25	L min	C	Rod Ø d	Cylinder Ø D	E	Ø F	Gas vol. (l)	Weight (kg)
		Initial	End force*									
SPC 750-080	80	7400	8700	270	190	21	25	75.2	28.3	40	0.30	5.50
SPC 750-100	100			310	210						0.36	5.80
SPC 750-125	125			360	235						0.44	6.10
SPC 750-160	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	15000	19000	370	245	24	36	95.2	42.4	60	0.73	9.20
SPC 1500-160	160			440	280						0.91	10.30
SPC 1500-200	200			520	320						1.11	11.40
SPC 1500-250	250			620	370						1.36	12.90
SPC 1500-300	300			720	420						1.62	14.40
SPC 3000-125	125	30000	38000	390	265	25.5	50	120.2	56.6	80	1.15	10.70
SPC 3000-160	160		38000	460	300						1.43	11.40
SPC 3000-200	200		38000	540	340						1.74	12.10
SPC 3000-250	250		39000	640	390						2.14	13.10
SPC 3000-300	300		39000	740	440						2.53	14.00
SPC 5000-125	125	50000	65000	405	280	27.5	65	150.2	70.7	100	1.90	26.60
SPC 5000-160	160		65000	475	315						2.33	28.90
SPC 5000-200	200		66000	555	355						2.82	31.70
SPC 5000-250	250		66000	655	405						3.43	35.00
SPC 5000-300	300		66000	755	455						4.05	38.60

* = at full stroke

BASIC INFORMATION

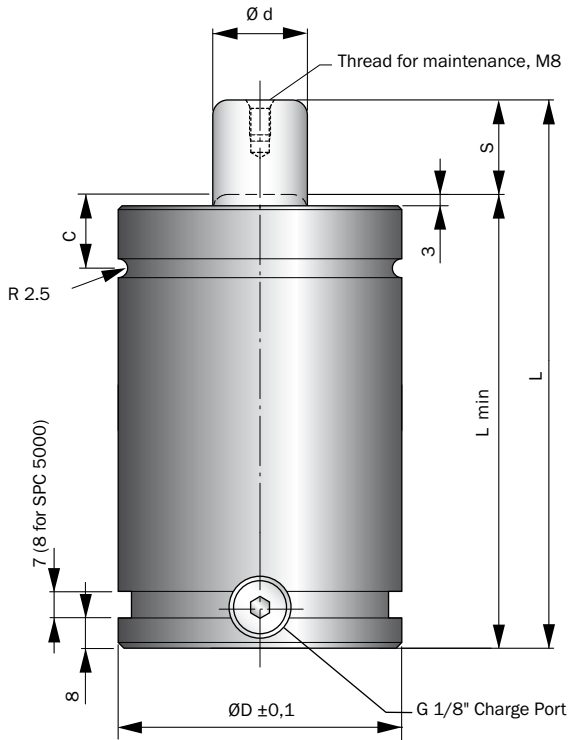
Pressure medium	Nitrogen
Max. charging pressure	150 bar (at 20°C)
Min. charging pressure	25 bar (at 20°C)
Operating temperature	0 to +80°C
Force increase by temperature.	0.3%/°C
Recommended max strokes/min	See chart
Dampening length	≈ 30 mm
Dampening speed	0.4 m/s
Rod surface	Nitrided
Tube surface	Black oxide
Repair Kits	Available for all models

MOUNTING POSSIBILITIES

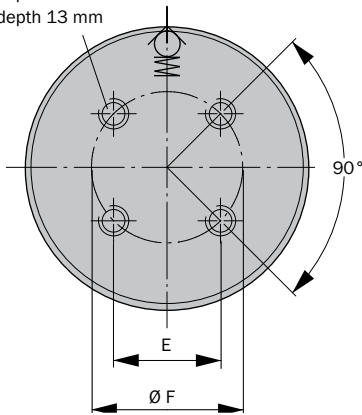


Speed Control™ – SPC Gas Springs

TECHNICAL FACTS



- 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



Speed Control™ – SPC gas springs have been engineered to reduce or eliminate blank holder bounce; commonly associated with increased return stroke speeds from new generation of presses.

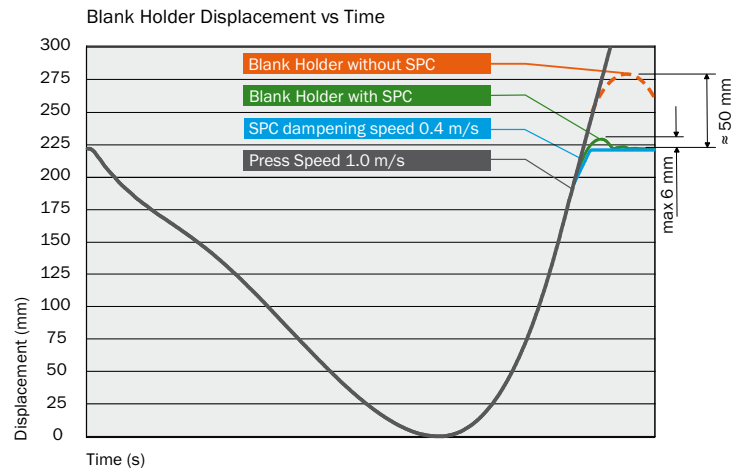
SPC gas springs have inbuilt return stroke speed dampening, which decelerates the last 30 mm of piston rod stroke to 0.4 m/s, helping to bring the blank holder to a smooth stop.

Speed Control™ – SPC features:

- Eliminates blank holder bounce
- Increases productivity by increasing part transfer efficiency
- Easily retrofitted to existing dies
- Stroke lengths 80 to 300 mm
- Linkable using hose-system

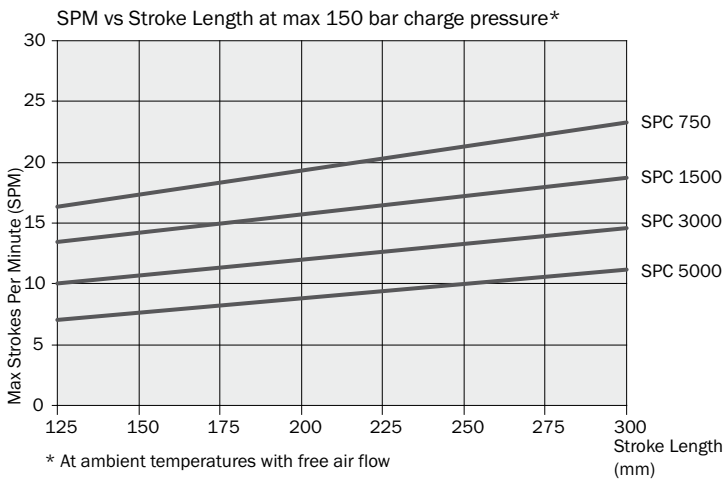
Patent No. SE 517269, DE 102 96 883 and US 7, 121, 538

FUNCTION EXAMPLE



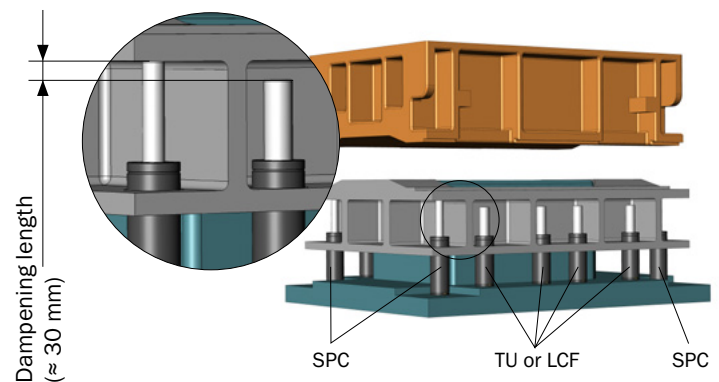
Speed Control™ gas springs resulting in a 90% reduction of blank holder bounce!

PERFORMANCE



INSTALLATION CONCEPT

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



WELCOME TO KALLER. THE SAFER CHOICE.

Welcome to KALLER, the world-leading brand for gas springs and gas hydraulic systems for stamping dies – as well as gas hydraulic suspension systems for heavy duty off-road vehicles.

With innovation as our driving force, we have developed and refined the nitrogen gas spring technology since 1983.

At KALLER we are constantly solving problems and increasing our customers' productivity. When providing innovative solutions for the safer working environment, we do so with Training, Safety and Reliability as our top priority. That's why KALLER is not only the world-leading gas spring provider, it's why we're The Safer Choice.



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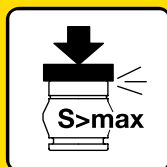
KALLER Training Program

TRAINING. Without doubt the KALLER Training Program is the best and most creative way to fully understand and appreciate the importance of the safety and reliability features.



KALLER Safety App

SAFETY. Fake or KALLER original? With the KALLER Safety App you can identify and verify your specific KALLER gas springs.



Overstroke Protection System

SAFETY. When a gas spring is overstroked, this helps reduce the risk of tool damage or injury.



Overload Protection System

SAFETY. Jammed cam or tool part being forced by gas springs? This will help reducing such risks.



Overpressure Protection System

SAFETY. Vents the spring if the internal gas pressure exceeds the maximum allowable limit to prevent accidents.



PED approved for 2 million strokes

RELIABILITY. Our 2 million stroke PED approval ensures safer component cycle life.



Flex Guide™ System

RELIABILITY. Prolongs service life, allows more strokes per minute, and offers greater tolerance to lateral tool movements.



Dual Seal™ Link Systems

RELIABILITY. Fewer production interruptions due to leakage caused by vibration. Simplified installation thanks to the non-rotation feature.