Electronic end-position controller Soft Stop SPC11

Highlights

- Shorter cycle times
- Minimised vibrations
- 2 freely selectable intermediate positions

Tuning for pneumatic drives: shorten travel times by up to 30% and drastically reduce vibrations when moving into the end position.

Giving pneumatic drives a clear run
The Soft Stop system lets you reduce the travel time from point A to point B by up to 30%; it also improves end position cushioning characteristics for linear and semi-rotary drives, thus increasing the service life of the drives. New: Travel to fixed stops without shock absorbers.

Extremely economical
Shorter travel times, fewer vibrations, increased system service life for optimum production and higher productivity, easy and fast installation and commissioning without complex custom designs – and all that at an attractive price.

Extremely flexible
Up to two freely selectable intermediate positions without a fixed stop for ejection or wait positions. Replaces custom designs and more expensive electromechanical drive solutions.

Extremely easy to install
Thanks to Festo plug & work, installation is problem-free and commissioning via teach-in is quick and easy, even when retrofitting existing shock absorber solutions. Making a few modifications on the PLC is enough.

Extremely reliable and safe
Minimises maintenance time and effort thanks to a lower vibration load.

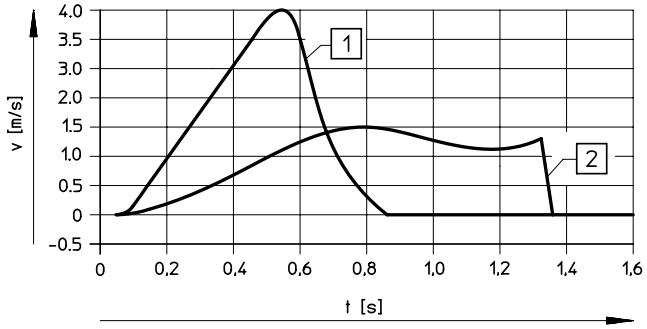
Additional information:

Product page
> www.festo.com/catalogue/spc11

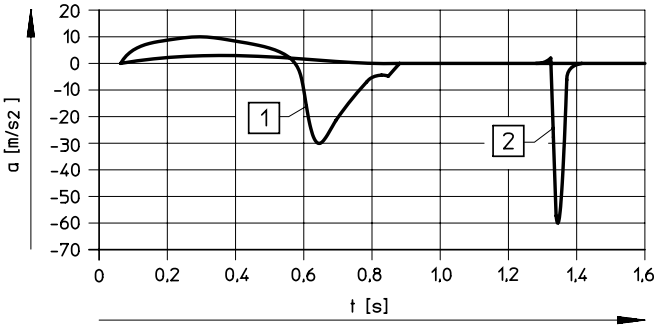
Key features

Moving mass	2...300 kg (horizontal)	
	2...100 kg (vertical)	
Control	Autonomous controller with closed-loop control	
	PLC interface	Digital I/O
		AS-Interface
		All system parameters can be set and changed externally; a logic 1 signal at the remote input locks all buttons on the end-position controller SPC11
Mid-positions	Up to 2 freely programmable mid-positions	
	Accuracy of ±0.25% of the displacement encoder length, but at least ±2 mm	
	The accuracy of the intermediate positions in the case of the swivel module DSMI is ±2°	
	Can be used as sensor functionality, i.e. when a mid-position is overrun, a logic 1 signal is supplied at the corresponding output for 50 ms	
	Intermediate positions can be approached from both sides	
Travel to fixed stops without shock absorber		
Stop position: parameterisable functionality, e.g. fixed stop with very short braking ramp; adaptation on/off		

Comparison:
Travel times and speed curve with Soft Stop and conventional drive with shock absorbers



1 Drive with electronic end-position controller SPC11
2 Drive with shock absorber
v Speed
t Time



1 Drive with electronic end-position controller SPC11
2 Drive with shock absorber
a Acceleration
t Time

Overview: Available drives for Soft Stop

Standards-based cylinder DSBC with external displacement encoder	Standards-based cylinder DNCI with built-in displacement encoder	Rodless drives DGC/DGC-K	Rodless drives DDLI/DGCI with built-in displacement encoder	Swivel module DSMI with built-in displacement encoder
Double-acting piston rod drive DSBC with a wide range of variants. The necessary displacement encoder is attached. • Diameter: 32...125 mm • Stroke: 1...2800 mm	Double-acting piston rod drive DNCI, optionally with through piston rod and external guide unit. • Diameter: 32...63 mm • Stroke: 100...500 mm	Rodless linear drives DGC and DGC-K are suitable for applications with high loads and a small installation space. The displacement encoder is attached. • Diameter: 18...80 mm • Stroke: 1...8500 mm	Pneumatic linear drives DDLI/DGCI with built-in displacement encoder, optionally with moment compensator or slide. • Diameter: 25...63 mm • Stroke: 100...2000 mm	Swivel module with built-in potentiometer based on the swivel module DSM. • Size: 40 mm • Swivel angle: Max. 270° • Torque: Max. 20 Nm