## Electronic end-position controller Smart Soft Stop SPC11





Tuning for pneumatic drives that cuts travel times by up to 30 % and dramatically reduces vibration in the approach to the end position.

## Provides free travel for pneumatic drives

The Smart Soft Stop system enables the travel time from A to B to be reduced by up to 30 % and improves cushioning characteristics in the end position for linear and semi-rotary drives – thereby increasing the service life of the drives. New! Travel to fixed stops without shock absorbers.

### Absolutely economical

Reduced travel times, fewer vibrations and longer system service life for optimum production and greater productivity, easy, quick installation and commissioning without costly in-house constructions – and all of this at a very attractive price.

#### Absolutely flexible

Up to two freely selectable intermediate positions without fixed stop for ejector or rest positions. Replaces in-house constructions and expensive electromechanical drive solutions.

### Absolutely easy to install

Festo plug & work<sup>®</sup> means troublefree installation and quick, easy commissioning using the "teachin" function – even when retrofitting existing shock absorber solutions. All it takes are just a few changes on the PLC side.

### Absolutely safe and reliable

Minimises maintenance costs due to the reduced vibration load.





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## Features

Moving loads	2 300 kg (horizontal)				
	2 100 kg (vertical)				
Activation	with closed control loop as autonomous controller				
	PLC interface	Digital I/O			
		AS-interface			
	PLC interface: all system parameters can be defined and changed externally. A 1 signal				
	at the remote input locks all pushbuttons on the end-position controller SPC11.				
Intermediate	up to two freely programmable intermediate positions				
positions	accuracy ±0.25 % of the displacement encoder length, and no less than ±2 mm				
	the level of accuracy of intermediate positions is $\pm 2^{\circ}$ for swivel module DSMI				
	usable as a sensor functionality, which means that when the relevant intermediate				
	position is passed, a 1 signal is produced at the corresponding output for 50 ms.				
	intermediate positions can be approached from both sides				
Travel to fixed stops without shock absorbers					
New! Stop position					
Parameterisable functionality, for example, stop with shortest braking ramp; on/off adaptation					



## Comparison

Travel times and speeds with Smart 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 Smart Soft Stop

Standard cylinders DNC	Standard cylinders with attached dis- placement encoder DNCM	Rodless drives DGP/DGPL	Rodless drives with integrated dis- placement encoder DGPI/DGPIL	Swivel modules with integrated dis- placement encoder DSMI
Double-acting	Double-acting	Rodless linear drives	Pneumatic linear	Swivel module with
piston rod drive DNC	piston rod drive,	DGP and DGPL. Suit-	drives DGPI/DGPIL	integrated po-
with a wide range of	available with	able for applications	with integrated dis-	tentiometer based
variants.	through piston rod	with high loads and	placement encoder,	on the swivel
The necessary dis-	or hollow through	tight installation	available with driver	module DSM.
placement encoder	piston rod and	spaces. The neces-	or slide.	– Sizes: 25, 40 mm
is attached to the	external guide unit.	sary displacement	– Diameter:	– Swivel angle
cylinder.	– Diameter:	encoder is attached	25 63 mm	(max.): 270°
– Diameter:	32/50 mm	to the cylinder.	– Stroke:	– Max. torque:
32 80 mm	– Stroke:	– Diameter:	225 2,000 mm	5 or 20 Nm
– Stroke:	100 500 mm	25 63 mm		respectively
100 735 mm		– Stroke:		
		225 2,000 mm		

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