

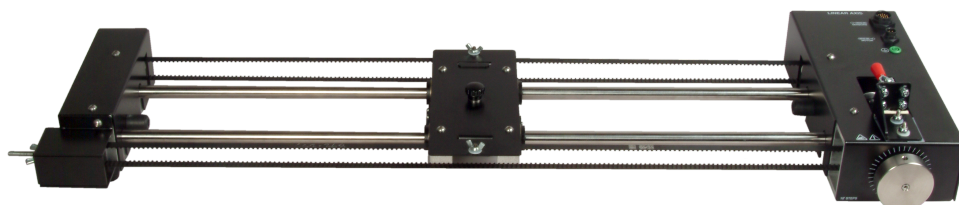
# Linear Axis

581463 (9323-00)

# FESTO

LabVolt Series

Datasheet



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## General Description

The Linear Axis positioning system includes a brushed dc servo motor (an optional brushless dc servo motor is available), a belt mechanism, and two optical encoders (one on the motor and the other on the travel cart).

Various dynamic variables can be modified: friction, loading, and backlash. An inertia wheel can be mounted directly on the motor shaft or used as a load on the travel cart. Backlash experiments can be performed by loosening the main strap and implementing control using either the motor encoder or the travel cart encoder. The travel cart straps can be easily disengaged from the motor shaft when students need to experiment only with the motor.

## Specifications

Parameter	Value
<b>Motor</b>	
Power Output	128 W
Nominal Voltage	60 V dc
Current at Continuous Stall Torque	4.14 A dc
Nominal Speed	3400 r/min
<b>Encoder (Motor)</b>	
Type	Incremental
Resolution	1000 lines (4000 counts)
<b>Encoder (Travel Cart)</b>	
Type	Incremental
Resolution	360 lines (1800 counts)
<b>Inertia Wheel</b>	
Moment of Inertia	0.0002563 kg·m <sup>2</sup> (0.876 lb·in <sup>2</sup> )
<b>Friction Brake Pad Material</b>	
	Felt
<b>Cart Travel Distance</b>	
	654 mm (25.75 in)
<b>Physical Characteristics</b>	
Dimensions (H x W x D)	165 x 1054 x 349 mm (6.50 x 41.50 x 13.75 in)
11.8 kg (26 lb)	11.8 kg (26 lb)

Reflecting the commitment of Festo Didactic to high quality standards in product, design, development, production, installation, and service, our manufacturing and distribution facility has received the ISO 9001 certification.

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