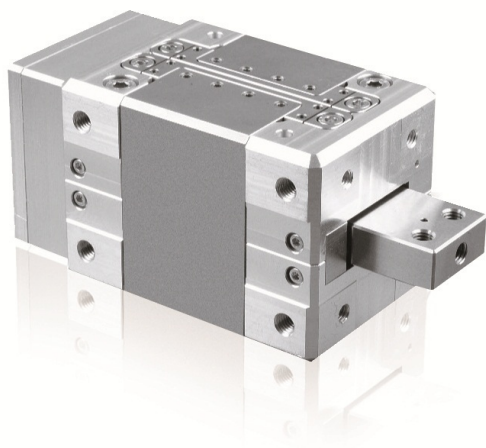


NEXLINE® Linear Actuator

High-Force PiezoWalk® Drive for Long-Range Nanopositioning

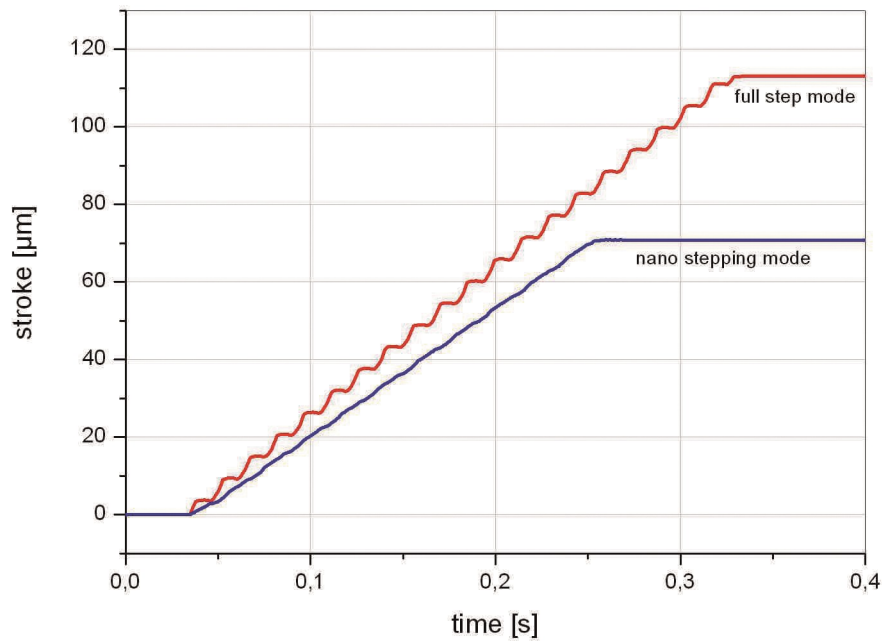


N-216

- Force generation up to 600 N
- Holding force up to 800 N
- Travel range 20 mm
- Integrated linear encoder with resolution 5 nm

Specifications

	N-216.101 / N-216.1A1	N-216.201 / N-216.2A1	Tolerance
Active axes	X	X	
Motion and positioning			
Travel range	20 mm	20 mm	
Travel range in analog mode	±3 µm	±3 µm	
Integrated sensor	N-216.101: none N-216.1A1: linear encoder	N-216.201: none N-216.2A1: linear encoder	
Open-loop resolution	0.03 nm	0.03 nm	typ.
Closed-loop resolution	- / 5 nm (N-216.1A1)	- / 5 nm (N-216.2A1)	
Velocity (10 % duty cycle, full step mode)*	1.0 mm/s	1.0 mm/s	max.
Velocity (100 % duty cycle, full step mode)*	0.6 mm/s	0.6 mm/s	max.
Velocity (100 % duty cycle, nanostepping mode)**	0.4 mm/s	0.4 mm/s	max.
Mechanical properties			
Drive force (active)***	300 N	600 N	max.
Holding force (passive)	400 N	800 N	min.
Drive properties			
Motor type	NEXLINE®	NEXLINE®	
Operating voltage	-250 V to +250 V	-250 V to +250 V	
Miscellaneous			
Operating temperature range	0 to 55 °C	0 to 55 °C	
Material	Aluminum, stainless steel	Aluminum, stainless steel	
Mass	1150 g	1250 g	



Motion mode comparison of a NEXLINE® actuator: The nanostepping mode provides a very smooth motion. Full step mode allows higher speed.

Ordering Information

N-216.101

NEXLINE® piezo-walking high-load actuator , 20 mm, 300 N, open loop

N-216.1A1

NEXLINE® piezo-walking high-load actuator, 20 mm, 300 N, linear encoder, 5 nm resolution

N-216.201

NEXLINE® piezo-walking high-load actuator , 20 mm, 600 N, open loop

N-216.2A1

NEXLINE® piezo-walking high-load actuator, 20 mm, 600 N, linear encoder, 5 nm resolution

Ask about custom designs!