

APPLICATIONS

- > Biotechnology
- > Medical devices
- > Defence
- > Microscopy
- > Laboratory automation
- > Materials characterization
- > Digital imaging
- > Recreational equipment
- > Photonics

KEY FEATURES

- > High speed up to 20mm/s.
- > Blocking at rest. Position is preserved when power is removed.
- > Resistance to external forces (shock, vibrations). It is ideal for embedded applications
- > Strong miniaturisation possibilities.
- > High resolution within the nanometre range if required.
- > Life time greater than 10^6 cycles
- > Severe environment compatibility (vacuum, cryogenic, clean environment...)
- > Few parts: cost-effective solution for series

RELATED PRODUCT

- > Stepping Piezo Controller SPC45



NON CONTRACTUAL PICTURE

SPECIFICATIONS

- > Preliminary data

PARAMETER	TYPICAL VALUE	UNIT
> Stepping mode		
Travel range	10	mm
Nominal Speed ^{(1) (2)}	10	mm/s
Max speed ⁽³⁾	20	mm/s
Typical step size ^{(1) (2)}	5 ... 30	µm
> Fine positioning mode		
Stroke ^{(1) (3)}	54.0	µm
Resolution ⁽³⁾	< 1	nm
Stiffness	0.50	N/µm

> Forces

Holding force without consumption	3	N
Nominal driving force ^{(1) (2)}	0.8	N
Max driving force ⁽³⁾	2	N

> Driver

Voltage pattern	Sawtooth-like	
Typical stepping frequency	700.00	Hz
Max voltage range	-20 ... 150	V
Typical peak current (pulsed) ⁽²⁾	0.10	A
Capacitance	0.25	µF
Nominal driver	SPC45	

> Mechanical properties

Lifetime ⁽⁴⁾	> 1 000 000	cycles
Height	15.00	mm
Width	30.00	mm
Length (in actuation direction)	30.00	mm
Mass	30.00	g

ANNOTATIONS

Guaranteed in lab environment

(1) Unloaded

(2) With nominal driver

(3) Custom version and driver

(4) Unloaded, 2mm stroke, nominal speed, 50% duty-cycle

MISCELLANEOUS

Operating temperature :	+10°C ... +70°C	
Connector :	8 pins ERNI connector	

INCLUDED ACCESSORIES

ERN 8 pins cable	30	mm
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OPTIONS

Longer stroke :	Please contact CTEC for more detail	
Non magnetic :	Please contact CTEC for more detail	
Magnetic Incremental sensor		

DRAWINGS

