hpower
high power actuators by piezosystem jena

ABOUT HPOWER

hpower actuators combine fastest response times in µs, superior kHz dynamics, high force generation in the range of tens of kN and nanometer precision in a way that is unmatched by any other linear driving system. The actuation can be obtained without any mechanical wear, making the actuators extremely durable. hpower products include ring and stack type actuators, as well as shakers, shock generators and high power amplifiers. hpower is the result of the collaboration between piezosystem jena and Piezomechanik GmbH and therefore combines centuries of piezo expertise with new innovations.

HPOWER AMPLIFIER POSICON 1000/3

Voltage amplifier with integrated position control

voltage amplifier Posicon 1000/3

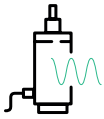
Concept

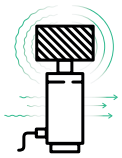
The voltage amplifier **POSICON 1000/3** is specially designed to be used with hpower actuators or other capacitive loads with a closed loop control. In this operating mode, the actuators can generate ≈ 30% more elongation because of the voltage range from -200 to +1000V. Coupling with **POSICON 1000/3**, hpower actuator can achive precise motion and high power at the same time.

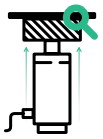
Product highlights

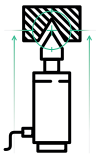
- closed loop amplifier for feedback control
- for high stroke, high force and precision applicatoins
- three channel amplifier
- output current: 8 mA
- output voltage: -200 ... 1000 V
- Noise ≈ 1mVpp

Applications:


MODAL ANALYSIS


VIBRATION CONTROL


MATERIAL TESTING


MECHANICAL ENGINEERING

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Technical data of PosiCon 1000/3

	unit	PosiCon 1000/3
output		
voltage range	V	-200 ... +1000
DC-offset range	V	-200 ... +1000
gain	-	100 @ “att“=”0.5/200 @ “att”=”1”
max. output current	mA	8
signal noise	mVpp	≈ 1 (with capacitive loads ≥100 nF)
plug	-	D-SUB 5W1
input		
voltage range	V	-2 ... +10 @ “att” =”0.5”/-1...+5 @ “att”=”1”
input resistance	kΩ	10
plug	-	BNC
monitor output		
voltage range	V	0...+5 (sensor: front panel); -2 ... +10 (piezo voltage:rear panel)
plug	-	BNC
voltage supply		
mains voltage	V AC	230/115 ± 10% @ 50/60 Hz
power switch	-	trigger switch / rear panel
fuse	-	800 @230V (long time lag) / 800 @ 115V (slow blow)
dimensions (w × d × h)	mm / ’’	260 ×320 ×160 / 10.3 ×22.6 × 6.3

Get in touch with us and we will help configure the best solution.

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