

## 12V40 series – OEM piezo controller

### Compact analog piezo controller

#### Concept:

The 12V40 and 24V40 piezo controller series from **piezosystem jena** is especially made for piezo electric actuators used in nanopositioning tasks for industrial applications. The 12V40 requires a main supply voltage of 12 VDC while the 24V40 requires a 24 VDC main voltage supply. The use of these piezo controllers offers piezoelectric actuator control with the highest resolution and without any time delay.

The piezo controller offers the user the choice to control a piezoelectric element manually or via analog modulation input with a signal of 0 to 10 VDC with a nearly unlimited step resolution. To support industrial use, all operational elements from the front panel are also available on the rear side. Based on the design and the small dimensions, the piezo controller 12V40 and 24V40 series are well suited for nanopositioning tasks for industrial applications as well as for simpler laboratory setups made for scientific applications.

#### Specials:

The piezo controllers in the 12V40 and 24V40 series have a robust metal casing. The casings are available as a screw slot version to support stand alone application and as a 19"-Rack mount version for system integration.

The DC offset level used to control the piezoelectric actuator is adjustable with a  $\frac{3}{4}$  turn potentiometer on the front side and by analog modulation input signal of 0 to 10 VDC.



Image: 12V40 (screw slot casing)

#### Product Highlights:

- 1-channel OEM piezo controller
- Compact dimensions
- Protected by a robust metal casing
- 40 mA permanent output current
- 12 VDC or 24 VDC main voltage
- Modulation input
- Monitor output

#### Applications:

- Pick & place automation
- OEM integration
- Valve and gripper technology
- Switching technology

## 12V40 series – OEM piezo controller

### Technical data:

OEM piezo controller		unit	12V40 (without sensor controller)		
description	-	12V40	12V40	24V40	24V40
part number	-	E-440-011	E-440-012	E-440-031	E-440-032
casing style	-	screw slot version	19"-rack mount module	screw slot version	19"-rack mount module
number of channels	-	1	1	1	1
display	-	no	no	no	no
main supply voltage	V	12VDC	12VDC	24VDC	24VDC
output voltage signal	V	-10...150V			
output current (permanent)	mA	40mA			
voltage noise	mV	< 0.3mV <sub>RMS</sub> @500Hz			
piezo connector	voltage	LEMO 0S.302			
	sensor	-	-		
sensor controller	-	no			
PC interface	-	no			
DC Offset	-	¾ turn potentiometer front panel			
modulation input	V	0....+10V (front and rear panel)			
modulation input impedance	Ohm	10kOhm			
monitor output impedance (typ.)	Ohm	100kOhm			
monitor output	V	-1...+15V front panel / 0...+10V rear panel			
connector main supply voltage	-	2.1mm Barrel type			
working temperature range	-	5°C to 35°C (41F to 95F)			
specials	-	power on delay, overdrive protection			
dimensions (lxwxh)	mm	182.5x130x45	182.5x105x48	182.5x130x45	182.5x105x48

Specifications subject to change without notice