

# Piezo Amplifier / Servo Controller

For 1 Axis, with Analog and Digital Interface



## E-665

- 360 mA Peak current
- Notch filter for higher bandwidth
- Position control for SGS and capacitive sensors
- Table for user-defined curves
- Integrated 24-bit USB interface (.CR, .SR)
- Network capability up to 12 axes (.CR, .SR)

## Specifications

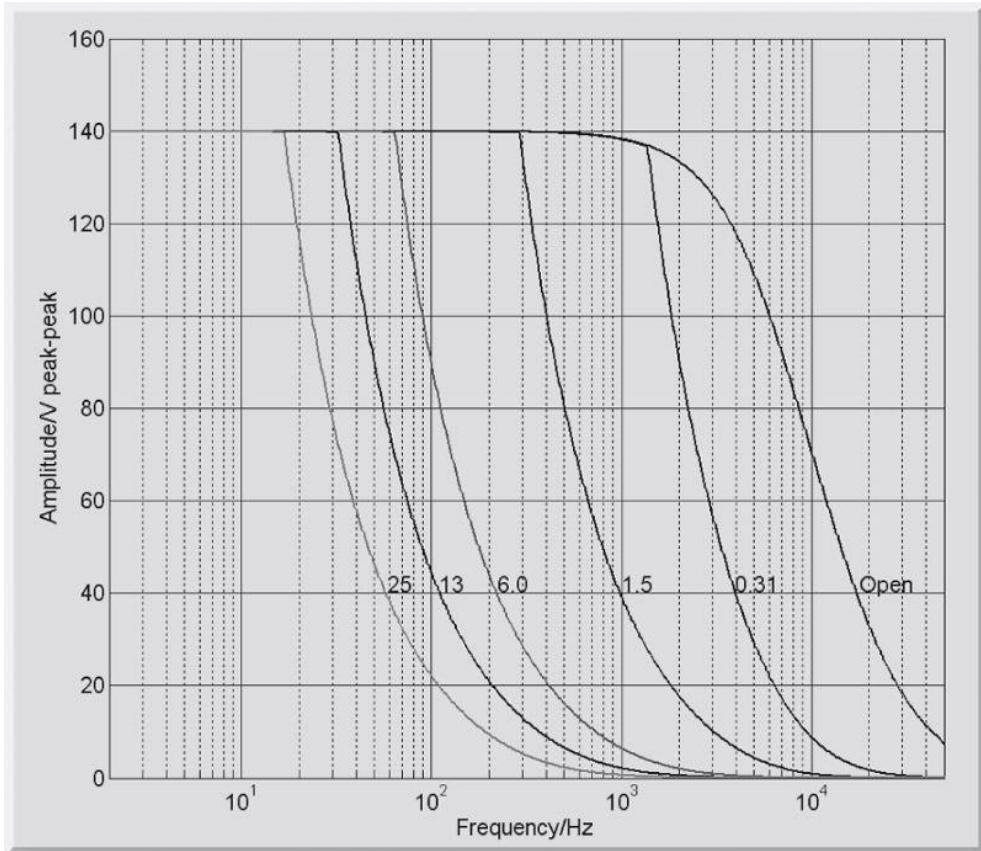
	<b>E-665.SR, E-665.SO / E-665.CR</b>
Function	Piezo amplifier and position servo controller
Axes	1
<b>Sensor</b>	<b>E-665.SR, E-665.SO / E-665.CR</b>
Controller type	P-I (analog) + notch filter
Sensor type	SGS (.S) / capacitive (.C)
<b>Amplifier</b>	<b>E-665.SR, E-665.SO / E-665.CR</b>
Input voltage range	-2 to +12 V
Output voltage range	-30 to +130 V
Peak current, < 20 ms	360 mA
Average output current	150 mA
Current limitation	Short-circuit proof
Noise, 0 to 100 kHz	0.5 (.S) / 4.0 (.C) mV <sub>rms</sub>
Voltage gain	10 ±0.1
Input impedance	100 kΩ

Interfaces and operation	E-665.SR, E-665.SO / E-665.CR
Communication interfaces*	USB, RS-232 (Sub-D 9 (m)), 24-bit A/D and 20-bit D/A
Piezo connection	LEMO ERA.00.250.CTL (.S) / Sub-D special (.C)
Sensor connection	LEMO EPL.05.304.HLN (.S) / Sub-D special (.C)
Analog input	BNC
Sensor monitor socket	BNC
Controller network*	up to 12 channels, parallel
Supported functions*	Wave table; 256 data points, up to 16 macros
Display and indicators	2 × 4½ digits, LED
DC offset setting	10-turn potentiometer, adds 0 to 10 V to the input voltage
Miscellaneous	E-665.SR, E-665.SO / E-665.CR
Operating temperature range	5 to 40 °C
Overheat protection	Deactivation at 80 °C
Dimensions	236 mm × 88 mm × 273 mm + handles
Mass	2.5 kg
Operating voltage	115 VAC / 230 VAC, 50-60 Hz (linear power adapter)
Max. power consumption	60 W

\* E-665.SO without digital interface

Ask about custom designs!

## Drawings / Images



E-665: Operating limits (open loop) with various piezo loads, capacitance values in  $\mu\text{F}$

## Ordering Information

### **E-665.CR**

Piezo amplifier / servo controller, 1 axis, USB, RS-232, -30 to 130 V, capacitive sensor

### **E-665.SO**

PIFOC Piezo amplifier / servo controller, 1 axis, -30 to 130 V, strain gauge sensor

### **E-665.SR**

Piezo amplifier / servo controller, 1 axis, USB, RS-232, -30 to 130 V, strain gauge sensor