

## HVP 1000/200

### *Voltage amplifier for pulse generation*

#### **Concept:**

The high voltage pulser **HVP1000/200** has been designed to drive special Piezocomposite Actuators or other suitable loads with very high charging currents for pulse-wise operation in a kind of "on-off" square-wave mode.

#### **Specials:**

The basic principle of the **HVP1000/200** is the charging of a capacitor ( $C \gg 100 \mu\text{F}$ ) with the necessary voltage. If triggered the capacitor will be disconnected from the power supply and discharged instantly by the Piezocomposite Actuator. A current of **200 A** flows for a short time. The voltage at the Piezocomposite Actuator **increases in a few  $\mu\text{s}$**  on the pre-set value.

The Piezocomposite Actuator can be connected via LEMO or laboratory plugs (SLS200). Alternative at the SLS200 plugs an ohmic resistor can be applied to adjust the rise time.



Image: HVP 1000/200

#### *Product highlights:*

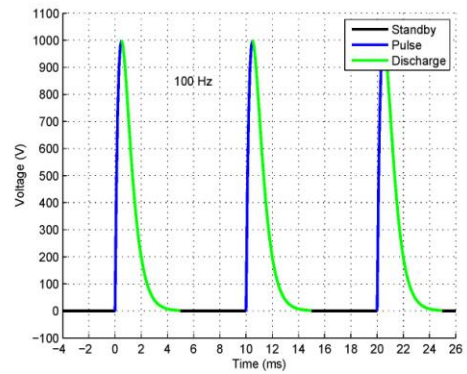
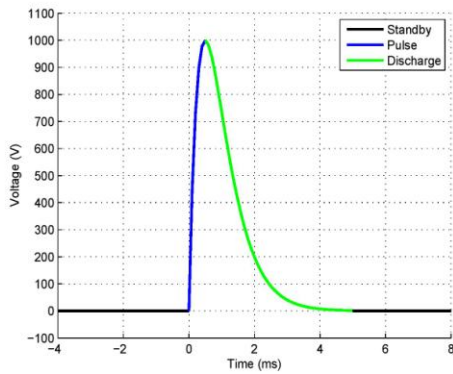
- Very high charging current for shortest rise times
- Alternative ohmic resistor to adjust the rise time

#### *Application examples:*

- Material testing
- Calibration of sensors
- Rapid actuation of ultra fast valves

# HVP 1000/200

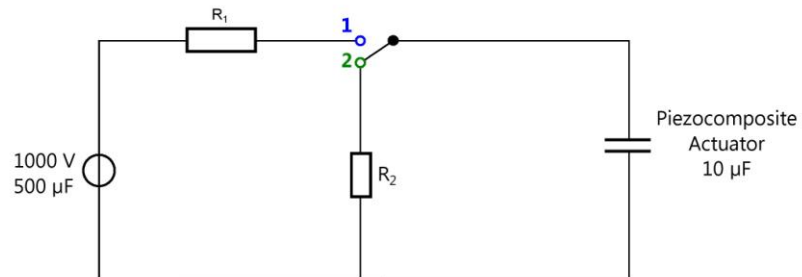
## Basic principle of HVP amplifiers



**Switch Position**

**1: Pulse**

**2: Discharge**



## HVP 1000/200

### Technical data

	unit	HVP 1000/200
<b>output</b>		
voltage	V	+40 ... +1000
max. current	A	200
charging resistor	$\Omega$	5
plug	-	LEMO, SLS200
<b>input</b>		
voltage range „extern“	V	0 ... +5
voltage range "MOD.IN"	V	LOW = 0; HIGH = 5
input resistance	k $\Omega$	1
plug	-	BNC
<b>monitor output</b>		
voltage range	V	0 ... +10
plug	-	BNC
<b>voltage supply</b>		
mains voltage	V AC	230 $\pm$ 10% @50/60 Hz
power switch	-	trigger switch/front panel
fuse	-	2 micro fuses 5x20 anti-surge fuse means 2A integrated into main socket
LED's	-	HV: the high voltage output is activated IL: automated switching off of the voltage output because of overheating or overload
dimensions (w x h x d)	mm/"	260x160x270 / 10.2x6.3x10.6