

HVP 300/20

Voltage amplifier for pulse generation

Concept:

The high voltage pulser **HVP 300/20** has been designed to drive special Piezocomposite Actuators from **piezosystem jena** or other suitable loads with high charging currents for pulse-wise operation in a kind of "on-off" square-wave mode.

Specials:

The basic principle of the **HVP 300/20** 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 **20A** flows for a short time. The voltage at the load **increases in a few μs** on the pre-set value. The load 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 300/20

Product highlights:

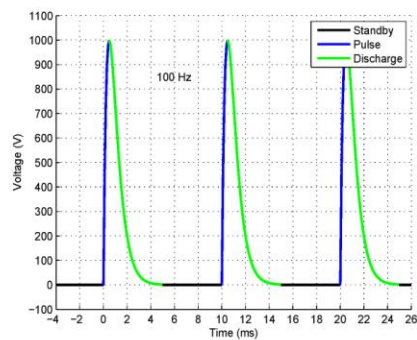
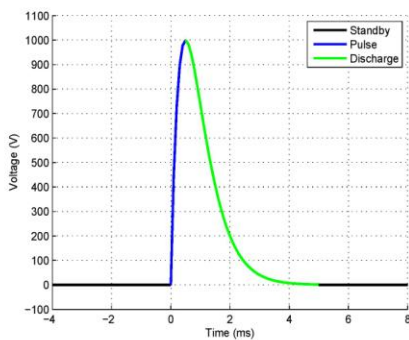
- High charging current for short rise times
- Alternative ohmic resistor to adjust the rise time

Application examples:

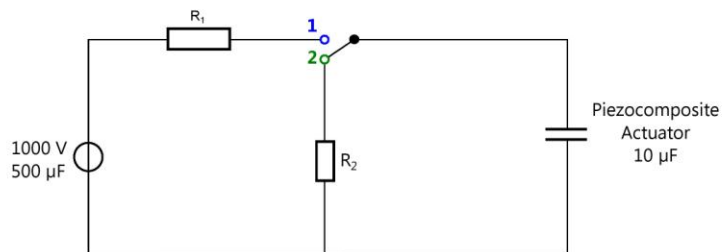
- Material testing
- Calibration of sensors
- Rapid actuation of ultra fast valves

HVP 300/20

Basic principle of HVP amplifiers



Switch Position
1: Pulse
2: Discharge



HVP 300/20

Technical data

	unit	HVP 300/20
output		
voltage	V	+40... +300
max. current	A	20
charging resistor	Ω	15
plug	-	LEMO, SLS200
input		
voltage range „extern“	V	0... +10
voltage range "MOD.IN"	V	LOW = 0; HIGH = 5
input resistance	kΩ	1
plug	-	BNC
monitor output		
voltage range	V	0... +3
plug	-	BNC
voltage supply		
mains voltage	V AC	230 ±10% @50/60 Hz
power switch	-	trigger switch/front panel
fuse	-	2 micro fuses 5 x20 anti-surge fuse means 1A integrated into main socket
LED's	-	HV : the high voltage output is activated IL: automated switching off of the voltage output because of overheat or overload
dimensions (w x h x d)	mm/"	260x160x270 / 10.2x6.3x10.6