

# HIGH REPETITION RATE PCKELS CELL DRIVERS – 2DP / DPB3

## Features

- HV pulse amplitude up to 3.1 kV
- Repetition rate up to 6 MHz
- HV pulse duration down to <1 ns
- HV pulse duration extension using pulse regeneration technique



Encased version of DPB3 series Pockels cell driver

CATALOGUE NUMBER OF DRIVER	2DP-1000-2.4-A1	2DP-2000-1.6-A1	DPB3-2500-3.1-A1	DPB3-3000-2.6-A1	2DPB3-4000-1.7-A1	2DPB3-6000-1.3-A1
Maximal HV operating voltage	2.4 kV	1.6 kV	3.1 kV	2.6 kV	1.7 kV	1.3 kV
Maximal HV repetition rate	1000 kHz	2000 kHz	2500 kHz	3000 kHz	4000 kHz	6000 kHz
Pulse duration	0 – 5000 ns		100 – 5000 ns		0 – 5000 ns	
HV pulse rise time, typical	< 6.5 ns	< 6 ns	< 9.5 ns	< 8.5 ns	< 10.5 ns	< 8.5 ns
HV fall rise time, typical	< 6.5 ns	< 6 ns	< 9.5 ns	< 8.5 ns	< 10.5 ns	< 8.5 ns
Output polarity	Positive		Bipolar		Positive	
HV power consumption	< 180 W	< 130 W	< 360 W	< 325 W	< 360 W	< 330 W
24 V power consumption	< 14 W	< 18 W	< 10 W	< 10 W	< 6 W	< 10 W
Recommended HV power supply model	HV-200 or HVS100-2x120		HV-2x200		HV-400	
Dimensions	See Fig. 17			See Fig. 18		
Cooling	Water					

Driver needs to be mounted on heatsink unless it is cooled by water. Driver's base plate temperature needs to be lower than 35 °C in all regimes of operation. Power consumption for 6 pF load. Voltage or repetition rate derating is necessary if capacitance of your Pockels cell is higher. Contact vendor for details.

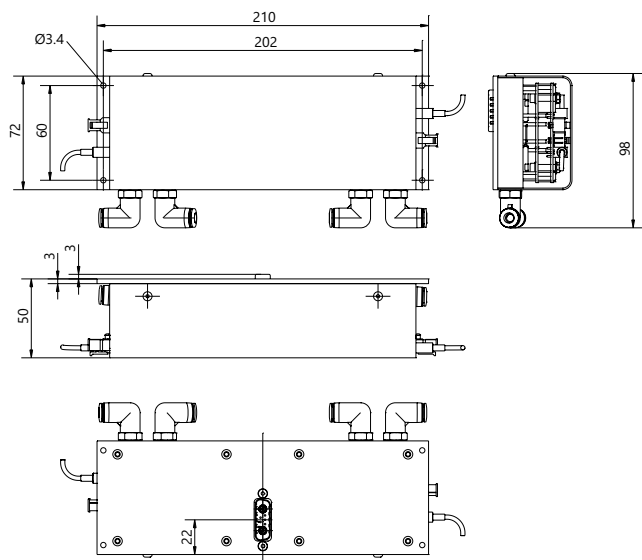


Fig. 17. Outline drawing of encased version 2DP series Pockels cell drivers

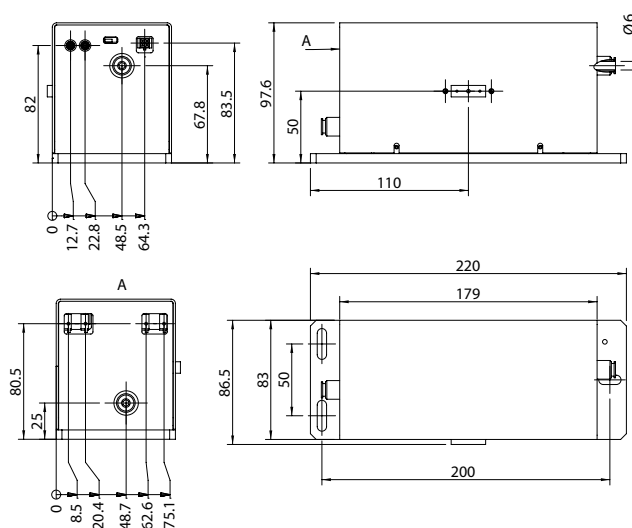


Fig. 18. Outline drawing of encased version 2DPB3/DPB3 series Pockels cell driver