

**PC • D-compact**

**KD\*P POCKELS CELLS**



D-compact/12



D-compact/9



PC12SR



PC10S

- Economically priced
- Compact size
- Low absorption
- Transmission from 400 nm to 1100 nm

**APPLICATIONS**

- Q-switching of the laser cavity
- Cavity Dumping

Pockels cells are used to change the polarization state of light passing through it when a voltage is applied to the electrodes of electro-optic crystals such as KD\*P. When used in conjunction with polarizer, Pockels cells can be used as fast optical switches.

Typical applications include Q-switching of the laser cavity, laser cavity dumping and coupling light into and from regenerative amplifiers. KD\*P based Pockels cells are routinely used for Q-switching applications

from the 400 nm to about 1.1 μm. Most of commercial flashlamp pumped Nd:YAG lasers and low repetition rate DPSS Nd:YAG lasers are equipped with KD\*P based Pockels cell for laser cavity Q-switching. Electro-optical KD\*P crystals have high laser power resistant dielectric AR coatings. Additionally PC12SR and D-compact series Pockels cells have AR coated windows for improved lifetime and protection in less user friendly environment.

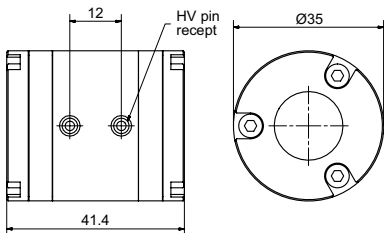
Model	PC5S	PC5D	PC10S	PC12SR	D-compact/9	D-compact/12	D-mini/8	D-mini/9
Clear aperture, mm	4.5×4.5	4.5×4.5	9.5×9.5	Ø11	Ø8	Ø11	Ø7	Ø8
Crystal size, (W×H×L) mm	5×5×16	5×5×16	10×10×25	Ø12×24	Ø9×20	Ø12×24	Ø8×12	Ø9×20
Quantity of crystals	1	2	1	1	1	1	1	1
V/2 voltage, kV DC	<6.5 <sup>1)</sup>	<3.4 <sup>1)</sup>	<6.8 <sup>1)</sup>	<6.8 <sup>1)</sup>	<6.8 <sup>1)</sup>	<6.8 <sup>1)</sup>	<5 <sup>2)</sup>	<6.8 <sup>1)</sup>
Capacitance, pF	1.5	3	4	6	6	6	3	6
Optical transmission, %	>97							
Contrast ratio <sup>3)</sup>	> 1:2000	>1:1000	>1:2000	>1:2000	>1:2000	>1:2000	>1:2000	> 1:2000
Cell size, mm	18×14×25	23×16×52	22×18×33	Ø35×41.4	Ø25.4×35	Ø25.4×39	Ø19×19	Ø19×25.4

<sup>1)</sup> At 1064 nm. <sup>2)</sup> At 800 nm.

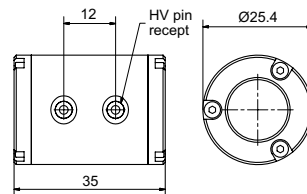
<sup>3)</sup> Measured by crossed polarizers method.

Specifications are subject to change without advance notice.

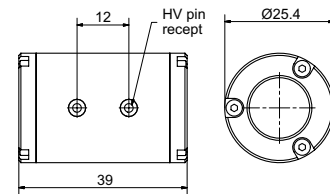
All crystals are antireflection coated. Damage threshold >5 J/cm<sup>2</sup> for 10 ns pulses at 1064 nm.



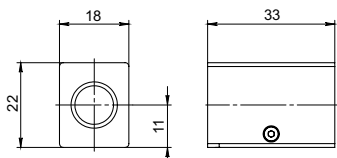
Outline drawing of PC12SR



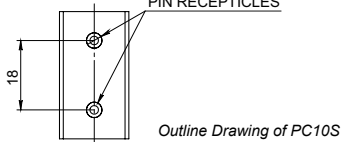
Outline drawing of D-compact/9



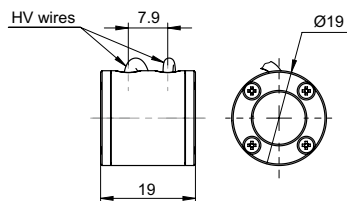
Outline drawing of D-compact/12



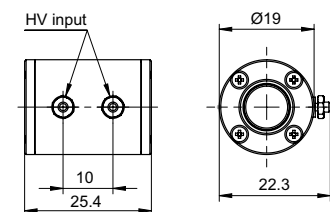
PIN RECEPTILES



Outline Drawing of PC10S



Outline drawing of D-mini/8



Outline drawing of D-mini/9

**RELATED PRODUCTS**

DQ High Repetition Rate Pockels Cell Driver for Q-Switching

See page 3.6



DQF Pockels Cell Driver for Q-Switching for Flashlamp Pumped Lasers

See page 3.13

