

## PKS 1

### Mirror tilting system

#### Concept:

The mirror tilting system series **PKS 1** has been developed for fast and fine mirror adjustment. Available for **½-inch** and **1-inch** mirrors, the system is designed for flexible use.

Especially for laser beam stabilization the series **PKS 1** can be integrated into the beam line easily.

The compact design and the high stiffness are perfect for dynamic applications.

Laser beam steering can be realized in near real time.

#### Specials:

The piezo driven range of fine adjustment of **1 mrad** can be offset in a range of  $\pm 2^\circ$  by using the fine-thread thumb screws.

The controlling voltage range is -20V to +130V.

The series **PKS 1** is adaptable to vacuum conditions.

#### Mounting:

The stage body can be mounted using screws to affix it. Two holes for M4 screws are located in the stage body.

A ½-inch mirror (Ø12.7mm) for the PKS 1-½" and a 1-inch mirror (25.4mm) for the PKS 1-1" can be easily mounted on the system by using the set screw or they can be glued directly.



Image: PKS 1

#### Product highlights:

- compact design
- orthogonal tilting axes
- available for ½" and 1" mirrors
- high stiffness
- adjustment range 1 mrad
- manual offset  $\pm 2^\circ$

#### Application examples:

- laser technology
- beam alignment
- scanning systems
- fine adjustment of optical mirrors

#### Options:

- vacuum version

## Product name

### Technical data

	Unit	PKS 1-1/2"	PKS 1-1"
Part no.	-	K-700-00	K-701-00
axes	-	Ø X/Ø Y	
tilting angle piezo drive open loop	mrad	1	
tilting angle manual	°	±2	
capacitance (±20%)*	µF	0.8	
resolution open loop**	µrad	0.002	
resonant frequency @ 10g	Hz	450/450	900/900
dimensions (w x h x d)	mm	48 x 36 x 30	52.5 x 36 x 25.5
max. mirror diameter***	"	1/2"	1"
connector	-	LEMO 05.302	
material	-	stainless steel	
weight	g	84 (without mirror)	140 (without mirror)

\* typical value for small electrical field strength

\*\* The resolution is only limited by the noise of the amplifier and metrology.

\*\*\* mirrors are not included

### Drawing

