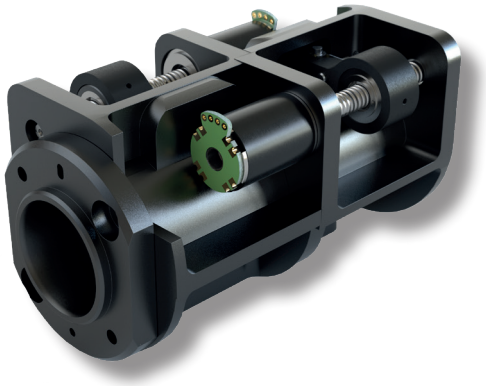
ROLLING LENS ACTUATOR



KEY FEATURES

- Accurate positioning system
- Low friction motorized mechanism
- Innovative and compact mechanical design
- Key solution for lens displacements with perfect alignment
- Bespoke design

OVERVIEW

This optomechanical platform, is a highly accurate motorized solution for the linear displacement of lenses sharing a common optical path. Thanks to an innovative mechanical design composed of two precise guiding bearing perfectly adjusted inside a common shared hole, amazing lateral positioning repeatability are achieved. Thought as a technical solution for any optical system requiring very low optical axis deviation and high compactness, a large panel of customizations are possible and welcomed.

TECHNICAL SPECIFICATIONS

Specification		
Number of lens holder		2
Max Stroke (per lens)	[mm]	7.5
Max Stroke (per lens)	[mm]	3
Max. lens diameter	[mm]	12.7 (½")
Optical aperture	[mm]	11
Z- Pos. unidirectional repeatability	[µm]	+/- 5
X,Y lateral repeatability	[µm]	+/- 1
Lens holder tilts repeatability	[mrad]	0.1
X, Y mismatch accuracy between both lens holders	[µm]	< 5
Nominal Speed	[mm/s]	5
Motor type		Stepper
Motor reference		Faulhaber DM1220
Drive mechanism		Ball screws or cam
Motor regulation		Open loop
Frame design	-	On request
Mechanical dimensions	[mm]	78 x 42 x 42

Remark: Device under development, values subject to modification
* Please feel free to contact us for any customization request