



Rotation Stage

M101

Features

Hall-sensor controlled automatic zero-positioning

Standard SM1-compatible mount for optical elements

Angular resolution $\leq 0.01^\circ$

Extremely low backlash $\leq 0.1^\circ$

Applications

Mirror positioning

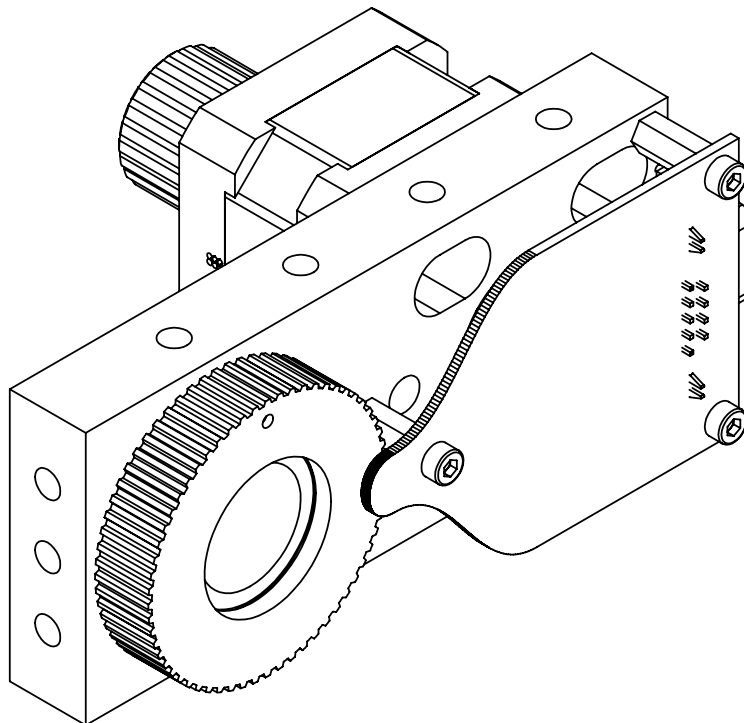
Polarization adjustment

Grating positioning

Neutral density filter positioning

Description

The LK-Instruments M101 is a robust and ball bearing mounted rotation stage designed for carrying optical elements. It can be mounted to the experiment as setup from any axis with standard M6 screws, headless screws, posts and post holders.



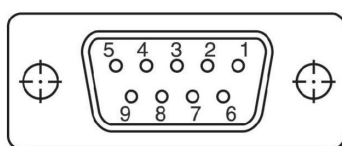
Specifications

Parameter	Conditions	M101A			M101B			Unit
		Min	Typ	Max	Min	Typ	Max	
Current		0.1	1.3	1.33	0.1	1.65	1.68	A/Phase
Holding torque	Subst. = 1, Curr. = 1.33A		7			14.6		Ncm
Step angle	Subst. = 1		0.3			0.3		Degree
Step angle accuracy			1.7			1.7		%
Backlash			0.1			0.1		deg
Gear ratio			3			3		
Velocity	Subst. = 1		150			150		deg/s
Load capacity								kg
Weight			0.504			0.634		kg
Temperature range		-10		50	-10		50	°C

MISSING: diagram: holding torque vs. substeps.

Connection Diagram

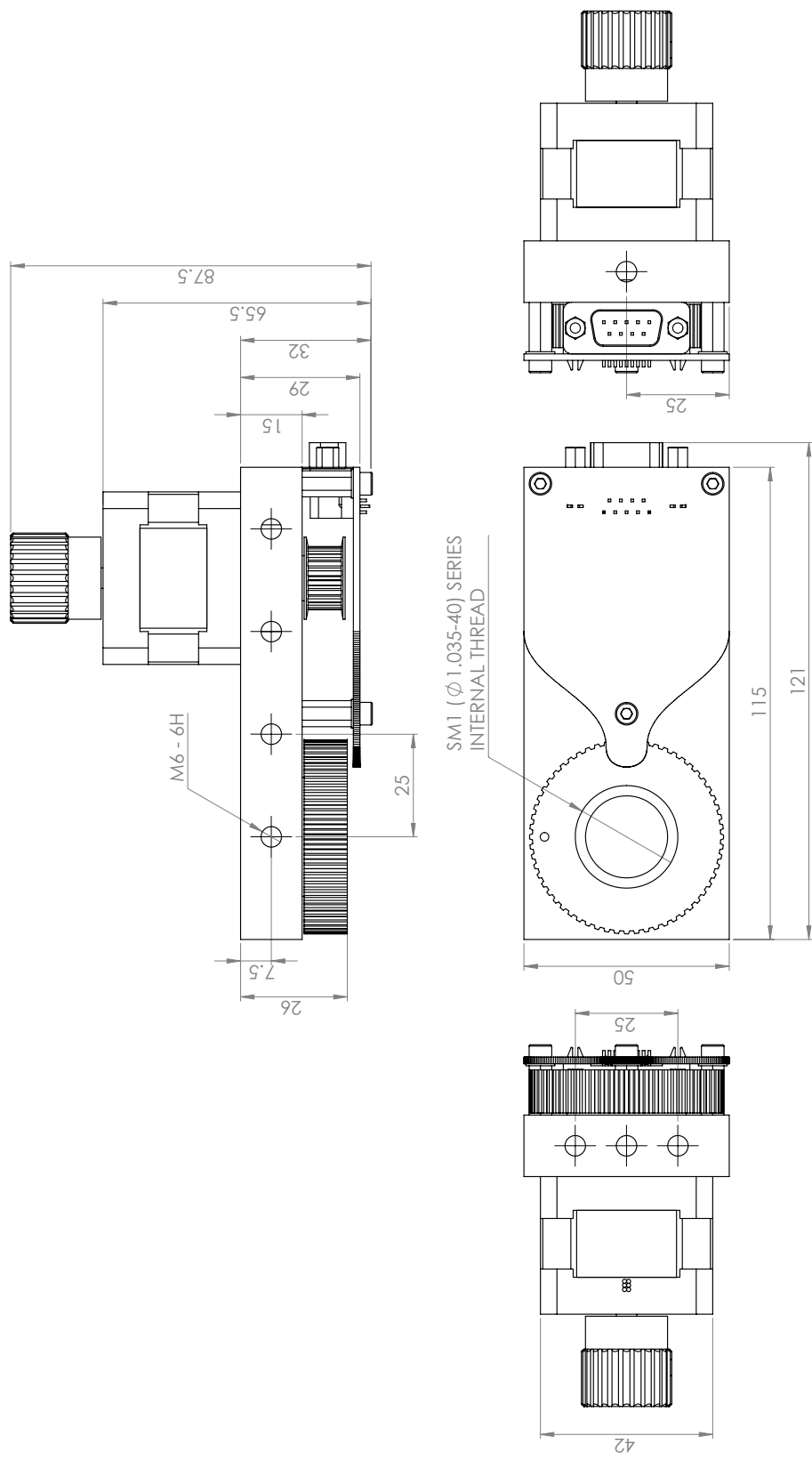
D-SUB 9 female connector



Front view

Pin	Function
1	Phase B1
2	Phase B2
3	Phase A2
4	Phase A1
5	Ground
6	+5V
7	Sens 1
8	Sens 2
9	Sens 3
Shield	NC

Outline Dimensions



All dimensions in millimeters

Ordering Information

Model	Description
M101A	with knob
M101ANK	without knob
M101B	with knob
M101BNK	without knob