



Piezo LEGS® XY Precision Stages with Aperture



Key features

- $X \pm 8$ mm and $Y \pm 8$ mm
- 6 N or 20 N stall force per axis
- 40 nm encoder resolution per axis
- Central optical aperture
- 2 kg load capacity
- Two-axis PMSD402 control

Product Description

The Piezo LEGS® XY Precision Stage family combines two closed-loop linear axes in a compact, integrated platform with a central aperture for optical or analytical access.

Both models provide ± 8 mm travel in X and Y, 40 nm encoder resolution per axis and a choice of 6 N or 20 N stall force per axis. The integrated construction avoids

the additional height and mechanical complexity associated with stacking two separate single-axis stages.

Each axis is driven directly by Piezo LEGS® technology and measured by an integrated optical encoder. The direct-drive design supports precise, backlash-free X-Y correction and allows the selected position to be maintained without continuous motor power.

Application:

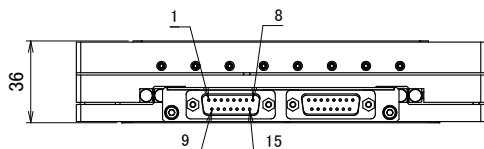
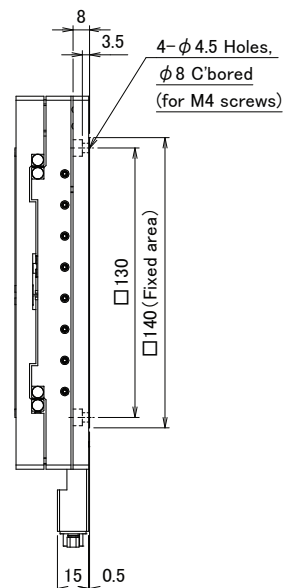
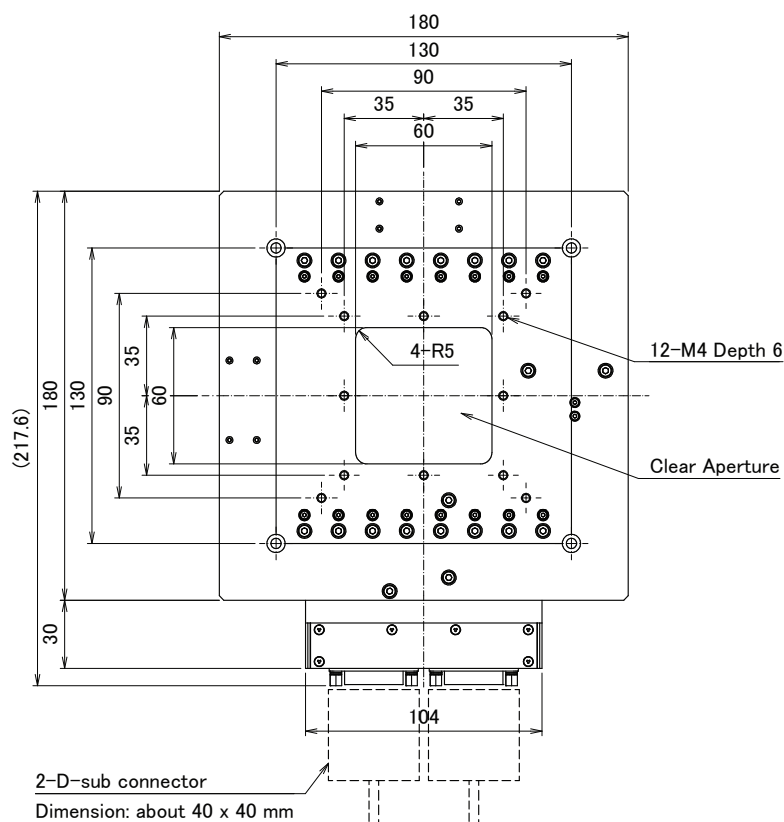
- Microscopy and specimen positioning
- Optical imaging with through-stage access
- Wafer, sensor and detector alignment
- Precision mapping and metrology
- Laser and photonics alignment



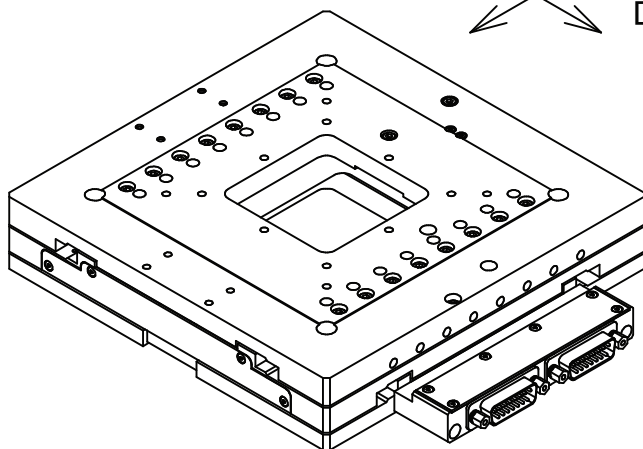
External Dimensions

LLS-XY-06-16-C-E40

LLS-XY-20-16-C-E40



Moving
Direction



Technical specifications

Model	Motion range	Stall force	Load	Max Speed	Weight
LLS-XY-06-16-C-E40	X ± 8 mm; Y ± 8 mm	6 N per axis	2 kg	5 mm/s	2.5 kg
LLS-XY-20-16-C-E40	X ± 8 mm; Y ± 8 mm	20 N per axis	2 kg	5 mm/s	2.5 kg

Shared platform specification

Specification	Family specification
Encoder resolution	40 nm
Positioning repeatability	± 40 nm
Body material	Aluminium
Recommended controller	PMSD401
Stage cable	CKS-20, 2 m; inclusion quantity to be confirmed

