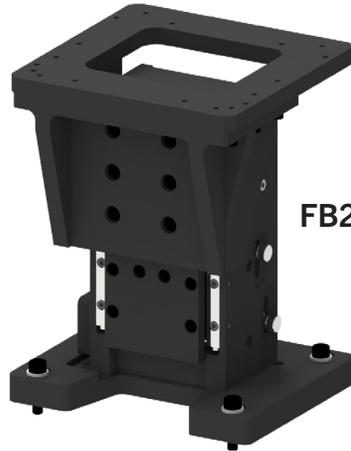


Z Axis

FB203 Series Motorized Linear Axis and Focus Blocks



FB203/E



FB204/E



FB205/E



FB206/E

The FB203 single axis stepper motor drive provides a versatile yet highly precise positioning solution for a variety of applications, featuring numerous mounting points for ease of integration. It forms the core of numerous focus block configurations, which have been designed by Prior for use in various microscopy applications to provide accurate and repeatable movement for focusing, sample translation and Z-stacking. The high load capacity of the drive allows Prior Scientific stages of various sizes to be mounted directly, in order to provide a standalone XYZ three axis stage system, fully controlled by Prior's ProScan III controller. Upright (FB204, FB205) and transmitted light/inverted (FB206) microscopy configurations are supported. Customized focus block configurations are also easily designed using the FB203 as the base, which is ideal for OEM manufacturing and optical-table-based microscopy systems.

Key Features

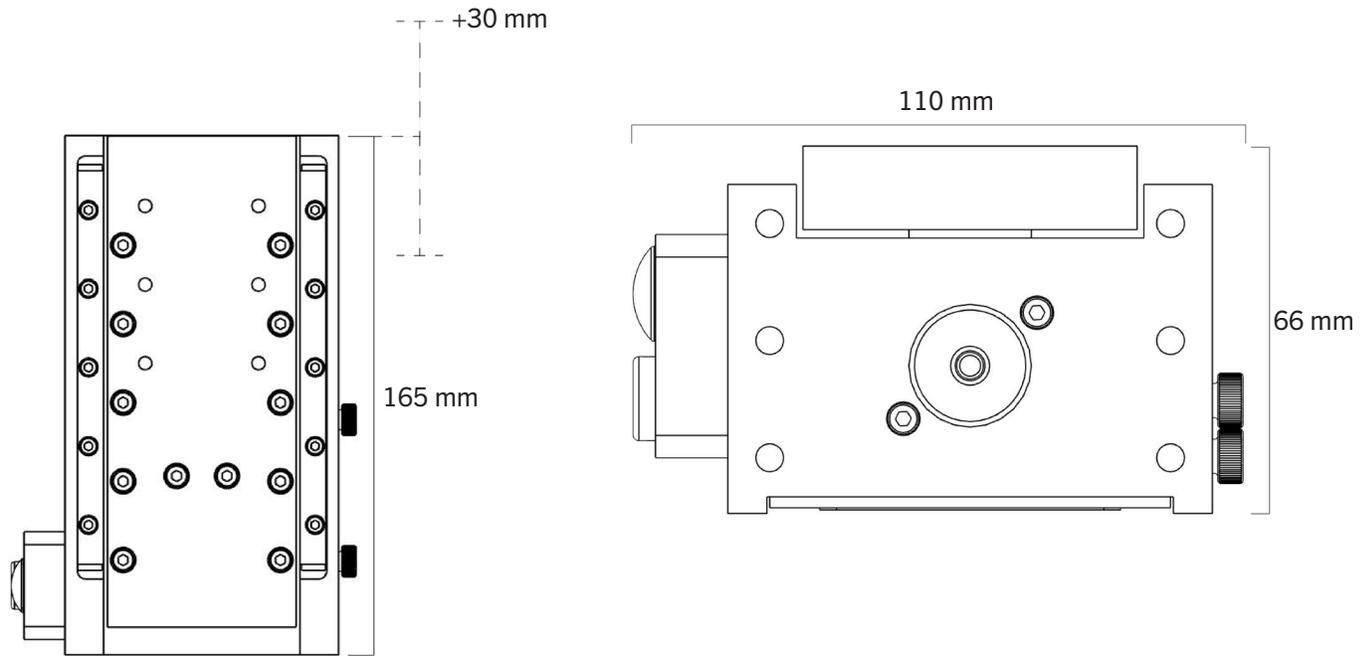
- Encoded and non-encoded versions
- 38 mm travel range
- Directly compatible with most Prior Scientific XY stages
- High precision ballscrew drive
- Adjustable limit switches

Applications

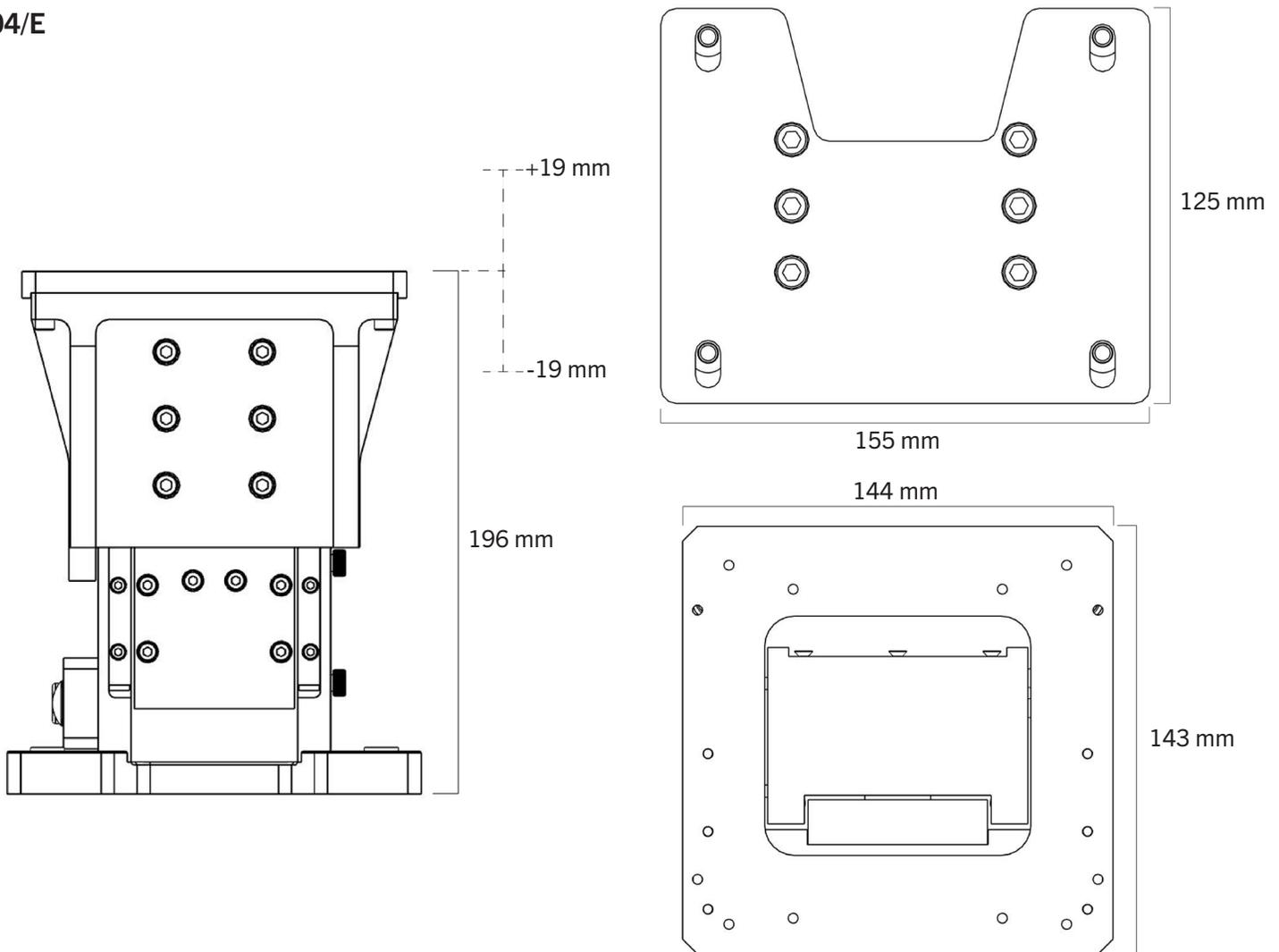
- Industrial and semiconductor inspection
- Life science imaging
- Customized optical table microscopy systems
- Laser based microscopy
- System integration and OEM manufacturing

Dimensions

FB203/E

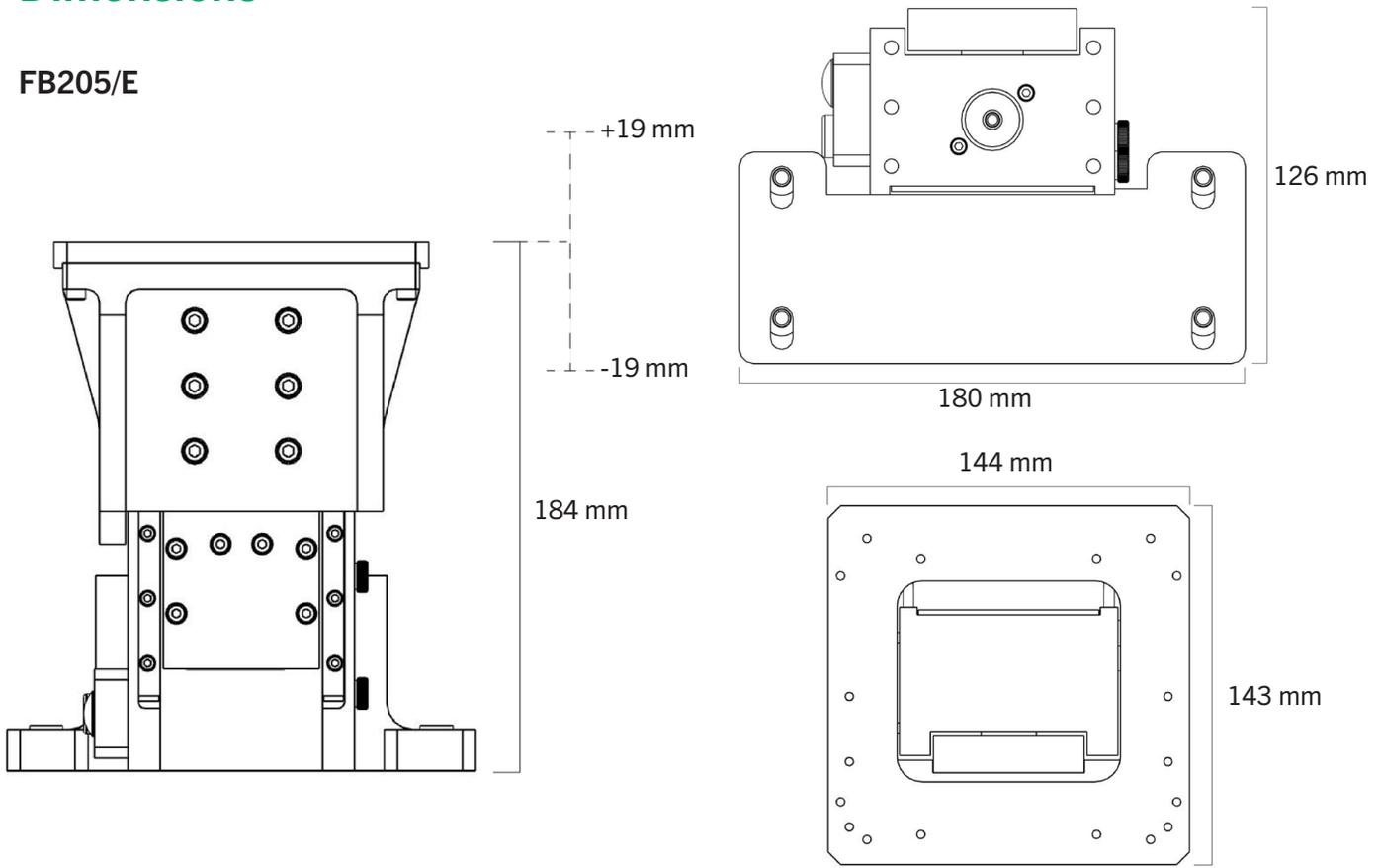


FB204/E

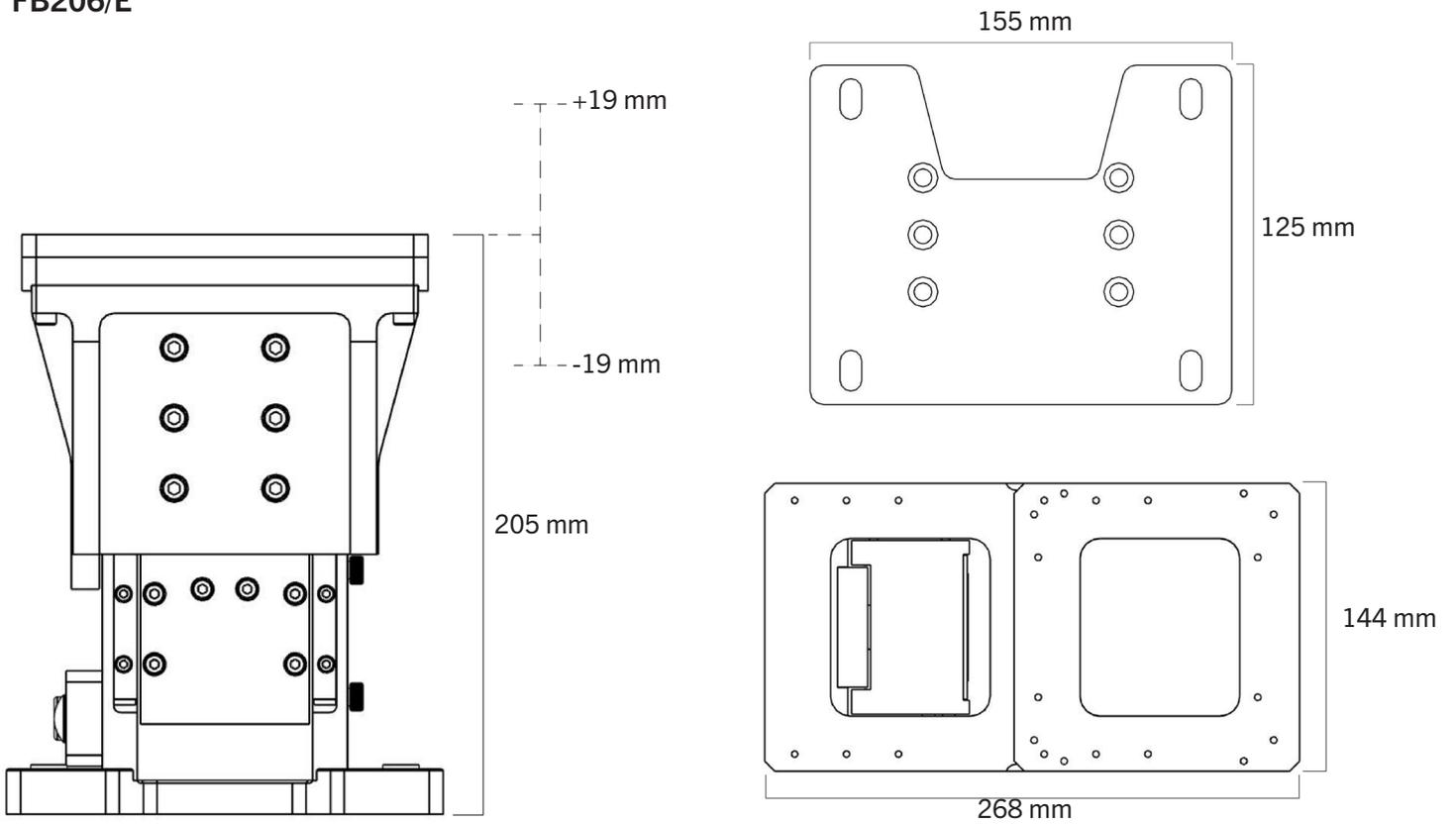


Dimensions

FB205/E



FB206/E



Specifications

	Non-encoded	Encoded
Travel range	38 mm	38 mm
Resolution ¹	20 nm	100 nm
Linearity ²	+/- 3.5 µm	± 3.5 µm
Maximum load	14 kg	14 kg
Repeatability ²	+/- 0.7 µm	+/- 0.3 µm
Accuracy ²	< 5 µm	< 5 µm
Maximum speed ³	14 mm/s	14 mm/s
Minimum speed ³	1 mm/s	1 mm/s
Cable length	1 m	1 m

¹ Defined as minimum motor step resolution for non-encoded devices, encoder resolution for encoded devices

² Over full travel

³ Under maximum load

All list specifications apply to FB203, FB204, FB205, FB206 and their corresponding encoded versions when used with a ProScan III controller.

Ordering Information

Part Number	Description
FB203	Single axis stepper motor drive, non-encoded, no brackets, no base
FB204	Focus block, non-encoded, brackets for upright reflected light microscopy, standard base
FB205	Focus block, non-encoded, brackets for upright reflected light microscopy, offset base
FB206	Focus block, non-encoded, brackets for upright transmitted light and inverted microscopy, standard base
FB203E	Single axis stepper motor drive, encoded, no brackets, no base
FB204E	Focus block, encoded, brackets for upright reflected light microscopy, standard base
FB205E	Focus block, encoded, brackets for upright reflected light microscopy, offset base
FB206E	Focus block, encoded, brackets for upright transmitted light and inverted microscopy, standard base

Contact Prior Scientific before ordering an encoded system with a ProScan III controller which will also control a HLD117 linear stage.

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