

# Picolis™

## Integrated Picomotor™ Stage with Quasi-Absolute Encoder



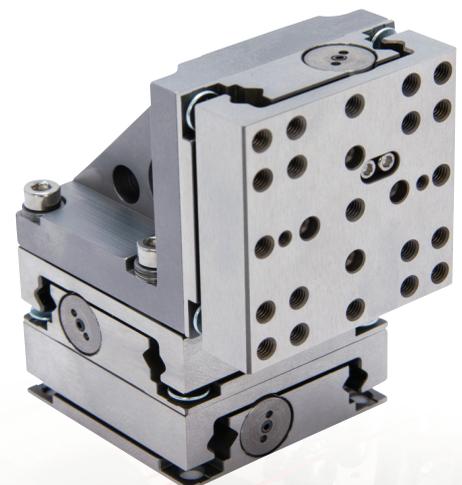
The Picolis family of compact linear stages incorporates our Picomotor actuator technology into one simple precise solution. Our popular Picomotor, with its set and forget technology is directly coupled to the moving carriage with no intermediate mechanism to offer the ultimate in stability and rigidity of a 37.5 x 37.5 x 13mm platform. The Picolis features 15mm travel, <30nm MIM, and >7N axial load capacity in a vertical configuration. The thermally matched stainless steel design and precision manufactured bearing surfaces provide ripple-free and low friction linear travel. The Picolis can be used with the current Picomotor controller/drivers.

With the addition of a quasi-absolute encoder, the closed-loop Picolis stage significantly reduces time searching for the absolute positioning after a power cycle. Small movement of the stage on the order of 600µm is required to find the absolute position, but homing or large movements are not necessary.

When you need fine control of your laser alignment, precise set and forget nozzle and optics adjustments on your flow cytometry instruments, or remote laser correction in your medical tools, the Picolis is the ideal solution due to its precision and stability.

- Picomotor set and forget technology
- Compact linear stage with 15mm travel
- Push force >7N
- Quasi-absolute encoder
- 1 µm resolution position
- Configurable for XYZ stacking

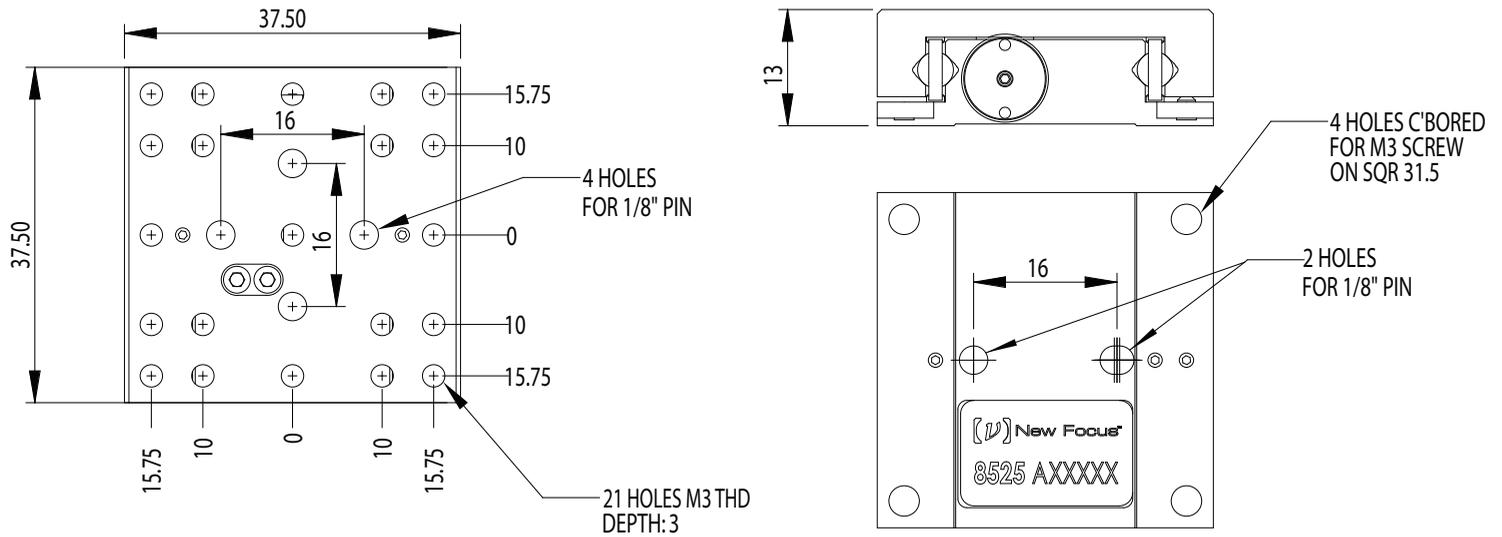
Specifications	8525	8535-CL
Dimensions (mm)	37.5 x 37.5 x 13	37.5 x 37.5 x 13
Travel Range (mm)	15	15
Minimum Incremental Motion (nm)	<30	<30
Motorized Axes	X	X
Feed Back Resolution	N/A	1µm
Position Accuracy (Full Travel)	N/A	+/-3µm
Repeatability	N/A	+/- 1µm
Vertical Load Capacity, Mount Vertically (+Cx)	7	7
Normal Load Capacity (N)	100	100
Cable Length [ft. (m)]	7 (2.1)	7 (2.1)
Environment	Regular	Regular
Thread Type	M3	M3
Control Type	Open Loop	Closed Loop
Weight	105 g	105 g
RAVE Connector Type	RJ22 4-pin	RJ22 4-pin
Encoder Connector Type	N/A	DB-15
Encoder Type	N/A	Quasi-Absolute



XYZ Picolis™ stack

# PICOLIS™ INTEGRATED PICOMOTOR LINEAR STAGE

## Picolis Dimensions (mm)



## Additional Ordering Information

Model	Description
8520	Right Angle Bracket
8521	Base Plate
8742-4-KIT	Four-Axis 8742 Picomotor Controller/Driver Kit
8743-CL-2-KIT	Four-Axis 8743 Picomotor Controller/Driver Kit
8712	PCB-Mountable Single-Axis Picomotor™ Driver
8758	Hand Control Pad for 874X Picomotor Controller/Drivers
8745-PS	Power Supply, 8742 and 8743-CL Controller/Driver, 12V
8745-STK-KIT	L-Shaped Stacking Plate Kit, 8742 and 8743-CL Controller/Driver
8745-MTG-KIT	Optical Table Mounting Plate Kit, 8742 and 8743-CL Controller/Driver
8758-MTG-KIT	Optical Table Mounting Plate Kit, 8758 Hand Control Pad



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