

# [Standard] Horizontal Surface Z-Axis, Feed Screw / Linear Ball Slide

# [High Precision] Dovetail Slide, Rack & Pinion / Cross Roller

## Points on Similar Product Comparison | Parallelism: 100μm

P.1972

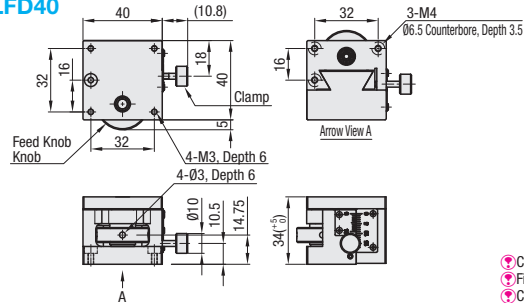
■Features: Horizontal Surface Z-Axis Type with feed screw. This is superior to Rack & Pinion Type in load capacity. Space-saving is achieved by limiting the position of clamp/scale to the right side face.

### Horizontal Surface Z-Axis, Feed Screw

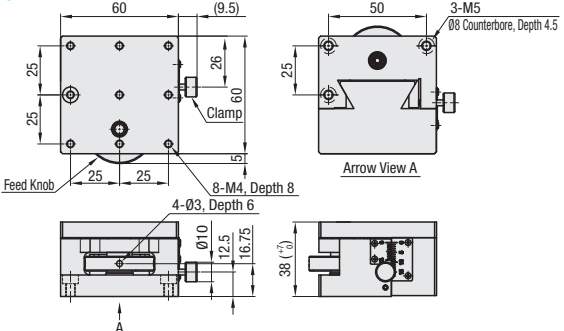


RoHS10

### ZLFD40



### ZLFD60



- Clamp and scale are provided on the right side face in the front.
  - Fix the bottom plate at 3 points.
  - Counterclockwise rotation of the knob elevates the stage surface.
- Material: Aluminum Alloy  
Surface Treatment: Black Anodize

### Z-Axis Stages

High Precision Stage Existing Product: ZLFG (P.1972), ZLPG (P.1973)

Part Number		Stage Surface (mm)	Travel Distance (mm)	Travel per Rotation (mm)	Parallelism (μm)	Load Capacity (N)	Weight (kg)	Unit Price
TYPE	No.							
ZLFD	40	40x40	+5	0.5	100	29.4	0.15	
	60	60x60	+7	0.5	100	98.1	0.37	

Ordering Example

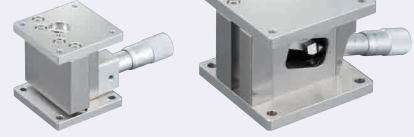
Part Number

ZLFD40

■Features: Z-Axis Stages with the stage top rising/lowering horizontally. Best suited for setup changes and simple focus adjustments.

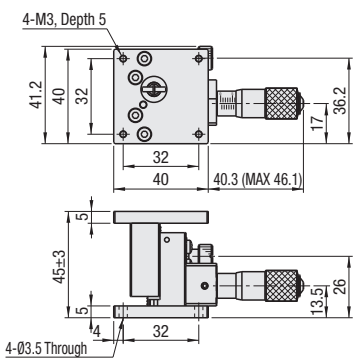
### Horizontal Z-Axis, Linear Ball Slide

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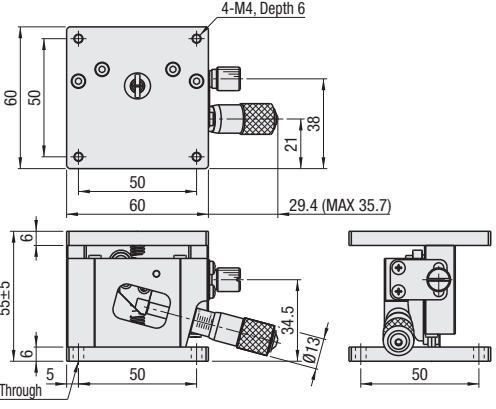


Accessory: Stainless Steel Hex Socket Low Head Cap Screws ZLLB40 (M3-10, 4 pcs.), ZLLB60 (M4-12, 4 pcs.)

### ZLLB40



### ZLLB60



Material: Steel  
Surface Treatment: Electroless Nickel Plating

### Z-Axis Stages

High Precision Stage Existing Product: ZLPGS (P.1972), ZLPG (P.1973)

Part Number		Stage Surface (mm)	Travel Distance (mm)	Load Capacity (N)	Resolution (μm/division)	Parallelism (μm)	Weight (kg)	Unit Price
Type	No.							
ZLLB	40	40x40	±3.0	29.4	≈ 5	80	0.3	
	60	60x60	±5.0	49.0	≈ 10		0.7	

Though having a repeatability, the lift may misalign with the scale graduation depending on the stroke, due to the principle of leverage used for the structure. Use the micrometer head scale for reference only.

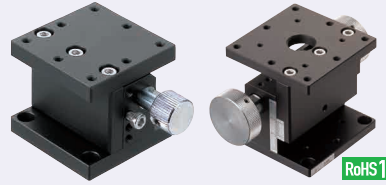
Ordering Example

Part Number

ZLLB40

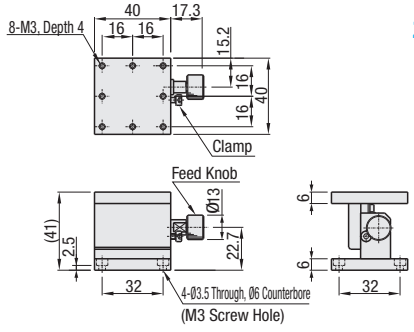
■Features: Rack & Pinion Stages with horizontal surface moving vertically.

### Horizontal Surface Z-Axis Stages, Rack & Pinion



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### ZLFG40



- Vernier scale will be on the opposite side of clamp mounting side.
- Forcibly tightening the clamp with a hex wrench or similar tool may make it more difficult to operate. Use the maximum tightening torque for reference only: ZLFG25: 10 cN·m, ZLFG40: 20 cN·m.

Part Number	Type	No.	Stage Surface (mm)	Travel Distance (mm)	Travel per Rotation (mm)	Load Capacity (N)	Travel Accuracy Straightness	Moment Load Capacity (N·m)			Weight (kg)	Accessory (4 pcs.) Type M-L	Unit Price
								Pitching	Yawing	Rolling			
ZLFG	40	25	25x25	±2.5	≈ 8	6.9	30μm	0.6	1.0	1.5	0.08	SCB2-8	
		40	40x40	±5	≈ 13	9.8		0.6	1.0	1.5	0.12	SCB3-6	
		60	60x60	±10	≈ 17	14.7		4.0	4.0	2.5	0.47	SCB4-6	

Resolution (Vernier Scale Indication): 0.1mm/division

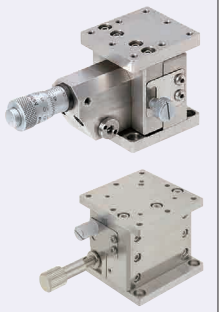
Ordering Example

Part Number

ZLFG60

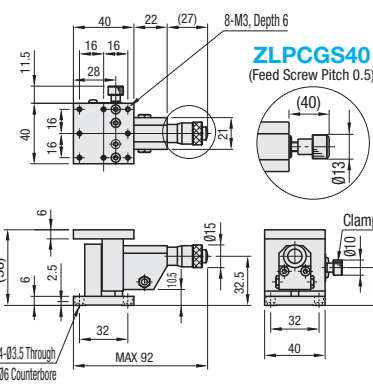
■Features: Suitable for highly accurate fine adjustment of horizontal surface of Z-axis. ZLPGS has higher load capacity compared to the same size ZLPG (P.1973).

### Horizontal Surface Z-Axis, Cross Roller (Stainless Steel)

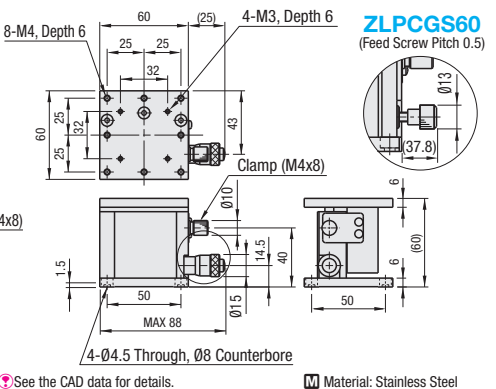


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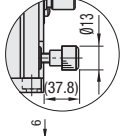
### ZLPGS40 (Micrometer Head Lead 0.5)



### ZLPGS60 (Micrometer Head Lead 0.5)



### ZLPCGS60 (Feed Screw Pitch 0.5)



Standard Stages Similar Products (available for limited sizes only): ZLLB (P.1971)

Part Number	Type	No.	Stage Surface (mm)	Travel Distance (mm)	Load Capacity (N)	Travel Accuracy Straightness	Moment Load Capacity (N·m)			Moment Rigidity ("N/cm)			Parallelism (μm)	Weight (kg)	Accessory (4 pcs.) Type M-L	Unit Price
							Pitching	Yawing	Rolling	Pitching	Yawing	Rolling				
ZLPGS	40	40	40x40	±3	29.4	3μm	1.8	1.1	1.2	0.81	0.22	0.30	100	0.49	SCB3-6	
		60	60x60	±3	58.8		3.3	2.4	3.1	0.42	0.18	0.12		0.99	SCB4-6	
ZLPCGS	40	40	40x40	±3	29.4	3μm	1.8	1.1	1.2	0.81	0.22	0.30	100	0.47	SCB3-6	
		60	60x60	±3	29.4		3.3	2.4	3.1	0.42	0.18	0.12		0.97	SCB4-6	

- Micrometer Head Resolution: 10μm/division
- Knob Cover H0C/R15 (Sold Separately): Ø15 micrometer head knobs can be increased in diameter by installing the cover. P.2004
- Though having a repeatability, the lift may misalign with the scale graduation depending on the stroke, due to the principle of leverage used for the structure. Use the micrometer head scale for reference only.

Ordering Example

Part Number

ZLPGS40