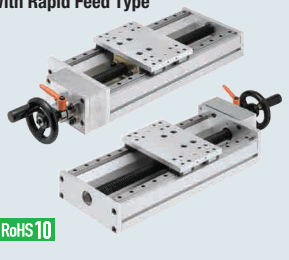


Manually Operated Unit

Rapid Feed Type

Features: Built-in speed multiplier enables feed rate of 2.5 times of the standard units.

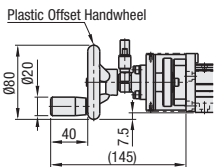
Manually Operated Units – With Rapid Feed Type



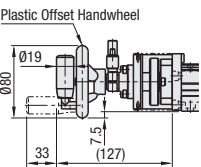
RoHS 10

KUEHS

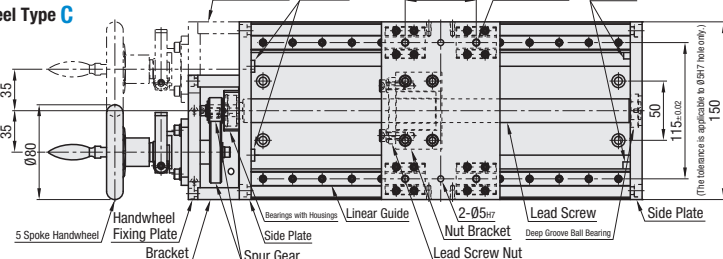
Handwheel Type A



Handwheel Type B



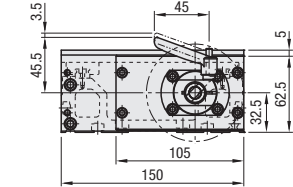
Handwheel Type C



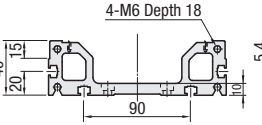
Components

Parts	Frame	Table	Lead Screws	Lead Screw Nut
Material	Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel	Brass
Surface Treatment	Clear Anodize	Clear Anodize	Black Oxide	—

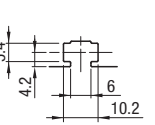
Parts	Nut Bracket	Side Plate	Spur Gear	Cover
Material	Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel	304 Stainless Steel
Surface Treatment	Clear Anodize	Clear Anodize	—	—



Arrow View A-A



Section View of Frame



Enlarged View of Slot for Nut

Ⓢ Use M6 nuts.

*The drawing shows right side mount.

Note 1) Stroke limit is where stroke reaches the mechanical limit.

Part Number	Type	No.	Handwheel Type	Base Length L (mm)	Effective Stroke St(mm)	Lead Screw	Allowable Load (N)		Allowable Moment (N • m)			Base Mounting Hole		Mass (kg)		
							Horizontal	Vertical	Ma	Mb	Mc	S	Q (Number of Holes)	A	B	C
KUEHS	20		A Plastic Handle	320	203	20 4	490	98	14	14	27	150	6	6.2	6.2	6.2
			B Plastic Offset Handwheel - Folding Type	370	253							175	6	6.7	6.7	6.7
			C Five Spoked Handwheel	420	303							200	6	7.2	7.2	7.2
				470	353							150	8	7.7	7.7	7.7

Ⓢ The allowable load for this product is the load that can be placed on the stage table such that it can still be moved. "Horizontal" and "vertical" indicate the installation orientation.

Part Number Example

Part Number

Handwheel Type

Handwheel Position

L

KUEHS20

-

A

-

L

-

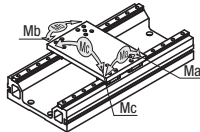
320

Required Torque / Required Turning Force

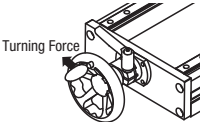
Part Number	Type	No.	Required Torque (N-m)		Required Turning Force (N)	
			Horizontal	Vertical	Horizontal	Vertical
KUEHS		20	0.147	1.051	5.653	40.41

- * T orque and turning force required at max. load capacity.
- * Turning force is the force that rotates the handwheel.
- * Vertical values are those when elevating the table.

Moment Diagram



Turning Force Fig.

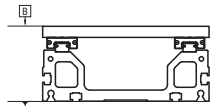


Accuracy

Type	Parallelism (mm)	Backlash. (mm)
KUEHS	0.15	0.3

- * Parallelism is the degree of running parallelism for dimension B against dimension A. (See the figure below)
- * The backlash value shown is for a lead screw model, and is a reference value.

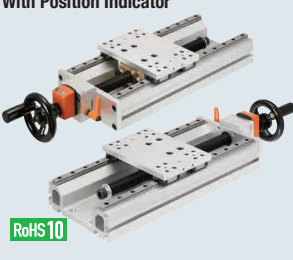
Parallelism Fig.



Manually Operated Units

With Position Indicator

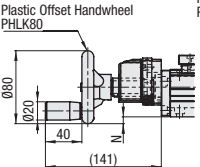
Manually Operated Units – With Position Indicator



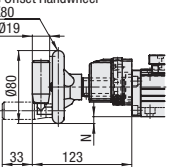
RoHS 10

KUDP

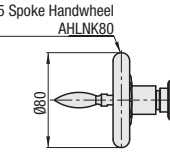
Handwheel Type A



Handwheel Type B



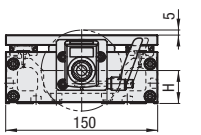
Handwheel Type C



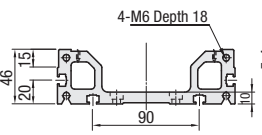
Components

Parts	Frame	Table	Lead Screws
Material	Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel or Equivalent
Surface Treatment	Clear Anodize	Clear Anodize	Black Oxide

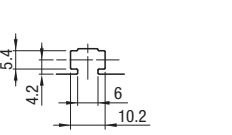
Parts	Lead Screw Nut	Nut Bracket	Side Plate
Material	Brass	Aluminum Alloy	Aluminum Alloy
Surface Treatment	—	Clear Anodize	Clear Anodize



Arrow View A-A



Section View of Frame



Enlarged View of the Slot for Nut

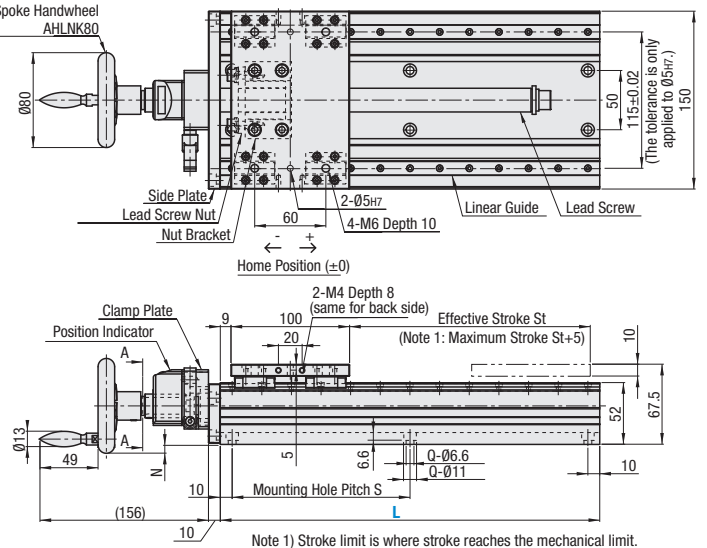
Ⓢ Use M6 nuts.

Part Number Example

Part Number

Handwheel Type

L



Note 1) Stroke limit is where stroke reaches the mechanical limit.

Allowable Load / Allowable Moment

Part Number	Type	No.	Handwheel Type	Base Length L (mm)	Effective Stroke St(mm)	Lead Screw	Allowable Load (N)		Allowable Moment (N-m)			Base Mounting Hole		Mass (kg)		
							Thread Dia.	Lead	Horizontal	Vertical	Ma	Mb	Mc	S	Q (Number of Holes)	Handwheel Type
KUDP	20		A Plastic Handle	170	53	20 4	1470	294	43	43	81	150	4	3.8	3.8	4.1
			B Plastic Offset Handwheel	220	103									4.3	4.3	4.6
			- Folding Type	320	203									5.3	5.3	5.6
			C Five Spoked Handwheel	370	253									5.8	5.8	6.1
				420	303									6.3	6.3	6.6
				470	353									6.8	6.8	7.1

Ⓢ The allowable load for this product is the load that can be placed on the stage table such that it can still be moved. "Horizontal" and "vertical" indicate the installation orientation.

Required Torque / Required Turning Force

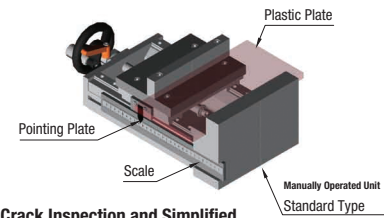
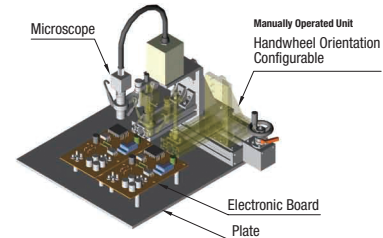
Part Number	Type	No.	Required Torque (N-m)		Required Turning Force (N)	
			Horizontal	Vertical	Horizontal	Vertical
KUDP		20	0.059	0.333	2.261	12.823

- *Torque and turning force required at max. load capacity.
- *Turning force is the force that rotates the handwheel. (See the figure on the right)
- * Vertical values are those when elevating the table.

Microscope Inspection Stage

Inspects a few types of electric components (at specific portion).

Manually Operated Unit is used for the axis of XY Inspection Stage to slide a microscope.

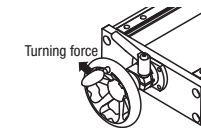


Crack Inspection and Simplified Measurement Device

Operates crack inspection and simplified measurement for plastic plates.

Manually Operated Unit is used to prevent claims due to slight cracks and scratches after delivery. Conducts inspection with constant pressure loaded, and measures dimensions with an attached scale.

Turning Force Fig.

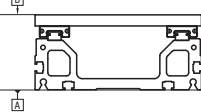


Accuracy

Type	Parallelism (mm)	Backlash (mm)
KUDP	0.15	0.3

- *Parallelism is when surface B and surface A are running side by side. (See figure below)
- *Backlash is not a guaranteed value but reference value.

Parallelism Fig.



Laser Marker Lifting Device

Laser marker is lifted/lowered to adjust the marking position since the position of laser engraving differs depending on products.

Angle Plate Integrated Manually Operated Unit is used to prevent tilt of a heavy laser marker when lifted/lowered.

