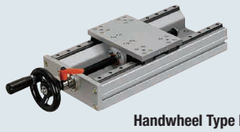
Manually Operated Units

Standard / High Load Type

Manually Operated Units – Standard / High Load Type

Handwheel Type A



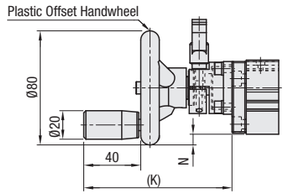
Handwheel Type B

Handwheel Type C

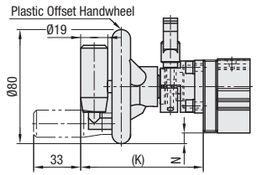
RoHS 10

KUE Standard

Handwheel Type A



Handwheel Type B Folding Type



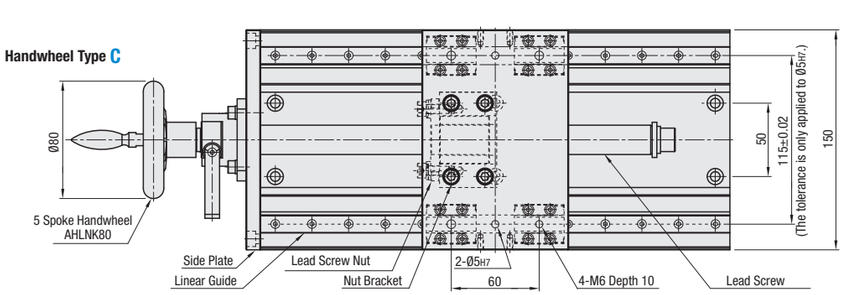
Components

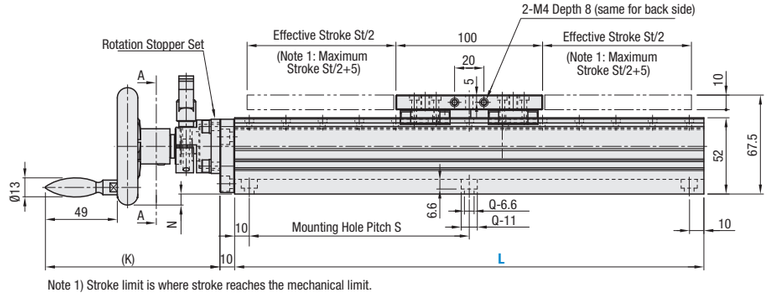
Parts	Frame	Table	Trapezoidal Lead Screws	Trapezoidal Screw Nut	Nut Bracket	Side Plate
Material	Aluminum Alloy	Aluminum Alloy	1045 Carbon Steel or Equivalent	Brass	Aluminum Alloy	Aluminum Alloy
Surface Treatment	Clear Anodize	Clear Anodize	Black Oxide	—	Clear Anodize	Clear Anodize

Stroke

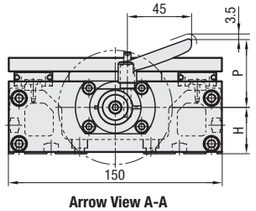
Type	Effective Stroke St (mm)					
	L=170	L=220	L=320	L=370	L=420	L=470
KUE	53	103	203	253	303	353

Handwheel Type C

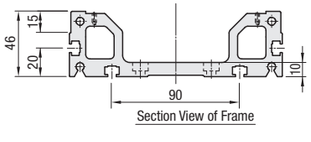




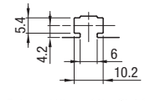
Note 1) Stroke limit is where stroke reaches the mechanical limit.



Arrow View A-A



Section View of Frame



Enlarged View of the Slot for Nut

ⓘ Use M6 nuts.

MiSUMi

Manually Operated Units

Standard / High Load Type, *continued*

Allowable Load / Allowable Moment

Part Number Type	Part Number No.	Handwheel Type	Base Length L (mm)	Effective Stroke St (mm)	Lead Screw Thread Dia.	Lead Screw Lead	Allowable Load (N) Horizontal	Allowable Load (N) Vertical	Allowable Moment (N•m) Ma	Allowable Moment (N•m) Mb	Allowable Moment (N•m) Mc	Base Mounting Hole S	Base Mounting Hole Q (Number of Holes)	(K) Handwheel Type A	(K) Handwheel Type B	(K) Handwheel Type C	Mass (kg) Handwheel Type A	Mass (kg) Handwheel Type B	Mass (kg) Handwheel Type C
KUE	14	A Plastic Handle B Plastic Offset Handwheel – Folding Type C Five Spoked Handwheel	170	53	14	3	735	147	7	7	13	150	4	100	82	115	2.9	2.9	3.2
			220	103								200	4				3.4	3.4	3.7
			320	203								150	6				4.4	4.4	4.7
			370	253								175	6				4.9	4.9	5.2
			420	303								200	6				5.4	5.4	5.7
			470	353								150	8				5.9	5.9	6.2
	20		170	53	20	4	1470	294	43	43	81	150	4	103	85	118	3.5	3.5	3.8
			220	103								200	4				4	4	4.3
			320	203								150	6				5	5	5.3
			370	253								175	6				5.5	5.5	5.8
			420	303								200	6				6	6	6.3
			470	353								150	8				6.5	6.5	6.8

ⓘ 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 Type	Part Number No.	Handwheel Type	Frame Length L	Selection Lead Screws Type	Selection Lead Screws Screw Shaft Dia.	Selection Lead Screws Lead	Rotation Stopper Set Type	Linear Guide Part Number	(K) Handwheel Type A	(K) Handwheel Type B	(K) Handwheel Type C	N	H	P	Frame Mounting Hole S, Q (Number of Holes) L	Frame Mounting Hole S, Q (Number of Holes) S	Frame Mounting Hole S, Q (Number of Holes) Q
KUE	14	A Plastic Offset Handwheel PHLK B Plastic Offset Handwheel PHLFK Folding Type C 5 Spoke Handwheel AHLNK	170	MTSBRA	14	3	MTQDM	SE2B13	100	82	115	5.5	34.5	43	100	82	115
			220														
			320														
	20		370	MTSBRC		4			103	85	118	7.5	32.5	45.5	103	85	118
			420														
			470														

Mass

Part Number Type	Part Number No.	Handwheel Type	Mass (kg) L=220	L=320	L=370	L=420	L=470
KUE	14	A	3.4	4.4	4.9	5.4	5.9
		B	3.1	4.1	4.6	5.1	5.6
		C	3.1	4.1	4.6	5.1	5.6
	20	A	4	5	5.5	6	6.5
		B	3.7	4.7	5.2	5.7	6.2
		C	3.7	4.7	5.2	5.7	6.2

Accuracy

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

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

Required Torque / Required Turning Force

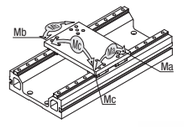
Part Number Type	Part Number No.	Required Torque (N•m) Horizontal	Required Torque (N•m) Vertical	Required Turning Force (N) Horizontal	Required Turning Force (N) Vertical
KUE	14	0.039	0.201	1.503	7.734
	20	0.059	0.420	2.261	16.164

*Required torque and turning force are when allowable load is applied on two tables.
*Turning force is the force that rotates the handwheel. (See the figure on the right)
*Vertical values are those when elevating the table.

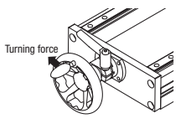
Part Number Example

Part Number	-	Handwheel Type	-	L
KUE14	-	A	-	320

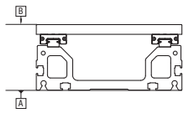
Moment Fig.



Turning Force Fig.



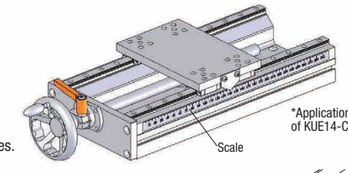
Parallelism Fig.



Applicatio Example

Horizontal

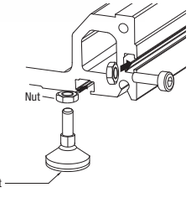
Scales can be installed on the frame side surfaces.



*Application Example of KUE14-C-320

Usage of Frame Slots

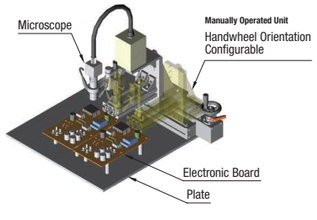
Side and bottom surfaces are grooved for M6 nuts. Nuts can be inserted either from the wheel side or the opposite side to tighten screws and install adjuster feet.

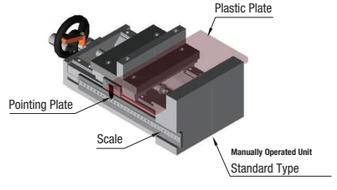


Microscope Inspection Stage

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.

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.