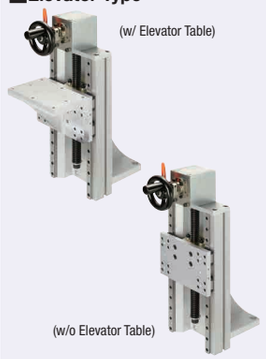
Manual Units

Elevator Type, Handwheel Orientation Configurable

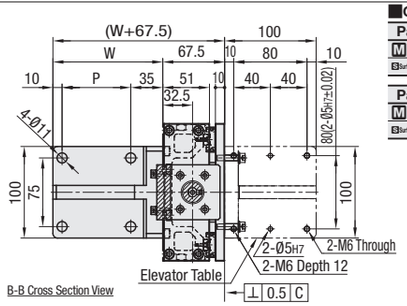
Manual Units - Symmetrical Action Dual Carriages

Features: Units suited for up-and-down movements. Simple vertical positioning is possible.

Elevator Type



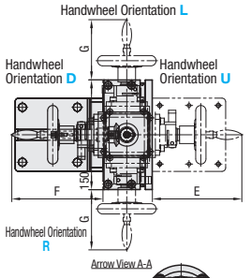
KULF



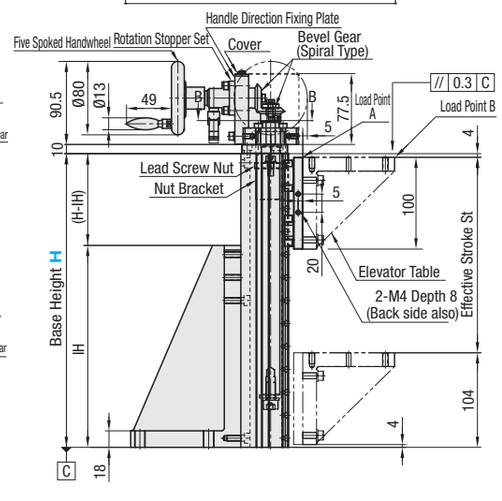
Components

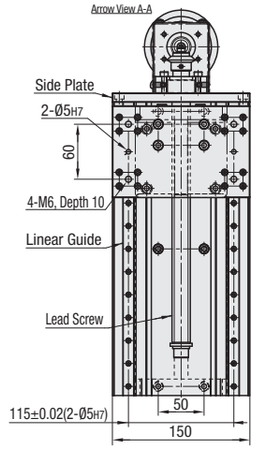
Parts	Base	Table	Elevator Table	Angle Plate	Lead Screw
Material	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	Aluminum Alloy	S45C
Surface Treatment	Clear Anodize	Clear Anodize	Clear Anodize	Clear Anodize	Black Oxide

Parts	Lead Screw Nut	Nut Bracket	Side Plate	Bevel Gear	Cover
Material	Brass	Aluminum Alloy	Aluminum Alloy	S45C	SUS304HL
Surface Treatment	-	Clear Anodize	Clear Anodize	-	-

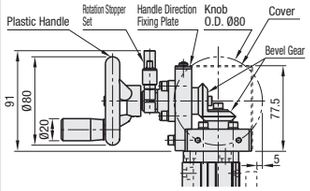


Handwheel Type C

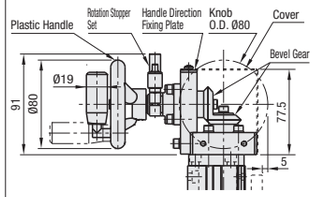




Handwheel Type A



Handwheel Type B



Part Number Type	No.	Handwheel Type	Handwheel Orientation Configurable	Elevator Table Selection	Base Length L (mm)	Effective Stroke St(mm)	Lead Screw Thread Dia.	Lead Screw Lead	Allowable Load (N) When Load Applied to Point A	Allowable Load (N) When Load Applied to Point B	Allowable Moment (N·m) Ma	Allowable Moment (N·m) Mb	Allowable Moment (N·m) Mc	Handwheel Type A E	A F	A G	B E	B F	B G	C E	C F	C G	W	P	IH	Mass (kg) Handwheel Type A	B	C
KULF	20	A Plastic Handle B Plastic Offset Handwheel - Folding Type C Five Spoked Handwheel	U D L R	Not Specified (w/) N (w/o)	170	62	20	4	294	270	43	43	81	107	109.5	67	122	124.5	82	122	124.5	82	120	75	170	7.3	7.3	7.6
					220	112																			220	8.1	8.1	8.4
					320	212																				9.2	9.2	9.5
					370	262																				9.7	9.7	10
					420	312																	150	105	350	11.5	11.5	11.8
					470	362																				12.0	12.0	12.3

Ordering Example

Part Number	-	Handwheel Type	-	Handwheel Orientation	-	Elevator Table	-	L	
KULF20	-	A	-	L			-	320	(w/ Elevator Table)
KULF20	-	A	-	U	-	N	-	320	(w/o Elevator Table)

Part Number Type	No.	Handwheel Type	Unit Price H=170	H=220	H=320	H=370	H=420	H=470
KULF	20	A						
		B						
		C						

Required Torque, Required Turning Force

Part Number Type	No.	Required Torque (N·m) Vertical	Required Turning Force (N) Vertical
KULF	20	1.085	41.740

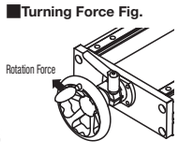
*Torque and turning force required at max. load capacity.
*Turning force is the force that rotates the handwheel.

Accuracy

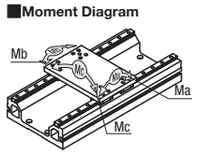
Type	Parallelism (mm)	Backlash (mm)
KULF	0.15	0.5

*Parallelism is the degree of running parallelism for dimension B against dimension A. (See the diagram below.)
*Backlash is not a guaranteed value but reference value.

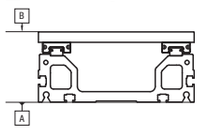
Turning Force Fig.



Moment Diagram



Parallelism Fig.



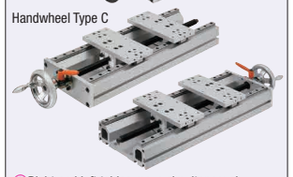
Features: Units best suited for simple manual positioning and capable of moving right and left tables simultaneously.

Symmetrical Action Dual Carriages

Handwheel Type A

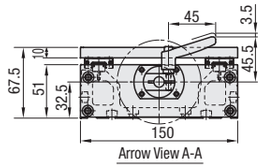
Handwheel Type B

Handwheel Type C



Right and left tables move simultaneously.

KUED

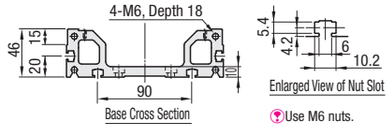


Components

Parts	Base	Table	Lead Screw	Lead Screw Nut	Nut Bracket	Side Plate
Material	Aluminum Alloy	Aluminum Alloy	S45C	Brass	Aluminum Alloy	Aluminum Alloy
Surface Treatment	Clear Anodize	Clear Anodize	-	-	Clear Anodize	Clear Anodize

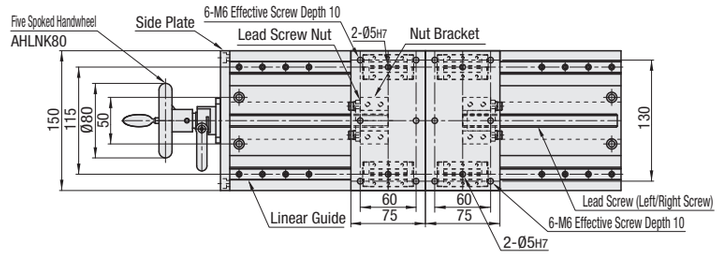
Stroke

Type	Effective Stroke St (mm) L=320	L=370	L=420	L=470
KUED	65	90	115	145

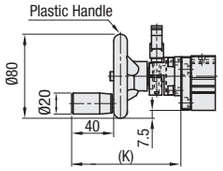


Use M6 nuts.

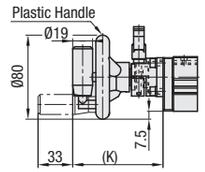
Handwheel Type C

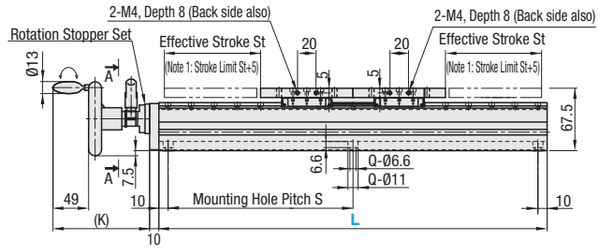


Handwheel Type A



Handwheel Type B: Folding Type





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 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	Q (Number of Holes)	(K) Handwheel Type A	B	C	Mass (kg) Handwheel Type A	B	C
KUED	14	A Plastic Handle B Plastic Offset Handwheel - Folding Type C Five Spoked Handwheel	320	65	14	3	122.5	24.5	0.5	0.5	6	150	6	99	81	113	4.9	4.6	4.6
			370	90								175	6				5.4	5.1	5.1
			420	115								200	6				5.9	5.6	5.6
			470	145								150	8				6.4	6.1	6.1
	20		320	65	20	4	245	49	1	1	13	150	6	107	89	121	5.5	5.2	5.2
			370	90								175	6				6	5.7	5.7
			420	115								200	6				6.5	6.2	6.7
			470	145								150	8				7	6.7	6.7

Ordering Example

Part Number	-	Handwheel Type	-	L
KUED14	-	A	-	320

Required Torque, Required Turning Force

Part Number Type	No.	Required Torque (N·m) Horizontal	Required Torque (N·m) Vertical	Required Turning Force (N) Horizontal	Required Turning Force (N) Vertical
KUED	14	0.039	0.223	1.503	8.586
	20	0.059	0.433	2.261	17.022

* The above torque / turning force is a value required when the allowable load is applied to the two tables.
* Turning force is the force that rotates the handwheel. (See the diagram on the right.)
* Vertical values are those when elevating the table.

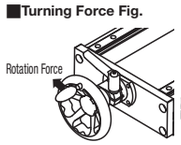
Part Number Type	No.	Handwheel Type	Unit Price L=320	L=370	L=420	L=470
KUED	14	A				
		B				
		C				
	20	A				
		B				
		C				

Accuracy

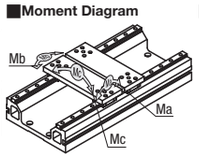
Type	Parallelism (mm)	Backlash (mm)
KUED	0.15	0.3

* Parallelism is the degree of running parallelism for dimension B against dimension A. (See the diagram on the right.)
* Backlash is not a guaranteed value but reference value.

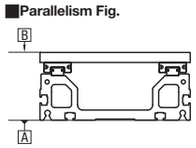
Turning Force Fig.



Moment Diagram

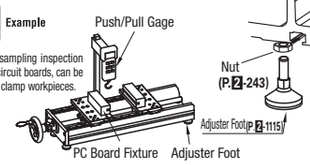


Parallelism Fig.



Example

As the sampling inspection tool of circuit boards, can be used to clamp workpieces.



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 a leveling mount.