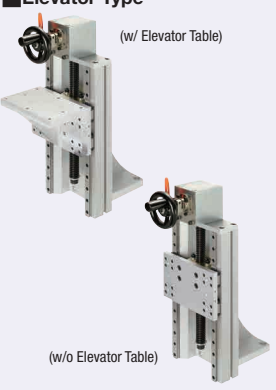


Manual Units

Elevator Type, Handwheel Orientation Configurable

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

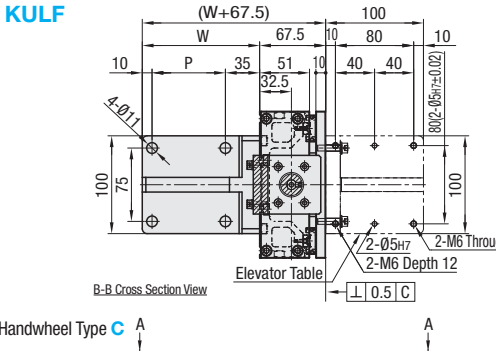
Elevator Type



(w/ Elevator Table)

(w/o Elevator Table)

KULF



(W+67.5) 100
W 67.5 10 80
10 P 35 51 10 40 40
4-Ø11
100 75
100
80(±0.02/±0.02)
Elevator Table
2-M6 Through
2-M6 Depth 12
0.5 C

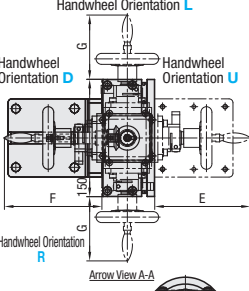
B-B Cross Section View

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 Oil

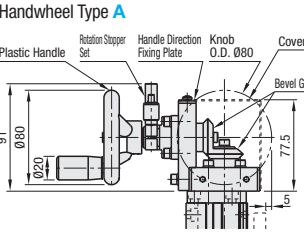
Parts	Lead Screw Nut	Nut Bracket	Side Plate	Bevel Gear	Cover
Material	Brass	Aluminum Alloy	Aluminum Alloy	S45C	SUS304RL
Surface Treatment	Clear Anodize	Clear Anodize	Clear Anodize	-	-

Handwheel Orientation L



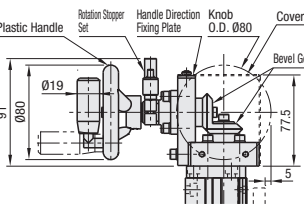
Handwheel Orientation D
Handwheel Orientation U
Handwheel Orientation R

Handwheel Type A



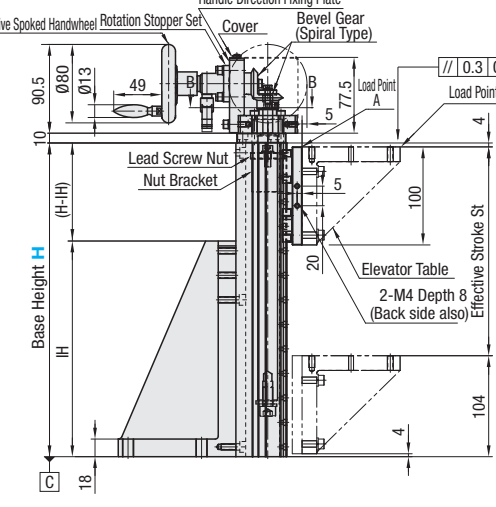
Rotation Stopper Set
Plastic Handle
Handle Direction Fixing Plate
Knob O.D. Ø80
Cover
Bevel Gear

Handwheel Type B



Rotation Stopper Set
Plastic Handle
Handle Direction Fixing Plate
Knob O.D. Ø80
Cover
Bevel Gear

Handwheel Type C



Five Spoked Handwheel
Rotation Stopper Set
Handle Direction Fixing Plate
Cover
Bevel Gear (Spiral Type)
Load Point A
Load Point B
Lead Screw Nut
Nut Bracket
Elevator Table
2-M4 Depth 8 (Back side also)
Effective Stroke St
Base Height H
H (H-H)
10
Ø80
Ø13
49
7.5
5
100
4
104
18
C
115±0.02(2-Ø5H7)
150

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	Allowable Load (N) When Load Applied to Point A	Allowable Moment (N·m) When Load Applied to Point B	Handwheel Type									W	P	IH	Mass (kg)				
												A			B			C						A	B	C		
												E	F	G	E	F	G	E	F	G								
KULF	20	A	Plastic Handle	U	Not Specified (w)	170	62	20	4	294	270	43	43	81	107	109.5	67	122	124.5	82	124.5	82	120	75	170	7.3	7.3	7.6
						220	112																			8.1	8.1	8.4
						320	212																			9.2	9.2	9.5
						370	262																			9.7	9.7	10
						420	312																			11.5	11.5	11.8
						470	362																			12.0	12.0	12.3

The allowable load for this product is the load that can be placed on the stage table such that it can still be moved.

Ordering Example: Part Number - Handwheel Type - Handwheel Orientation - Elevator Table - L

KULF20 - A - L - N - 320 (w/ Elevator Table)

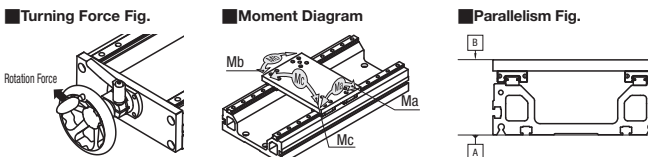
KULF20 - A - U - N - 320 (w/o Elevator Table)

Part Number	Handwheel Type	Unit Price
KULF	20	H=170
		H=220
		H=320
		H=370
		H=420
		H=470

Required Torque, Required Turning Force

Part Number	Required Torque (N·m)	Required Turning Force (N)
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

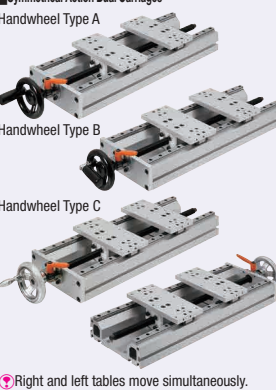
Type	Parallelism (mm)	Backlash (mm)
KULF	0.15	0.5

*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.

Manual Units - Symmetrical Action Dual Carriages

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

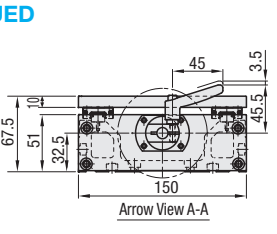
Symmetrical Action Dual Carriages



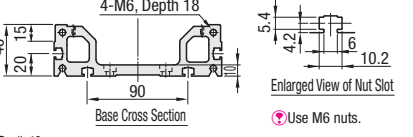
Handwheel Type A
Handwheel Type B
Handwheel Type C

Right and left tables move simultaneously.

KUED



67.5 10
51 32.5
150
Arrow View A-A



46 15 20 15 90 5.4 4.2 6 10.2
Base Cross Section
Enlarged View of Nut Slot
Use M6 nuts.

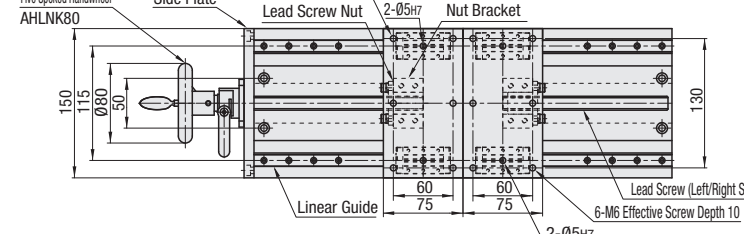
Components

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

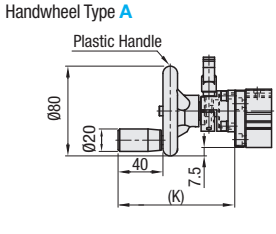
Type	Effective Stroke St (mm)			
	L=320	L=370	L=420	L=470
KUED	65	90	115	145

Handwheel Type C



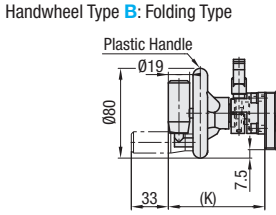
Five Spoked Handwheel AHLNK80
Side Plate
6-M6 Effective Screw Depth 10
Lead Screw Nut
2-Ø5H7
Nut Bracket
Linear Guide
Lead Screw (Left/Right Screw)
6-M6 Effective Screw Depth 10

Handwheel Type A



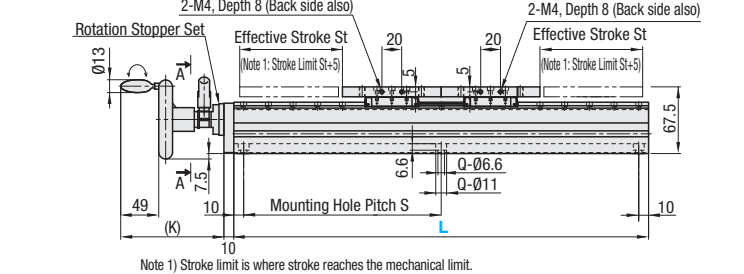
Plastic Handle
Ø80
Ø20
40
7.5
(K)

Handwheel Type B: Folding Type



Plastic Handle
Ø19
Ø80
33
(K)
7.5

Handwheel Type C



2-M4, Depth 8 (Back side also)
Rotation Stopper Set
Effective Stroke St
20
20
Effective Stroke St
2-M4, Depth 8 (Back side also)
2-Ø5H7
0-Ø6.6
0-Ø11
Mounting Hole Pitch S
L
67.5
10
10
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	Allowable Load (N)			Allowable Moment (N·m)			Base Mounting Hole (K)			Mass (kg)			
								Horizontal	Vertical	Ma	Mb	Mc	S	Q (Number of Holes)	Handwheel Type	Handwheel Type	Handwheel Type			
								A	B	C	A	B	C	A				B	C	
KUED	14	A	Plastic Handle	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													5.4	5.1	5.1
				420	115													5.9	5.6	5.6
				470	145													6.4	6.1	6.1
				320	65													5.5	5.2	5.2
				370	90													6	5.7	5.7
KUED	20	C	Five Spoked Handwheel	320	65	20	4	245	49	1	1	13	150	6	107	89	121	6.5	6.2	6.7
				370	90													6.5	6.2	6.7
				420	115													7	6.7	6.7
				470	145													7	6.7	6.7

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.

Ordering Example: Part Number - Handwheel Type - L

KUED14 - A - 320

Required Torque, Required Turning Force

Part Number	Required Torque (N·m)	Required Turning Force (N)
KUED	14	0.039
	20	0.059

*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.

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.

