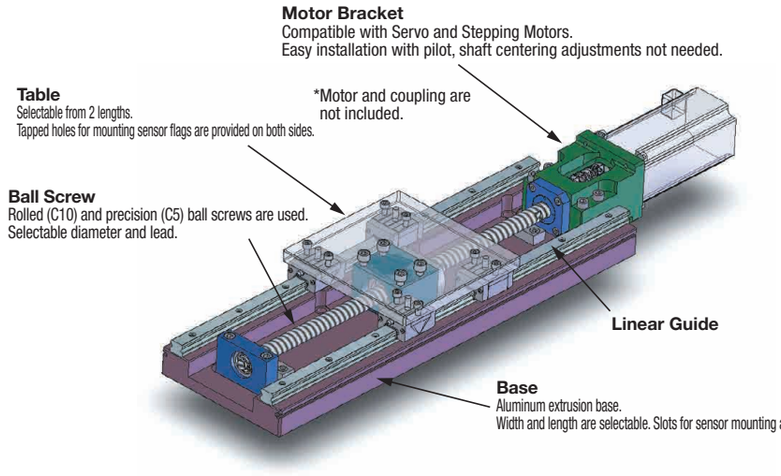
Frequently used in-house built mechanisms are standardized.
Rolled Ball Screw, Precision Ball Screw and Cover Type are lined up.

Features

① High Accuracy — **Units with Linear Guides and Ball Screws combined. Rolled ball screw type, precision ball screw type and covered type are available.**

② Economical — **Single axis units suitable for high load transfers at equivalent costs of only the components.**

③ High Load Capacity — **Adoption of Linear Guide for Medium-Heavy Load.**



Single Axis Unit List

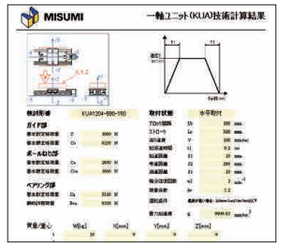
Shape	Type	Product Name	Features	Page
	KUA KUB KUH KUT	Rolled / Precision Ball Screw	Single Axis Unit Series Basic Type Rolled Ball Screws (C10) and Precision Ball Screw (C5) are employed. Best suited for heavy load transfer applications.	P.511
	KUAC KUBC KUHC KUTC	Cover Type Rolled / Precision Ball Screw	Cover is provided as standard equipment. Prevents foreign object intrusions offering safety. Easy maintenance.	P.513

Useful Technical Calculation Software

Life calculation necessary for selection of single axis actuators can be easily achieved for free on MISUMI website: Free on MISUMI website.

Selection Window

Calculation Result Window



http://fawos.misumi.jp/FA_WEB/unit/top/fa_soft2.html

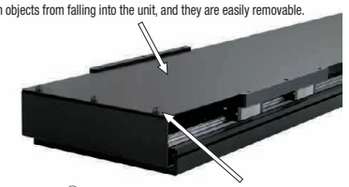
Environmental Measures

Cover Types are now available for safe use of Single Axis Units to meet customers' work environments. Neither quotation nor delivery management is required. Management costs are considerably reduced.

Covered Specifications (P.513)

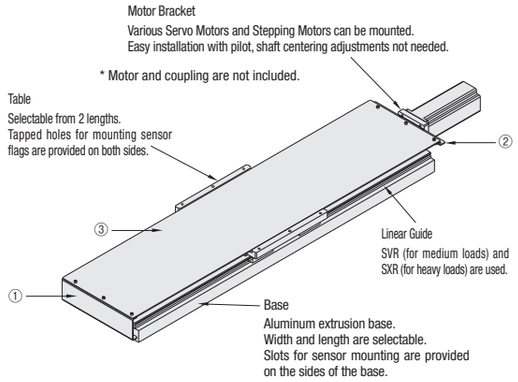
- **Economical: Prevents components from falling off and dripping liquids, and protects machines economically.**
- **Easy: Ordering procedure and installation are simple. Easy machine cleaning and maintenance.**
- **Reduction: Reduced machine trouble. More advantages with less cost. Labor saving for customers.**

○Cover prevents intrusion of foreign objects.
Keep foreign objects from falling into the unit, and they are easily removable.



○Easy Cover installation with no complex adjustments.

Applications:The Covered Series is suitable for use in areas where structural component damages due to small parts falling in, and adhesives and greases dripping are to be avoided.



Cover Mounting Procedure

1) KUAC and KUBC are secured to device or table provided by customers.

2) Install the included brackets ① and ② to the Single Axis Unit.

3) Lastly, secure included cover ③ to included brackets ① and ② installed in Step 2).

Note: Brackets ① and ②, and Cover ③-mounting Screws are included in the product package. Customer assembly required.

Technical Data

Max. Velocity

Part Number Type	No.	* Max. Velocity (mm/sec) L=340	L=400	L=460	L=520	L=580	L=640	L=700	L=760	L=820
Rolled Ball Screw KUA(C) KUB(C)	1204(S,L,LS)	265	265	265	265	265	265	-	-	-
	1210(S,L,LS)	651	651	651	651	651	651	651	633	-
	1505(L)	264	264	264	264	264	264	264	264	264
	1510(L)	527	527	527	527	527	527	527	527	527
	1520(L)	1055	1055	1055	1055	1055	1055	1055	1055	1055
	2005L	200	200	200	200	200	200	200	200	200
	2010L	-	397	397	397	397	397	397	397	397
	2020L	-	-	801	801	801	801	801	801	801

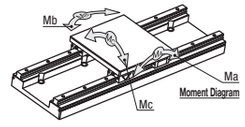
Part Number Type	No.	* Max. Velocity (mm/sec) L=340	L=400	L=460	L=520	L=580	L=640	L=700	L=760	L=820
Precision Ball Screw KUH(C) KUT(C)	1205(S,L,LS)	486	486	486	-	-	-	-	-	-
	1210(S,L,LS)	972	972	972	972	766	611	-	-	-
	1505(L)	389	389	389	389	389	374	-	-	-
	1510(L)	778	778	778	778	778	749	-	-	-
	1520(L)	1556	1556	1556	1556	1556	1498	-	-	-
	2005L	292	292	292	292	292	292	292	292	286
	2010L	-	583	583	583	583	583	583	583	517
	2020L	-	-	1167	1167	1167	1167	1167	1167	1027

For Terminology, see below.

Allowable Static Moment

Part Number Type	No.	Table Length L1	Allowable Static Moment (N·m) Ma	Mb	Mc	Table Length L1	Allowable Static Moment (N·m) Ma	Mb	Mc
KUA(C) KUB(C) KUH(C) KUT(C)	1204(S)	100	401.5	401.5	783.8	150	783.8	783.8	783.8
	1205(S)								
	1210(S)				858.1				858.1
	1505								
	1510								
	1520								
	1204L	150	1092.3	1092.3	2103.7	200	1733.3	1733.3	2103.7
	1205L								
	1210L								
	1505L								
	1510L								
	1520L								
	2005L		1677.8	1677.8	3008.9		2411.3	2411.3	3008.9
	2010L								
	2020L								

The table above lists reference values in static state.
For actual life calculations, please use our Technical Calculation Software, see **P.509**.



Mass KUA/KUB/KUH/KUT

Part Number No.	Mass (kg) L=340	L=400	L=460	L=520	L=580	L=640	L=700	L=760	L=820
12□□(S)	5.3	5.9	6.4	7.0	7.5	8.1	8.6	9.2	-
15□□	6.5	7.2	7.8	8.5	9.2	9.9	10.6	11.3	11.9
12□□L(S)	6.6	7.2	7.7	8.3	8.8	9.4	9.9	10.5	-
15□□L	8.0	8.8	9.6	10.4	11.2	12.0	12.8	13.6	14.4
20□□L	11.4	12.5	13.6	14.7	15.8	16.9	18.0	19.1	20.2

Mass KUAC/KUBC/KUHC/KUTC

No.	Mass (kg) L=340	L=400	L=460	L=520	L=580	L=640	L=700	L=760	L=820
12□□	5.8	6.5	7.0	7.7	8.2	8.9	9.4	10.1	-
15□□	7.1	7.8	8.5	9.2	10.0	10.7	11.4	12.2	12.8
12□□L	7.3	8.0	8.6	9.2	9.8	10.4	11.0	11.7	-
15□□L	8.8	9.6	10.5	11.4	12.2	13.1	13.9	14.8	15.7
20□□L	12.2	13.4	14.5	15.7	16.9	18.0	19.2	20.4	21.5

Terminology

- **Positioning Repeatability**
  Repeatability is measured by positioning seven times to a same point in the same direction.
- **Parallelism**
  An actuator is fixed to a surface plate. Parallelism readings are taken from a carriage center mounted dial indicator (0.01 graduation) setup against the surface plate. Measurement is taken along 20 ~ 30mm from the side of the base.
- **Max. Velocity**
  Values listed on each page are calculated based on critical speed and DN value of ball screws. Note that these are not guaranteed data considering motor rotational speed, operating conditions, etc.