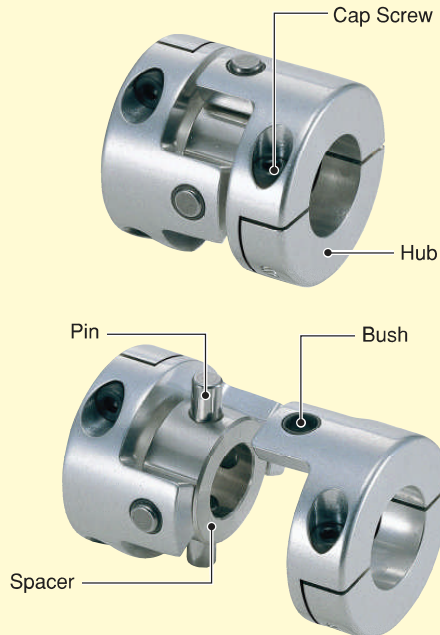


XUT



Configuration



Features

Merits

- Small Eccentric Reaction Force
- High Torque, High Static Torsional Stiffness, High Response
- Vibration Absorption

- Slippage between the bush and pin allows for parallel and angular misalignments
- Minimized backlash achieved through high precision fit of pin and bush
- Minimized load on shaft caused by misalignments
- Identical clockwise and counter-clockwise rotational characteristics
- Finished products featuring two different end bore diameters available in stock

Material & Finish

Hub	A2017*
Spacer	SUS304
Pin	SUJ2
Bush	Polyimide
Cap Screw	SCM435, Black Oxide Coating**

* Anodized coating is also possible. Please contact the customer service center for more information.

** Stock screws can be replaced with stainless steel screws. Please take advantage of our stainless steel screw option. For more information please refer to page 16.

Application	
Servomotor	◎
Stepping Motor	◎
General-Purpose Motor	—
Encoder	—
Special Characteristics	
Zero Backlash	●
High Torsional Stiffness	◎
High Torque	●
Allowable Misalignment	●
Vibration Absorption	●
Electrical Insulation	—
Corrosion Resistant (All Stainless Steel)	—

◎ : Excellent ● : Very Good

- Production of **MCT** has been discontinued. Please use **XUT** in its place.

Product Code	Replacement Product Code
MCT-20	XUT-20C
MCT-20C	
MCT-25	XUT-25C
MCT-25C	
MCT-32	XUT-30C
MCT-32C	XUT-35C
MCT-40	XUT40C
MCT-40C	
MCT-50	
MCT-50C	



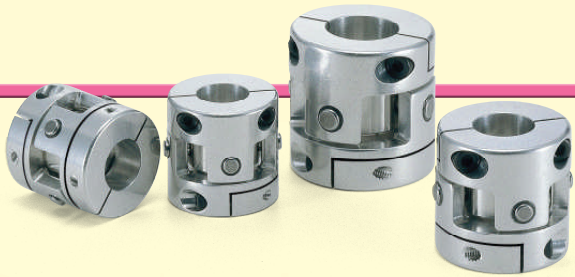
Replacement Product
When selecting replacement product, be sure to verify dimensions and specifications.

When Ordering

Specify product code and both bore diameters.

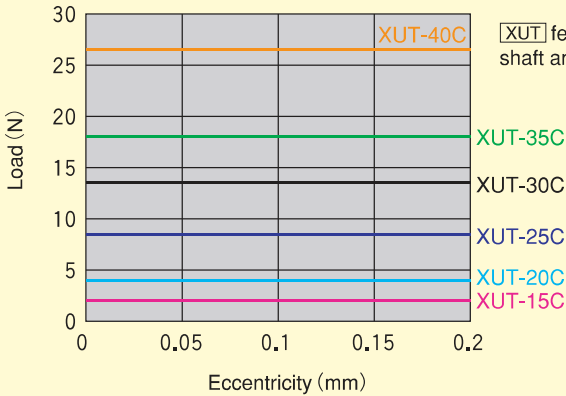
XUT-25C-6×8

Product Code D₁ D₂



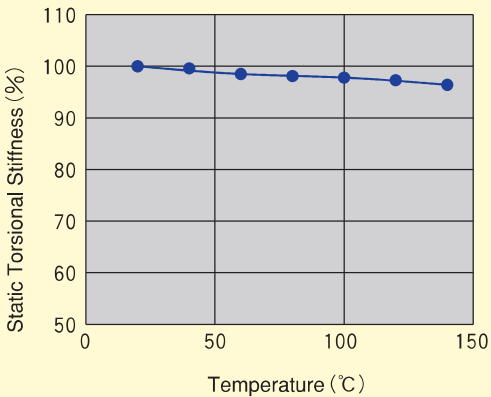
Technical Data

Eccentric Reaction Force




[XUT] features small eccentric reaction forces. This reduces the load placed on the shaft and bearings.

Changes in Static Torsional Stiffness Caused by Temperature



100% values represent product performance at 20°C. Because [XUT] experiences very little change in static torsional stiffness caused by temperature, the effect on response is minimal. However, please take into consideration that operating at high temperatures may lead to misalignment due to shaft distortion or elongation from thermal expansion.



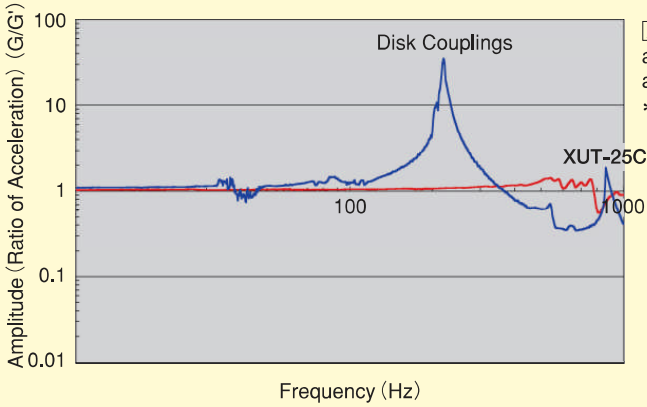
Minimized backlash achieved through high precision fit of pin and bush. [XUT]'s bush is made of abrasion resistant polyimide resin. Initial backlash levels will be maintained for a long time.

● The technical data contained in this catalog is for convenient reference, but they are not guaranteed values. More detailed technical data can be downloaded from our homepage.

Technical Data

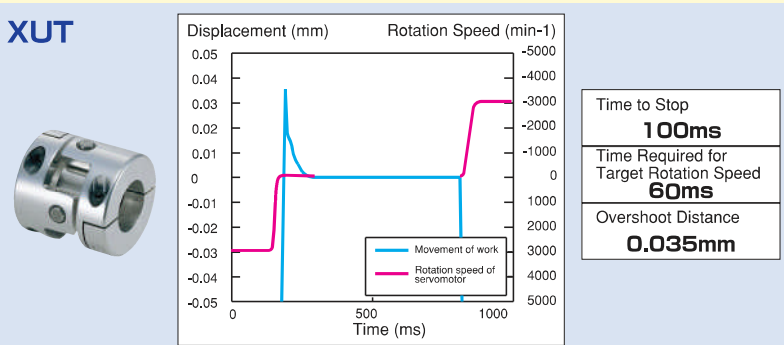


Natural Frequency



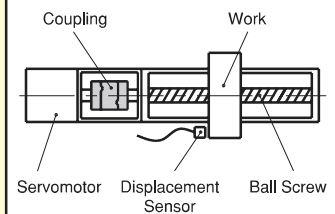
XUT features high torsional stiffness, low natural frequency amplitudes and excellent vibration absorption. This reduces hunting at high gain and improves high response control.
 * Data for all sizes can be downloaded from our homepage.

High Gain



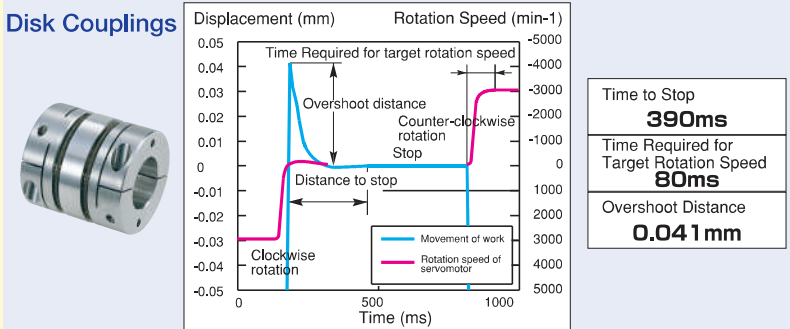
Test Method

Servomotor is rotated clockwise, stopped, then rotated counter-clockwise. Position of work is measured with displacement sensor.



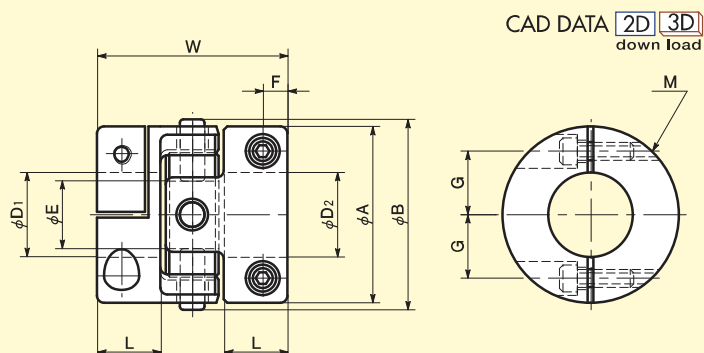
Servomotor Settings

- Acceleration and deceleration time: 0.01 seconds
- Rotation Speed: 3000 min-1
- Stop Time: 0.7 seconds



Middle Gain

● The technical data contained in this catalog is for convenient reference, but they are not guaranteed values. More detailed technical data can be downloaded from our homepage.



Dimensions

unit : mm

Product Code	A	B	L	W	E	F	G	M	Wrench Torque (N·m)
XUT-15C	15	16	6	18	4	2.5	5.2	M2	0.5
XUT-20C	20	22	7	20	7	2.7	6.5	M2	0.5
XUT-25C	25	27	9	27	10	3.5	9	M2,5	1
XUT-30C	30	32	9.5	30	10	4	10.5	M3	1.5
XUT-35C	35	37	11.5	35	13	5	12.5	M4	2.5
XUT-40C	40	42	12.5	40	15	5.5	15	M4	2.5

Product Code	Stock Bore Diameters													
	D1 · D2													
	3	4	5	6	8	10	11	12	14	15	16	18	19	20
XUT-15C	●	●	●	●										
XUT-20C		●	●	●	●									
XUT-25C			●	●	●	●	●	●						
XUT-30C				●	●	●	●	●	●					
XUT-35C					●	●	●	●	●	●	●			
XUT-40C					●	●	●	●	●	●	●	●	●	●

- All products come with cap screws
- Recommended tolerance for shaft diameters is h6 and h7.
- Bore and keyway modifications are available on request. Please take advantage of our bore modification services. For more information please refer to pages 17~19.

Specifications

Product Code	Max. Bore (mm)	Rated* Torque (N·m)	Max.* Torque (N·m)	Max. Rotational Frequency (min ⁻¹)	Moment** of Inertia (kg·m ²)	Static Torsional Stiffness (N·m/rad)	Errors of Eccentricity (mm)	Errors of Angularity (°)	Mass** (g)
XUT-15C	6	0.3	0.6	42000	2.3×10 ⁻⁷	200	0.2	1	8
XUT-20C	8	0.6	1.2	31000	8.1×10 ⁻⁷	400	0.2	1	16
XUT-25C	12	1.2	2.4	25000	2.7×10 ⁻⁶	900	0.2	1	33
XUT-30C	14	2.4	4.8	21000	6.2×10 ⁻⁶	1300	0.2	1	53
XUT-35C	16	4	8	18000	1.3×10 ⁻⁵	2200	0.2	1	81
XUT-40C	20	6	12	15000	2.6×10 ⁻⁵	2300	0.2	1	120

- * Adjustment of rated and maximum torque specifications for load fluctuations is not required. For more detailed information, please refer to For Better Drive on page 34.
- ** Moment of inertia and mass figures based on maximum bore dimensions.