A New Maximum Speed Coupling Makes Its Debut!

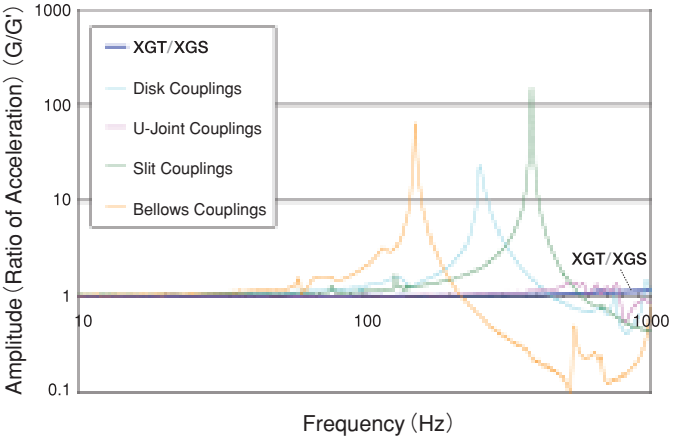
XGT/XGS

Ideal for Servomotors

High Precision Surpassing Disk and Cross Joint Couplings!

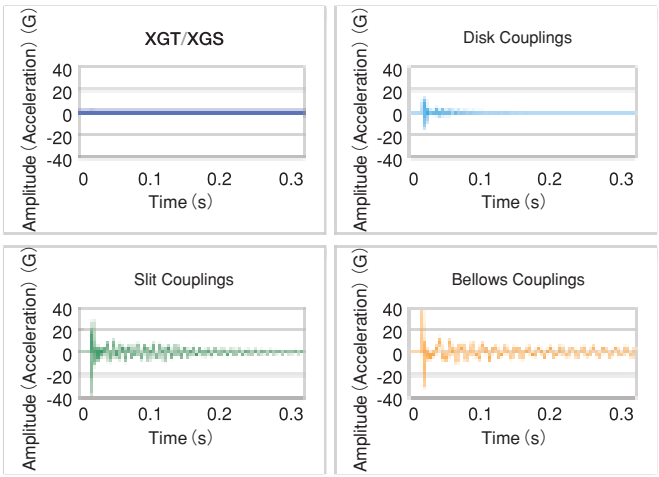
1 Eliminates Resonance

Conventional couplings use the elasticity of disks or bellows to absorb misalignments. This results in the existence of resonance frequencies. XGT and XGS employ anti-vibration rubber to eliminate resonance points under 1000Hz (Frequencies above 1000Hz unmeasurable).



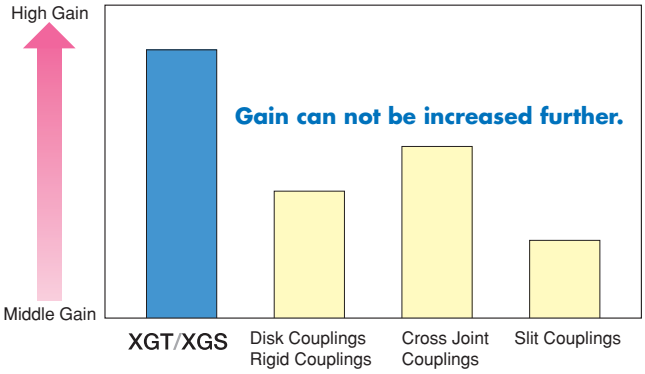
2 Absorbs Vibration

Damping tests of various coupling types showcase XGT and XGS 's superior vibration absorption properties.



3 Increases Gain

Increasing the gain of a servomotor will cause conventional couplings to resonate. However, due to the vibration absorbing attributes of XGT and XGS, as well as their lack of resonance points under 1000Hz, servomotor gain can be increased.

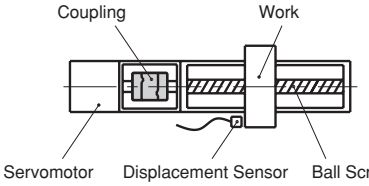


4 High Speed & Precise Positioning

XGT/XGS can increase the gain of a servomotor.
Making it possible to perform precise positioning in a shorter time.

Test Method

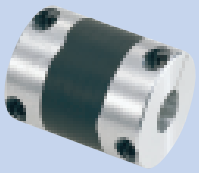
Servomotor is rotated clockwise, stopped, then rotated counter-clockwise. Position of work is measured with displacement sensor.

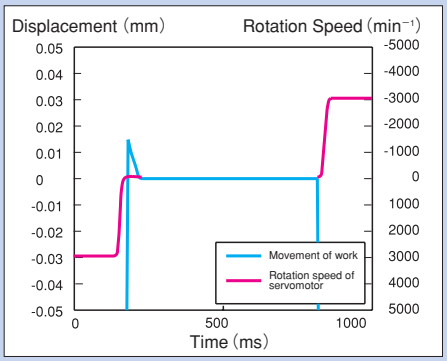


Servomotor Settings
- Acceleration and deceleration time: 0.01 seconds
- Rotation Speed: 3000 min^{-1}
- Stop Time: 0.7 seconds

High Gain

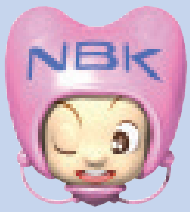
XGT/XGS



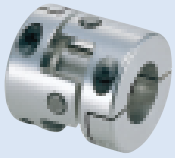


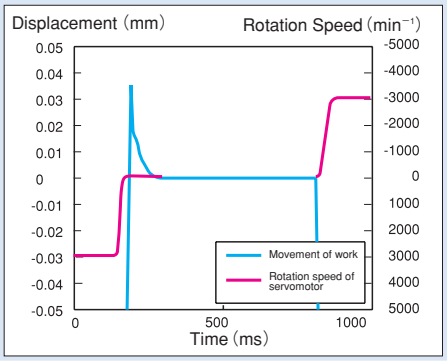
Just what I expected.

Time to Stop	40ms
Time Required for Target Rotation Speed	50ms
Overshoot Distance	0.015mm



Cross Joint Couplings



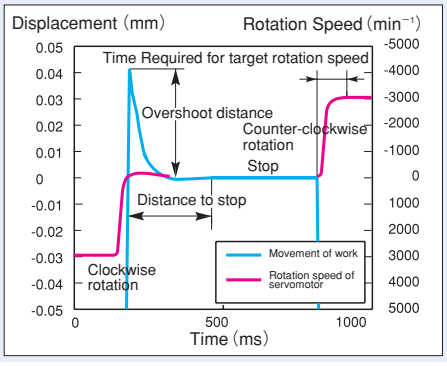


Time to Stop	100ms
Time Required for Target Rotation Speed	60ms
Overshoot Distance	0.035mm

Not what I expected at all!

Disk Couplings

Rigid Couplings



Time to Stop	390ms
Time Required for Target Rotation Speed	80ms
Overshoot Distance	0.041mm

Middle Gain