

[Overhang Load Length]

TIPS-090150

The overhang load length provides a reference for an appropriate offset of the load from the slider at which the actuator can operate smoothly without generating undesirable vibration.

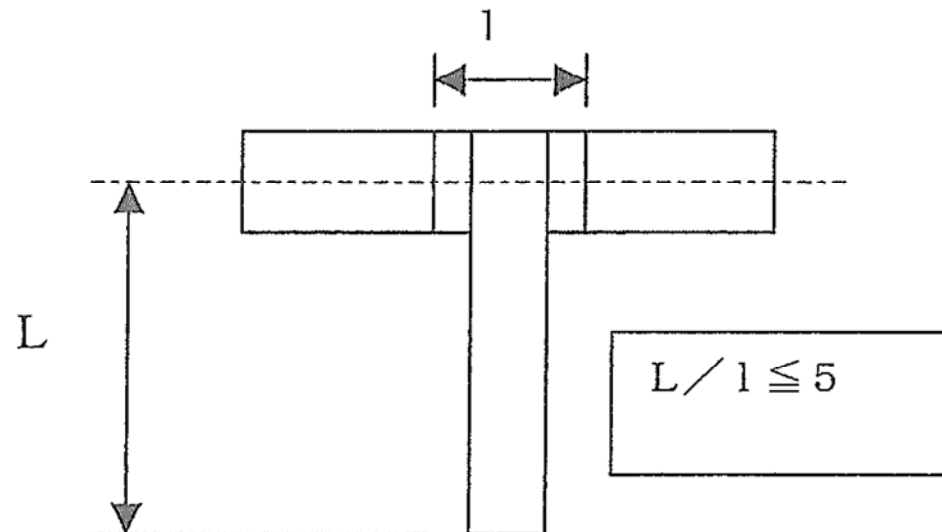
Take note that if the overhang load length is exceeded, vibration may increase the positioning time, generate longer overshooting, lower the positioning repeatability, etc.

Vibration can also cause the guide to get pinched or receive uneven loads and eventually fail prematurely. Accordingly, be sure to observe the allowable overhang load length. (The load coefficient will change.)

Based on our experience, the overhang load length should not exceed approx. 5 based on the expression " L / ℓ ," where L represents the overhang load length and ℓ represents the slider length. If " $L / \ell > 5$," use a double-guide specification or take other appropriate measures to ensure a sufficient span.

(Supplemental information)

With a measuring system equipped with a camera, the overhang load length may take a value of approx. 3 to 4. On the other hand, you can slightly increase the value of " L / ℓ " in applications where you only want your actuator to operate as intended.



Revision History	Issue Date	Note	Issued by
TIPS-090150	December 28, 2009	Initial Issue	Gene Changnon