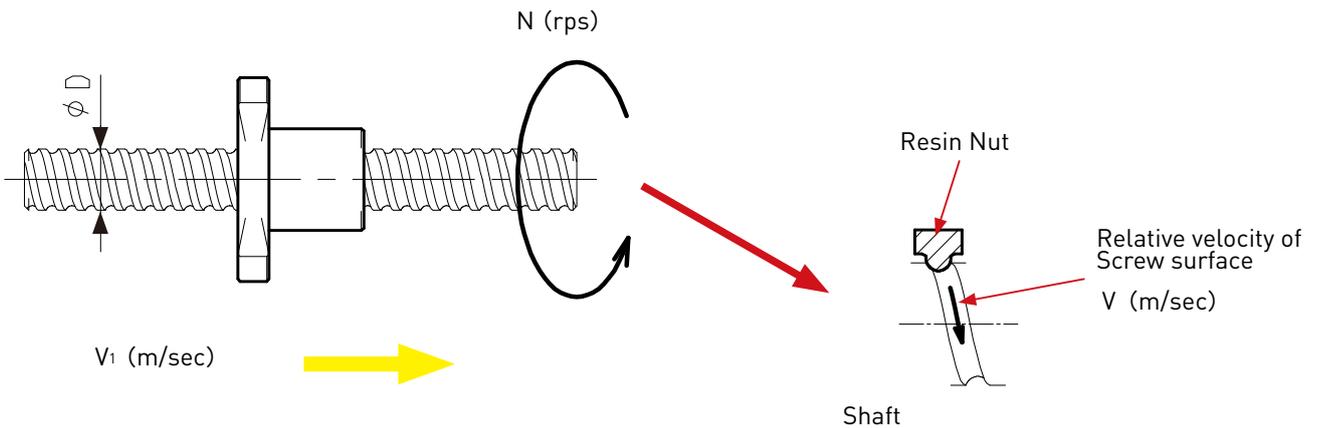
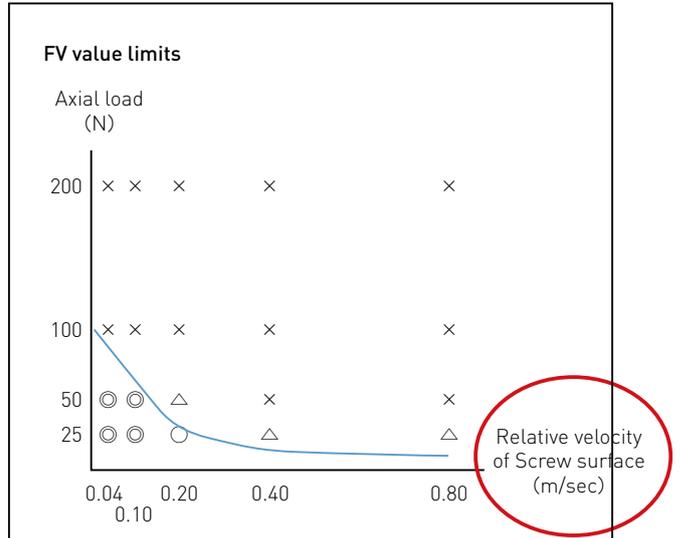


Q : What is the Relative velocity of Screw surface related to FV value of Resin Lead Screws? Is there any difference from velocity?

Relative velocity of Screw surface in horizontal axis of FV diagram means velocity in rotational direction, not axial moving speed (see figure below).

So, we need to convert the axial moving speed (V1) into Relative velocity of Screw surface (V).



Relative velocity of Screw surface (V) can be obtained by the formula below using Shaft revolution (N) and axial moving speed (V1).

$$V = N \cdot \pi \cdot D \text{ (m/sec)}$$

***In more accurate, $V = N \times \text{SQRT} \{(\pi D)^2 + L^2\}$

$$V = (V_1 / L) \times \pi D \text{ (m/sec)}$$

***In more accurate, $V = (V_1 / L) \times \text{SQRT} \{(\pi D)^2 + L^2\}$

D : Shaft diameter (m)
 N : Shaft revolution (rev/sec)
 V₁ : Axial moving speed (m/sec)
 L : Lead (m)
 SQRT : $\sqrt{\quad}$