

Q&A

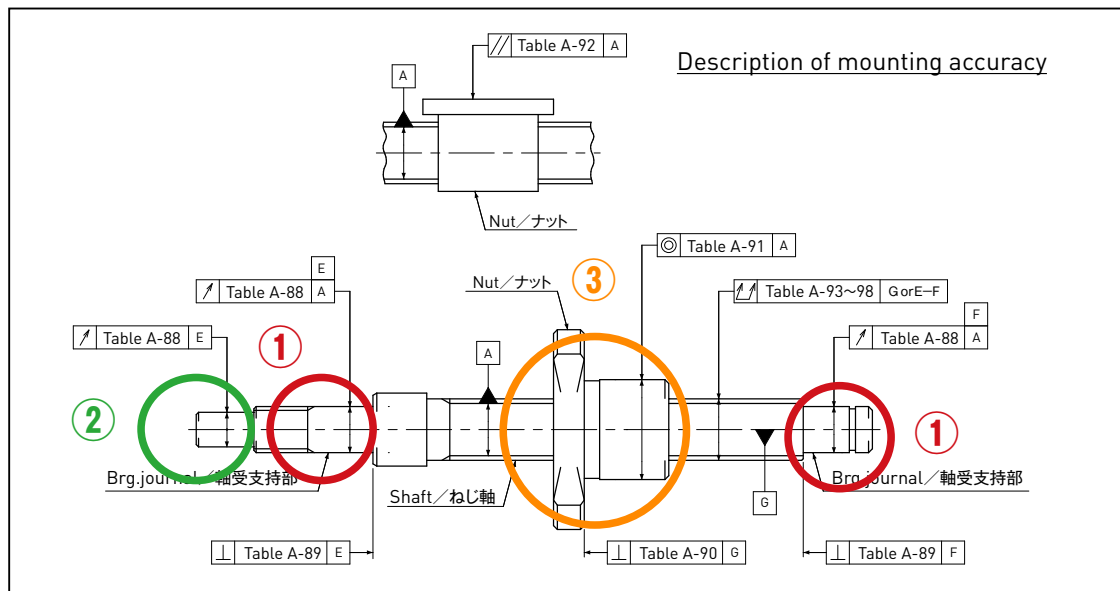
Question: Are there any tolerances or prescriptions of Ball Screw mounting accuracy?

Yes, JIS prescribes the mounting accuracy, which is officially called Run-out and location tolerances. They are necessary to install other parts onto each portion of Ball Screw Shaft and Nut. To understand the Run-out and location tolerances, we will show you the name of each portion as shown below.

Bearing seat or face……Portion of Bearing installation (①).

End journal related to Bearing seat……Portion of Coupling or Gear installation (②).

Ball Nut location face and diameter……Portion of Housing or Bracket installation (③).



Radial Run-out and Axial Run-out (Perpendicularity) are prescribed related to each reference plane, also total Run-out, which means the bending of Shaft is prescribed. Each permissible deviation depends on the size of Ball Screw and accuracy, please see KSS Master Catalogue in detail.

	Prescribed items	Symbol	Reference plane
Bearing seat	Radial Run-out		Screw groove
	Axial Run-out		Bearing seat
End-journal	Radial Run-out		Bearing seat
Nut outer	Radial Run-out	or	Centerline of Screw Shaft
Nut location face	Axial Run-out		Centerline of Screw Shaft
Shaft	Total Run-out		Centerline of Screw Shaft

Accuracy grade is prescribed even on mounting portion!!!