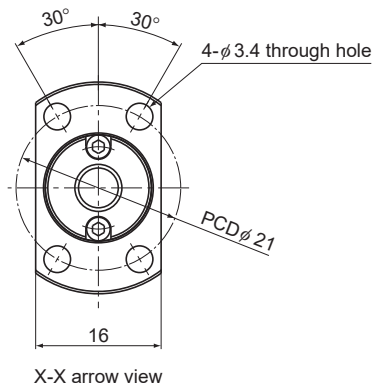


Technical drawing of a shaft assembly with a gear and a pulley. The drawing includes dimensions for diameters, lengths, and tolerances.

Dimensions and Tolerances:

- Shaft diameter: $\phi 14g6$ with tolerances -0.006 and -0.017 .
- Gear diameter: $\phi 27$.
- Pulley diameter: $\phi 5$ with tolerances 0.001 and 0.006 .
- Pulley groove width: $7^{+0}_{-0.2}$.
- Shaft length segments: 11, 4, (5), 6, 3, 7, 19, 6.
- Overall lengths: L_1 , L_2 , L_3 .
- Surface finish (Ra) tolerances: 0.005 E, 0.0025 E, 0.0017 E, 0.001 E.
- Geometric tolerances: 0.005 E, 0.0025 E, 0.0017 E, 0.001 E.
- Form and position tolerances: 0.005 E, 0.0025 E, 0.0017 E, 0.001 E.
- Feature control frames: $\sqrt{\text{H}}$ C-C', $\sqrt{\text{D}}$ E, $\sqrt{\text{I}}$ C-C', $\sqrt{\text{J}}$ E.
- Other features: 30° V-groove, $R: 0.2$ or less, $M5 \times 0.5$ thread, $C0.3$ fillet.

Note: For accuracy grade C5, GT clearance is also standardized.



Ball screw specifications		
Lead (mm)	8	
BCD (mm)	6.3	
Thread minor diameter (mm)	5	
Threading direction, No. of threaded grooves	Rightward, 2	
No. of circuits	1.5 turn $\times$ 2 rows	
Clearance symbol	GT	G2
Axial clearance (mm)	0.005 or less	0.02 or less
Basic dynamic load rating C_a (kN)	1.32	1.32
Basic static load rating C_{0a} (kN)	2.18	2.18
Preload torque (N·m)	—	—
Spacer ball	None	None
Rigidity value (N/ μ m)	84	
Circulation method	End cap	

Unit: mm

	Runout of the screw shaft axis	Runout of the nut circumference	Flange mounting surface runout	Runout of the thread groove surface	Lead angle accuracy		Nut mass	Shaft mass	Permissible rotational speed
	D	H	I	J	Representative travel distance error	Fluctuation	kg	kg/m	min ⁻¹
	0.035	0.012	0.01	0.01	± 0.018	0.018	0.025	0.14	5,000
	0.05	0.02	0.014	0.014	Travel distance: $\pm 0.05/300$		0.025	0.14	5,000
	0.035	0.012	0.01	0.01	± 0.02	0.018	0.025	0.14	5,000
	0.05	0.02	0.014	0.014	Travel distance: $\pm 0.05/300$		0.025	0.14	5,000