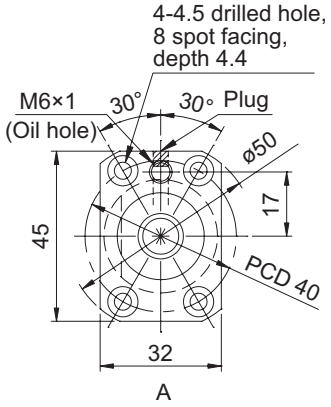
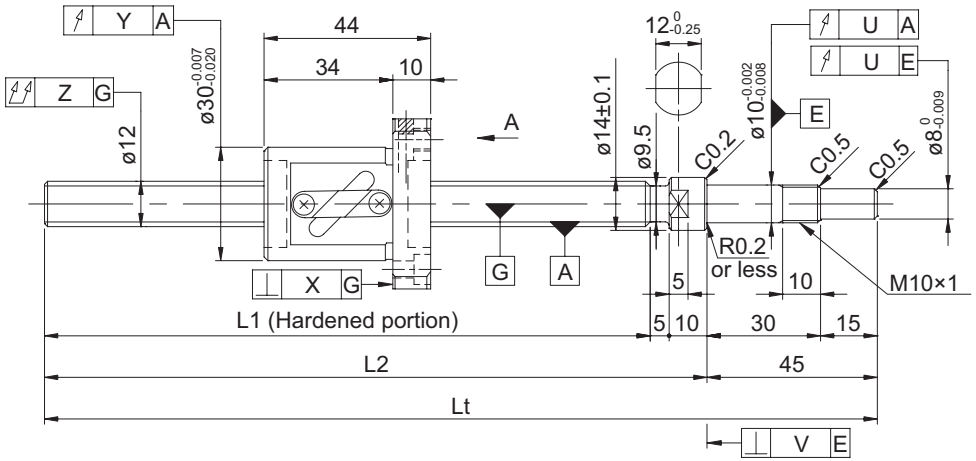
• Ball screw specifications

Shaft diameter (mm) - Lead (mm)	12 - 5	
Number of circuits / Thread direction	2.5 turns 1 circuit / Right-hand	
Ball diameter (mm)	3.175	
Root diameter (mm)	9.5	
Series	GP	
Basic dynamic load rating C (N)	3740	5950
Basic static load rating C0 (N)	4900	9800
Accuracy grade / Axial clearance symbol	C3 / S	C3 / F
Axial clearance (mm)	0	0.005 or less
Preload torque (N·cm)	1.5 to 5.0	Up to 1.0
Spacer ball	1 : 1	None
Recirculation system	Tube method	
Wiper	Lip seal	
Lubricant	Alvania Grease S2	





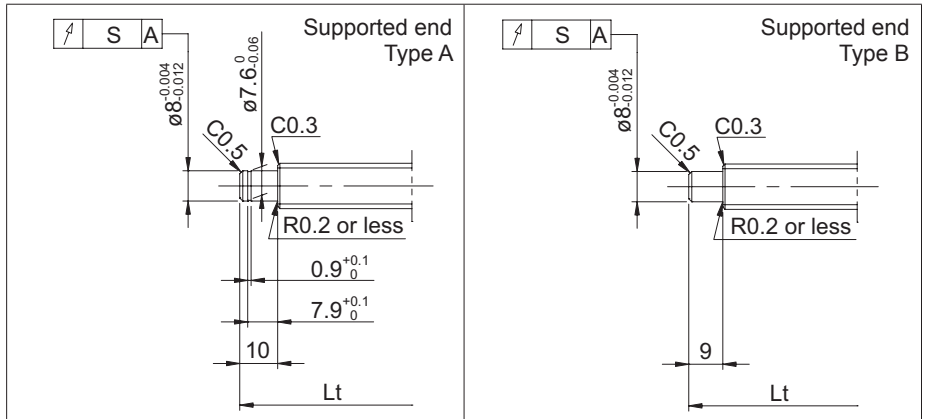
Model No. (One shaft end finished)	Screw shaft length L1	L2	Lt	Maximum stroke (L1 - nut length)	Lead accuracy ±E_c	e_c	e_{300}
GP1205DS-BALR-0300B-C3S	240	255	300	196	0.012	0.008	0.008
GP1205DS-BALR-0300B-C3F							
GP1205DS-BALR-0450B-C3S	390	405	450	346	0.013	0.010	0.008
GP1205DS-BALR-0450B-C3F							

• Product with axial clearance of 0.005 or less (F) shown may be partially preloaded.
• Preload torque is a value before applying grease.
• At the time of delivery, grease is inserted inside of the nut, with rust-preventive oil also applied. Before and during use, apply lubricant where appropriate.

• Shaft end finish type

Standard precision ball screws are available with KURODA's recommended shaft end finish types for each size. The fixed end type is finished beforehand.
Regarding the supported shaft end, additional machining to KURODA's recommended shaft end finish type described below is available. Please contact KURODA with your orders. Model examples for finished shaft ends are described below.

Model example: Finished fixed end (See left figure) → Both shaft ends finished
GP1205DS-BALR-0450B-C3F → GP1205DS-BALR-0450X0380-C3F
Thread length
Overall screw shaft length



Applicable supported end support unit	Applicable fixed end support unit
BUK-8S (Square type)	BUK-10, BUK-10F (Square type)
BUM-8S (Round type)	BUM-10, BUM-10F (Round type)

• Optional specifications

• Anticorrosive black coating (coating thickness: 1 to 2 μm) is available.

Accuracy of each part X	Y	Z	S	U	V	Preload torque (N·cm) Without clearance	With clearance	Mass (kg)
0.008	0.010	0.030	0.011	0.007	0.003	1.5 to 5.0	----	0.43
						----	Up to 1.0	
0.008	0.010	0.050	0.011	0.007	0.003	1.5 to 5.0	----	0.53
						----	Up to 1.0	