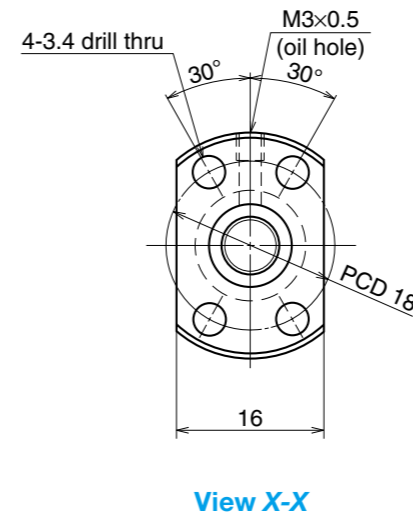
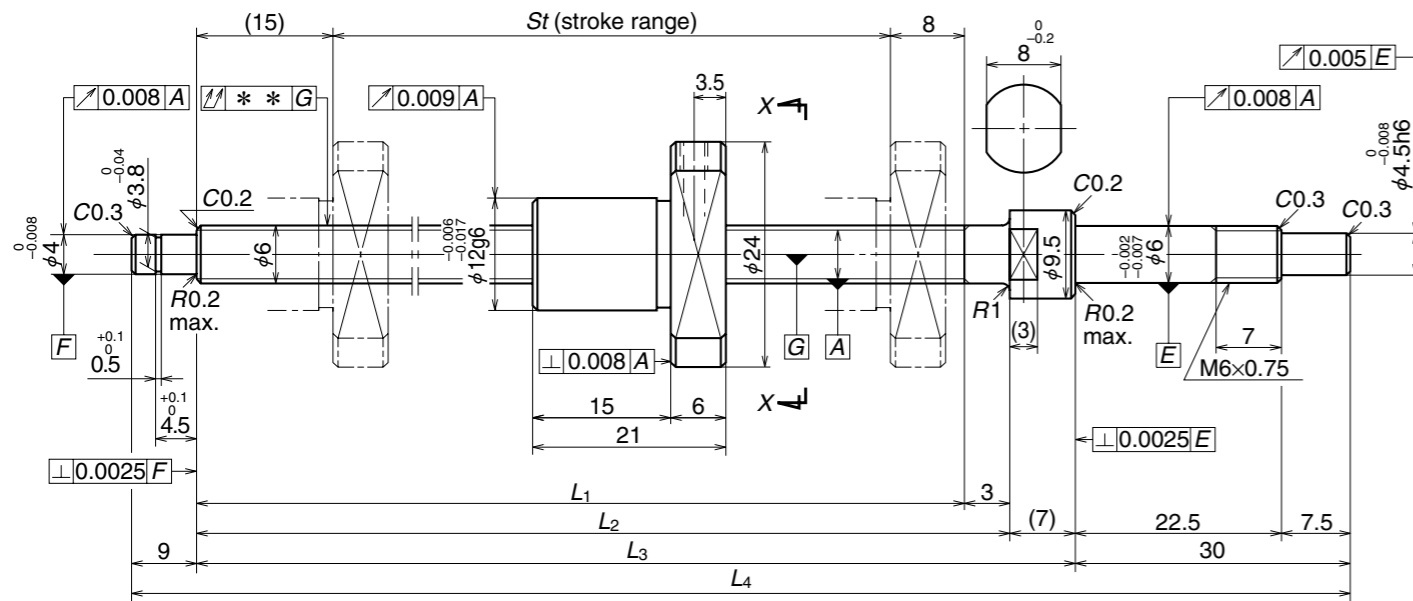


Unit: mm

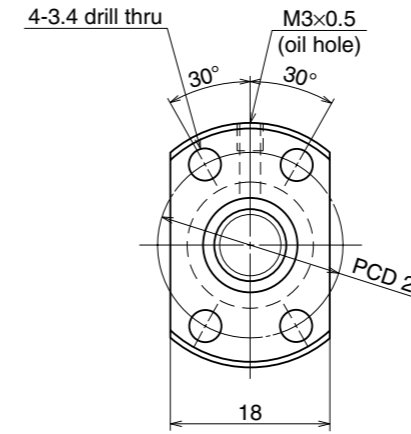
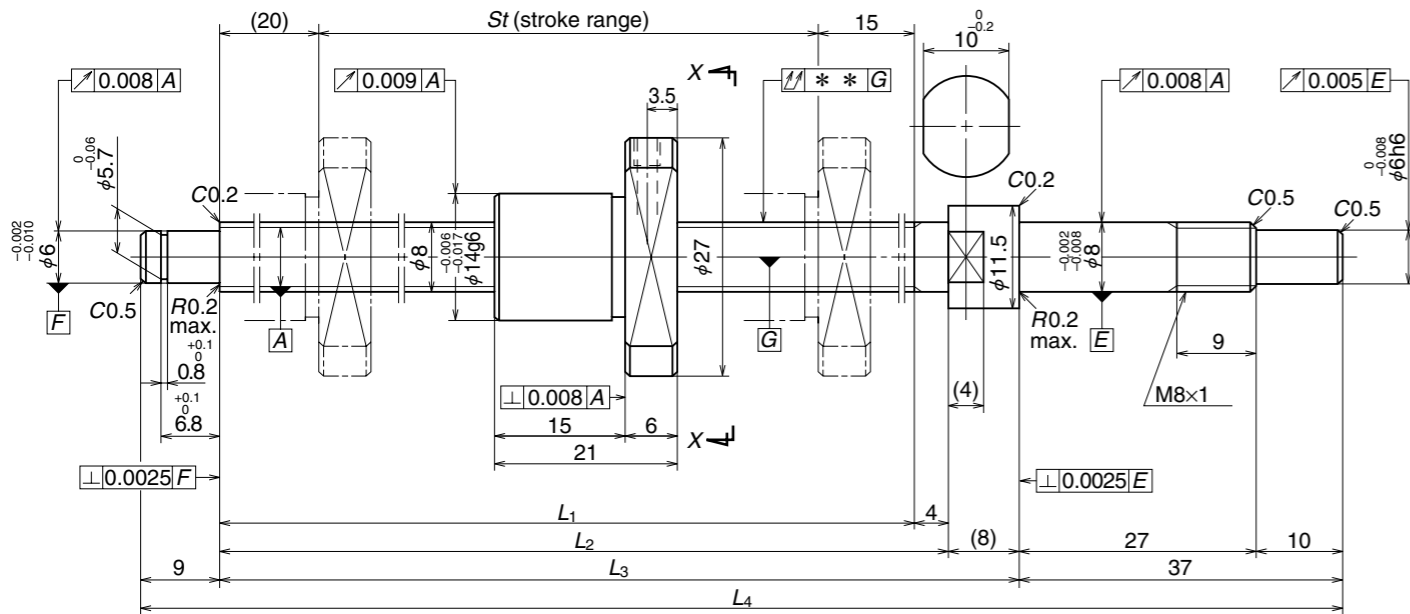


Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	6 x 1 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	0.800 / 6.2	
Effective turns of balls	1 x 3	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	470
	Static C_{0a}	680
Axial play	0	
Dynamic friction torque (N·cm)	1.3 or less	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
												Fixed - Simple support
W0601KA-3PY-C3Z1	100	102	125	128	135	174	0	0.010	0.008	0.025	0.06	3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.
 Note 3: Nut does not have seal.

Unit: mm



View X-X

Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	8 x 1 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	0.800 / 8.2	
Effective turns of balls	1 x 3	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	545
	Static C_{0a}	955
Axial play	0	
Dynamic friction torque (N·cm)	1.8 or less	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK08-01C (square)	○
WBK08S-01C (square)		○
WBK08-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W0802KA-1PY-C3Z1	150	155	190	194	202	248	0	0.010	0.008	0.035	0.12	Fixed - Simple support 3 000

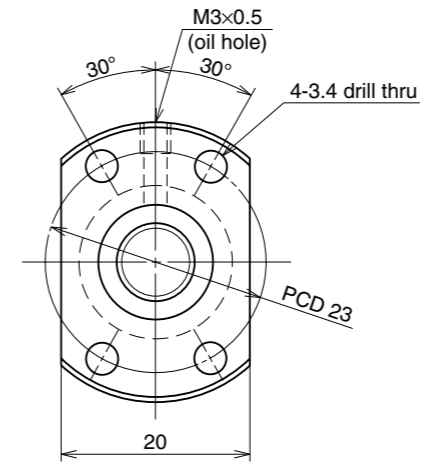
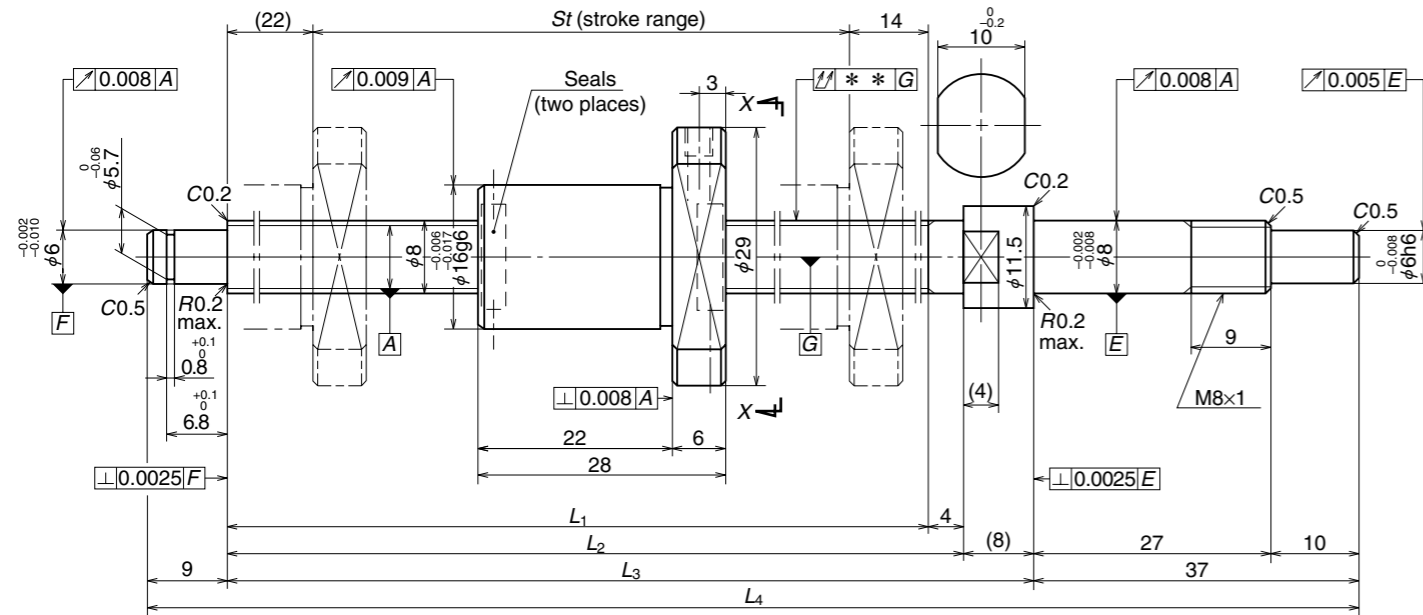
Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.
 Note 3: Nut does not have seal.

Ball Screws KA Series: Stainless Steel Product (Finished Shaft End)

Nut Model: MPFD

Screw Shaft $\phi 8$ Lead 2

Unit: mm



View X-X

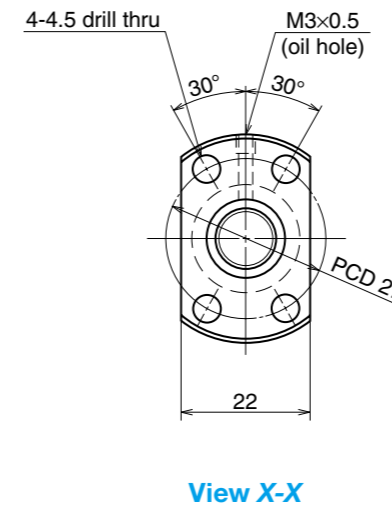
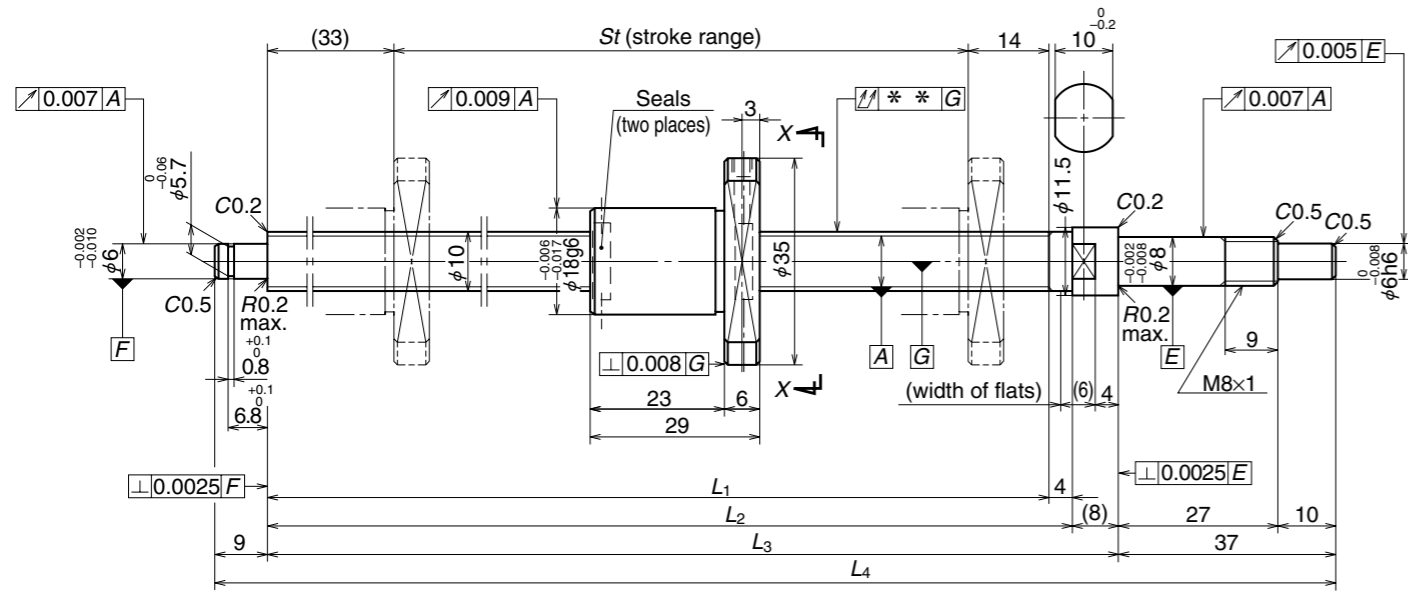
Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	8 x 2 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	1.200 / 8.3	
Effective turns of balls	1 x 3	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	1 080
	Static C_{0a}	1 630
Axial play	0	
Dynamic friction torque (N·cm)	2.0 or less	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK08-01C (square)	○
WBK08S-01C (square)		○
WBK08-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W0802KA-5PY-C3Z2	150	154	190	194	202	248	0	0.010	0.008	0.035	0.13	Fixed - Simple support 3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.



Unit: mm

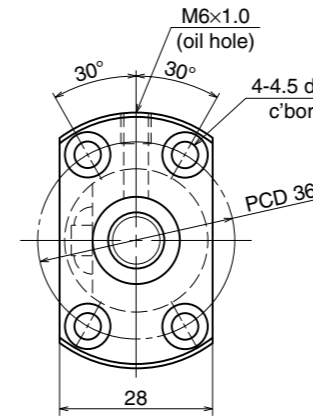
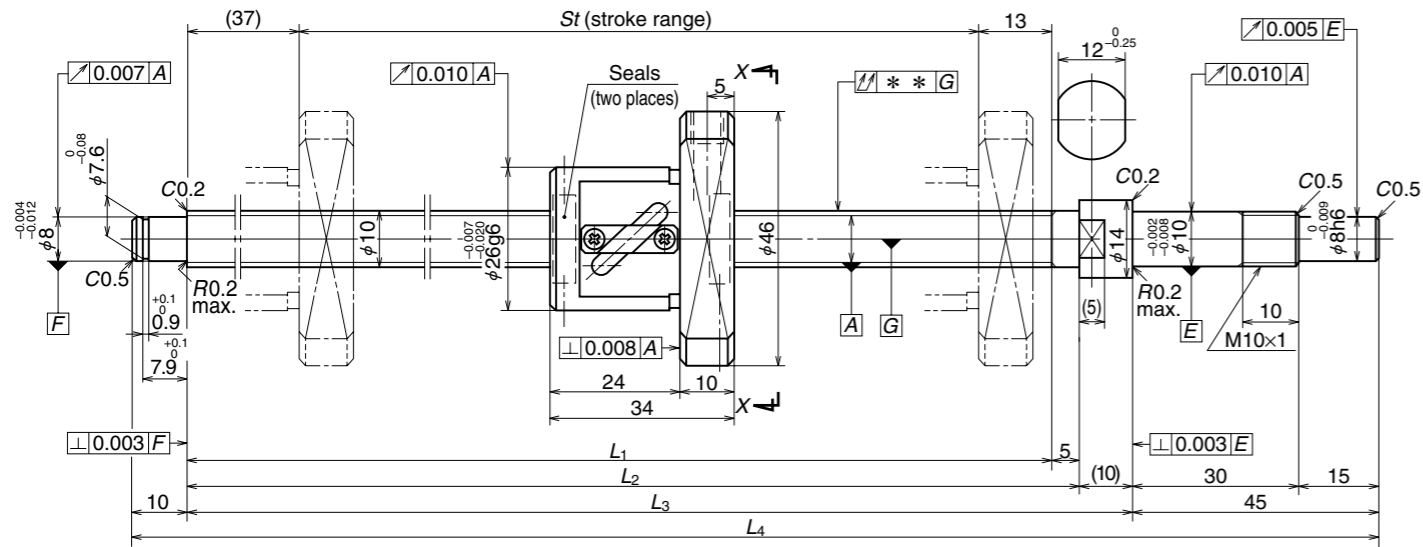
Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	10 x 2 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	1.200 / 10.3	
Effective turns of balls	1 x 3	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	1 210
	Static C_{0a}	2 110
Axial play	0	
Dynamic friction torque (N·cm)	0.10 - 2.5	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK10-01C (square)	○
WBK10S-01C (square)		○
WBK10-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W1002KA-3PY-C3Z2	200	203	250	254	262	308	0	0.012	0.008	0.030	0.22	Fixed - Simple support 3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.



View X-X

Unit: mm

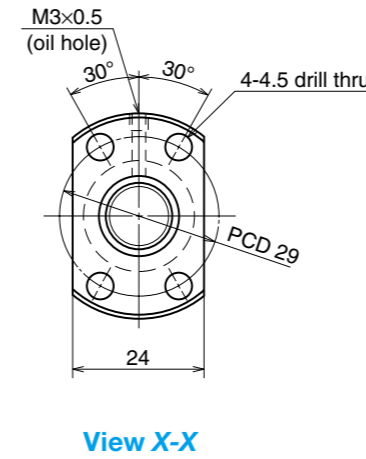
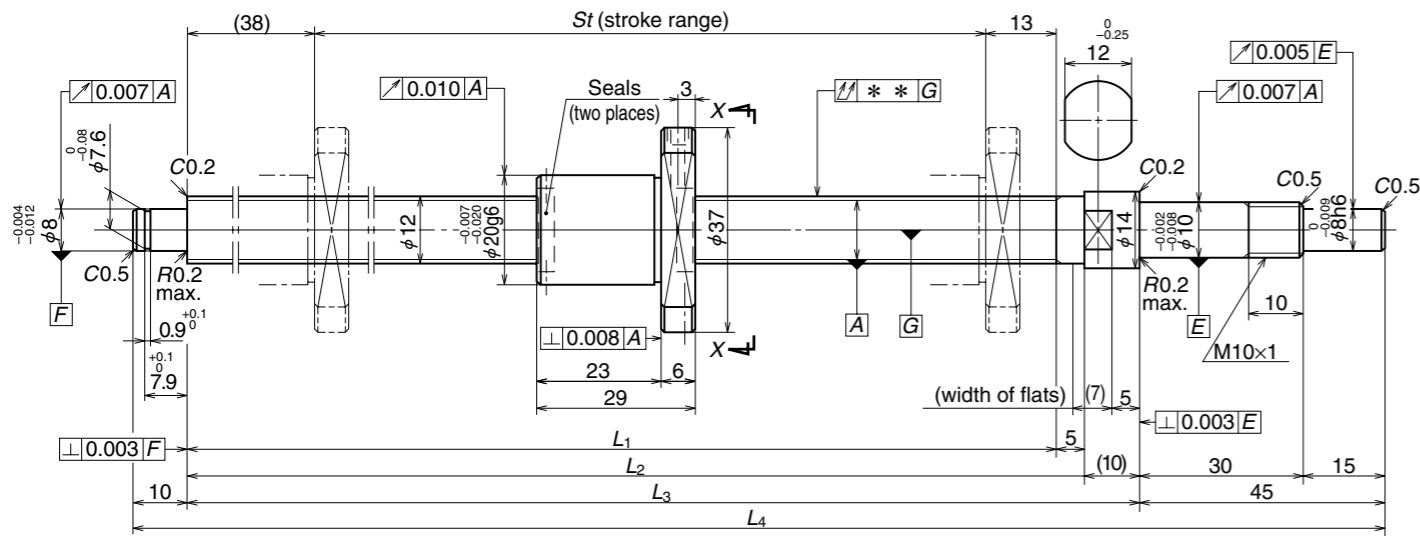
Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	10 x 4 / Right	
Preload / Ball recirculation	P-preload / Return tube	
Ball dia. / Ball circle dia.	2.000 / 10.3	
Effective turns of balls	2.5 x 1	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	2 250
	Static C_{0a}	3 290
Axial play	0	
Dynamic friction torque (N·cm)	0.5 - 3.9	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	0.8	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK10-01C (square)	○
WBK10S-01C (square)		○
WBK10-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W1001KA-3P-C3Z4	100	110	160	165	175	230	0	0.010	0.008	0.030	0.29	3 000
W1003KA-3P-C3Z4	300	310	360	365	375	430	0	0.013	0.008	0.050	0.39	3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.



Unit: mm

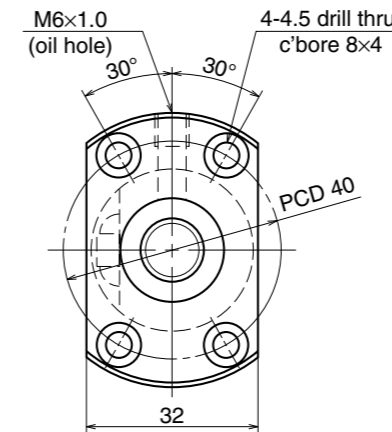
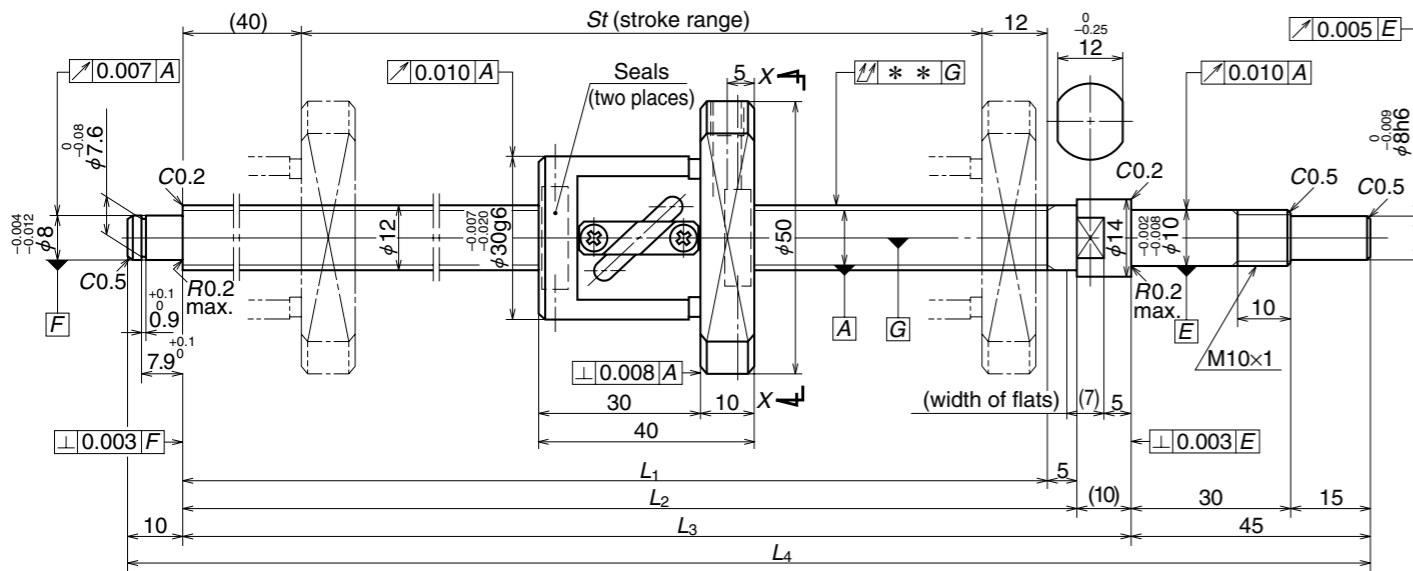
Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	12 x 2 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	1.200 / 12.3	
Effective turns of balls	1 x 3	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	1 360
	Static C_{0a}	2 680
Axial play	0	
Dynamic friction torque (N·cm)	0.4 – 3.4	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK10-01C (square)	○
WBK10S-01C (square)		○
WBK10-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W1201KA-3PY-C3Z2	100	109	160	165	175	230	0	0.010	0.008	0.030	0.24	3 000
W1203KA-1PY-C3Z2	250	259	310	315	325	380	0	0.012	0.008	0.040	0.36	3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Apply to screw shaft surface when replenishing.



View X-X

Unit: mm

Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	12 x 5 / Right	
Preload / Ball recirculation	P-preload / Return tube	
Ball dia. / Ball circle dia.	2.381 / 12.3	
Effective turns of balls	2.5 x 1	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	3 070
	Static C_{0a}	4 670
Axial play	0	
Dynamic friction torque (N·cm)	1.0 – 4.4	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	1.2	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK10-01C (square)	○
WBK10S-01C (square)		○
WBK10-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
W1202KA-3P-C3Z5	200	208	260	265	275	330	0	0.012	0.008	0.040	0.47	3 000
W1205KA-1P-C3Z5	450	458	510	515	525	580	0	0.016	0.012	0.065	0.66	3 000

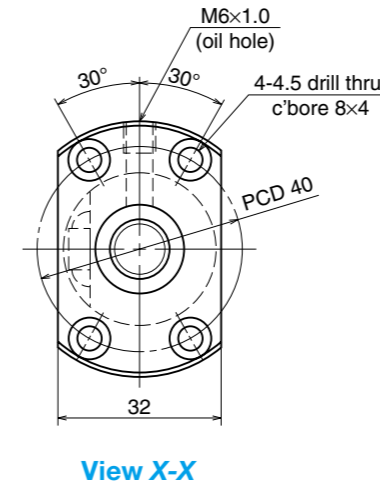
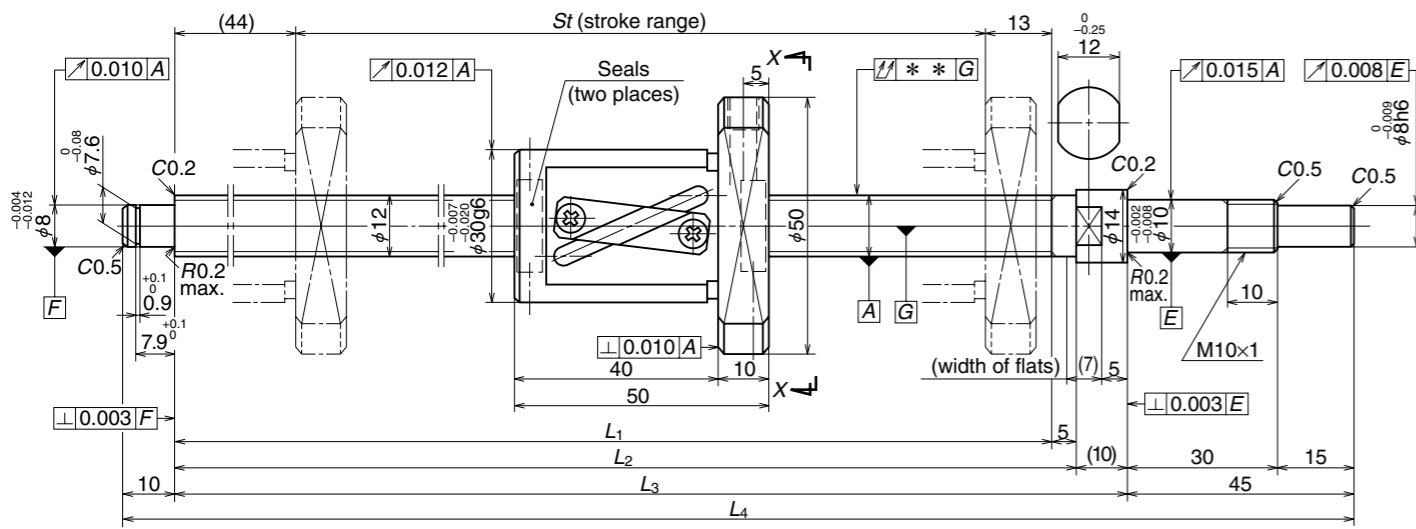
Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.

Ball Screws KA Series: Stainless Steel Product (Finished Shaft End)

Nut Model: LPFT

Screw Shaft $\phi 12$ Lead 10

Unit: mm



Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	12 x 10 / Right	
Preload / Ball recirculation	P-preload / Return tube	
Ball dia. / Ball circle dia.	2.381 / 12.5	
Effective turns of balls	2.5 x 1	
Accuracy grade / Preload	C5 / Z	
Basic load rating (N)	Dynamic C_a	3 070
	Static C_{0a}	4 790
Axial play	0	
Dynamic friction torque (N·cm)	1.0 – 4.9	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	1.4	

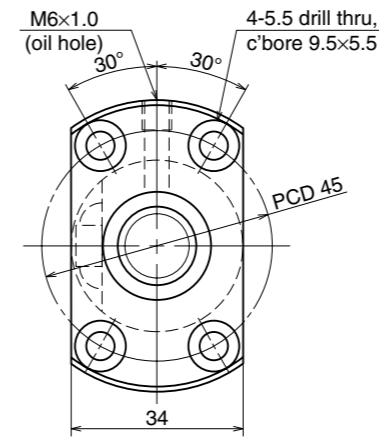
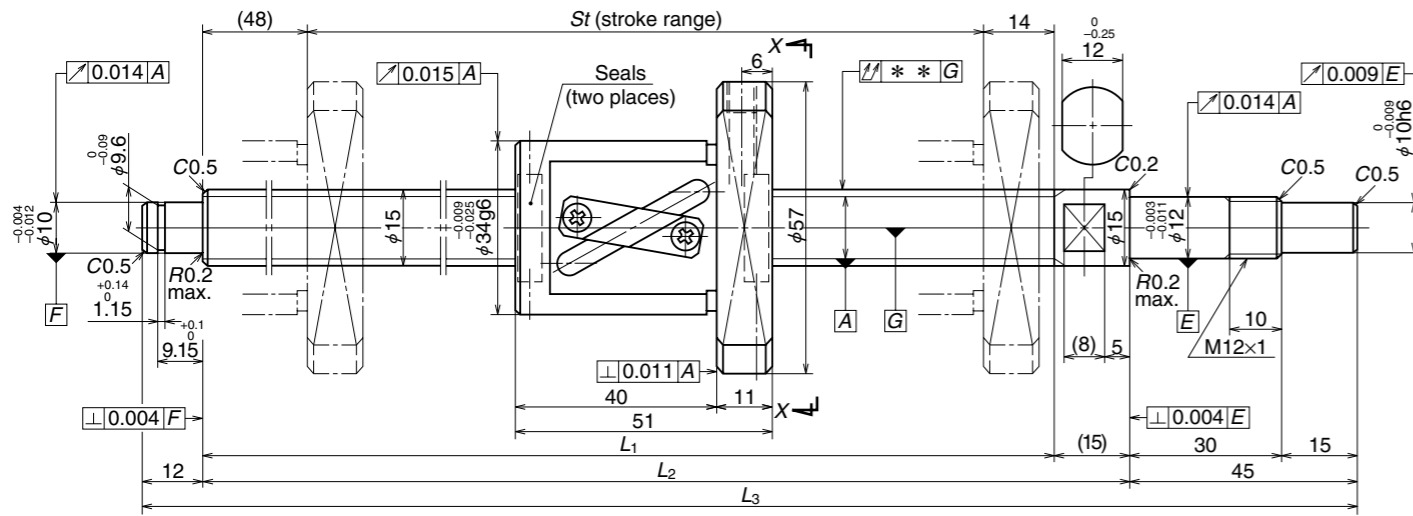
Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK10-01C (square)	○
WBK10S-01C (square)		○
WBK10-11C (round)	○	

Ball Screws KA Series

Part number	Stroke		Screw shaft length				Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	L_4	Target value T	Error e_p	Variation v_u			Supporting condition
												Fixed - Simple support
W1203KA-3P-C5Z10	250	253	310	315	325	380	0	0.023	0.018	0.050	0.56	3 000
W1205KA-3P-C5Z10	450	453	510	515	525	580	0	0.030	0.023	0.075	0.72	3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.

Unit: mm



View X-X

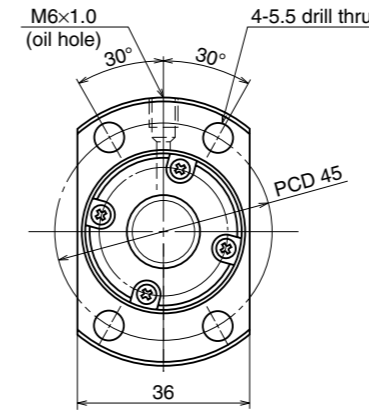
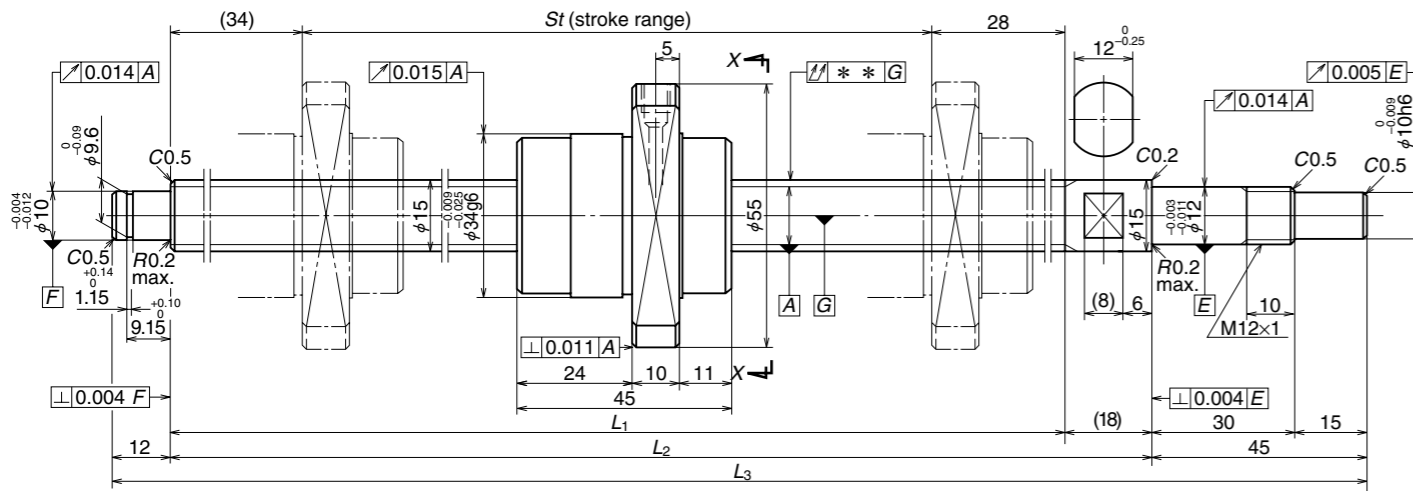
Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	15 x 10 / Right	
Preload / Ball recirculation	P-preload / Return tube	
Ball dia. / Ball circle dia.	3.175 / 15.5	
Effective turns of balls	2.5 x 1	
Accuracy grade / Preload	C5 / Z	
Basic load rating (N)	Dynamic C_a	5 780
	Static C_{0a}	9 430
Axial play	0	
Dynamic friction torque (N·cm)	1.5 - 7.9	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	2.3	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK12-01C (square)	○
WBK12S-01C (square)		○
WBK12-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length			Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	Target value T	Error e_p	Variation v_u			Supporting condition
											Fixed - Simple support
W1504KA-3P-C5Z10	400	427	489	504	561	0	0.027	0.020	0.050	0.99	3 000
W1506KA-3P-C5Z10	600	627	689	704	761	0	0.035	0.025	0.065	1.2	3 000
W1510KA-1P-C5Z10	1 000	1 027	1 089	1 104	1 161	0	0.046	0.030	0.110	1.7	1 610

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.



View X-X

Unit: mm

Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	15 x 20 / Right	
Preload / Ball recirculation	P-preload / End cap	
Ball dia. / Ball circle dia.	3.175 / 15.5	
Effective turns of balls	1.7 x 1	
Accuracy grade / Preload	C5 / Z	
Basic load rating (N)	Dynamic C_a	4 150
	Static C_{0a}	6 450
Axial play	0	
Dynamic friction torque (N·cm)	1.5 - 7.9	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	1.9	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK12-01C (square)	○
WBK12S-01C (square)		○
WBK12-11C (round)	○	

Unit: mm

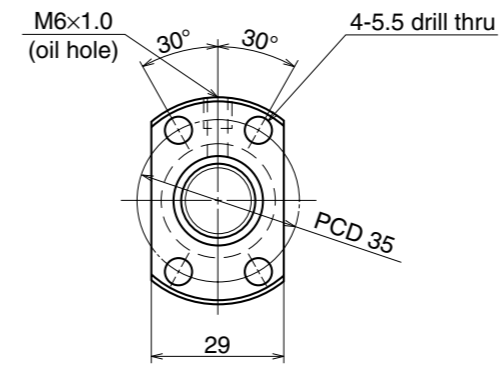
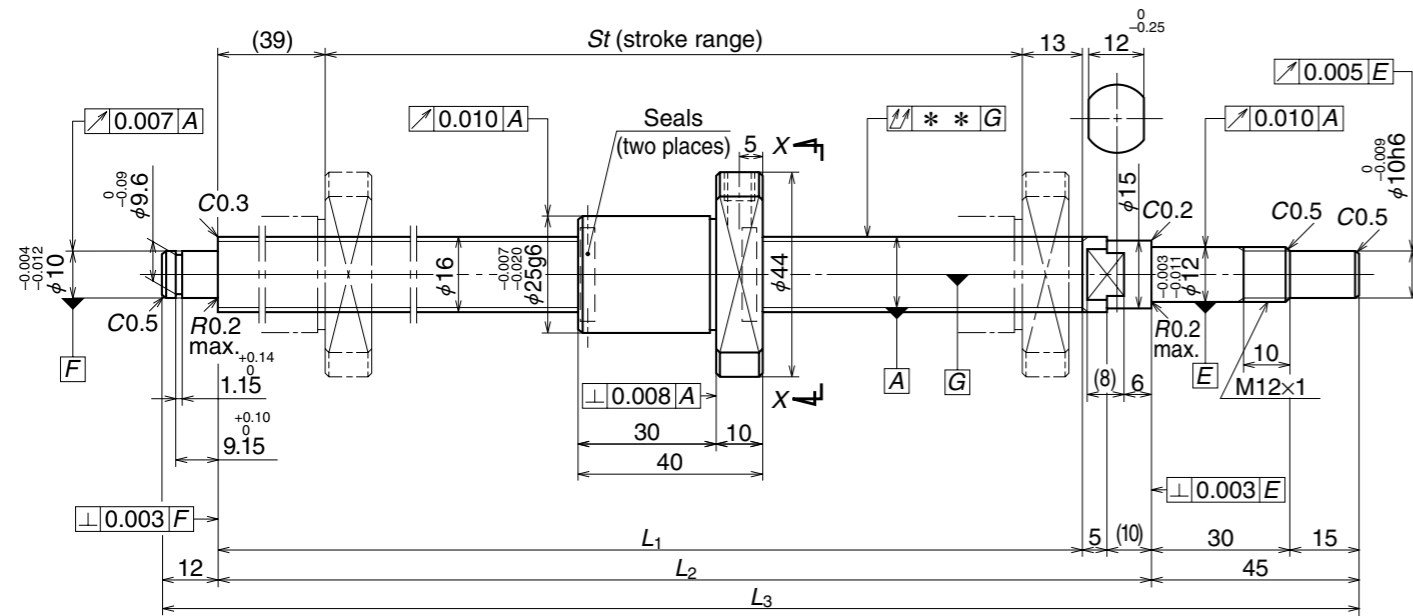
Part number	Stroke		Screw shaft length			Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	Target value T	Error e_p	Variation v_u			Supporting condition
W1504KA-7PG-C5Z20	400	424	486	504	561	0	0.027	0.020	0.050	1.0	3 000
W1506KA-7PG-C5Z20	600	624	686	704	761	0	0.035	0.025	0.065	1.3	3 000
W1510KA-3PG-C5Z20	1 000	1 024	1 086	1 104	1 161	0	0.046	0.030	0.110	1.8	1 610

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.

Ball Screws KA Series: Stainless Steel Product (Finished Shaft End)

Nut Model: MPFD

Screw Shaft $\phi 16$ Lead 2



View X-X

Unit: mm

Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	16 x 2 / Right	
Preload / Ball recirculation	P-preload / Deflector	
Ball dia. / Ball circle dia.	1.588 / 16.4	
Effective turns of balls	1 x 4	
Accuracy grade / Preload	C3 / Z	
Basic load rating (N)	Dynamic C_a	2 870
	Static C_{0a}	6 250
Axial play	0	
Dynamic friction torque (N·cm)	0.5 - 4.9	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	1.6	

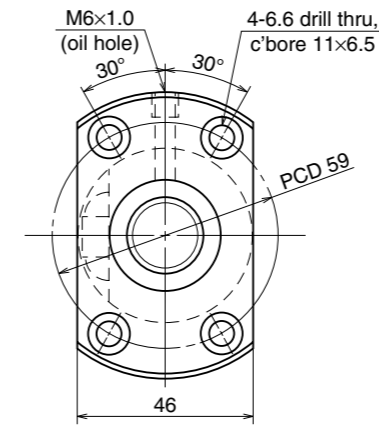
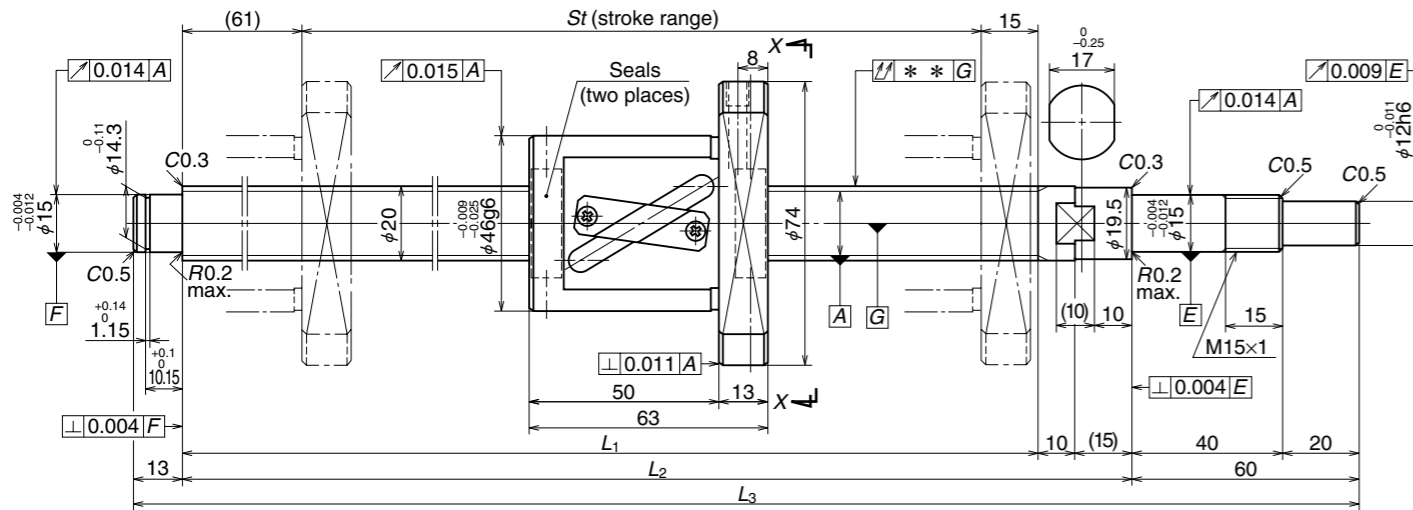
Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK12-01C (square)	○
WBK12S-01C (square)		○
WBK12-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length			Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	Target value T	Error e_p	Variation v_u			Supporting condition
W1601KA-3PY-C3Z2	100	137	189	204	261	0	0.010	0.008	0.020	0.46	Fixed - Simple support 3 000
W1603KA-1PY-C3Z2	300	337	389	404	461	0	0.013	0.010	0.035	0.75	3 000

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.
 Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.

Unit: mm



View X-X

Ball Screw Specifications		
Shaft dia. x Lead / Direction of turn	20 x 20 / Right	
Preload / Ball recirculation	P-preload / Return tube	
Ball dia. / Ball circle dia.	3.969 / 21	
Effective turns of balls	1.5 x 1	
Accuracy grade / Preload	C5 / Z	
Basic load rating (N)	Dynamic C_a	5 760
	Static C_{0a}	9 370
Axial play	0	
Dynamic friction torque (N·cm)	2.0 – 11.8	
Spacer ball	None	
Factory-packed grease	Refer to Note 1 below	
Internal spatial volume of nut (cm ³)	4.2	

Recommended Support Unit For Clean Environment Use	Fixed side	Simple support side
	WBK15-01C (square)	○
WBK15S-01C (square)		○
WBK15-11C (round)	○	

Unit: mm

Part number	Stroke		Screw shaft length			Lead accuracy			Shaft run-out **	Mass (kg)	Permissible rotational speed N (min ⁻¹)
	Nominal	Maximum	L_1	L_2	L_3	Target value T	Error e_p	Variation v_u			Supporting condition
W2005KA-3P-C5Z20	400	434	510	535	608	0	0.030	0.023	0.050	2.0	3 000
W2007KA-3P-C5Z20	600	634	710	735	808	0	0.035	0.025	0.085	2.5	3 000
W2011KA-3P-C5Z20	1 000	1 034	1 110	1 135	1 208	0	0.046	0.030	0.110	3.4	2 160

Note 1: Only rust preventive agent is applied at time of delivery. Please apply lubricant (oil or grease) before use.

Note 2: NSK Clean Grease LG2 is recommended. Amount for replenishing should be about 50% of nut internal space capacity.