



KURODA



Double Nut **FR SERIES**

- Higher Speeds
- Reduced Noise
- Precise Positioning

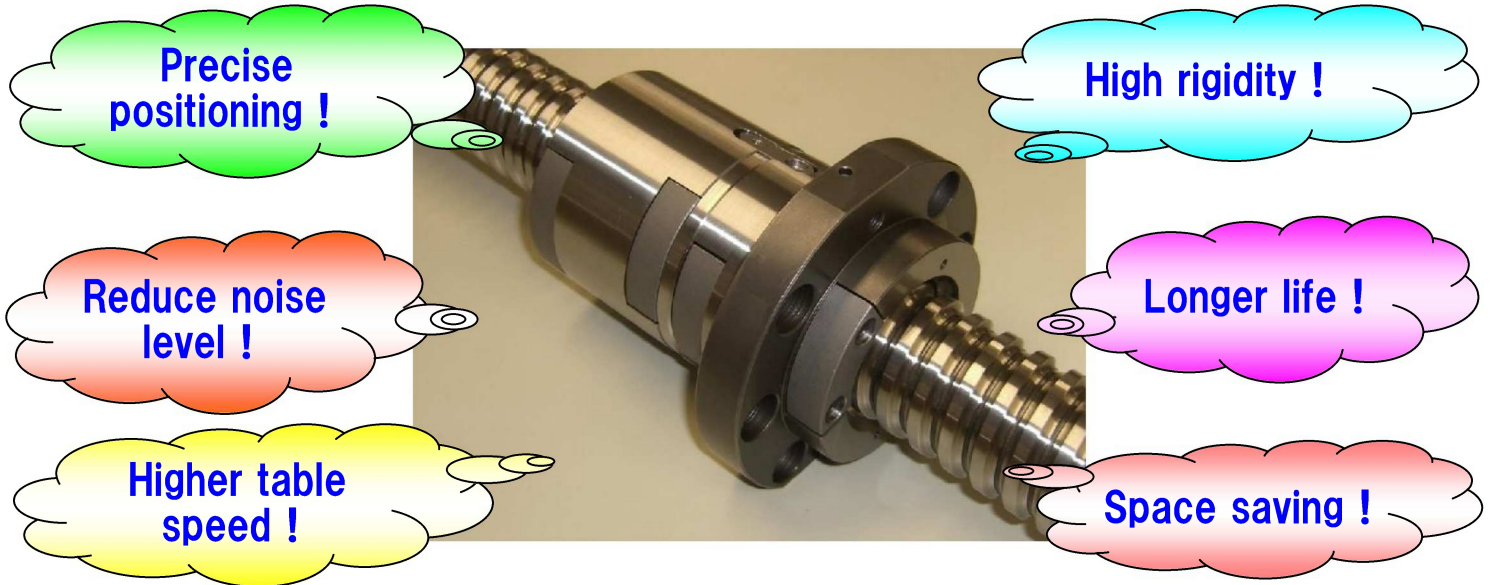
Contact Us! 800-433-3434 USA
Email info@grp6.com

Ultra-Quiet Ball screw F series

Double Nut FR Series

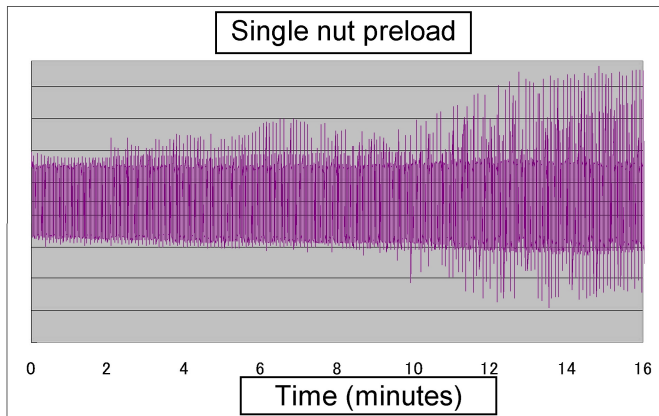
Shaft Diameter $\phi 32$ $\phi 36$ $\phi 40$

Especially recommended for a machine which requires high rigidity and precise positioning accuracy.

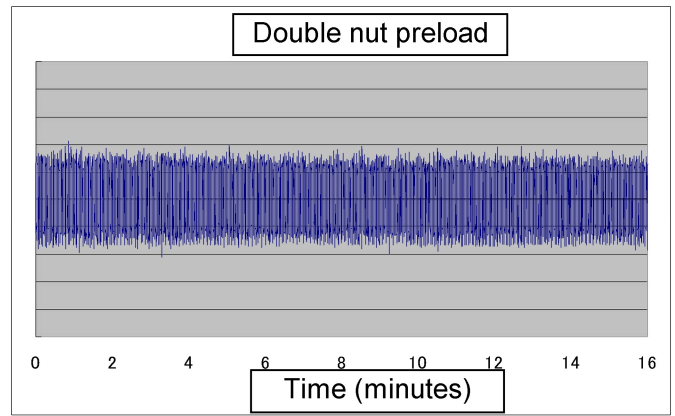


Comparison of oscillation torque between double nut and single nut

★Oscillation torque characteristics of preload (Axial clearance: 0) ball screws



Oscillation torque tends to increase by increasing the time period of oscillation.



Oscillation time period doesn't influence the oscillation torque value.

Combination of Shaft Diameter and Lead length

Shaft DIA	Lead Length			
	8mm	10mm	12mm	16mm
32mm	●	●	●	●
36mm			●	●
40mm	●	●	●	●

●: Customized item(Double Nut FR series)

□How to Display Model Number

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Series	Dia	Lead	Number of turns & circuits	Single or double nut	Flange Shape	Ball recirculation	Seal type	Thread Direction	Total length	Thread length	Accuracy grade	Axial clearance
F series	32	08	P	E	D	P	N	R	****	****	C3	S

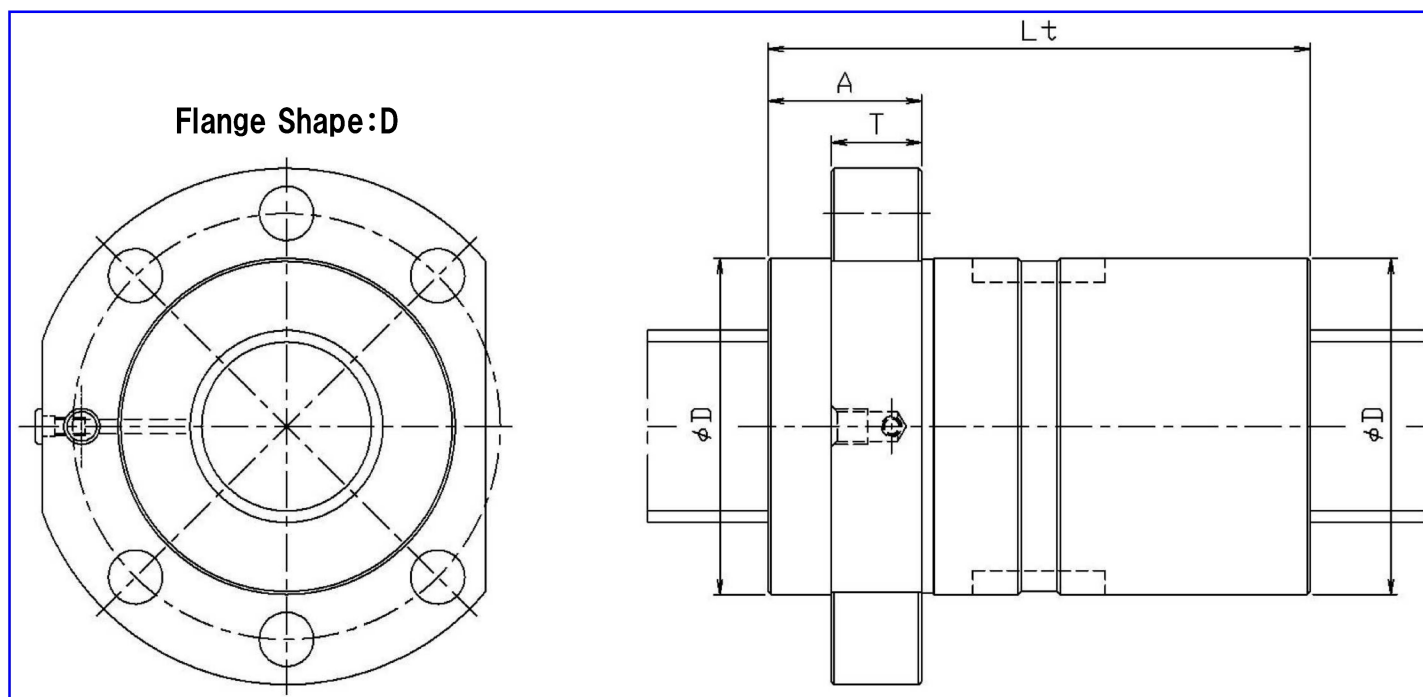
(1) Series:FR (2) Shaft Dia (3) Lead length (4) Number of turns and circuits

(5) Nut type E: Double Nut (with Spacer ball) (6) Flange shape D: Round with D cut (7) Ball recirculation D: End deflect

(8) Seal N: Without seal (9) Thread direction R:Right (10) Total length (11) Thread length

(12) Accuracy grade C3~C5 (13) Axial clearance S: Axial clearance 0mm(Preload)

□Shape / Dimension / Basic load rating / Rigidity



Model Number	Shaft O.Dia d (mm)	Lead L (mm)	Number of Turns× Circuits	Basic dynamic load rating C (N)	Basic static load rating Co (N)	*Rigidity KNW (N/μm)	Nut dimension (mm)				Rigidity of single nut (as reference)
							Outer Dia D	Total length Lt	Length A	Flange thickness T	
FR3208PE-DPNR	32	8	3.7X1	30,100	74,600	570	56	90	25.5	15	330
FR3210PE-DPNR	32	10	3.7X1	43,100	97,000	580	62	115	28.5	15	370
FR3212PE-DPNR	32	12	3.7X1	43,100	97,000	580	62	137	31	15	370
FR3216PE-DPNR	32	16	3.7X1	43,100	97,000	580	62	174	30	15	370
FR3612PE-DPNR	36	12	3.7X1	59,500	140,500	670	70	134	32.5	18	400
FR3616PE-DPNR	36	16	3.7X1	59,500	140,500	670	70	176	35	18	400
FR4008PE-DPNR	40	8	3.7X1	34,400	98,300	700	64	100	26	15	410
FR4010PE-DPNR	40	10	3.7X1	49,400	125,800	700	70	115	28.5	15	410
FR4012PE-DPNR	40	12	3.7X1	64,000	160,700	740	74	135	33	18	460
FR4016PE-DPNR	40	16	3.7X1	64,000	160,700	740	74	174	34	18	460

*The rigidity in the above list represents the value applied to the axial load about 3 times or less of the preload, which is equivalent to 1/20 of basic dynamic load rating.

(Note)The rigidity is the practical value based on the result of rigidity test, which calculates from the elastic displacement measured when the axial load equivalent to 30% of basic dynamic load rating is applied between the screw thread and the steel balls.

●The content of this brochure is subject to change without notice for product improvement purpose.