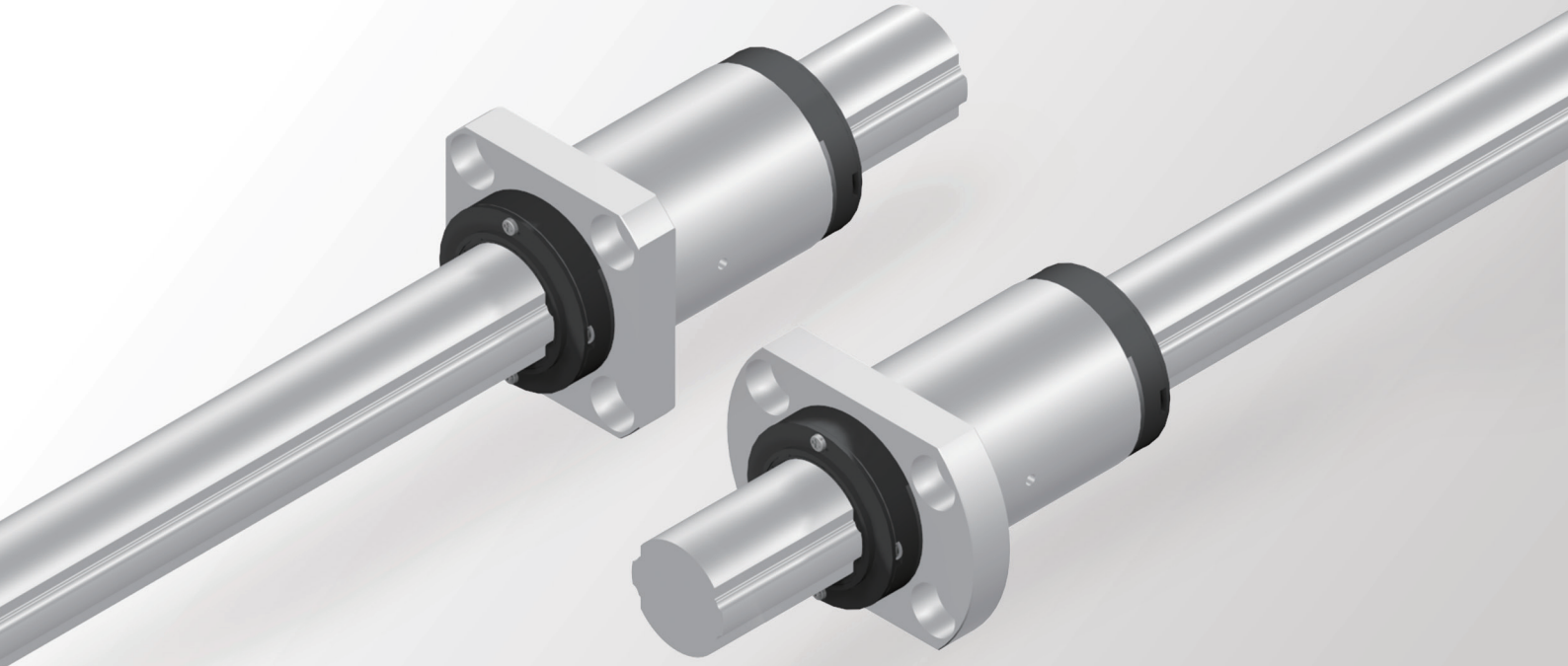




Compact Ball Spline

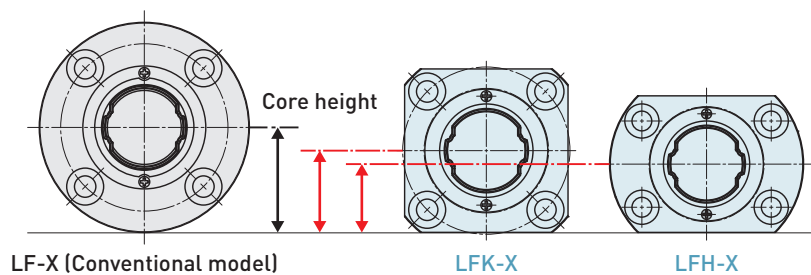
LFK-X / LFH-X



Compact
Design

Allows for Compact Designs

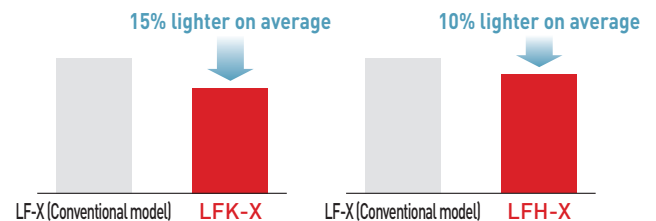
Models LFK-X and LFH-X are designed with a lower core height than the conventional Model LF-X. This allows for more compact mounting and peripheral components.



Lighter Weight

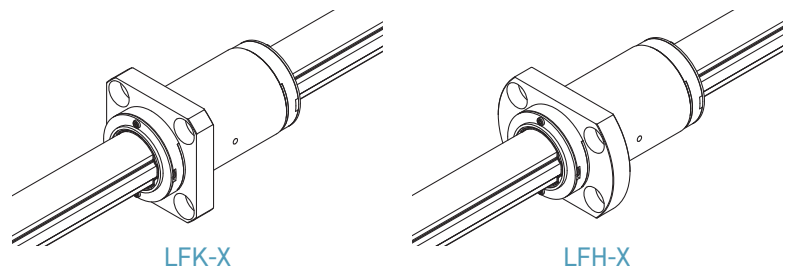
Lighter Weight

The modified flange shape makes the weight of the spline nut lighter than the round-flanged Model LF-X, reducing the weight of devices.

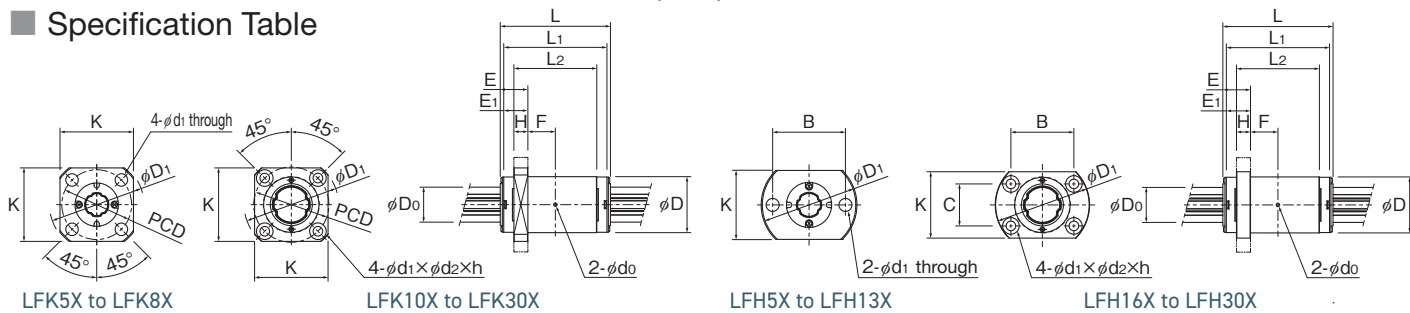


Lineup

The lineup features nine sizes ranging from $\phi 5$ to $\phi 30$ with two types of spline nut: standard type and long type ($\phi 5$ to $\phi 8$).



■ Specification Table



LFK5X to LFK8X

LFK10X to LFK30X

LFH5X to LFH13X

LFH16X to LFH30X

Unit: mm

Model No.	Spline shaft D _{h7}	Outer diameter		Length		Effective length L ₂	Flange outer diameter D ₁	Nut dimensions								Basic torque rating		Basic load rating		Static permissible moment		Spline nut weight (g)								
		D	Tolerance	L (With seal)	L ₁ (Without seal)			K	B	C	H	F	E	E ₁	Greasing hole d _o	PCD	Mounting hole d ₁ ×d ₂ ×h	C _T (N·m)	C _{0T} (N·m)	C (kN)	C ₀ (kN)		M _{A1} (N·m)	M _{A2} (With seal) (N·m)	M _{A2} (Without seal) (N·m)					
LFK5X	5	10	0 -0.009	15	13.6	7.3	23	18	-	-	-	-	-	-	-	17	3.4 through	0.82	1.25	0.56	0.85	1.04	8.2	6.6	7.9					
LFH5X				16	17	-		2.7	-	-	-	-	-	-	-	-		-	-	-	1.59	3.20	1.09	2.19	6.11	35.5	28.4	8.6		
LFK5XL				18	-	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	12.6
LFH5XL				16	17	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	13.3
LFK6X	6	12	0 -0.011	19	17.6	10.2	25	20	-	-	-	-	-	-	-	19	3.4 through	1.73	2.77	0.98	1.58	2.85	19.0	15.2	11.6					
LFH6X				18	19	-		2.7	2.4	7.1	5.9	1	-	-	-	-		-	-	-	2.81	5.54	1.60	3.15	10.6	59.8	47.8	12.4		
LFK6XL				20	-	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	18.3
LFH6XL				18	19	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	19.1
LFK8X	8	15	0 -0.011	25	23.8	14.6	28	22	-	-	-	-	-	-	-	22	3.4 through	6.00	9.23	1.39	2.15	5.13	34.3	27.4	22.3					
LFH8X				21	22	-		3.8	3.5	9	7.5	1.5	-	-	-	-		-	-	-	10.1	19.5	2.35	4.53	21.1	110.9	88.7	24.4		
LFK8XL				22	-	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	32.3
LFH8XL				21	22	-		-	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	34.4
LFK10X	10	19	0 -0.013	33	30.8	23.9	38	30	-	-	6	5.95	10.55	9.45	1.5	28	4.5×8×4.4	9.41	17.3	2.94	5.40	21.5	114	104	54					
LFH10X								25	29	-	-	-	-	-	-	-	-									-	-	-	-	-
LFK13X	13	23	0 -0.013	36	32.4	24	43	34	-	-	6	6	12	10.2	1.5	33	4.5×8×4.4	17.1	28.7	4.16	6.96	28.9	164	149	67					
LFH13X								29	33	-	-	-	-	-	-	-	-									-	-	-	-	-
LFK16X	16	28	0 -0.013	50	46.4	35.5	48	37	-	-	6	11.7	13.3	11.5	2	38	4.5×8×4.4	42.9	68.6	8.40	13.4	77.4	419	381	110					
LFH16X								34	31	22	-	-	-	-	-	-	-									-	-	-	-	-
LFK20X	20	32	0 -0.016	63	59	47.4	54	42	-	-	8	15.7	15.8	13.8	2	43	5.5×9.5×5.4	66.4	117	10.5	18.6	144	735	669	177					
LFH20X								38	36	24	-	-	-	-	-	-	-									-	-	-	-	-
LFK25X	25	40	0 -0.016	71	67	52.6	62	50	-	-	8	18.3	17.2	15.2	3	51	5.5×9.5×5.4	125	207	15.9	26.2	230	1183	1077	298					
LFH25X								46	40	32	-	-	-	-	-	-	-									-	-	-	-	-
LFK30X	30	45	0 -0.016	80	75.6	59.6	74	58	-	-	10	19.8	20.2	18	3	60	6.6×11×6.5	196	319	20.8	34.0	335	1714	1560	411					
LFH30X								51	49	35	-	-	-	-	-	-	-									-	-	-	-	-

■ Model Number Coding

Select an option



Number of spline nuts on a single shaft (No symbol for 1 nut)

Model No.

Overall spline shaft length (in mm)

Spline shaft symbol
No symbol: Solid shaft
K: Hollow shaft K Type (thick)
N: Hollow shaft N Type (thin)

Contamination prevention accessory symbol
No symbol: Without seal
UU: With end seal (both sides)
U: With end seal (one side)

Clearance in the rotational direction symbol
No symbol: Normal clearance
CL: CL clearance
CM: CM clearance

Accuracy symbol
No symbol: Normal grade
H: High accuracy grade
P: Precision grade

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