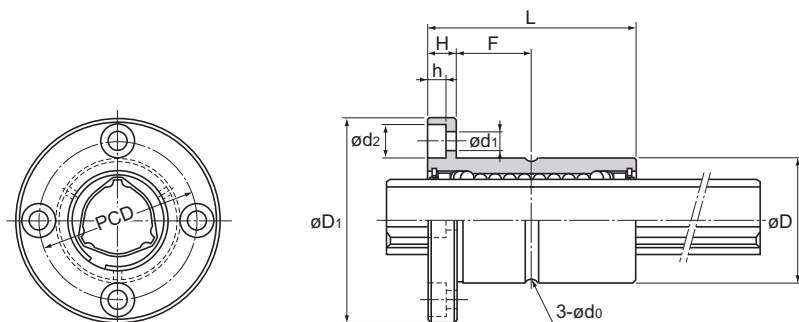


Model LBF (Medium-Load Type)



Model No.	Spline nut dimensions									
	Outer diameter		Length		Flange diameter		H	F	Lubrication hole d_0	PCD
	D	Tolerance	L	Tolerance	D_1	Tolerance				
LBF 15	23	0 -0.013	40	0 -0.2	43	0 -0.2	7	13	2	32
● LBF 20	30	0 -0.016	50	0 -0.3	49		7	18	2	38
● LBF 25	37		60		60		9	21	2	47
● LBF 30	45		70		70		10	25	3	54
● LBF 40	57	0 -0.019	90	0 -0.4	90	0 -0.3	14	31	3	70
● LBF 50	70		100		108		16	34	4	86
● LBF 60	85	0 -0.022	127		124		18	45.5	4	102
● LBF 70	95		110		142		20	35	4	117
● LBF 85	115		140		168		22	48	5	138
● LBF 100	135	0 -0.025	160		195	0 -0.4	25	55	5	162

○: Indicates model numbers able to handle high temperatures (with metal retainers, the operating temperature is up to 100°C).

(Example) LBF20 A CL+500L H

High temperature symbol

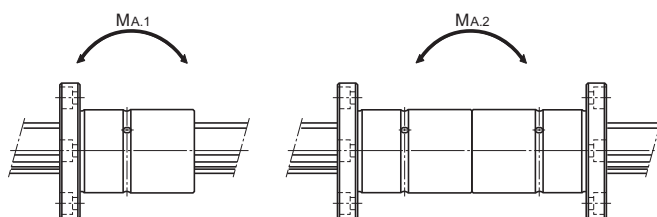
●: Indicates model numbers for which felt seals are available (see **A3-128**).

A felt seal cannot be attached to ball spline models using metal retainers.

Model number coding

2	LBF20	DD	CL	+900L	P	K
Model No.		Symbol for clearance in the rotational direction ²		Accuracy symbol ³		Symbol for spline shaft ⁴
Number of spline nuts on one shaft (no symbol for one nut)		Contamination protection accessory symbol ¹		Overall spline shaft length ⁵ (in mm)		

¹ See **A3-128**. ² See **A3-32**. ³ See **A3-37**. ⁴ See **A3-71**. ⁵ See **A3-123**.



Unit: mm

	Mounting hole $d_1 \times d_2 \times h$	Basic torque rating		Basic load rating (radial)		Static permissible moment		Mass	
		C_T N·m	C_{DT} N·m	C kN	C_0 kN	M_{A1}^1 N·m	M_{A2}^2 N·m	Spline nut kg	Spline shaft kg/m
	4.5×8×4.4	30.4	74.5	4.4	8.4	25.4	185	0.11	1
	4.5×8×4.4	74.5	160	7.8	14.9	60.2	408	0.2	1.8
	5.5×9.5×5.4	154	307	13	23.5	118	760	0.36	2.7
	6.6×11×6.5	273	538	19.3	33.8	203	1,270	0.6	3.8
	9×14×8.6	599	1,140	31.9	53.4	387	2,640	1.2	6.8
	11×17.5×11	1,100	1,940	46.6	73	594	4,050	1.9	10.6
	11×17.5×11	1,870	3,830	66.2	121	1,300	8,280	3.5	15.6
	14×20×13	2,190	3,800	66.4	102	895	6,530	3.6	21.3
	16×23×15.2	3,620	6,360	90.5	141	2,000	12,600	6.2	32
	18×26×17.5	5,910	12,600	126	237	3,460	20,600	11	45

¹ M_{A1} indicates the permissible moment value in the axial direction when a single spline nut is used, as shown in the figure above.

² M_{A2} indicates the permissible moment value in the axial direction when two spline nuts in close contact with each other are used, as shown in the figure above.

Note: For details on the maximum lengths of ball spline shafts by accuracy, please see **A3-123**.