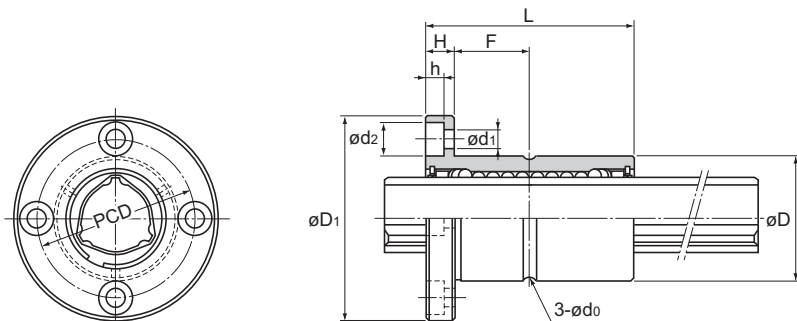


## Model LBF (Medium-Load Type)



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	$0$ -0.3	90	$0$ -0.3	14	31	3	70
○● LBF 50	70		100		108		16	34	4	86
○ LBF 60	85		127		124		18	45.5	4	102
○● LBF 70	95	$0$ -0.022	110	$0$ -0.4	142	$0$ -0.4	20	35	4	117
○● LBF 85	115		140		168		22	48	5	138
○● LBF 100	135		160		195		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

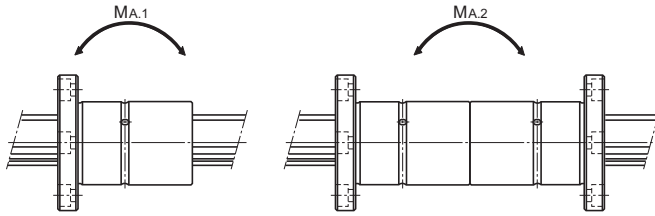
High temperature symbol

●: 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

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

<sup>1</sup> See **A3-128**. <sup>2</sup> See **A3-32**. <sup>3</sup> See **A3-37**. <sup>4</sup> See **A3-71**. <sup>5</sup> 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	$C_D$ kN	$M_{A.1}^1$ N·m	$M_{A.2}^2$ 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

<sup>1</sup>  $M_{A.1}$  indicates the permissible moment value in the axial direction when a single spline nut is used, as shown in the figure above.

<sup>2</sup>  $M_{A.2}$  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**.