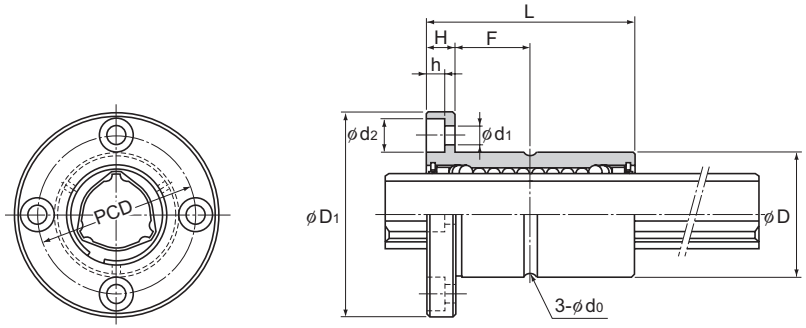
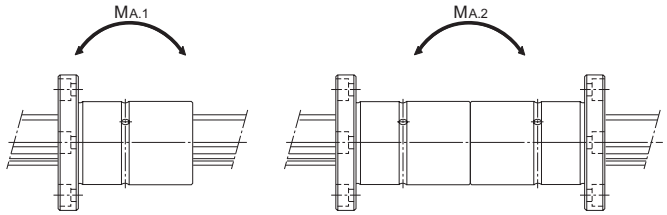
Model LBF (Medium Load Type)





Unit: mm

Model No.	Spline nut dimensions											Basic torque rating		Basic load rating (radial)		Static permissible moment		Mass	
	Outer diameter		Length		Flange diameter		H	F	Greasing hole	PCD	Mounting hole								
	D	Tolerance	L	Tolerance	D_1	Tolerance			d_0		$d_1 \times d_2 \times h$	C_T N-m	C_{0T} N-m	C kN	C_0 kN	$M_{A.1}$** N-m	$M_{A.2}$** N-m	Spline Nut kg	Spline shaft kg/m
LBF 15	23	0 −0.013	40	0 −0.2	43	0 −0.2	7	13	2	32	4.5×8×4.4	30.4	74.5	4.4	8.4	25.4	185	0.11	1
○● LBF 20	30	0 −0.016	50		49		7	18	2	38	4.5×8×4.4	74.5	160	7.8	14.9	60.2	408	0.2	1.8
○● LBF 25	37		60	0 −0.3	60		9	21	2	47	5.5×9.5×5.4	154	307	13	23.5	118	760	0.36	2.7
○● LBF 30	45		70		70		10	25	3	54	6.6×11×6.5	273	538	19.3	33.8	203	1270	0.6	3.8
○● LBF 40	57	0 −0.019	90		90		14	31	3	70	9×14×8.6	599	1140	31.9	53.4	387	2640	1.2	6.8
○● LBF 50	70		100		108	0 −0.3	16	34	4	86	11×17.5×11	1100	1940	46.6	73	594	4050	1.9	10.6
○ LBF 60	85		127		124		18	45.5	4	102	11×17.5×11	1870	3830	66.2	121	1300	8280	3.5	15.6
○● LBF 70	95	0 −0.022	110		142		20	35	4	117	14×20×13	2190	3800	66.4	102	895	6530	3.6	21.3
○● LBF 85	115		140	0 −0.4	168		22	48	5	138	16×23×15.2	3620	6360	90.5	141	2000	12600	6.2	32
○● LBF 100	135	0 −0.025	160		195	0 −0.4	25	55	5	162	18×26×17.5	5910	12600	126	237	3460	20600	11	45

Note) ○: indicates model numbers for which high temperature types are available (with metal retainer; service temperature: up to 100℃).
(Example) LBF20 A CL+500L H
High temperature symbol

●: indicates model numbers for which felt seal types are available (see A-509).
A felt seal cannot be attached to Ball Spline models using metal retainer.

Note) **$M_{A.1}$ indicates the permissible moment value in the axial direction when a single spline nut is used, as shown in the figure above.
**$M_{A.2}$ 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.
(Single spline nut configuration is not stable in accuracy. We recommend using two spline nuts in close contact with each other.)
For details on the maximum lengths of ball spline shafts by accuracy, please see B-410.

Model number coding

2 LBF20 DD CL +900L P K

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

(*1) See A-509. (*2) See A-481. (*3) See A-482. (*4) See B-381.

Description of Each Option⇒A-509