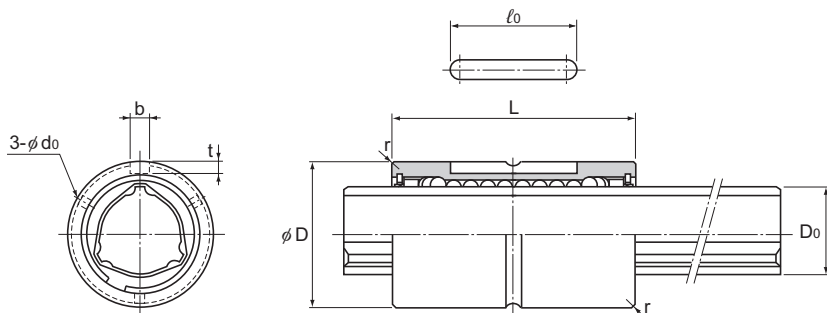


Model LBS (Medium Load Type)



Model No.	Spline nut dimensions											
	Outer diameter		Length		L ₂	L ₃	D ₂	Keyway dimensions			r	C
	D	Tolerance	L	Tolerance				b H8	t +0.1 0	l ₀		
LBS 15	23	$\begin{matrix} 0 \\ -0.013 \end{matrix}$	40	$\begin{matrix} 0 \\ -0.2 \end{matrix}$	—	—	—	3.5	2	20	0.5	—
○● LBS 20	30	$\begin{matrix} 0 \\ -0.016 \end{matrix}$	50	$\begin{matrix} 0 \\ -0.3 \end{matrix}$	—	—	—	4	2.5	26	0.5	—
○● LBS 25	37		60		—	—	—	5	3	33	0.5	—
○● LBS 30	45		70		—	—	—	7	4	41	1	—
○● LBS 40	60	$\begin{matrix} 0 \\ -0.019 \end{matrix}$	90	$\begin{matrix} 0 \\ -0.4 \end{matrix}$	—	—	—	10	4.5	55	1	—
○● LBS 50	75	100	—		—	—	15	5	60	1.5	—	
○● LBS 70	100	$\begin{matrix} 0 \\ -0.022 \end{matrix}$	110		—	—	—	18	6	68	2	—
○● LBS 85	120	$\begin{matrix} 0 \\ -0.025 \end{matrix}$	140	$\begin{matrix} 0 \\ -0.4 \end{matrix}$	—	—	—	20	7	80	2.5	—
○● LBS 100	140		160		—	—	—	28	9	93	3	—

Note) ○: Model numbers able to handle high temperatures (metal retainers: operating temperature up to 100°C)
Compatible model numbers: LBS20 to 100

(Example) LBS20 A CL+500L H

└──────────┘ High temperature symbol

- : Model numbers compatible with felt seals. Compatible model numbers: LBS20 to 100
Felt seals cannot be attached to ball spline models using metal retainers.
When equipping felt seals, the length dimensions of the nuts will change.

Model number coding

2 LBS40 UU CL +1000L P K

Model No.

Symbol for clearance
in the rotational direction
(*2)

Accuracy symbol
(*3)

Symbol for spline shaft (*4)

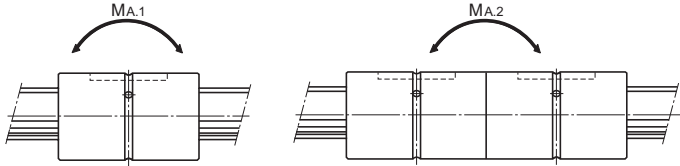
Number of spline nuts
on one shaft
(no symbol for one nut)

Contamination protection
accessory symbol
(*1)

Overall spline shaft length (*5)
(in mm)

(*1) See **A3-126**. (*2) See **A3-30**. (*3) See **A3-35**. (*4) See **A3-69**. (*5) See **A3-121**.

High Torque Type Ball Spline



Unit: mm

	Lubrication hole d_0	Spline shaft outer diameter		Basic torque rating		Basic load rating (radial)		Static permissible moment		Mass	
		D_0	d_s	C_T N·m	C_{0T} N·m	C kN	C_0 kN	M_{A1}^{**} N·m	M_{A2}^{**} N·m	Spline Nut kg	Spline shaft kg/m
	2	14.5	—	30.4	74.5	4.4	8.4	25.4	185	0.06	1
	2	19.7	—	74.5	160	7.8	14.9	60.2	408	0.14	1.8
	2	24.5	—	154	307	13	23.5	118	760	0.25	2.7
	3	29.6	—	273	538	19.3	33.8	203	1270	0.44	3.8
	3	39.8	—	599	1140	31.9	53.4	387	2640	1	6.8
	4	49.5	—	1100	1940	46.6	73	594	4050	1.7	10.6
	4	70	—	2190	3800	66.4	102	895	6530	3.1	21.3
	5	84	—	3620	6360	90.5	141	2000	12600	5.5	32
	5	99	—	5190	12600	126	237	3460	20600	9.5	45

Note) M_{A1} indicates the permissible moment value in the axial direction when a single spline nut is used.

M_{A2} indicates the allowable moment load value in the axial direction when using two spline nuts in contact with each other.

For details on the maximum lengths of ball spline shafts by accuracy, please see **A3-121**.