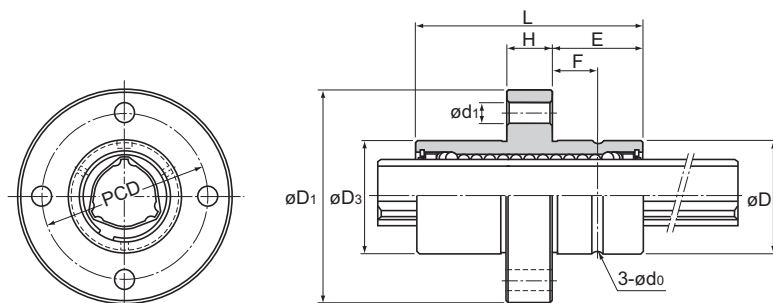


Model LBR



Model No.	Spline nut dimensions								
	Outer diameter		Outer diameter D ₃	Length		Flange diameter D ₁	H	E	PCD
	D	Tolerance		L	Tolerance				
LBR 15	25	$\begin{smallmatrix} 0 \\ -0.013 \end{smallmatrix}$	25.35	40	$\begin{smallmatrix} 0 \\ -0.2 \end{smallmatrix}$	45.4	9	15.5	34
○● LBR 20	30	$\begin{smallmatrix} 0 \\ -0.016 \end{smallmatrix}$	30.35	60	$\begin{smallmatrix} 0 \\ -0.3 \end{smallmatrix}$	56.4	12	24	44
○● LBR 25	40		40.35	70		70.4	14	28	54
○● LBR 30	45		45.4	80		75.4	16	32	61
○● LBR 40	60	$\begin{smallmatrix} 0 \\ -0.019 \end{smallmatrix}$	60.4	100		96.4	18	41	78
○● LBR 50	75		75.4	112		112.4	20	46	94
○ LBR 60	90	$\begin{smallmatrix} 0 \\ -0.022 \end{smallmatrix}$	90.5	127	$\begin{smallmatrix} 0 \\ -0.4 \end{smallmatrix}$	134.5	22	52.5	112
○● LBR 70	95		95.6	135		140.6	24	55.5	117
○● LBR 85	120		120.6	155		170.6	26	64.5	146
○● LBR 100	140	$\begin{smallmatrix} 0 \\ -0.025 \end{smallmatrix}$	140.6	175		198.6	34	70.5	170

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

(Example) LBR40 A CM+600L H

High temperature symbol

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

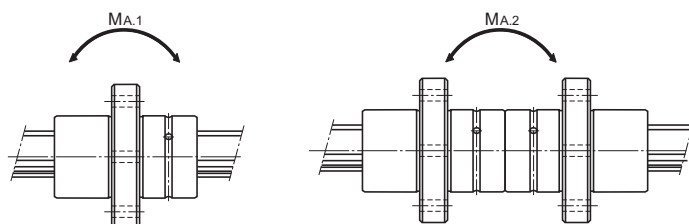
A felt seal cannot be attached to ball spline models using metal retainers.

Model number coding

2	LBR30	UU	CM	+700L	H	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**.

High-Torque Ball Spline



Unit: mm

				Basic torque rating		Basic load rating (radial)		Static permissible moment		Mass	
	Mounting hole d_1	F	Lubrication hole d_0	C_T N·m	C_{DT} N·m	C kN	C_0 kN	$M_{A.1}^1$ N·m	$M_{A.2}^2$ N·m	Spline nut kg	Spline shaft kg/m
	4.5	7.5	2	30.4	74.5	4.4	8.4	25.4	185	0.14	1
	5.5	12	2	90.2	213	9.4	20.1	103	632	0.33	1.8
	5.5	14	2	176	381	14.9	28.7	171	1,060	0.54	2.7
	6.6	16	3	312	657	22.5	41.4	295	1,740	0.9	3.8
	9	20.5	3	696	1,420	37.1	66.9	586	3,540	1.7	6.8
	11	23	4	1,290	2,500	55.1	94.1	941	5,610	2.7	10.6
	11	26	4	1,870	3,830	66.2	121	1,300	8,280	3.7	15.6
	14	27	4	3,000	6,090	90.8	164	2,080	11,800	6	21.3
	16	32	5	4,740	9,550	119	213	3,180	17,300	8.3	32
	18	35	5	6,460	14,400	137	271	4,410	25,400	14.2	45

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

² $M_{A.2}$ 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.

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