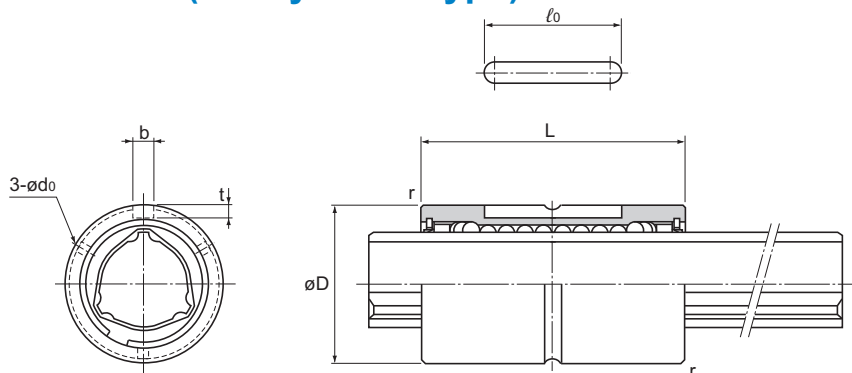


Model LBST (Heavy-Load Type)



| Model No. | Spline nut dimensions | | | | | | | | |
|-------------|-----------------------|-------------|--------|-----------|-------------------|----------------|----------------|-----|------------------------------------|
| | Outer diameter | | Length | | Keyway dimensions | | | r | Lubrication hole d ₀ |
| | D | Tolerance | L | Tolerance | b H8 | t +0.1 0 | ℓ ₀ | | |
| ○● LBST 20 | 30 | 0 -0.016 | 60 | 0 -0.2 | 4 | 2.5 | 26 | 0.5 | 2 |
| ○● LBST 25 | 37 | | 70 | | 5 | 3 | 33 | 0.5 | 2 |
| ○● LBST 30 | 45 | 0 -0.019 | 80 | 0 -0.3 | 7 | 4 | 41 | 1 | 3 |
| ○● LBST 40 | 60 | | 100 | | 10 | 4.5 | 55 | 1 | 3 |
| ○● LBST 50 | 75 | 0 -0.022 | 112 | 0 -0.4 | 15 | 5 | 60 | 1.5 | 4 |
| ○ LBST 60 | 90 | | 127 | | 18 | 6 | 68 | 1.5 | 4 |
| ○● LBST 70 | 100 | 0 -0.025 | 135 | 0 -0.5 | 18 | 6 | 68 | 2 | 4 |
| ○● LBST 85 | 120 | | 155 | | 20 | 7 | 80 | 2.5 | 5 |
| ○● LBST 100 | 140 | 0 -0.029 | 175 | 0 -0.5 | 28 | 9 | 93 | 3 | 5 |
| ○ LBST 120 | 160 | | 200 | | 28 | 9 | 123 | 3.5 | 6 |
| ○ LBST 150 | 205 | | 250 | | 32 | 10 | 157 | 3.5 | 6 |

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

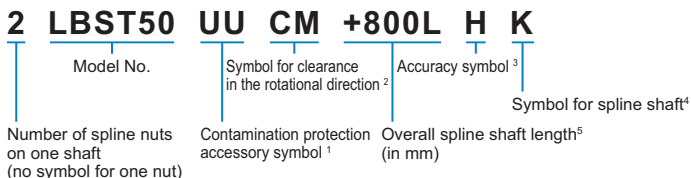
(Example) LBST25 A CM+400L H

High temperature symbol

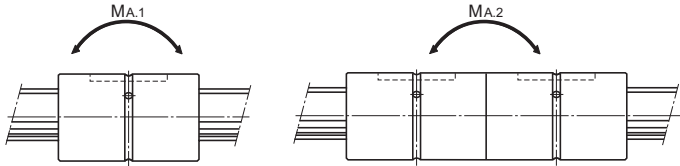
●: Indicates model numbers for which felt seals are available (see **A3-128**).

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

Model number coding



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



Unit: mm

| | Basic torque rating | | Basic load rating (radial) | | Static permissible moment | | Mass | |
|--|---------------------|-----------------|----------------------------|-------------|---------------------------|--------------------|------------------|----------------------|
| | C_T N·m | C_{OT} N·m | C kN | C_o kN | $M_{A,1}^1$ N·m | $M_{A,2}^2$ N·m | Spline nut kg | Spline shaft kg/m |
| | 90.2 | 213 | 9.4 | 20.1 | 103 | 632 | 0.17 | 1.8 |
| | 176 | 381 | 14.9 | 28.7 | 171 | 1,060 | 0.29 | 2.7 |
| | 312 | 657 | 22.5 | 41.4 | 295 | 1,740 | 0.5 | 3.8 |
| | 696 | 1,420 | 37.1 | 66.9 | 586 | 3,540 | 1.1 | 6.8 |
| | 1,290 | 2,500 | 55.1 | 94.1 | 941 | 5,610 | 1.9 | 10.6 |
| | 1,870 | 3,830 | 66.2 | 121 | 1,300 | 8,280 | 3.3 | 15.6 |
| | 3,000 | 6,090 | 90.8 | 164 | 2,080 | 11,800 | 3.8 | 21.3 |
| | 4,740 | 9,550 | 119 | 213 | 3,180 | 17,300 | 6.1 | 32 |
| | 6,460 | 14,400 | 137 | 271 | 4,410 | 25,400 | 10.4 | 45 |
| | 8,380 | 19,400 | 148 | 306 | 5,490 | 32,400 | 12.9 | 69.5 |
| | 13,900 | 32,200 | 196 | 405 | 8,060 | 55,400 | 28 | 116.6 |

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.

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