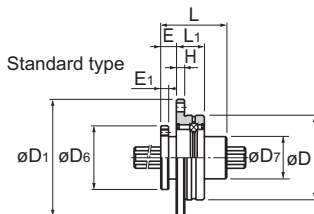
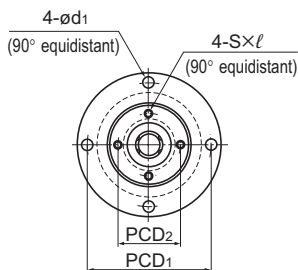
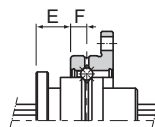


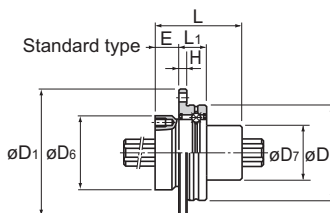
Model LTR-A Compact Type



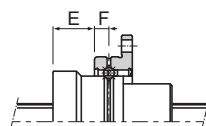
Type K (Inverted flange)



Model LTR8A



Type K (Inverted flange)



Model LTR10A

| Model No. | Spline nut dimensions | | | | | | | | | | | | | | |
|-----------|-----------------------|------------------|-------------|-----------------------------------|----------------------|----------------|----|----------------|--------------------|-------------|--------------------------------|----------------|------------------|------------------|----------|
| | Outer diameter | | Length L | Flange diameter D ₁ | D ₅ h7 | D ₇ | H | L ₁ | Standard type E | Type K E | Lubrication hole position F | E ₁ | PCD ₁ | PCD ₂ | S × l |
| | D | Tolerance | | | | | | | | | | | | | |
| LTR8 A | 32 | -0.009 -0.025 | 25 | 44 | 24 | 16 | 3 | 10.5 | 6 | 8.5 | 4 | 3 | 38 | 19 | M2.6 × 3 |
| LTR10 A | 36 | | 33 | 48 | 28 | 21 | 3 | 10.5 | 9 | 11.5 | 4 | — | 42 | 23 | M3 × 4 |
| LTR13 A | 44 | | 36 | 56 | 30 | 24 | 4 | 18 | 9 | 9 | 9 | — | 50 | 25 | M2.5 × 5 |
| LTR16 A | 48 | | 50 | 64 | 36 | 31 | 6 | 21 | 10 | 10 | 10.5 | — | 56 | 30 | M4 × 6 |
| LTR20 A | 56 | -0.010 -0.029 | 63 | 72 | 43.5 | 35 | 6 | 21 | 12 | 12 | 10.5 | — | 64 | 36 | M5 × 8 |
| LTR25 A | 66 | | 71 | 86 | 52 | 42 | 7 | 25 | 13 | 13 | 12.5 | — | 75 | 44 | M5 × 8 |
| LTR32 A | 78 | | 80 | 103 | 63 | 52 | 8 | 25 | 17 | 17 | 12.5 | — | 89 | 54 | M6 × 10 |
| LTR40 A | 100 | -0.012 -0.034 | 100 | 130 | 79.5 | 64 | 10 | 33 | 20 | 20 | 16.5 | — | 113 | 68 | M6 × 10 |

Model number coding

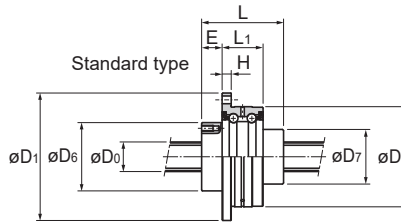
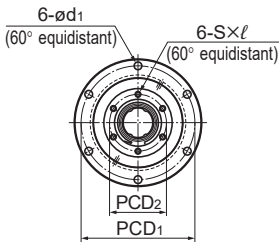
2 LTR32 K UU ZZ CL A +500L P K

| | | | | | | |
|------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------------|--------------------------------|--------------------------------------------------|--------------------------------------|
| Model No. | Flange orientation symbol ¹ | Spline nut contamination protection accessory symbol ² | Symbol for clearance in the rotational direction ⁴ | Compact type (support bearing) | Accuracy symbol ⁵ | Symbol for spline shaft ⁶ |
| Number of spline nuts on one shaft (no symbol for one nut) | | | Support bearings contamination protection accessory symbol ³ | | Overall spline shaft length ⁷ (in mm) | |

¹ No Symbol: standard K: inverted flange ² See **A3-128**. ³ See **A3-128**. ⁴ See **A3-32**.

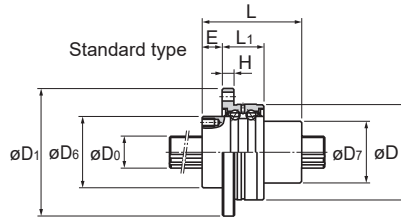
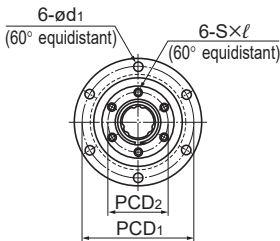
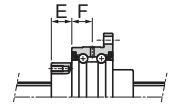
⁵ See **A3-37**. ⁶ See **A3-120**. ⁷ See **A3-123**.

Rotary Ball Spline



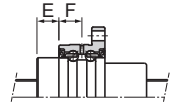
Model LTR13A

Type K (Inverted flange)



Models LTR16A to 40A

Type K (Inverted flange)



Unit: mm

| d ₁ | Spline shaft diameter | | Basic torque rating | | Basic load rating | | Static permissible moment | Support bearing basic load rating | | Mass | |
|----------------|-----------------------|---------------|-----------------------|------------------------|-------------------|----------------------|------------------------------------|-----------------------------------|----------------------|------------------|----------------------|
| | D ₀ h7 | Rows of balls | C _T N·m | C _{0T} N·m | C kN | C ₀ kN | M _A ¹ N·m | C kN | C ₀ kN | Spline nut kg | Spline shaft kg/m |
| 3.4 | 8 | 4 | 1.96 | 2.94 | 1.47 | 2.55 | 5.9 | 0.69 | 0.24 | 0.08 | 0.4 |
| 3.4 | 10 | 4 | 3.92 | 7.84 | 2.84 | 4.9 | 15.7 | 0.77 | 0.3 | 0.13 | 0.62 |
| 3.4 | 13 | 4 | 5.88 | 10.8 | 3.53 | 5.78 | 19.6 | 5.2 | 5.1 | 0.22 | 1.1 |
| 4.5 | 16 | 6 | 31.4 | 34.3 | 7.06 | 12.6 | 67.6 | 6.7 | 6.4 | 0.35 | 1.6 |
| 4.5 | 20 | 6 | 56.9 | 55.9 | 10.2 | 17.8 | 118 | 7.4 | 7.8 | 0.51 | 2.5 |
| 5.5 | 25 | 6 | 105 | 103 | 15.2 | 25.8 | 210 | 9.7 | 10.6 | 0.79 | 3.9 |
| 6.6 | 32 | 6 | 180 | 157 | 20.5 | 34 | 290 | 10.5 | 12.5 | 1.25 | 5.6 |
| 9 | 40 | 6 | 419 | 377 | 37.8 | 60.5 | 687 | 16.5 | 20.7 | 2.51 | 9.9 |

¹ M_A indicates the permissible moment value in the axial direction when a single spline nut is used, as shown in the figure below.

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

