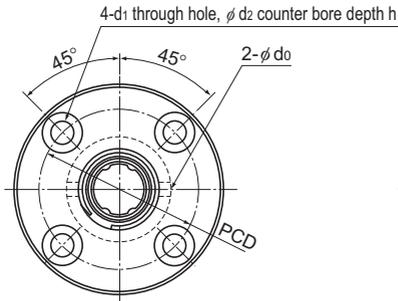
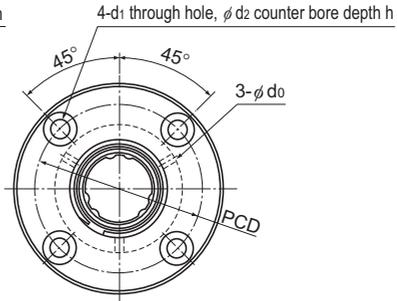


Model LF



Models LF6 to 13



Models LF16 to 60

| Model No. | Spline nut dimensions | | | | | | | | | | | | |
|-----------|-----------------------|-----------|--------|-----------|-----------------|-----------|-----|------|------|-----|------------------------------------|------------|--|
| | Outer diameter | | Length | | Flange diameter | | H | F | C | r | Lubrication hole d ₀ | PCD | Mounting hole d ₁ ×d ₂ ×h |
| | D | Tolerance | L | Tolerance | D ₁ | Tolerance | | | | | | | |
| LF 6 | 14 | 0 | 25 | 0 | 30 | 0 | 5 | 7.5 | 0.5 | 0.5 | 1.5 | 22 | 3.4×6.5×3.3 |
| LF 8 | 16 | -0.011 | 25 | | 32 | | 5 | 7.5 | 0.5 | 0.5 | 1.5 | 24 | 3.4×6.5×3.3 |
| LF 10 | 21 | 0 | 33 | -0.2 | 42 | 0 | 6 | 10.5 | 0.5 | 0.5 | 1.5 | 32 | 4.5×8×4.4 |
| LF 13 | 24 | | -0.013 | | 36 | | 44 | 7 | 11 | 0.5 | 0.5 | 1.5 | 33 |
| ○ LF 16 | 31 | 0 | 50 | 0 | 51 | -0.2 | 7 | 18 | 0.5 | 0.5 | 2 | 40 | 4.5×8×4.4 |
| ○ LF 20 | 35 | | -0.016 | | 63 | | 58 | 9 | 22.5 | 0.5 | 0.5 | 2 | 45 |
| ○ LF 25 | 42 | 0 | 71 | 0 | 65 | -0.3 | 9 | 26.5 | 0.5 | 0.5 | 3 | 52 | 5.5×9.5×5.4 |
| ○ LF 30 | 47 | | -0.019 | | 80 | | 75 | 10 | 30 | 0.5 | 0.5 | 3 | 60 |
| ○ LF 40 | 64 | 0 | 100 | 0 | 100 | -0.4 | 14 | 36 | 1 | 0.5 | 4 | 82 | 9×14×8.6 |
| ○ LF 50 | 80 | | -0.022 | | 125 | | 124 | 16 | 46.5 | 1 | 1 | 4 | 102 |
| ○ LF 60 | 90 | 0 | 140 | 0 | 134 | 18 | 52 | 1 | 1 | 5 | 112 | 11×17.5×11 | |

Note) ○: indicates model numbers for which high temperature types are available (with metal retainer; service temperature: up to 100°C).

(Example) LF30 A CL+700L H

High temperature symbol

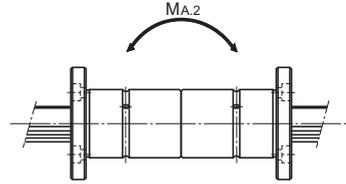
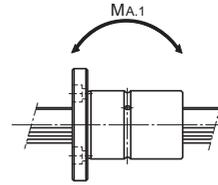
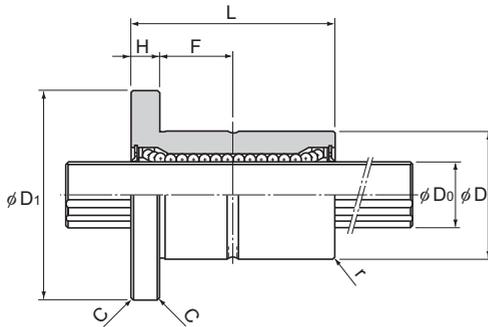
Model number coding

2 LF20 UU CM +400L P N

2: Model No.
 LF20: Number of spline nuts on one shaft (no symbol for one nut) (*1)
 UU: Symbol for clearance in the rotational direction (*2)
 CM: Contamination protection accessory symbol
 +400L: Overall spline shaft length (in mm) (*3)
 P: Accuracy symbol (*3)
 N: Symbol for spline shaft (*4)

(*1) See **A3-126**. (*2) See **A3-30**. (*3) See **A3-35**. (*4) See **A3-93**. (*5) See **A3-121**.

Medium Torque Type Ball Spline



Unit: mm

Ball Spline

| | Spline shaft diameter D_0 h7 | Rows of balls | Basic torque rating | | Basic load rating | | Static permissible moment | | Mass | |
|--|--------------------------------------|---------------|---------------------|-----------------|-------------------|-------------|---------------------------|----------------------|-----------------|----------------------|
| | | | C_T N·m | C_{OT} N·m | C kN | C_0 kN | M_{A1}^{**} N·m | M_{A2}^{**} N·m | Spline Nut g | Spline shaft kg/m |
| | 6 | 4 | 0.98 | 1.96 | 1.18 | 2.16 | 4.9 | 36.3 | 35 | 0.23 |
| | 8 | 4 | 1.96 | 2.94 | 1.47 | 2.55 | 5.9 | 44.1 | 37 | 0.4 |
| | 10 | 4 | 3.92 | 7.84 | 2.84 | 4.9 | 15.7 | 98 | 90 | 0.62 |
| | 13 | 4 | 5.88 | 10.8 | 3.53 | 5.78 | 19.6 | 138 | 110 | 1.1 |
| | 16 | 6 | 31.4 | 34.3 | 7.06 | 12.6 | 67.6 | 393 | 230 | 1.6 |
| | 20 | 6 | 56.9 | 55.9 | 10.2 | 17.8 | 118 | 700 | 330 | 2.5 |
| | 25 | 6 | 105 | 103 | 15.2 | 25.8 | 210 | 1140 | 455 | 3.9 |
| | 30 | 6 | 171 | 148 | 20.5 | 34 | 290 | 1710 | 565 | 5.6 |
| | 40 | 6 | 419 | 377 | 37.8 | 60.5 | 687 | 3760 | 1460 | 9.9 |
| | 50 | 6 | 842 | 769 | 60.9 | 94.5 | 1340 | 7350 | 2760 | 15.5 |
| | 60 | 6 | 1220 | 1040 | 73.5 | 111.7 | 1600 | 9990 | 3490 | 22.3 |

Note) M_{A1}^{**} indicates the permissible moment value in the axial direction when a single spline nut is used, as shown in the figure above.

M_{A2}^{**} 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.

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