

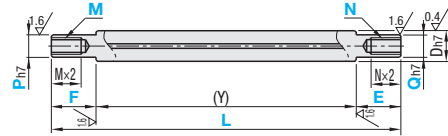
Ball Splines

Both Ends Stepped and Tapped

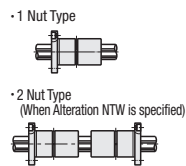


Both Ends Stepped and Tapped	Spline Shaft, Nut Material: SUS40C Equivalent: SCM415 Hardness: 38HRC	Spline Shaft, Nut Material: SUS440C Equivalent: S50C Hardness: 55HRC
		Nut 1 pc.
With Round Flange Nut	BSLM	BSLMS
With Compact Flange Nut	BSLN	
With Straight Nut	BSL	

$$6.3 / (\sqrt{1.6} / \sqrt{0.4} / \sqrt{6})$$

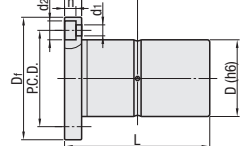
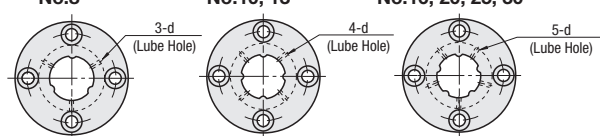


Flanged Nut Orientation

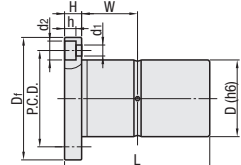
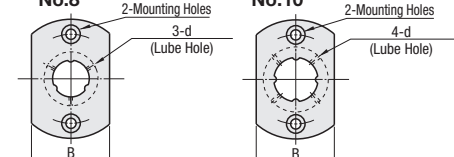


When selecting Overall Length (L Dimension), check the Annealing Range. P.340
Accuracy P.339 For the included nut, please select a shape from below.

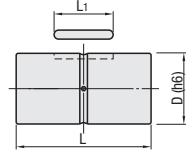
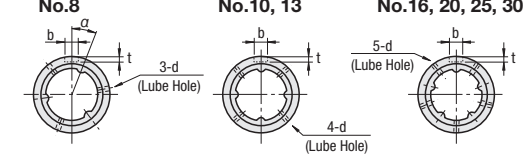
Round Flange Nuts



Compact Flange Nuts

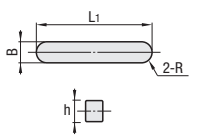


Straight Nuts



* The key is press-fit into the nut.

Dimension of Included Key



* Please refrain from machining the nuts as it may have adverse effects on the accuracy.

Spline Shafts

Part Number	1mm Increment			P, Q Selection	M (Coarse) / N (Coarse) Selection (M+3<P, N+3<Q)	D	(Y)		Mass (kg/m)
	Type	No.	L				1-Nut Type	F · E	
BSLM BSLN BSL BSLMS	*8	60-400(190)	2.5 ≤ F ≤ P × 5 2.5 ≤ E ≤ Q × 5	6	3	8	56-396(186)	0.39	
	*10	60-600(390)		6 8	3 4	10.4	56-596(386)	0.65	
	*13	60-600(390)		6 8 10	3 4 5 6	13.4	56-596(386)	1.11	
	*16	70-600(390)		6 8 10 12 13	3 4 5 6 8 10	16.6	66-596(386)	1.65	
	20	80-700		8 10 12 13 15 16	4 5 6 8 10 12	20.6	76-696	2.57	
	25	90-900		8 10 12 13 15 16 20	4 5 6 8 10 12 16	25.8	86-896	4.04	
	30	100-1150		10 12 13 15 16 20 25	4 5 6 8 10 12 16 20	30.8	96-1146	5.85	

For BSLMS, only * marked sizes are available, and the Max. L and Y dimensions are in ().
For BSLN, only No. 8 and 10 are available.

Round Flange Nuts, Compact Flange Nuts

No.	D (h6)	L	Df	H	P.C.D.	d1	d2	h	W	d	B	Basic Rated Torque		Basic Load Rating		Allowable Static Moment		Mass (kg)
												Dynamic C _t (N·m)	Static C _t (N·m)	Dynamic C (kN)	Static C ₀ (kN)	M ₀₁ (N·m)	M ₀₂ (N·m)	
8	16	25	32	6	24	3.5	6	3.1	6.5	21	25	4.8	8.7	1.2	2.1	5	36	0.04
10	21	40(33)	42(41)	6(8)	32(30)	4.5	8	4.4(5.3)	14(8.5)	1.5	-	19(11)	34(21)	3.8(2.4)	6.9(4.3)	26(15)	181(102)	0.09
13	24	44(36)	44(45)	7(8)	33(34)							28(20)	52(37)	4.6(3.3)	8.3(5.9)	36(22)	251(148)	0.11
16	31	50	51	7	40	5.5	9.5	4.4	18	2	-	51	93	6.2	11.1	56	386	0.2
20	35	63	58	9	45							85	154	8.5	15.3	83	611	0.3
25	42	71	65	9	52	6.6	11	6.5	30	2.5	-	193	348	15.4	27.7	173	1248	0.4
30	47	80	75	10	60							272	490	18.5	33.3	212	1581	0.57

Dimensions in () are for SUS440C Equivalent. Allowable static moment M₀₁ is a value measured when a single nut is used, and M₀₂ is a value measured when two nuts are used.

Straight Nuts

No.	D (h6)	L	b	Tolerance	t	d	α	Basic Rated Torque		Basic Load Rating		Allowable Static Moment		Mass (kg)	Dimensions of Key (Included)					
								Dynamic C _t (N·m)	Static C _t (N·m)	Dynamic C (kN)	Static C ₀ (kN)	M ₀₁ (N·m)	M ₀₂ (N·m)		B	Tolerance	h	Tolerance	L1	R
8	16	25	2.5	+0.014	0	1.2	25°	4.8	8.7	1.2	2.1	5	36	0.013	2.5	2.5	0	10.5	1.25	
10	21	40(33)	3	0	1.5	1.5	-	19(11)	34(21)	3.8(2.4)	6.9(4.3)	26(15)	181(102)	0.06	3	+0.016	3	-0.025	17(14)	1.5
13	24	44(36)						28(20)	52(37)	4.6(3.3)	8.3(5.9)	36(22)	251(148)	0.07					17(14)	
16	31	50	3.5	+0.018	0	2	-	51	93	6.2	11.1	56	386	0.15	3.5	+0.024	4	0	18	1.75
20	35	63	85					154	8.5	15.3	83	611	0.2	29						
25	42	71	4	0	2.5	2	2.5	193	348	15.4	27.7	173	1248	0.29	4	+0.012	4	-0.030	33	2
30	47	80						272	490	18.5	33.3	212	1581	0.37					42	

Dimensions in () are for SUS440C Equivalent. Allowable static moment M₀₁ is a value measured when a single nut is used, and M₀₂ is a value measured when two nuts are used.