

TBI Motion Ball Splines SLF Series



FEATURES

- 6mm to 50mm Ball Spline Diameters
- Flange Type Nut
- Up to 4,000 mm in Length
- Dynamic Loads up to 4,086 kgf
- Static Loads up to 5,615 kgf
- Precision-Ground Raceways
- Accuracy Grade: Normal, High, and Precision
- Preload: Zero, Slight, and Medium

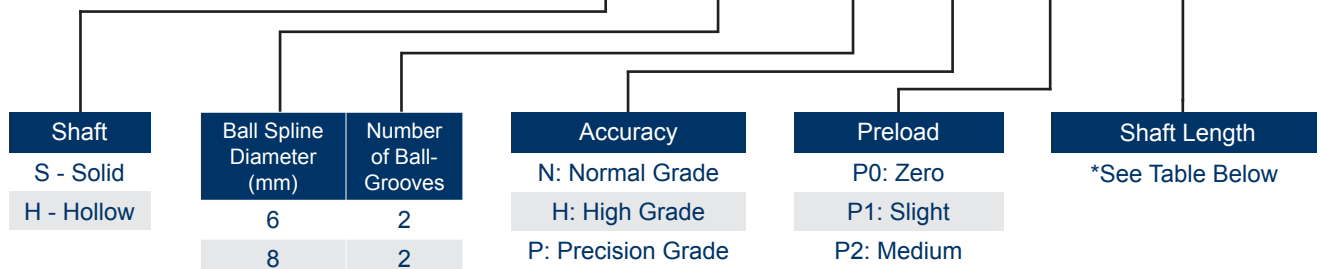


DESCRIPTION

The SLF Flange Type ball splines have a shaft diameter ranging from 6mm to 50mm. The ball spline nuts are designed with recirculating ball tracks which transmit torque linearly along the raceway of the spline shaft. These ball splines are suited for applications which are subject to vibration, impact loads, high precision, or high speed. This assembly provides a dynamic force of 4,086 kgf and a static forces up to 5,615 kgf. The maximum spline shaft length is 4,000mm (diameter dependent). The ends of the shaft can be customized per your drawing. Please contact Anaheim Automation to discuss your specific requirements.

PART NUMBER LAYOUT

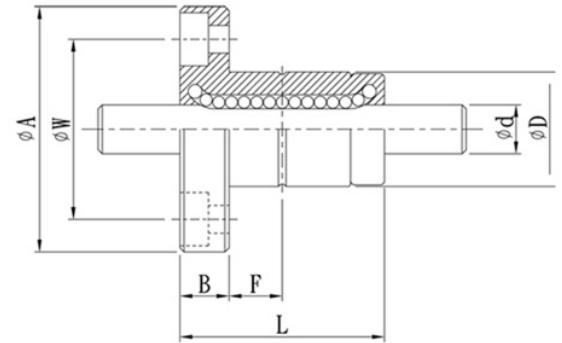
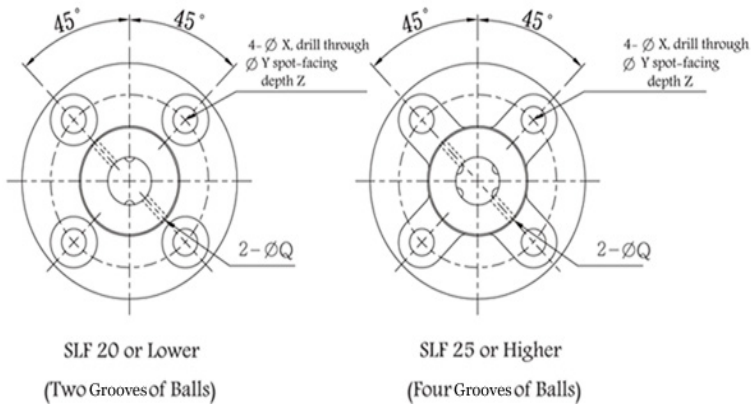
BSP-TM-SLFS-006-T2-N-P1-225



Ball Spline Diameter (mm)	Number of Ball-Grooves
6	2
8	2
10	2
13	2
16	2
20	2
25	4
30	4
40	4
50	4

Shaft Type	Diameter	Maximum Length
Solid	6mm - 20mm	2000mm
	25mm - 50mm	4000mm
Hollow	6mm, 8mm	500mm
	10mm, 13mm	1000mm
	16mm, 20mm, 30mm, 40mm	1200mm
	25mm, 50mm	3000mm

L011217



Units are in mm

Model No.	Shaft Dia. d	Hollow Shaft Inner Dia.	n: Number of Ball Grooves Q: Oil Hole							Mounting Hole			Nut Weight (g)	Shaft Weight (g/m)	
			Nut Dimensions							X	Y	Z			
			D	L	A	B	F	Q	W						
BSP-TM-SLF-006-T2	6	2	14	25	30	8	7.5	1	22	3.4	6.5	4.5	2	36.7	0.22
BSP-TM-SLF-008-T2	8	3	16	27	32	8	7.5	1.5	24	3.4	6.5	4.5	2	47	0.39
BSP-TM-SLF-010-T2	10	4	21	33	42	9	10.5	1.5	32	4.5	8	4	2	100	0.60
BSP-TM-SLF-013-T2	13	7	24	36	44	9	11	1.5	33	4.5	8	4.5	2	117	1.03
BSP-TM-SLF-016-T2	16	8	31	50	51	10	18	2	40	4.5	8	6	2	226	1.56
BSP-TM-SLF-020-T2	20	10	35	56	58	10	18	2	45	5.5	9.5	5.4	2	303	2.44
BSP-TM-SLF-025-T4	25	15	42	71	65	13	26.5	3	52	5.5	9.5	8	4	458	3.80
BSP-TM-SLF-030-T4	30	16	47	80	75	13	30	3	60	6.6	11	8	4	633	5.49
BSP-TM-SLF-040-T4	40	20	64	100	100	18	36	4	82	9	14	12	4	1430	9.69
BSP-TM-SLF-050-T4	50	26	80	125	124	20	46.5	4	102	11	17.5	12	4	2756	15.19

Model No.	C: Basic Dynamic Rating Load (kgf) C _T : Basic Dynamic Torque Load (kgf)		C ₀ : Basic Static Rating Load (kgf) C _{0T} : Basic Static Torque Load (kgf)		Static Permissible Moment	
	Basic Load Rating		Basic Torque Rating		M _{A1}	M _{A2}
	C	C ₀	C _T	C _{0T}		
BSP-TM-SLF-006-T2	137	225	0.46	0.76	0.39	3.48
BSP-TM-SLF-008-T2	137	225	0.60	0.99	0.39	3.82
BSP-TM-SLF-010-T2	285	397	1.62	2.25	0.95	8.53
BSP-TM-SLF-013-T2	396	540	2.89	3.94	1.50	12.46
BSP-TM-SLF-016-T2	545	849	4.77	7.43	3.71	26.09
BSP-TM-SLF-020-T2	724	1109	7.90	12.09	5.53	38.00
BSP-TM-SLF-025-T4	1003	1593	21.99	43.01	10.35	68.59
BSP-TM-SLF-030-T4	1160	1980	30.26	62.93	15.68	93.27
BSP-TM-SLF-040-T4	2972	4033	105.37	176.05	36.59	246.34
BSP-TM-SLF-050-T4	4086	5615	179.89	304.35	51.58	428.72