Brand of **NTN Group**

BALL SPLINES

BSP

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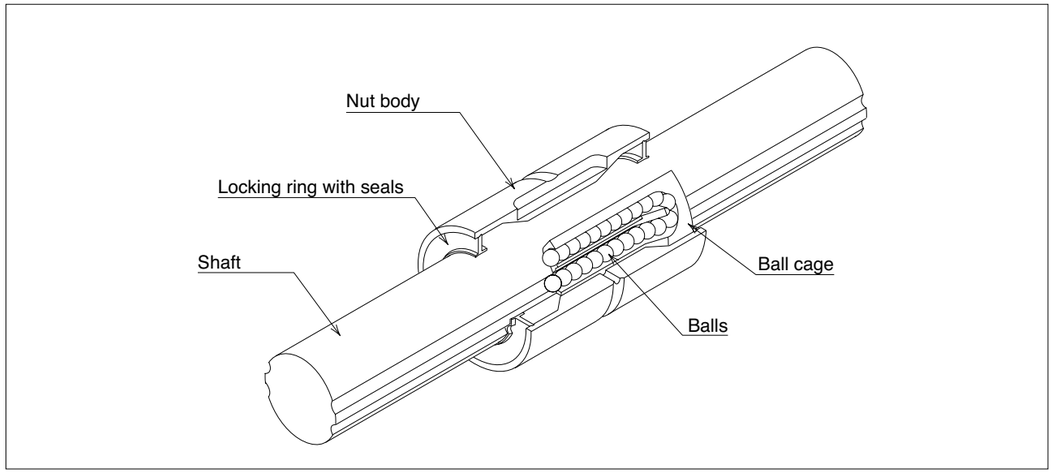
SNR Ball Splines BSP

SNR Ball Spline BSP are linear guides on shafts with raceways. The shafts, with the accurate grinded raceways in combination with ball nuts, are able to transfer rotations and also linear strokes. They are suitable for high linear speeds and high rotation speeds.

Structure



Advantages

- **High load capacity**
  By a defined relationship between race way radius and ball diameter, the contact surfaces significantly increase. This allows, unlike conventional sliding guides, very high load ratings with minimum dimensions and long service life time.
- **Torque and force transmission**
  The design principle of the Ball Splines allow the transmission of forces, tilting and rotation moments by simultaneous linear motions.
- **Wide range of applications**
  The combination of an extremely accurate grinded profile rail, the runner block and precision ball screw.
  The wide product range with shaft diameters from 4 mm up to 100 mm in combination with different nut designs, results in a wide variety of applications in industrial automation.
- **Customized machining**
  It is easy to produce Ball Splines according to customers drawing.

Type code

Example for standard without options and machining:

BSP	25	FN	1	UU	L	0500	N	Z1	–	N
1	2	3	4	5	6	7	8	9		10

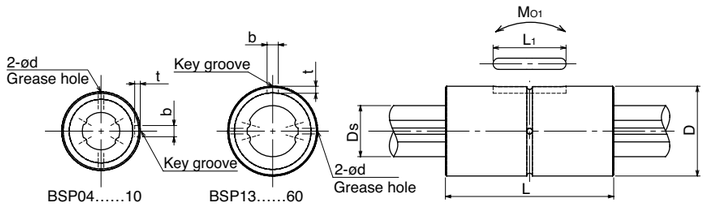
Example special with options and / or machining:

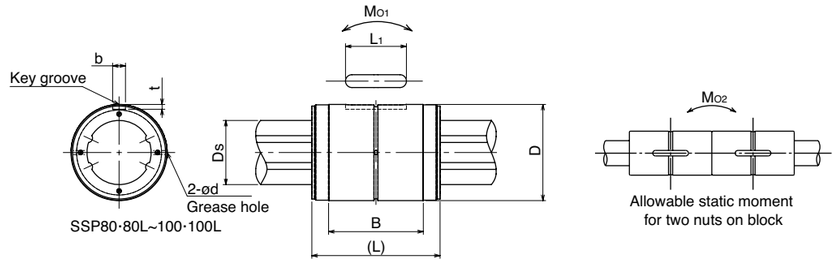
BSP	25	FN	1	UU	L	0500	N	Z1	–	S	–	03	00	1	0	–	1	0
1	2	3	4	5	6	7	8	9		10		11	12	13	14		15	16

1	BSP	**Serie**	
2	25	**Size**	
3	FN	**Nut type**	
4	1	**Number of nuts**	
5	UU	**Seals**	
		UU: with seals	**AA:** without seals
6	L	**Shaft type**	
		L: Solid shaft	**K:** Hollow shaft
7	0500	**Shaft length**	
8	N	**Precision class**	
		N: Normal precision	**P:** P-precision
9	Z1	**Precision class**	
		Z0: without preload	**Z1:** low preload
		Z2: medium preload	
10	N	**Special**	
		N: Standard	**S:** special version
11	03	**Grease**	
		Stipulated in the catalog Ball rail systems page 77	
12	00	**Grease connection**	
13	1	**Nut material**	
		See materials and coatings	
14	0	**Special nuts**	
		0	Without special options
		A...Z	According to a drawing or text description (Index is given in case of an order issued)
15	1	**Shaft material**	
		See materials and coatings	
16	A...Z	**Special shafts**	
		0	Without special options
		A...Z	According to a drawing or text description (Index is given in case of an order issued)

Data sheets

Ball Splines with cylindrical nuts

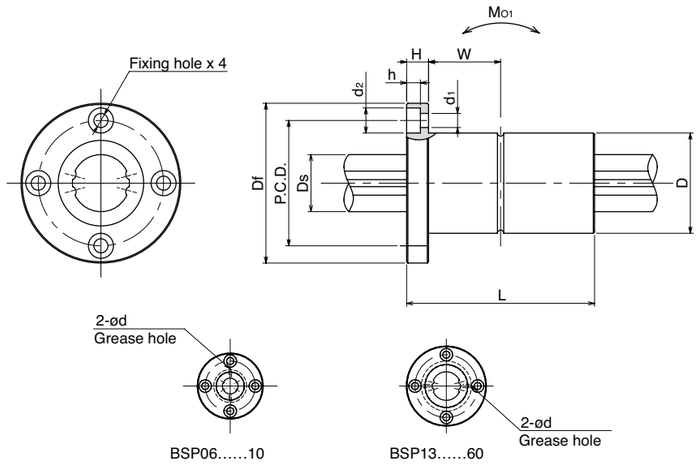


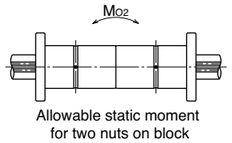


Type			Dimension [mm]									
			øD h6	L		B	b		t		L1	d	Ds h7
BSP	04	CN	10	16	0 -0,2	-	2.0	+0,014 0	1.2	+0,05 0	6.0	-	4
BSP	06	CN	14	25	0 -0,2	-	2.5	+0,014 0	1.2	+0,05 0	10.5	1.0	6
BSP	08	CN	16	25	0 -0,2	-	2.5	+0,014 0	1.2	+0,05 0	10.5	1.5	8
BSP	10	CN	21	33	0 -0,2	-	3.0	+0,014 0	1.5	+0,05 0	13.0	1.5	10
BSP	13	CN	24	36	0 -0,2	-	3.0	+0,014 0	1.5	+0,05 0	15.0	1.5	13
BSP	16	CN	31	50	0 -0,2	-	3.5	+0,018 0	2.0	+0,05 0	17.5	2.0	16
BSP	20	CN	35	63	0 -0,2	-	4.0	+0,018 0	2.5	+0,05 0	29.0	2.0	20
BSP	25	CN	42	71	0 -0,3	-	4.0	+0,018 0	2.5	+0,05 0	36.0	3.0	25
BSP	30	CN	47	80	0 -0,3	-	4.0	+0,018 0	2.5	+0,05 0	42.0	3.0	30
BSP	40	CN	64	100	0 -0,3	-	6.0	+0,018 0	3.5	+0,05 0	52.0	4.0	40
BSP	50	CN	80	125	0 -0,3	-	8.0	+0,022 0	4.0	+0,05 0	58.0	4.0	50
BSP	60	CN	90	140	0 -0,3	-	12.0	+0,027 0	5.0	+0,05 0	67.0	4.0	60
BSP	80	CN	120	160	-	118.2	16.0	+0,027 0	6.0	+0,05 0	76.0	5.0	80
BSP	80	CL	120	217	-	175.2	16.0	+0,027 0	6.0	+0,05 0	110.0	5.0	80
BSP	100	CN	150	185	-	132.6	20.0	+0,033 0	7.0	+0,05 0	110.0	5.0	100
BSP	100	CL	150	248	-	195.6	20.0	+0,033 0	7.0	+0,05 0	160.0	5.0	100

Torque moment [kNm]		Load rating [kN]		Allowable static moment [kNm]		Cross-sectional moment of inertia [mm⁴]	Cross-sectional coefficient [mm³]	Weight [kg]		Type		
								Nut [kg]	Shaft [kg/m]			
C_T	C_{0T}	C	C0	M_{01}	M_{02}							
0.00074	0.00105	0.86	1.22	0.002	0.010	11.80	5.90	0.0065	0.10	BSP	04	CN
0.0015	0.0024	1.22	2.28	0.005	0.040	59.00	19.70	0.019	0.21	BSP	06	CN
0.0021	0.0037	1.45	2.87	0.007	0.050	$1,90 \times 10^2$	47.60	0.023	0.38	BSP	08	CN
0.0044	0.0082	2.73	5.07	0.018	0.116	$4,61 \times 10^2$	92.20	0.054	0.60	BSP	10	CN
0.021	0.039	2.67	4.89	0.014	0.109	$1,38 \times 10^3$	$2,13 \times 10^2$	0.07	1.0	BSP	13	CN
0.060	0.110	6.12	11.2	0.046	0.299	$2,98 \times 10^3$	$3,73 \times 10^2$	0.15	1.5	BSP	16	CN
0.105	0.194	8.90	16.3	0.110	0.560	$7,35 \times 10^3$	$7,34 \times 10^2$	0.22	2.4	BSP	20	CN
0.189	0.346	12.8	23.4	0.171	1.029	$1,79 \times 10^4$	$1,43 \times 10^3$	0.33	3.7	BSP	25	CN
0.307	0.439	18.6	23.2	0.181	1.470	$3,66 \times 10^4$	$2,44 \times 10^3$	0.36	5.4	BSP	30	CN
0.674	0.934	30.8	37.5	0.358	2.940	$1,55 \times 10^5$	$5,75 \times 10^3$	0.95	9.6	BSP	40	CN
1.291	2.955	40.3	64.9	0.690	4.084	$2,83 \times 10^5$	$1,13 \times 10^4$	1.90	15.0	BSP	50	CN
1.577	2.629	47.7	79.5	0.881	5.473	$5,91 \times 10^5$	$1,97 \times 10^4$	2.30	21.6	BSP	60	CN
3.860	6.230	83.1	134.0	2.00	11.10	$1,93 \times 10^6$	$4,38 \times 10^4$	5.10	39.0	BSP	80	CN
5.120	9.340	110.0	201.0	4.41	21.10	$1,93 \times 10^6$	$4,38 \times 10^4$	7.60	39.0	BSP	80	CL
6.750	11.570	135.0	199.0	3.36	19.30	$4,69 \times 10^6$	$9,38 \times 10^4$	9.70	61.0	BSP	100	CN
8.960	17.300	179.0	298.0	7.34	37.70	$4,69 \times 10^6$	$9,38 \times 10^4$	13.90	61.0	BSP	100	CL

Ball Splines with flange type nuts

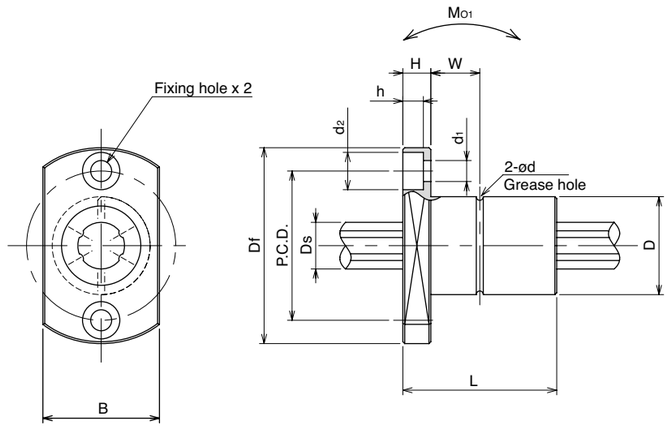


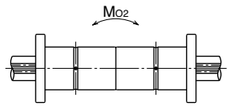


Type			Dimension [mm]								
			øD h6	L		Df	H	P.C.D.	d1 x d2 x h	W	d	Ds h7
BSP	06	FN	14	25	0 -0,2	30	5	22	3,4 x 6,5 x 3,3	7.5	1.0	6
BSP	08	FN	16	25	0 -0,2	32	5	24	3,4 x 6,5 x 3,3	7.5	1.5	8
BSP	10	FN	21	33	0 -0,2	42	6	32	4,5 x 8,0 x 4,4	10.5	1.5	10
BSP	13	FN	24	36	0 -0,2	43	7	33	4,5 x 8,0 x 4,4	11.0	1.5	13
BSP	16	FN	31	50	0 -0,2	50	7	40	4,5 x 8,0 x 4,4	18.0	2.0	16
BSP	20	FN	35	63	0 -0,2	58	9	45	5,5 x 9,5 x 5,4	22.5	2.0	20
BSP	25	FN	42	71	0 -0,3	65	9	52	5,5 x 9,5 x 5,4	26.5	3.0	25
BSP	30	FN	47	80	0 -0,3	75	10	60	6,6 x 11,0 x 6,5	30.0	3.0	30
BSP	40	FN	64	100	0 -0,3	100	14	82	9,0 x 14,0 x 8,6	36.0	4.0	40
BSP	50	FN	80	125	0 -0,3	124	16	102	11,0 x 17,5 x 11,0	46.5	4.0	50
BSP	60	FN	90	140	0 -0,3	129	18	107	11,0 x 17,5 x 11,0	52.0	4.0	60

Torque moment		Load rating		Allowable static moment		Cross-sectional moment of inertia	Cross-sectional coefficient	Weight		Type		
[kNm]		[kN]		[kNm]		[mm⁴]	[mm³]	[kg]				
C_T	C_{0T}	C	C0	M_{01}	M_{02}			Nut [kg]	Shaft [kg/m]			
0.0015	0.0024	1.22	2.28	0.0051	0.0400	59.0	19.7	0.037	0.21	BSP	06	FN
0.0021	0.0037	1.45	2.87	0.0074	0.0500	190.0	47.6	0.042	0.38	BSP	08	FN
0.0044	0.0082	2.73	5.07	0.0180	0.1160	461.0	92.2	0.094	0.60	BSP	10	FN
0.0210	0.0392	2.67	4.89	0.0137	0.1090	$1,38 \times 10^3$	$2,13 \times 10^2$	0.10	1.00	BSP	13	FN
0.060	0.110	6.12	11.20	0.046	0.299	$2,98 \times 10^3$	$3,73 \times 10^2$	0.20	1.50	BSP	16	FN
0.105	0.194	8.90	16.30	0.110	0.560	$7,35 \times 10^3$	$7,34 \times 10^2$	0.33	2.40	BSP	20	FN
0.189	0.346	12.80	23.40	0.171	1.029	$1,79 \times 10^4$	$1,43 \times 10^3$	0.45	3.70	BSP	25	FN
0.307	0.439	18.60	23.20	0.181	1.470	$3,66 \times 10^4$	$2,44 \times 10^3$	0.55	5.38	BSP	30	FN
0.647	0.934	30.80	37.50	0.358	2.940	$1,15 \times 10^5$	$5,75 \times 10^3$	1.41	9.55	BSP	40	FN
1.291	2.955	40.30	64.90	0.690	4.084	$2,83 \times 10^5$	$1,13 \times 10^4$	3.20	15.00	BSP	50	FN
1.577	2.629	47.70	79.50	0.881	5.473	$5,91 \times 10^5$	$1,97 \times 10^4$	3.20	21.60	BSP	60	FN

Ball Splines with flange type nuts and limited stroke



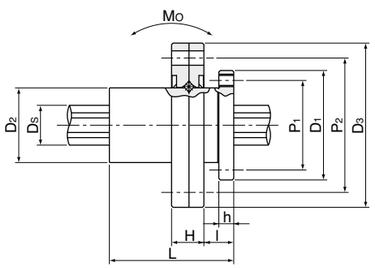


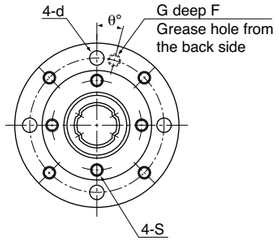
Allowable static moment
for two nuts on block

Type			Dimension [mm]															
			Hub	øD h6	$øD_1$	L		E	Df	H	B	P.C.D.	A	F	S	W	d	Ds h7
BSP	06	FX	22	11	10.0	40	0 -0,2	3.3	23.0	4	14	17.0	-	-	3.4	12.7	1.2	6
BSP	08	FX	20	13	12.5	40	0 -0,2	3.3	25.5	4	16	19.5	-	-	3.4	12.7	1.2	8
BSP	10	FX	28	16	15.5	50	0 -0,2	3.3	28.5	5	20	-	18	13	3.4	16.7	1.5	10
BSP	13	FX	24	20	19.5	50	0 -0,2	4.8	36.0	5	25	-	22	17	3.4	15.2	1.5	13
BSP	16	FX	26	24	23.5	60	0 -0,2	4.8	40.0	7	29	-	25	19	4.5	18.2	2	16

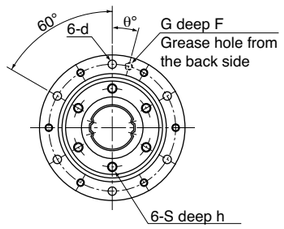
Torque moment [kNm]		Load rating [kN]		Allowable static moment [kNm]		Cross-sectional moment of inertia	Cross-sectional coefficient	Weight [kg]		Type		
								Nut	Shaft			
C_T	C_{0T}	C	C0	M_{01}	M_{02}	[mm^4]	[mm^3]	[kg]	[kg/m]			
0.0023	0.0038	1.80	3.00	0.0112	0.0450	59.0	19.7	0.000	0.210	BSP	06	FX
0.0033	0.0055	2.02	3.37	0.0131	0.0520	190.0	47.6	0.027	0.380	BSP	08	FX
0.0065	0.0109	3.21	5.35	0.0256	0.1020	461.0	92.2	0.048	0.600	BSP	10	FX
0.0276	0.0507	4.15	7.60	0.0388	0.1550	$1,38 \times 10^3$	$2,13 \times 10^2$	0.075	1.000	BSP	13	FX
0.0628	0.1150	7.66	14.00	0.0883	0.3530	$2,98 \times 10^3$	$3,73 \times 10^2$	0.123	1.500	BSP	16	FX

Ball Splines with rotary type nuts





BSP06.....10RN



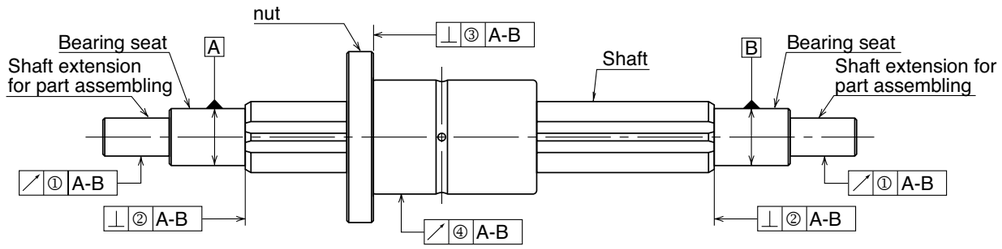
BSP13.....60RN

Type	Dimension [mm]																	[°]
	øD1 h6	øD2		L		P1	S	h	l	H	B1	øD3 h7	P2	d	G	F	øDs h7	Θ
BSP 06 RN	20.0	13	-	25	0 -0,2	16	M 2	2.5	5.0	6.5	-	30	24	2.4	M3	2.6	6	20
BSP 08 RN	22.0	15	-	25	0 -0,2	18	M 2,5	3.0	6.0	6.5	-	33	27	2.9	M3	2.6	8	20
BSP 10 RN	27.0	19	-	33	0 -0,2	22	M 3	4.0	8.0	7.0	-	40	33	3.4	M3	2.8	10	20
BSP 13 RN	29.0	24	-	36	0 -0,2	24	M 3	5.0	8.0	9.0	-	50	42	3.4	M3	3.6	13	15
BSP 16 RN	36.0	31	-	50	0 -0,2	30	M 4	6.0	10.0	11.0	-	60	50	4.5	M3	4.4	16	15
BSP 16 RL	39.5	52	0 -0,007	50	-	32	M 5	8.0	10.0	5.0	37	68	60	4.5	-	-	16	-
BSP 20 RN	44.0	35	-	63	0 -0,2	38	M 4	7.0	12.0	13.0	-	72	62	4.5	M6x0,75	5.2	20	15
BSP 20 RL	43.5	56	0 -0,007	63	-	36	M 5	8.0	12.0	6.0	48	72	64	4.5	-	-	20	-
BSP 25 RN	55.0	42	-	71	0 -0,3	47	M 5	8.0	13.0	16.0	-	82	72	4.5	M6x0,75	6.4	25	15
BSP 25 RL	53.0	62	0 -0,007	71	-	45	M 6	8.0	13.0	6.0	55	78	70	4.5	-	-	25	-
BSP 30 RN	61.0	47	-	80	0 -0,3	52	M 6	10.0	17.0	17.0	-	100	86	6.6	M6x0,75	6.8	30	15
BSP 40 RN	76.0	64	-	100	0 -0,3	66	M 6	10.0	23.0	20.0	-	120	104	9.0	M6x0,75	8.0	40	15
BSP 50 RN	92.0	80	-	125	0 -0,3	80	M 8	13.0	24.0	22.0	-	134	118	9.0	M6x0,75	8.8	50	15
BSP 60 RN	107.0	90	-	140	0 -0,3	95	M 8	13.0	25.0	25.0	-	155	137	9.0	M6x0,75	10.0	60	15

Torque moment Ball Spline		Load rating Ball Spline		Load rating cross roller bearing		Allowable static moment	Cross-sectional moment of inertia	Cross-sectional coefficient	Weight		max. rpm	Type
[kNm]		[kN]		[kN]		[kNm]	[mm⁴]	[mm³]	[kg]		[min⁻¹]	
C_T	C_{0T}	C	C0	C	C0	M_0			Nut [kg]	Shaft [kg/m]		
0.0015	0.0024	1.22	2.28	0.60	0.50	0.0051	59.0	19.7	0.04	0.21	2 940	BSP 06 RN
0.0021	0.0037	1.45	2.87	1.20	1.10	0.0074	190.0	47.6	0.05	0.38	2 580	BSP 08 RN
0.0044	0.0082	2.73	5.07	2.40	2.45	0.0180	461.0	92.2	0.09	0.60	2 060	BSP 10 RN
0.0210	0.0392	2.67	4.89	2.90	3.70	0.0180	$1,38 \times 10^3$	$2,13 \times 10^2$	0.17	1.00	1 350	BSP 13 RN
0.0600	0.1100	6.12	11.20	5.60	6.70	0.0460	$2,98 \times 10^3$	$3,73 \times 10^2$	0.33	1.50	1 080	BSP 16 RN
0.0600	0.1100	6.12	11.20	13.00	12.80	0.0460	$2,98 \times 10^3$	$3,73 \times 10^2$	0.45	1.50	4 000	BSP 16 RL
0.105	0.194	8.90	16.30	6.55	8.79	0.0630	$7,35 \times 10^3$	$7,34 \times 10^2$	0.57	2.40	890	BSP 20 RN
0.1050	0.7940	8.90	16.30	17.40	17.20	0.1100	$2,98 \times 10^3$	$3,73 \times 10^2$	0.69	2.40	3 600	BSP 20 RL
0.189	0.346	12.80	23.40	9.63	12.70	0.1710	$1,79 \times 10^4$	$1,43 \times 10^3$	0.81	3.70	700	BSP 25 RN
0.1890	0.3460	12.80	23.40	22.10	22.50	0.1710	$2,98 \times 10^3$	$3,73 \times 10^2$	0.92	3.70	3 200	BSP 25 RL
0.307	0.439	18.60	23.20	11.80	17.10	0.1810	$3,66 \times 10^4$	$2,44 \times 10^3$	1.19	5.38	640	BSP 30 RN
0.674	0.934	30.80	37.50	23.00	32.30	0.3580	$1,15 \times 10^5$	$5,75 \times 10^3$	2.25	9.55	510	BSP 40 RN
1.291	2.955	40.30	64.90	27.80	44.00	0.6900	$2,83 \times 10^5$	$1,13 \times 10^4$	3.57	15.00	430	BSP 50 RN
1.577	2.629	47.70	79.50	29.00	48.80	0.8810	$5,91 \times 10^5$	$1,97 \times 10^4$	5.03	21.60	370	BSP 60 RN

Precision

- Ball Splines of the types BSP…CN / CL, BSP…FN and BSP…BN are available in normal precision and P-precision.
- The Ball Splines of the types BSP…RN / RL and BSP…FX are only available in normal precision.



Type		Radial run-out of the bearing seats ① [µm]		Perpendicularity of the end of the spline shaft section ② [µm]		Perpendicularity of the flange ③ [µm]	
		Normal-Precision	P-Precision	Normal-Precision	P-Precision	Normal-Precision	P-Precision
BSP	04	14	8	9	6	-	-
BSP	06	14	8	9	6	11	8
BSP	08	14	8	9	6	11	8
BSP	10	17	10	9	6	13	9
BSP	13	19	12	11	8	13	9
BSP	16	19	12	11	8	13	9
BSP	20	19	12	11	8	13	9
BSP	25	22	13	13	9	16	11
BSP	30	22	13	13	9	16	11
BSP	40	25	15	16	11	19	13
BSP	50	25	15	16	11	19	13
BSP	60	29	17	19	13	22	15
BSP	80	29	17	19	13	-	-
BSP	100	34	20	22	15	-	-

Type			Radial run-out of outer surface of nut relative to shaft support area (Max.) ④ [µm] Shaft length [mm]								
			up to 200	> 200 up to 315	> 315 up to 400	> 400 up to 500	> 500 up to 630	> 630 up to 800	> 800 up to 1.000	> 1.000 up to 1.250	> 1.250 up to 1.600	> 1.600 up to 2.000
BSP	04	Normal precision	46	89	126	-	-	-	-	-	-	-
		P precision	26	57	82	-	-	-	-	-	-	-
BSP	06	Normal precision	46	89	126	-	-	-	-	-	-	-
		P precision	26	57	82	-	-	-	-	-	-	-
BSP	08	Normal precision	46	89	126	163	-	-	-	-	-	-
		P precision	26	57	82	108	-	-	-	-	-	-
BSP	10	Normal precision	36	54	68	82	102	-	-	-	-	-
		P precision	20	32	41	51	65	-	-	-	-	-
BSP	13	Normal precision	34	45	53	62	75	92	115	153	195	-
		P precision	18	25	31	38	46	58	75	97	127	-
BSP	16	Normal precision	34	45	53	62	75	92	115	153	195	-
		P precision	18	25	31	38	46	58	75	97	127	-
BSP	20	Normal precision	32	39	44	50	57	68	83	102	130	171
		P precision	18	21	25	29	34	42	52	65	85	116
BSP	25	Normal precision	32	39	44	50	57	68	83	102	130	171
		P precision	18	21	25	29	34	42	52	65	85	116
BSP	30	Normal precision	32	39	44	50	57	68	83	102	130	171
		P precision	18	21	25	29	34	42	52	65	85	116
BSP	40	Normal precision	32	36	39	43	47	54	63	76	93	118
		P precision	16	19	21	24	27	32	38	47	59	77
BSP	50	Normal precision	32	36	39	43	47	54	63	76	93	118
		P precision	16	19	21	24	27	32	38	47	59	77
BSP	60	Normal precision	30	34	36	38	41	45	51	59	70	86
		P precision	16	17	19	21	23	26	30	35	43	54
BSP	80	Normal precision	30	34	36	38	41	45	51	59	70	86
		P precision	16	17	19	21	23	26	30	35	43	54
BSP	100	Normal precision	30	32	34	35	37	40	43	48	55	65
		P precision	16	17	17	19	20	22	24	28	33	40

Preload

Preload is a description of the radial clearance of Ball Splines. Applied preload eliminates the radial clearance of the Ball Splines and increases the stiffness. SNR Ball Splines are available in three preload classes.

Type		Preload / Radial clearance [μm]		
		Z0	Z1	Z2
BSP	04	-2...+1	-6...-2	-
BSP	06	-2...+1	-6...-2	-
BSP	08	-2...+1	-6...-2	-
BSP	10	-3...+1	-8...-3	-
BSP	13	-3...+1	-8...-3	-13...-8
BSP	16	-3...+1	-8...-3	-13...-8
BSP	20	-4...+2	-12...-4	-20...-12
BSP	25	-4...+2	-12...-4	-20...-12
BSP	30	-4...+2	-12...-4	-20...-12
BSP	40	-6...+3	-18...-6	-30...-18
BSP	50	-6...+3	-18...-6	-30...-18
BSP	60	-6...+3	-18...-6	-30...-18
BSP	80	-6...+3	-18...-6	-30...-18
BSP	100	-8...+4	-24...-8	-40...-24

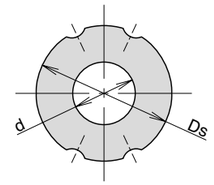
Type	Preload class	Operation conditions
Without preload	Z0	- low load - smooth movement - no alternating load - almost no vibrations and shocks
Low preload	Z1	- low torque moments - high position accuracy - alternating load - low vibrations and shocks
Medium preload	Z2	- torque moments - overhanging loads - strong alternating loads - vibrations and shocks

Shaft options

Hollow shaft

Ball Splines are also available in hollow shaft version.

Type		Shaft diameter	Inner diameter	Cross-sectional coefficient	Cross-sectional moment of inert
		Ds [mm]	d [mm]	Z [mm³]	I [mm⁴]
BSP	04	4	1.5	5.7	11
BSP	06	6	2.0	19.4	58
BSP	08	8	3.0	46.5	186
BSP	10	10	4.0	89.6	448
BSP	13	13	6.0	193	1 260
BSP	16	16	8.0	348	2 780
BSP	20	20	10.0	686	6 860
BSP	25	25	15.0	1 230	15 400



Maximum length

Type		Maximum length	
		Solid shaft [mm]	Hollow shaft [mm]
BSP	04	300	300
BSP	06	400	400
BSP	08	500	500
BSP	10	630	600
BSP	13	1 500	1500
BSP	16	1 500	1500
BSP	20	2 000	2000
BSP	25	2 000	2000
BSP	30	2 000	-
BSP	40	2 000	-
BSP	50	2 000	-
BSP	60	2 000	-
BSP	80	2 000	-
BSP	100	2 000	-

Material / Coating

SNR Ball Splines are available with different coatings and partially in stainless versions.

Index in the type code	Material / Coating	Remarks
0	Standard material	
1	Stainless version	Only for BSP…CN and BSP…FN up to size 25
2	Blackchrome coating	
5	DURALLOY TDC® coating	From size 25 possible

Notes

MORE INFORMATION CONCERNING OUR PRODUCTS
FOR LINEAR MOTION IS PROVIDED IN OUR CATALOGUES.

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NTN Europe - 1 rue des Usines - 74000 Annecy
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