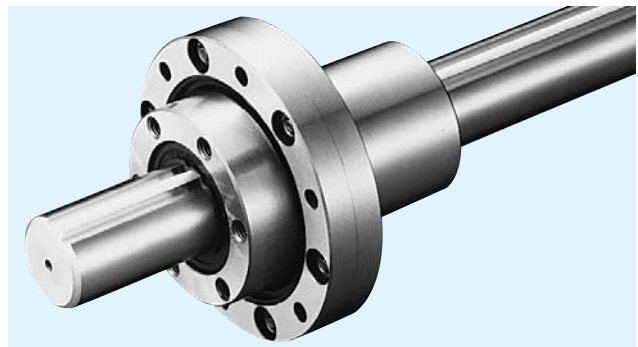
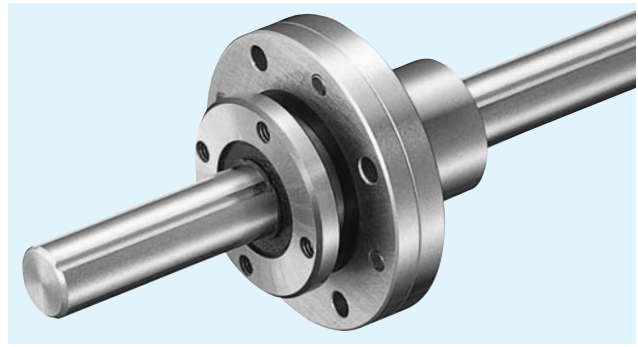
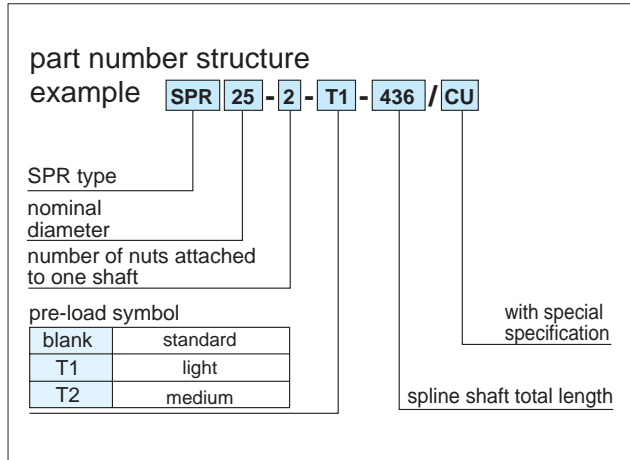
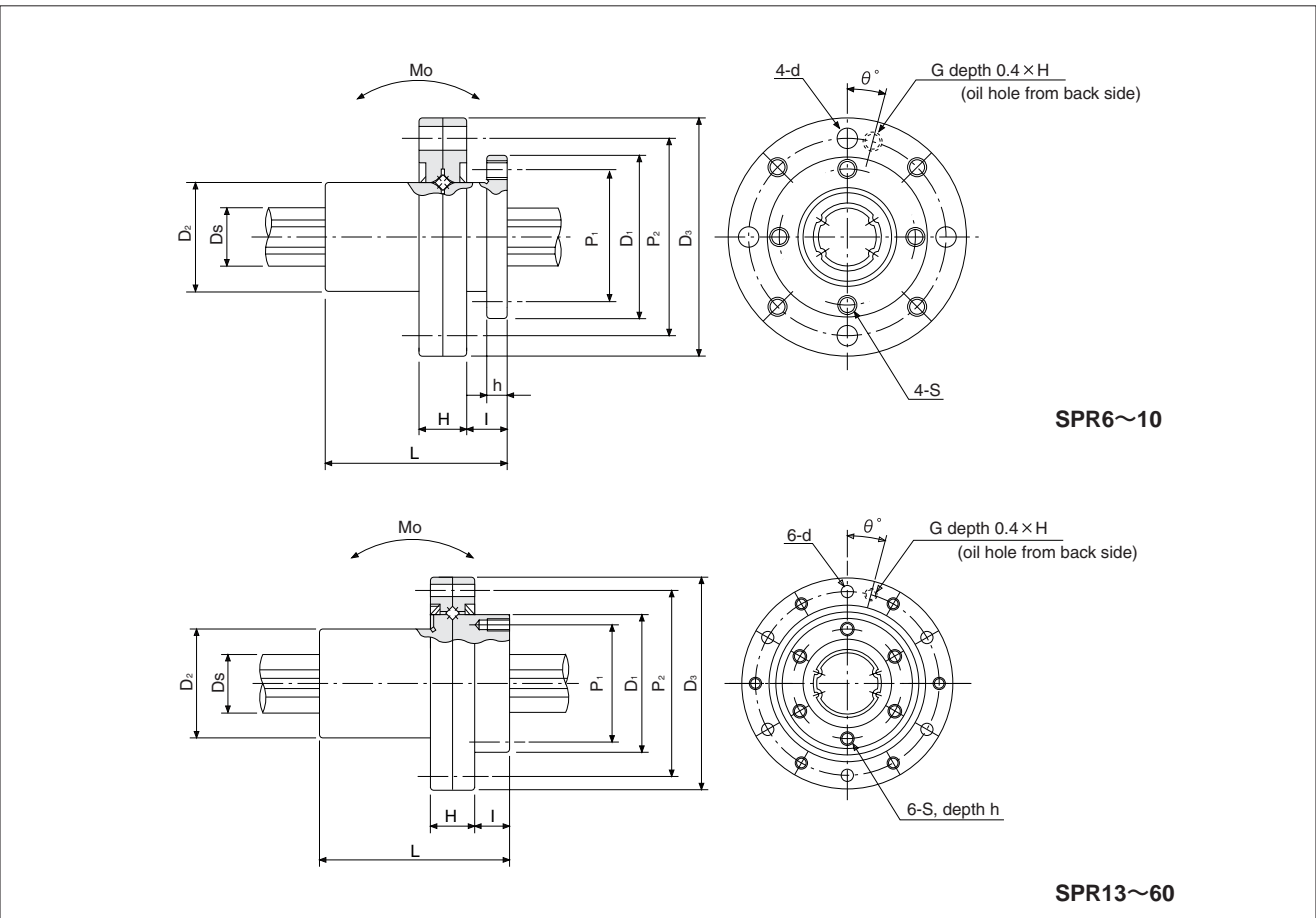


# SPR TYPE



part number	ball spline major dimensions								major dimensions of support bearing							
	D <sub>1</sub>		D <sub>2</sub>	L	P <sub>1</sub>	S	h	I	H	D <sub>3</sub>		P <sub>2</sub>	d	G	θ°	
	mm	tolerance μm								mm	mm					mm
<b>SPR 6</b>	20		13	25	0 -0.2	16	M2	2.5	5	6.5	30	0/-21	24	2.4	φ2	20°
<b>SPR 8</b>	22	0	15	25		18	M2.5	3	6	6.5	33	0 -25	27	2.9		
<b>SPR10</b>	27	-21	19	33		22	M3	4	8	7	40		33	3.4		
<b>SPR13</b>	29		24	36		24	M3	5	8	9	50	0 -30	42	3.4	φ3	15°
<b>SPR16</b>	36		31	50		30	M4	6	10	11	60		50	4.5		
<b>SPR20A</b>	44		35	63		38	M4	7	12	13	72		62	4.5		
<b>SPR20</b>	40	0	34	60		34	M4	7	12	13	66		56	4.5		
<b>SPR25A</b>	55	-25	42	71		47	M5	8	13	16	82		72	4.5		
<b>SPR25</b>	50		40	70		42	M5	8	13	16	78		68	4.5		
<b>SPR30</b>	61	0	47	80		52	M6	10	17	17	100		86	6.6	M6 × 0.75	15°
<b>SPR40</b>	76	-30	62	100	64	M6	10	23	20	120	-35		104	9		
<b>SPR50</b>	88	0	75	112	77	M8	13	24	22	130	0		114	9		
<b>SPR60</b>	102	-35	90	127	90	M8	13	25	25	150	-40		132	9		

# ROTARY BALL SPLINE



spline shaft		ball spline				support bearing		allowable static moment	second cross-sectional moment of inertia	cross-sectional coefficient	mass		※maximum rotational speed	part number
Ds	tolerance	basic torque rating		basic load rating		basic load rating					nut	spline shaft		
mm	μm	C <sub>T</sub> N·m	C <sub>OT</sub> N·m	C kN	C <sub>O</sub> kN	C <sub>R</sub> kN	C <sub>OR</sub> kN	Mo N·m	mm <sup>4</sup>	mm <sup>3</sup>	kg	kg/m	rpm	
6	0/-12	1.5	2.4	1.22	2.28	0.6	0.5	5.1	5.9 × 10 <sup>3</sup>	1.97 × 10 <sup>3</sup>	0.04	0.21	3,500	<b>SPR 6</b>
8	0	2.1	3.7	1.45	2.87	1.2	1.14	7.4	1.9 × 10 <sup>3</sup>	4.76 × 10 <sup>3</sup>	0.05	0.38	3,500	<b>SPR 8</b>
10	-15	4.4	8.2	2.73	5.07	2.4	2.45	18.0	4.61 × 10 <sup>3</sup>	9.22 × 10 <sup>3</sup>	0.09	0.60	3,000	<b>SPR10</b>
13	0	21	39.2	2.67	4.89	3.0	3.70	13.7	1.38 × 10 <sup>3</sup>	2.13 × 10 <sup>2</sup>	0.17	1.0	1,800	<b>SPR13</b>
16	-18	60	110	6.12	11.2	5.6	6.70	46	2.98 × 10 <sup>3</sup>	3.73 × 10 <sup>2</sup>	0.33	1.5	1,500	<b>SPR16</b>
20	0 -21	105	194	8.9	16.3	6.61	7.89	63	7.35 × 10 <sup>3</sup>	7.34 × 10 <sup>2</sup>	0.57	2.4	1,100	<b>SPR20A</b>
18.2		83	133	7.84	11.3	5.90	7.35	63	5.05 × 10 <sup>3</sup>	5.54 × 10 <sup>2</sup>	0.45	2.0	1,200	<b>SPR20</b>
25		189	346	12.8	23.4	10.0	13.4	171	1.79 × 10 <sup>4</sup>	1.43 × 10 <sup>3</sup>	0.81	3.7	900	<b>SPR25A</b>
23		162	239	12.3	16.1	9.11	11.5	104	1.27 × 10 <sup>4</sup>	1.11 × 10 <sup>3</sup>	0.75	3.1	1,000	<b>SPR25</b>
28		289	412	18.6	23.2	13.2	18.0	181	2.75 × 10 <sup>4</sup>	1.96 × 10 <sup>3</sup>	1.25	4.8	800	<b>SPR30</b>
37.4	0	637	882	30.8	37.5	22.8	32.3	358	8.73 × 10 <sup>3</sup>	4.67 × 10 <sup>3</sup>	2.30	8.6	800	<b>SPR40</b>
47	-25	1,390	3,180	46.1	74.2	27.2	42.1	696	2.16 × 10 <sup>5</sup>	9.21 × 10 <sup>3</sup>	3.10	13.1	570	<b>SPR50</b>
56.5	0/-30	2,100	4,800	58.0	127.4	30.0	48.2	1,300	4.51 × 10 <sup>5</sup>	1.60 × 10 <sup>4</sup>	4.70	19	500	<b>SPR60</b>

※Maximum rotational speed for grease lubrication.

1kN ≒ 102kgf 1N·m ≒ 0.102kgf·m

Contact NB for further information when higher speeds or oil lubrication is required.