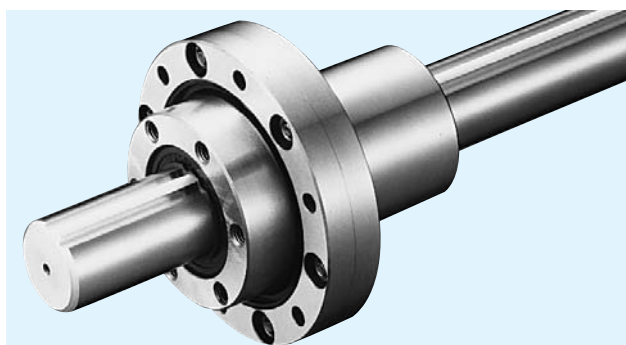
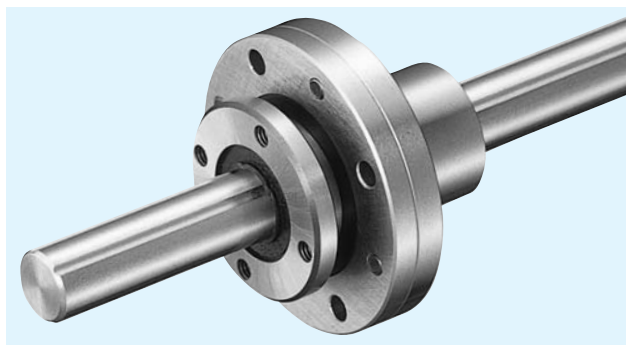
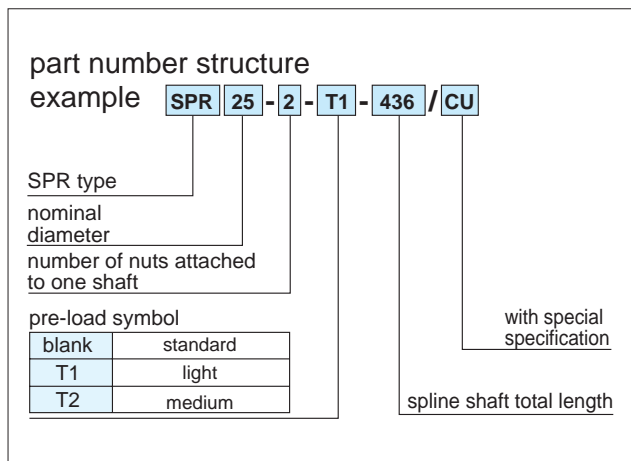


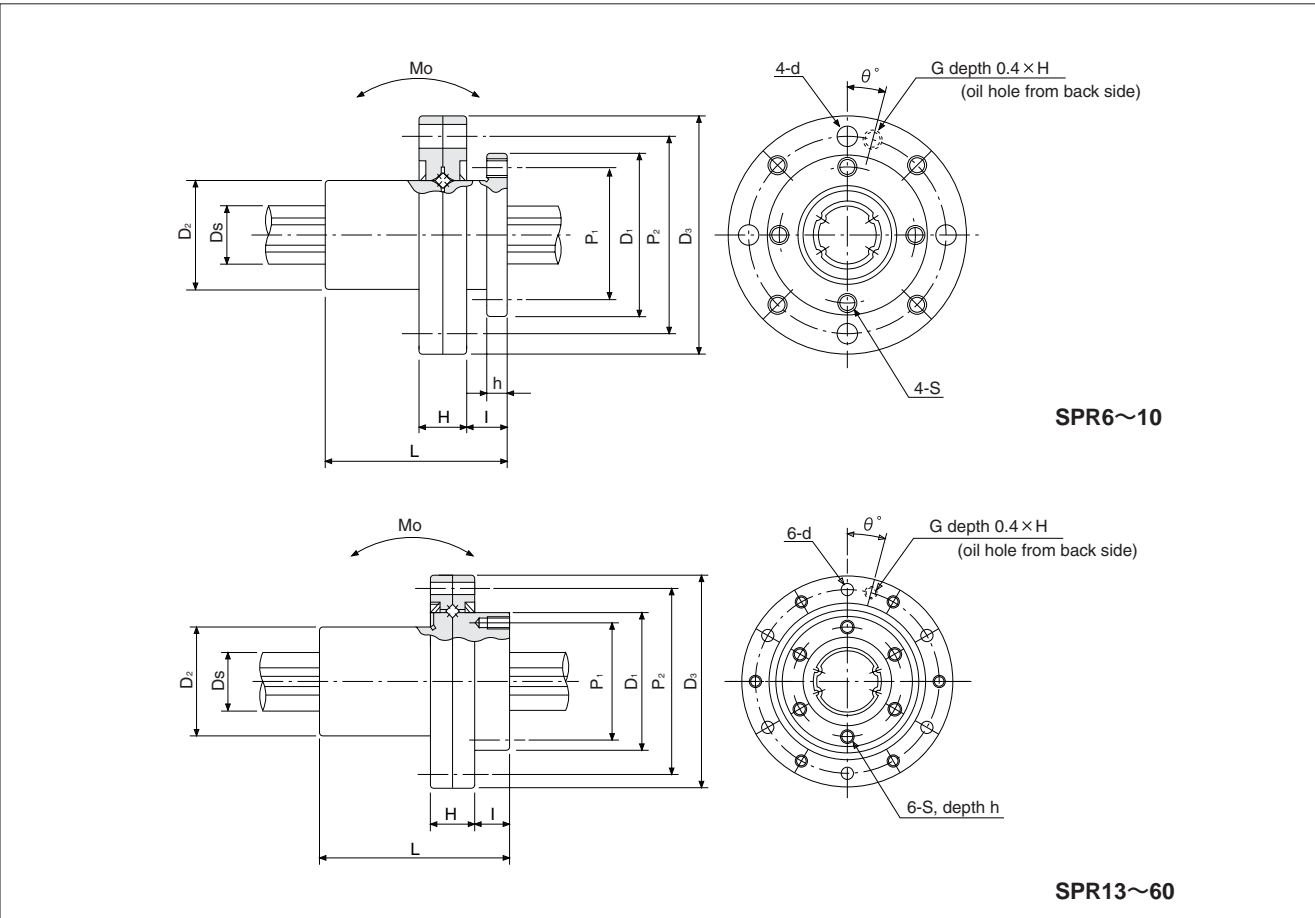


SPR TYPE



part number	ball spline major dimensions								major dimensions of support bearing							
	D ₁		D ₂	L	P ₁	S	h	I	H	D ₃		P ₂	d	G	θ°	
	mm	μm								mm	μm					
SPR 6	20		13	25	0 -0.2	16	M2	2.5	5	6.5	30	0/-21	24	2.4	φ2	20°
SPR 8	22	0	15	25		18	M2.5	3	6	6.5	33	0 -25	27	2.9		
SPR10	27	-21	19	33		22	M3	4	8	7	40		33	3.4		
SPR13	29		24	36		24	M3	5	8	9	50	0 -30	42	3.4	φ3	15°
SPR16	36		31	50		30	M4	6	10	11	60		50	4.5		
SPR20A	44		35	63		38	M4	7	12	13	72		62	4.5		
SPR20	40	0	34	60		34	M4	7	12	13	66		56	4.5		
SPR25A	55	-25	42	71		47	M5	8	13	16	82		72	4.5		
SPR25	50		40	70		42	M5	8	13	16	78		68	4.5		
SPR30	61	0	47	80		52	M6	10	17	17	100		0	86	6.6	M6 × 0.75
SPR40	76	-30	62	100	64	M6	10	23	20	120	-35		104	9		
SPR50	88	0	75	112	77	M8	13	24	22	130	0		114	9		
SPR60	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 Mo	second cross-sectional moment of inertia	cross-sectional coefficient	mass		※maximum rotational speed	part number
Ds mm	tolerance μm	basic torque rating		basic load rating		basic load rating					nut	spline shaft		
		dynamic CT N·m	static COT N·m	dynamic C kN	static Co kN	dynamic CR kN	static COR kN							
6	0/-12	1.5	2.4	1.22	2.28	0.6	0.5	5.1	5.9 × 10 ³	1.97 × 10 ³	0.04	0.21	3,500	SPR 6
8	0	2.1	3.7	1.45	2.87	1.2	1.14	7.4	1.9 × 10 ³	4.76 × 10 ³	0.05	0.38	3,500	SPR 8
10	-15	4.4	8.2	2.73	5.07	2.4	2.45	18.0	4.61 × 10 ³	9.22 × 10 ³	0.09	0.60	3,000	SPR10
13	0	21	39.2	2.67	4.89	3.0	3.70	13.7	1.38 × 10 ³	2.13 × 10 ²	0.17	1.0	1,800	SPR13
16	-18	60	110	6.12	11.2	5.6	6.70	46	2.98 × 10 ³	3.73 × 10 ²	0.33	1.5	1,500	SPR16
20	0 -21	105	194	8.9	16.3	6.61	7.89	63	7.35 × 10 ³	7.34 × 10 ²	0.57	2.4	1,100	SPR20A
18.2		83	133	7.84	11.3	5.90	7.35	63	5.05 × 10 ³	5.54 × 10 ²	0.45	2.0	1,200	SPR20
25		189	346	12.8	23.4	10.0	13.4	171	1.79 × 10 ⁴	1.43 × 10 ³	0.81	3.7	900	SPR25A
23		162	239	12.3	16.1	9.11	11.5	104	1.27 × 10 ⁴	1.11 × 10 ³	0.75	3.1	1,000	SPR25
28		289	412	18.6	23.2	13.2	18.0	181	2.75 × 10 ⁴	1.96 × 10 ³	1.25	4.8	800	SPR30
37.4	0	637	882	30.8	37.5	22.8	32.3	358	8.73 × 10 ⁴	4.67 × 10 ³	2.30	8.6	800	SPR40
47	-25	1,390	3,180	46.1	74.2	27.2	42.1	696	2.16 × 10 ⁵	9.21 × 10 ³	3.10	13.1	570	SPR50
56.5	0/-30	2,100	4,800	58.0	127.4	30.0	48.2	1,300	4.51 × 10 ⁵	1.60 × 10 ⁴	4.70	19	500	SPR60

※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.

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 SLIDE SHAFT
 SLIDE WAY/GONIO WAY
 SLIDE TABLE
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