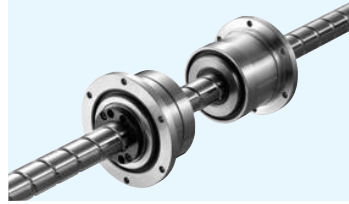


SPBR TYPE

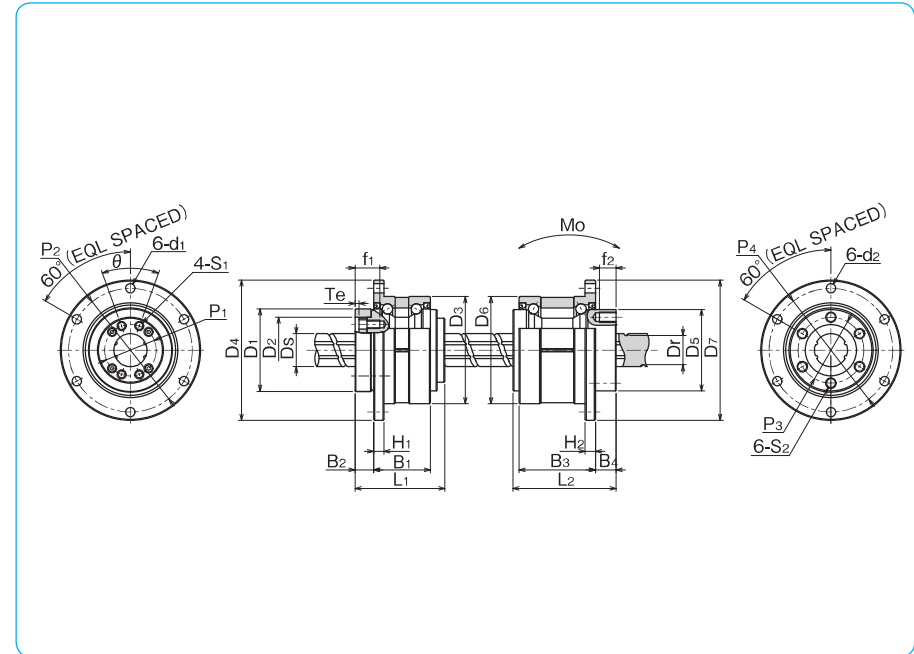


part number structure

example **SPBR 16 -300 /CU**

SPBR type	nominal diameter	ball screw spline shaft total length	with special specification
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Note: retainer material is resin.



ROTARY BALL SCREW NUT

part number	major dimensions										major dimensions of angular contact bearings						
	D ₁ mm	h7 tolerance μm	D ₂ mm	H7 tolerance μm	L ₁ mm	P ₁ P.C.D. mm	θ	S ₁	f ₁ mm	T _e mm	D ₃ mm	D ₄ mm	H ₁ mm	B ₁ mm	B ₂ mm	P ₂ P.C.D. mm	d ₁ mm
SPBR16	40	0	32		43.5	25	40°	M4	12	2	52	68	5	27.5	9	60	4.5
SPBR20	50	-25	39	+25 0	54	31	40°	M5	16	2	62	78	6	34	11	70	4.5
SPBR25	58	0/-30	47		65	38	40°	M6	19	3	72	92	8	43	12.5	81	5.5

ball screw spline shaft D _s	lead	root diameter D _r	ball screw basic load rating dynamic C _a kN	ball screw basic load rating static C _{oa} kN	angular contact bearings basic load rating dynamic C _{an} kN	angular contact bearings basic load rating static C _{oar} kN	angular contact bearings * maximum revolutions	moment of inertia for the nut kg·cm ²	moment of inertia for the ball screw shaft kg·cm ² /mm	mass nut kg	mass shaft kg/m	ball screw nut maximum revolutions based on D _m ·N rpm	size
16	16	13.4	4.62	8.59	11.1	22.2	4,000	0.60	4.43×10 ⁻⁴	0.45	1.47	4,179	16
20	20	17.2	5.77	12.2	14.4	30.5	3,200	1.75	1.12×10 ⁻³	0.76	2.33	3,414	20
25	25	21.9	8.62	19.2	18.2	39.8	2,800	3.86	2.74×10 ⁻³	1.26	3.65	2,692	25

ROTARY BALL SPLINE NUT

part number	major dimensions						major dimensions of angular contact bearings						
	D ₅ mm	h7 tolerance μm	L ₂ mm	P ₃ P.C.D. mm	S ₂	f ₂ mm	D ₆ mm	D ₇ mm	H ₂ mm	B ₃ mm	B ₄ mm	P ₄ P.C.D. mm	d ₂ mm
SPBR16	39.5	0	50	32	M5	8	52	68	5	37	10	60	4.5
SPBR20	43.5	-25	63	36	M5	8	56	72	6	48	12	64	4.5
SPBR25	53	0/-30	71	45	M6	8	62	78	6	55	13	70	4.5

ball spline				angular contact bearings			allowable static moment	moment of inertia	mass nut
basic torque rating dynamic C _T N·m	static C _{or} N·m	basic load rating dynamic C kN	basic load rating static C _o kN	basic load rating dynamic C _R kN	basic load rating static C _{or} kN	* maximum revolutions rpm	M _o N·m	kg·cm ²	kg
60	110	6.12	11.2	13.0	12.8	4,000	46	0.63	0.54
105	194	8.9	16.3	17.4	17.2	3,600	110	1.10	0.70
189	346	12.8	23.4	22.1	22.5	3,200	171	2.14	0.92

*Please select the smallest maximum revolutions (rpm) in case that more than one portion rotate at the same time.

※Maximum revolutions with grease lubrication.

•Moment of inertia is calculated excluding the angular contact bearings.