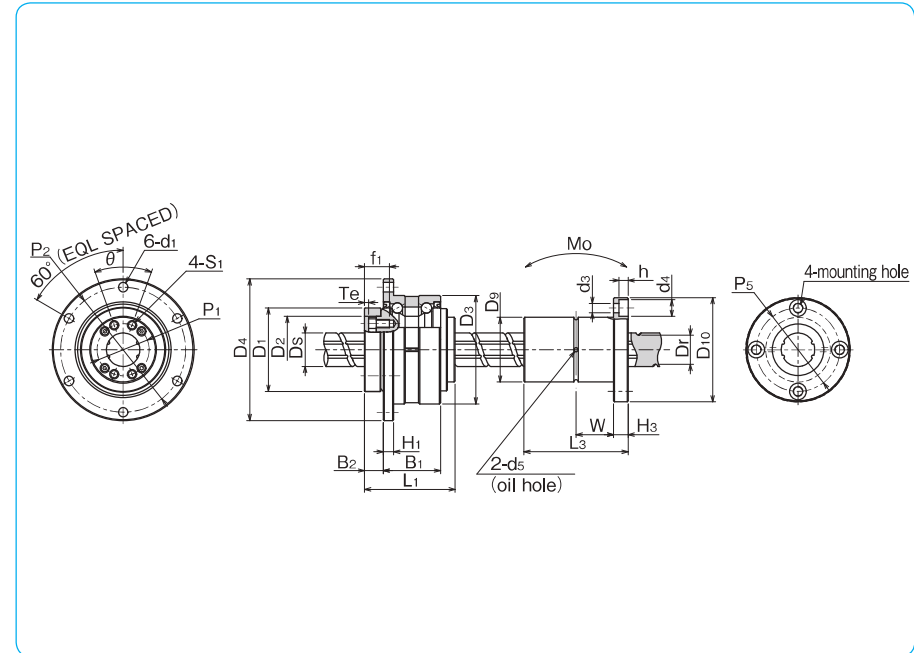
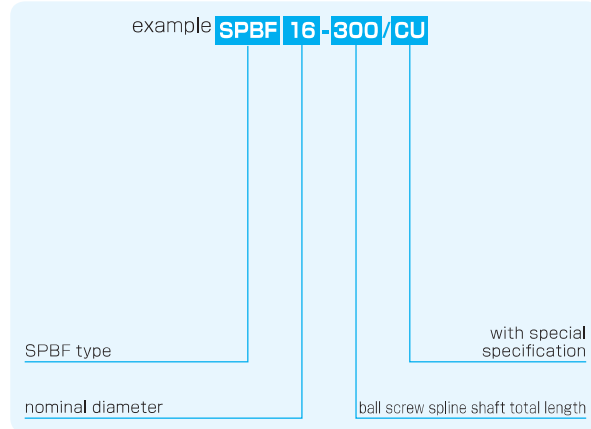


# SPBF TYPE



## part number structure



## ROTARY BALL SCREW NUT

part number	major dimensions										major dimensions of angular contact bearings							
	D <sub>1</sub> h7 mm	tolerance μm	D <sub>2</sub> H7 mm	tolerance μm	L <sub>1</sub> mm	P <sub>1</sub> P.C.D. mm	θ	S <sub>1</sub>	f <sub>1</sub> mm	T <sub>e</sub> mm	D <sub>3</sub> tolerance μm	D <sub>4</sub> mm	H <sub>1</sub> mm	B <sub>1</sub> mm	B <sub>2</sub> mm	P <sub>2</sub> P.C.D. mm	d <sub>1</sub> mm	
<b>SPBF16</b>	40	0	32	+25 0	43.5	25	40°	M4	12	2	52	0	68	5	27.5	9	60	4.5
<b>SPBF20</b>	50	-25	39	0	54	31	40°	M5	16	2	62	-7	78	6	34	11	70	4.5
<b>SPBF25</b>	58	0/-30	47	0	65	38	40°	M6	19	3	72	-7	92	8	43	12.5	81	5.5

ball screw spline shaft D <sub>s</sub> mm	lead mm	root diameter D <sub>r</sub> mm	ball screw basic load rating dynamic C <sub>d</sub> kN	static C <sub>o</sub> kN	angular contact bearings basic load rating dynamic C <sub>d</sub> kN	static C <sub>o</sub> kN	moment of inertia for the nut kg·cm <sup>2</sup>	moment of inertia for the ball screw shaft kg·cm <sup>2</sup> /mm	mass nut kg	shaft kg/m	ball screw nut maximum revolutions based on D <sub>m</sub> ·N rpm	size	
16	16	13.4	4.62	8.59	11.1	22.2	4,000	0.60	4.43×10 <sup>-4</sup>	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 <sup>-3</sup>	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 <sup>-3</sup>	1.26	3.65	2,692	25

## BALL SPLINE NUT

part number	major dimensions							
	D <sub>9</sub> mm	h6 tolerance μm	L <sub>3</sub> mm	tolerance mm	D <sub>10</sub> mm	H <sub>3</sub> mm	P <sub>5</sub> P.C.D. mm	d <sub>3</sub> ×d <sub>4</sub> ×h mm
<b>SPBF16</b>	31	0	50	0	50	7	40	4.5×8×4.4
<b>SPBF20</b>	35	-16	63	-0.2	58	9	45	5.5×9.5×5.4
<b>SPBF25</b>	42	-16	71	0/-0.3	65	9	52	5.5×9.5×5.4

W mm	d <sub>5</sub> mm	basic torque rating dynamic C <sub>T</sub> N·m	static C <sub>oT</sub> N·m	basic load rating dynamic C kN	static C <sub>o</sub> kN	allowable static moment Mo N·m	moment of inertia kg·cm <sup>2</sup>	mass nut kg
18	2	60	110	6.12	11.2	46	0.52	0.2
22.5	2	105	194	8.9	16.3	110	1.11	0.33
26.5	3	189	346	12.8	23.4	171	2.01	0.45

•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.