

Spherical Bearing / Spherical Bearing Holder Sets

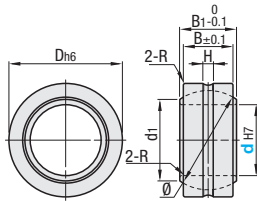
Standard Type

Spherical Bearing

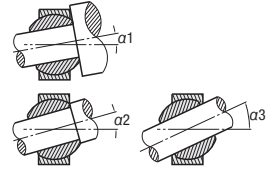


RoHS 10

Type	RBPB	Material		
		Holder	Spherical Inner Ring	Bushing
Standard	RBPB	S35C	*SUJ2 (58HRC~)	Special Copper Alloy * Hard Chrome Plating



Allowable Incline



Shaft Step Shape	Shaft Condition	Allowable Incline Angle
Large	Stepped part of the shaft contacts the outer circumference of the holder.	Small ($\alpha 1$)
Medium	Stepped part of the shaft contacts the side or the inner circumference of the holder.	Medium ($\alpha 2$)
No	Shaft contacts the inner circumference of the holder.	Large ($\alpha 3$)

Part Number Type	d	D	B	B ₁	d ₁	H	R	Ball Dia. Ø (mm)	Allowable Incline Angle			Static Load Capacity Radial Cs (kN)	Mass (g)	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10-30
									$\alpha 1^*$	$\alpha 2^*$	$\alpha 3^*$				
RBPB	5	16	6	8	7.7	1	0.3	11.112	8	13	30	7.84	8.5		
	6	18	6.75	9	9			12.7				9.8	13		
	8	22	9	12	10.4			15.875				16.7	24		
	10	26	10.5	14	12.9	1.2	0.5	19.05	8	14	25	23.5	39		
	12	30	12	16	15.4			22.225				31.4	58		
	14	34	13.5	19	16.9			25.4				40.2	84		
	16	38	15	21	19.4	2.5	0.7	28.575	9	15	24	50	111		
	18	42	16.5	23	21.9			31.75				61.8	160		
	20	46	18	25	24.4			34.925				73.5	210		
	22	50	20	28	25.8	3	0.8	38.1	10	9	23	88.2	265		
	25	56	22	31	29.6			42.862				111	390		
	30	66	25	37	34.8			50.8				148	610		

Ordering Example Part Number RBPB14

Shaft Fits

Usage Condition	Shaft	Housing
Inner Ring Rotary Load	Normal Load m6	H7
	Non-directional Load n6	
Outer Wheel Rotary Load	Normal Load h7	M7
	Non-directional Load k6	

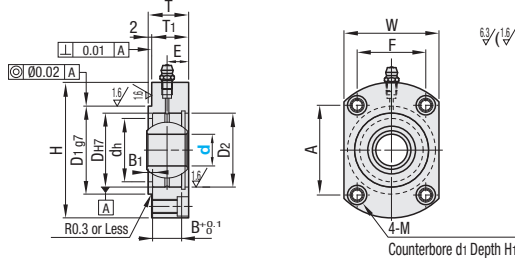
Clearance

Standard
Radial Direction Clearance 0.035mm or Less
Axial Clearance 0.1mm or Less

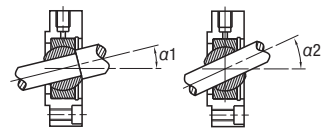
Spherical Bearing Holder Sets



Type	RBPBCB RBPBCM	Material			Holder	Holder	S Surface Treatment	A Accessor
		Holder	Spherical Inner Ring	Bushing				
Standard Type	RBPBCB RBPBCM	S35C	*SUJ2 (58HRC~)	Special Copper Alloy	S45C Equivalent	Black Oxide Electroless Nickel Plating	SUS304	* Hard Chrome Plating



Allowable Incline



Part Number Type	d	D _{H7}	B	B ₁	H	W	T	T ₁	E	d _h	D ₁	D ₂	A	F	M (Coarse) (d ₂)	d ₁	H ₁	RBPBCB		RBPBCM		
																		Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10-20	Unit Price 1 ~ 9 pc(s).	Volume Discount Rate 10-20	
RBPBCB RBPBCM	5	16	6	4	38	25	13	11	6	12	20	-0.007	16	24	15	M5 (4.3)	8	5				
	6	18	6.75	3.25	40	28	14	12	6.38	14	23		18	26	17							
	8	22	9	2	45	31	14	12	7.5	18	27		22	29	19							
	10	26	10.5	2.5	50	36	16	14	8.25	22	32	-0.009	26	31	25	M6 (5.2)	9.5	6				
	12	30	12	3	54	40	18	16	9	24	36		30	34	28							
	14	34	13.5	2.5	63	45	20	18	10.75	28	41		34	40	31							
	16	38	15	2	70	50	21	19	11.5	35	46	-0.034	38	43	37	M8 (6.8)	11	7				
	18	42	16.5	2.5	77	54	23	21	12.25	36	50		42	51	39							
	20	46	18		87	57	24	22	13	40	53		47	58	39							
	22	50	20	2	92	62	27	25	15	43	58	-0.01	50	60	44	M10 (8.5)	14	9				
	25	56	22		97	67	29	27	16	49	63		56	63	49							
	30	66	25		112	80	33	31	18.5	58	76		68	70	62							

Ordering Example Part Number RBPBCB12 RBPBCM5

Specifications for Spherical Bearing Holder Sets

d	Ball Dia. Ø (mm)	Allowable Incline Angle		Static Load Capacity Radial Cs (kN)	Mass (g)
		$\alpha 1^*$	$\alpha 2^*$		
5	11.112	13°	30°	7.84	8.5
6	12.7			9.8	13
8	15.875			16.7	24
10	19.05	13°	25°	23.5	39
12	22.225			31.4	58
14	25.4			40.2	84
16	28.575	16°	24°	50	111
18	31.75			61.8	160
20	34.925			73.5	210
22	38.1	15°	23°	88.2	265
25	42.862			111	390
30	50.8			148	610

Shaft Fits

Usage Condition	Shaft	Housing
Inner Ring Rotary Load	Normal Load m6	H7
	Non-directional Load n6	
Outer Wheel Rotary Load	Normal Load h7	M7
	Non-directional Load k6	

Shaft Step Shape	Shaft Condition	Allowable Incline Angle
Medium	Stepped part of the shaft contacts the side or the inner circumference of the holder.	Medium ($\alpha 1$)
No	Shaft contacts the inner circumference of the holder.	Large ($\alpha 2$)

Clearance

Standard
Radial Direction Clearance 0.035mm or Less
Axial Clearance 0.1mm or Less