

Self-Aligning Ball Bearings

Features: The self-aligning ability enables to tolerate mounting misalignment and deflection during rotation. Suitable for use with power transmission shafts that may sustain deflection.

B1 □ □ □ □

(Installation Diagram)

Material: SUJ2
Accuracy Grade: JIS B 1514 Class 0

RoHS 10

For details on the tolerance and allowable values of inner and outer rings, see P.2243

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass (g) (Reference)	Unit Price
					Cr (Dynamic) kN	Co (Static) kN		Ds (min)	dh (max)	R (max)		
B1200	10	30	9	0.6	5.55	1.19	22000	14.0	26.0	0.6	33	
B1300		35	11		7.35	1.62	20000					
B1201	12	32	10	1	5.70	1.27	22000	16.0	28.0	1	39	
B1301		37	12		9.65	2.16	18000					
B1202	15	35	11	0.6	7.6	1.75	18000	19.0	31.0	0.6	51	
B1302		42	13		1	9.7	2.29					
B1203	17	40	12	0.6	8.00	2.01	16000	21.0	36.0	0.6	72	
B1303		47	14		1	12.7	3.20					
B1204	20	47	14	1	10.0	2.61	14000	25.0	42.0	1	120	
B1304		52	15		1.1	12.6	3.35					

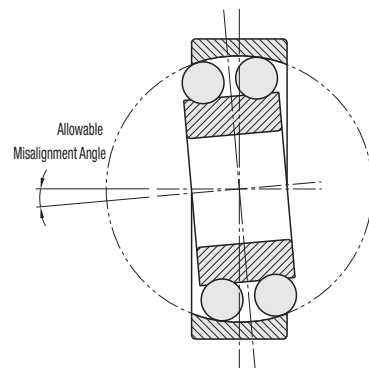
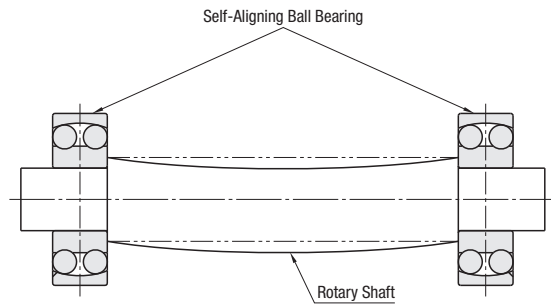
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Design and Features

The outer ring raceway forms a spherical surface, whose center of curvature is common to the bearing center. Thus the inner ring, balls and cage are capable of freely revolving around the bearing center with self-aligning ability. Suitable for use with drive shafts, which tend to undergo deflection. This is also fit to use in a situation that alignment of a shaft and housing is difficult.

Allowable Misalignment Angle

Note : Allowable misalignment angle of Self-Aligning Ball Bearings is approx. 0.07 ~ 0.12 radian (4° ~ 7°) at normal load condition, however this degree of allowable misalignment may be limited by the abutment and fillet dimensions around the bearing.



Ordering Example
Part Number
B1300

Stainless Steel Deep Groove Bearings

Features: The O.D. is decreased by directly machining a V groove on the outer ring of the bearing.

SZV

Material: SUS440C Equivalent
Accuracy Grade: JIS B 1514 Class 0

RoHS 10

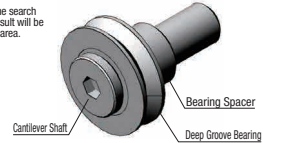
Part Number	Type	d	D	B	VD	C Chamfer	Basic Load Rating		Relative Dimensions		Mass (g) (Reference)	Unit Price
							Cr (Dynamic) N	Co (Static) N	Ds (min)	dh (max)		
SZV	3	12	4		9.06	(0.25)	542	186	4.5	7.5	1.3	
	3	14			11.06							
	4	12			9.06				1.2			
	4	14			11.06				1.8			
6	16	13.06	650	235	7.5	10	2.1					

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V Groove valley radii is R0.2.

Combination of these app. examples can be selected on our website.
Selection Details P.87
e-Catalog Search Keyword #MA391 Search

* Enter the search keyword in the search box on e-Catalog. The search result will be shown in "Modular Assembler" area.



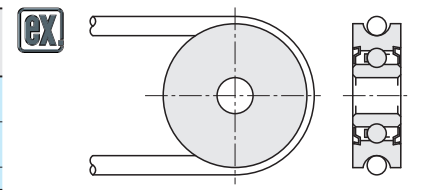
SZU

Material: SUS440C Equivalent
Accuracy Grade: JIS B 1514 Class 0

RoHS 10

Part Number	Type	d	D	B	UD	UR (Groove Radius)	C Chamfer	Basic Load Rating		Relative Dimensions		Mass (g) (Reference)	Unit Price
								Cr (Dynamic) N	Co (Static) N	Ds (min)	dh (max)		
SZU	3	12	4		10	1.15	(0.25)	542	186	4.5	7.5	1.2	
	3	14			12								
	4	12			10					1.1			
	4	14			12					1.8			
6	16	14	650	235	7.5	10	2.1						

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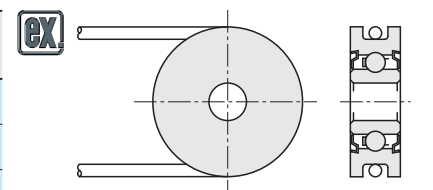
SZG

Material: SUS440C Equivalent
Accuracy Grade: JIS B 1514 Class 0

RoHS 10

Part Number	Type	d	D	B	GD	GR (Groove Width)	C Chamfer	R (Corner R)	Basic Load Rating		Relative Dimensions		Mass (g) (Reference)	Unit Price
									Cr (Dynamic) N	Co (Static) N	Ds (min)	dh (max)		
SZG	3	12	4		10	2	(0.25)	0.25	542	186	4.5	7.5	1.3	
	3	14			12									
	4	12			10						1.2			
	4	14			12						1.8			
6	16	14	650	235	7.5	10	2.1							

kgf=Nx0.101972



Ordering Example
Part Number - D
SZV3 - 12
SZU3 - 12