

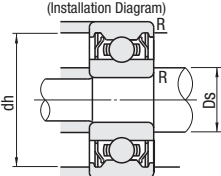
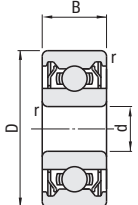
Low Dust Generation Grease Filled Ball Bearings

Ball Bearings with Flange - Low Dust Generation Grease Filled



SBC6□□ZZ
SBC6□□□ZZ

RoHS10



Bearing Accuracy: JIS B 1514 Class 0

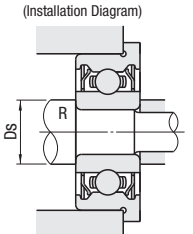
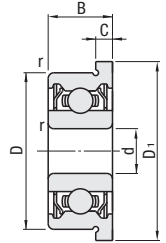
Inner and Outer Ring		Shield	Rolling Element	Retainer
M Material	H Hardness	M Material	M Material	M Material
SUS440C Equivalent	57~63HRC	SUS304	SUS440C	*SUS304

* For SBC673, 674, 675 and 676, Retainer material is SUS304 or SUS420J2.



SFLC6□□ZZ

RoHS10



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SUS440C Equivalent	57~63HRC	SUS304	SUS440C	*SUS304

* For SFLC673, 674, 675 and 676, Retainer material is SUS304 or SUS420J2.

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass (g) (Reference)	Unit Price
					Cr (Dynamic) N	Cor (Static) N		Ds (min)	dh (max)	R (max)		
SBC673ZZ	3	6	2.5	0.08	177	59	71000	3.6	5.4	0.08	0.27	
SBC683ZZ		7	3	0.1	331	104	63000	3.9	5.8	0.1	0.45	
SBC693ZZ		8	4	0.15	476	144	60000	4.2	6.8	0.15	0.83	
SBC623ZZ	10	536			175	50000	8.8		1.66			
SBC674ZZ	4	7	2.5	0.08	217	86	60000	4.6	6.4	0.08	0.29	
SBC684ZZ		9	4	0.15	544	179	53000	5	7.8	0.1	1.01	
SBC694ZZ		11			545	182	48000	5.2	9.8	0.15	1.75	
SBC624ZZ		13	5	0.2	1105	388	40000	5.6	11.4	0.2	3.04	
SBC675ZZ	5	8	2.5	0.08	185	72	53000	5.6	7	0.08	0.34	
SBC685ZZ		11	5	0.15	607	225	45000	6.2	9.8	0.15	1.96	
SBC695ZZ		13	4	0.2	915	344	43000	6.6	11.4	0.2	2.5	
SBC605ZZ		14	5		1105	404	40000		12.4		3.48	
SBC625ZZ		16		0.3	1470	536	36000	7	14	0.3	4.86	
SBC676ZZ	6	10	3	0.1	421	174	45000	6.6	8.9	0.1	0.68	
SBC686ZZ		13	5	0.15	918	352	40000	7	11.8	0.15	2.69	
SBC696ZZ		15		0.2	1139	418	40000	7.6	13.4	0.2	3.72	
SBC606ZZ		17	6	0.3	1921	668	38000	8	15	0.3	6.08	
SBC626ZZ		19			1986	708	32000		17		7.94	
SBC678ZZ	8	12	3.5	0.1	462	219	40000	8.8	10.9	0.1	0.97	
SBC688ZZ		16	5	0.2	1368	568	36000	9.6	14.4	0.2	4.02	
SBC698ZZ		19	6	0.3	1901	728	36000	10	17	0.3	7.18	
SBC608ZZ		22	7		2799	1103	34000		20		12	
SBC628ZZ		24	8		2833	1138	28000		22		17	

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	Cor (Static) Kn		Ds		dh (max)			R (max)
								(min)	(max)				
SBC6900ZZ	10	22	6	0.3	2.7	1.25	34000	12	12.5	20	10		
SBC6000ZZ		26	8		4.55	1.95	31000		13	24	0.3	19	
SBC6200ZZ		30	9		0.6	5.1	2.4		24000	15	26	0.6	32
SBC6901ZZ	12	24	6	0.3	2.9	1.45	31000	14	14	22	11		
SBC6001ZZ		28	8		5.1	2.4	27000		15	26	0.3	22	
SBC6201ZZ		32	10		0.6	6.8	3.05		22000	16	16.5	28	0.6
SBC6902ZZ	15	28	7	0.3	4.3	2.25	26000	17	18	26	17		
SBC6002ZZ		32	9		5.6	2.85	23000		18.5	30	0.3	30	
SBC6202ZZ		35	11		0.6	7.65	3.75		20000	19	31	0.6	45
SBC6903ZZ	17	30	7	0.3	4.6	2.55	23000	19	28	0.3	18		
SBC6003ZZ		35	10		6	3.25	21000		21		33	39	
SBC6203ZZ		40	12		0.5	9.55	4.8		17000		21	22	36
SBC6904ZZ	20	37	9	0.3	6.35	3.7	19000	22	23.5	35	0.3	36	
SBC6004ZZ		42	12	0.6	9.4	5.05	17000	24	25	38	0.6	69	
SBC6204ZZ		47	14	1	12.8	6.65	15000	25	26.5	42	1	106	



Ordering Example

Part Number

SBC684ZZ
SBC6202ZZ

Part Number	d	D	B	D ₁	C	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions		Mass (g) (Reference)	Unit Price
							Cr (Dynamic) N	Cor (Static) N		Ds (min)	R (max)		
SFLC673ZZ	3	6	2.5	7.2	0.6	0.1	177	59	71000	3.6	0.08	0.33	
SFLC683ZZ		7	3	8.1	0.8		331	104	63000	3.9	0.1	0.53	
SFLC693ZZ		4	8	9.5	0.9	0.15	474	144	60000	4.2	0.15	0.97	
SFLC623ZZ			10	11.5	1		536	175	50000			1.86	
SFLC674ZZ	4	7	2.5	8.2	0.6	0.1	217	86	60000	4.6	0.08	0.35	
SFLC684ZZ		4	9	10.3	1		544	179	53000	5	0.1	1.14	
SFLC694ZZ			11	12.5		0.15	545	182	48000	5.2	0.15	1.96	
SFLC624ZZ		13	5	15		0.2	1105	388	40000	5.6	0.2	3.53	
SFLC675ZZ	5	8	2.5	9.2		0.6	0.1	185	72	53000	5.6	0.08	0.41
SFLC685ZZ		11	5	12.5	1	0.15	607	225	45000	6.2	0.15	2.18	
SFLC695ZZ		13	4	15		0.2	915	344	43000	6.6	0.2	2.84	
SFLC605ZZ		14	16	1105			404	40000	3.85				
SFLC625ZZ		5	16	18		0.3	1470	536	36000	7	0.3	5.3	
SFLC676ZZ			10	3	11.2		0.6	0.1	421	174	45000	6.6	0.1
SFLC686ZZ	6	13	5	15	1.1	0.15	918	352	40000	7	0.15	3.04	
SFLC696ZZ		15		17	1.2	0.2	1139	418	40000	7.6	0.2	4.26	
SFLC606ZZ		17	19	0.3		1921	668	38000	8	0.3	6.61		
SFLC626ZZ		19	22		1.5	1986	708	32000			9.09		
SFLC678ZZ		8	12	3.5	13.6	0.8	0.1	462	219	40000	8.8	0.1	
SFLC688ZZ	16		5	18	1.1	0.2	1368	568	36000	9.6	0.2	4.47	
SFLC698ZZ	19		6	22	1.5	0.3	1901	728	36000	10	0.3	8.3	
SFLC608ZZ	22		7	25			2799	1103	34000			13	



Ordering Example

Part Number

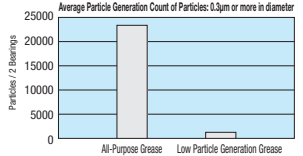
SFLC623ZZ

Comparison of Particle Generation Characteristics of Ball Bearings

① Grease Performance and Operating Environment				
	All-Purpose Grease Filled / Low Dust Generation Grease Filled			
	B6□□ZZ SB6□□ZZ	SBC6□□ZZ SFLC6□□ZZ	SBC6□□ZZ	SBC6□□ZZ
Thickener	Lithium Soap	Lithium Soap	Lithium Soap	Lithium Soap
Base Oil	Mineral Oil	Synthetic Oil	Poly α-Olefin	
Base Oil Dynamic Viscosity (40°C, mm ² /s)	26	100	25	
Worked Penetration	270	315	181	
Dropping Point (°C)	170~190	216	203	
Evaporation (wt%)	0.32 (99°Cx22h)	0.43 (99°Cx22h)	0.14 (99°Cx22h)	
Separation (100°Cx24h, wt%)	2.9	0.57	0.1	
In Air	-25~+120	-10~+80	-10~+80	
In Vacuum	Unsuitable	Unsuitable	Unsuitable	

② Comparison of Particle Generation Characteristics

Average Particle Generation Count of Particles: 0.3μm or more in diameter



Particles / 2 Bearings

Evaluation Conditions

Bearing : 6205 Open

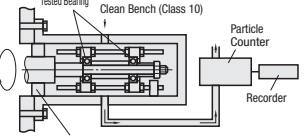
Load : 5 to 10% of dynamic load rating

Rotational Speed : 450rpm

Environment : In air, inside a clean bench (Class 10)

Temp. : Room temperature

*** Test Equipment Overview**



Tested Bearing Clean Bench (Class 10) Particle Counter Recorder

Magnetic Fluid Seal