


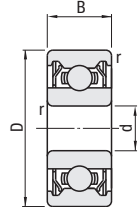
# Low Dust Raise Greased Bearings

Low Dust Raise Greased Bearings

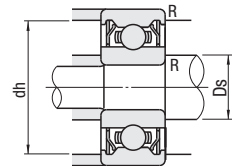


RoHS 10

**SBC6 \_ ZZ**  
**SBC6 \_ ZZ**



**Installation Diagram**



Inner & Outer Ring		Shield	Rolling Element	Retainer
Material	Hardness	Material	Material	Material
440C Stainless Steel or Equivalent	57-63 HRC	304 Stainless Steel	440C Stainless Steel	*304 Stainless Steel

\*For SBC673, 674, 675 and 676. Retainer material is 304 Stainless Steel or 420 Stainless Steel.

Bearing Accuracy JIS B 1514 Class 0

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass (g) (Reference)
					Cr (Dynamic) N	Co (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			1105	404	40000		12.4		3.48
SBC625ZZ		16	5	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			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

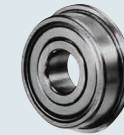
kgf=Nx0.101972

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions				Mass (g) (Reference)		
					Cr (Dynamic) kN	Co (Static) kN		Ds		dh (max.)	R (max.)			
								(min)	(max.)					
SBC690ZZ	10	22	6	0.3	2.7	1.25	34000	12	12.5	20	0.3	10		
SBC600ZZ		26	8		4.55	1.95	31000	12	13	24		19		
SBC620ZZ		30	9		0.6	5.1	2.4	24000	14	15		26	32	
SBC691ZZ	12	24	6	0.3	2.9	1.45	31000	14	14	22	0.3	11		
SBC601ZZ		28	8		5.1	2.4	27000	14	15	26		22		
SBC621ZZ		32	10		0.6	6.8	3.05	22000	16	16.5		28	0.6	37
SBC692ZZ	15	28	7	0.3	4.3	2.25	26000	17	18	26	0.3	17		
SBC602ZZ		32	9		5.6	2.85	23000	17	18.5	30		30		
SBC622ZZ		35	11		0.6	7.65	3.75	20000	19	19.5		31	0.6	45
SBC693ZZ	17	30	7	0.3	4.6	2.55	23000	19	19.5	28	0.3	18		
SBC603ZZ		35	10		6	3.25	21000	19	21	33		39		
SBC623ZZ		40	12		0.5	9.55	4.8	17000	21	22		36	0.6	65
SBC694ZZ	20	37	9	0.3	6.35	3.7	19000	22	23.5	35	0.3	36		
SBC604ZZ		42	12		0.6	9.4	5.05	17000	24	25		38	0.6	69
SBC624ZZ		47	14		1	12.8	6.65	15000	25	26.5		42	1	106

Part Number Example: **SBC684ZZ**, **SBC620ZZ**

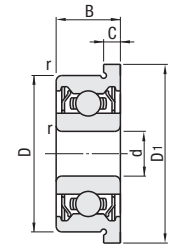
# Low Dust Raise Greased Bearings with Flange

Low Dust Raise Greased Bearings with Flange

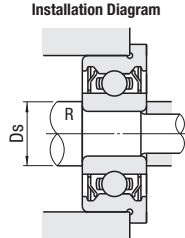


RoHS 10

**SFLC6 \_ ZZ**



**Installation Diagram**



Inner & Outer Ring		Shield	Rolling Element	Retainer
Material	Hardness	Material	Material	Material
440C Stainless Steel or Equivalent	57-63 HRC	304 Stainless Steel	440C Stainless Steel	*304 Stainless Steel

\*For SFLC673, 674, 675 and 676. Retainer material is 304 Stainless Steel or 420 Stainless Steel.

Bearing Accuracy JIS B 1514 Class 0

Part Number	d	D	B	D1	C	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions		Mass (g) (Reference)
							Cr (Dynamic) N	Co (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	0.1	331	104	63000	3.9	0.1	0.53
SFLC693ZZ		8	4	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		9	4	10.3	1	0.1	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	5	16	0.3	1105	404	40000	3.85			
SFLC625ZZ	16	18		0.3	1470	536	36000	7	0.3	5.3		
SFLC676ZZ	6	10	3	11.2	0.6	0.1	421	174	45000	6.6	0.1	0.77
SFLC686ZZ		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	6	19	1.5	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	1.15
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			

Part Number Example: **SFLC623ZZ**

## Comparison of Low Particulate Characteristics of Ball Bearings

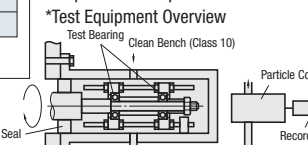
(1) Grease Performance and Operating Environment

Grease Performance	Regular Grease	Low Particulate Generation Grease Filled	
		B6 _ ZZ SB6 _ ZZ	SBC6 _ ZZ SFLC6 _ ZZ
Thickener	Lithium Soap	Lithium Soap	Lithium Soap
Base Oil	Mineral Oil	Synthetic Oil	Poly- $\alpha$ -Olefin
Base Oil Dynamic Viscosity (40°C, mm <sup>2</sup> /s)	26	100	25
Worked Penetration	270	315	181
Dropping Point (°C)	170-190	216	203
Evaporation (wt%) (99°C x 22h)	0.32	0.43	0.14
Separation (100°C x 24h, wt%)	2.9	0.57	0.1
Operating Temperature (°C)	In air: -25-+120 In Vacuum: Unsuitable	-10-+80	-10-+80

(2) Comparison of Particulate Generation Characteristics

\*Data below are for reference, not guaranteed.

**Evaluation Conditions**  
Bearings 6205 Open  
5-10% of dynamic load rating  
Rotational Speed: 450 rpm  
Environment: In air  
Inside a clean bench (Class 10)  
Temp.: Room Temperature  
\*Test Equipment Overview



Average particle generation count of particles 0.3µm or more in diameter

