

# Heat-Resistant Grease Filled Ball Bearings - Max. Operating Temperature 160°C

# Heat-Resistant Grease Filled Ball Bearings - Max. Operating Temperature 230°C / With Set Screws

**Heat-Resistant Grease Filled Ball Bearings - Max. Operating Temperature 160°C** RoHS

**HHB6\_\_ZZ**  
**HHB6\_\_ZZ**

Bearing Accuracy: JISB1514 Class 0  
Operating Temperature: 0~+160°C

Type	Inner and Outer Ring		Shield	Rolling Element	Retainer
	Material	Hardness	Material	Material	Material
HHB ZZ	440C Stainless Steel	57-63HRC	304 Stainless Steel	440C Stainless Steel	304 Stainless Steel

**Heat-Resistant Grease Filled Ball Bearings - Max. Operating Temperature 230°C** RoHS

**KB6\_\_ZZ**

Bearing Accuracy: JISB1514 Class 0  
Operating Temperature: 0~+230°C

Type	Inner and Outer Ring		Shield	Rolling Element	Retainer
	Material	Hardness	Material	Material	Material
KB ZZ	440C Stainless Steel	57-63HRC	304 Stainless Steel	440C Stainless Steel	304 Stainless Steel

Part Number	d	D	B	r (min)	Basic Load Rating			Relative Dimensions			Mass (g) (Reference)	Unit Price	
					Cr (Dynamic) N	Cor (Static) N	Allowable Rotational Speed rpm (Reference)	Ds (min)	dh (max)	R (max)			
HHB695ZZ	5	13	4	0.2	915	346	43000	6.6	11.4	0.2	2.4		
HHB605ZZ		14			1130	406	40000		12.4		3.5		
HHB625ZZ		16	5		1470	540	36000		7		14		0.3
HHB696ZZ	6	15		0.3	1139	418	40000	7.6	13.4	0.2	3.8		
HHB606ZZ		17			1924	677	38000		8		15		6.0
HHB626ZZ		19	6		1986	717	32000				17		8.1
HHB698ZZ	8	19		0.3	1901	734	36000	10	17	0.3	7.3		
HHB608ZZ		22	7		2799	1103	34000		20		12		
HHB628ZZ		24	8		2833	1138	28000		22		17		

Part Number	d	D	B	r (min)	Basic Load Rating			Relative Dimensions			Mass (g) (Reference)	Unit Price		
					Cr (Dynamic) kN	Cor (Static) kN	Allowable Rotational Speed rpm (Reference)	Ds (min)	dh (max)	R (max)				
HHB6900ZZ	10	22	6	0.3	2.29	1.01	34000	12	12.5	20	0.3	10		
HHB6000ZZ		26	8		3.90	1.57	31000		13	24	19			
HHB6200ZZ		30	9		0.6	4.35	1.91		24000	16	26	0.6		32
HHB6901ZZ	12	24	6	0.3	2.45	1.16	31000	14	14.5	22		11		
HHB6001ZZ		28	8		4.35	1.89	27000		15.5	26	0.3	22		
HHB6201ZZ		32	10		0.6	5.80	2.44		22000	17	28	0.6		37
HHB6902ZZ	15	28	7	0.3	3.70	1.80	26000	17	26		17			
HHB6002ZZ		32	9		4.75	2.26	23000		19	30	0.3		30	
HHB6202ZZ		35	11		0.6	6.50	3.00		20000	20.5	31		0.6	45
HHB6903ZZ	17	30	7	0.3	3.90	2.04	23000	19	19.5	28		18		
HHB6003ZZ		35	10		5.10	2.60	21000		21.5	33	0.3	39		
HHB6203ZZ		40	12		0.6	8.15	3.84		17000	23.5	36	0.6		65
HHB6904ZZ	20	37	9	0.3	5.40	2.96	19000	22	24	35	0.3	36		
HHB6004ZZ		42	12		7.95	4.00	17000		24	25.5	38	0.6		69
HHB6204ZZ		47	14		1.0	10.90	5.28		15000	25	26.5	42		1.0

Ordering Example **Part Number**  
HHB696ZZ  
HHB6003ZZ

Days to Ship **Configure Online**

Price **Configure Online**

**Grease Performance and Operating Environment**

Grease Performance	Regular Grease Filled		Heat-Resistant Grease Filled
	B6__ZZ SB6__ZZ	HHB6__ZZ HHB6__ZZ	
Thickener	Lithium Soap	Diurea	
Base Oil	Mineral Oil	Mineral Oil	
Base Oil Dynamic Viscosity (40°C, mm²/s)	26	88	
Worked Penetration	270	260	
Dropping Point (°C)	170-190	253	
Evaporation (wt%)	0.32 (99°Cx2h)	0.3 (99°Cx2h)	
Separation (100°Cx24h, wt%)	2.9	1.5	
In Air	-25~+120	-20~+160	
In Vacuum	Unsuitable	Unsuitable	

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 (min)	dh (max)	R (max)				
KB6900ZZ	10	22	6	0.3	2.29	1.01	3100	12	12.5	20	0.3	10		
KB6000ZZ		26	8		3.90	1.57	2700		13	24	19			
KB6200ZZ		30	9		0.6	4.35	1.91		2500	16	26	0.6		32
KB6901ZZ	12	24	6	0.3	2.45	1.16	2700	14	14.5	22		11		
KB6001ZZ		28	8		4.35	1.89	2500		15.5	26	0.3	22		
KB6201ZZ		32	10		0.6	5.80	2.44		2200	17	28	0.6		37
KB6902ZZ	15	28	7	0.3	3.70	1.80	2300	17	26		17			
KB6002ZZ		32	9		4.75	2.26	2100		19	30	0.3		30	
KB6202ZZ		35	11		0.6	6.50	3.00		2000	20.5	31		0.6	45
KB6903ZZ	17	30	7	0.3	3.90	2.04	2100	19	19.5	28		18		
KB6003ZZ		35	10		5.10	2.60	1900		21.5	33	0.3	39		
KB6203ZZ		40	12		0.6	8.15	3.84		1700	23.5	36	0.6		65
KB6904ZZ	20	37	9	0.3	5.40	2.96	1900	22	24	35	0.3	36		
KB6004ZZ		42	12		7.95	4.00	1600		24	25.5	38	0.6		69
KB6204ZZ		47	14		1.0	10.90	5.28		1400	25	26.5	42		1.0
KB6905ZZ	25	42	9	0.3	5.95	3.60	1300	25	28.5	40	0.3	38		
KB6005ZZ		47	12		8.55	4.65	1300		29	30	43	0.6		74
KB6205ZZ		52	15		1.0	11.9	6.30		1200	30	32	47		1.0
KB6906ZZ	30	47	9	0.3	6.15	4.00	1100	35	32	34	45	0.3	50	
KB6006ZZ		55	13		11.3	6.60	1100		35	36.5	50	1.0	107	
KB6206ZZ		62	16		1.0	16.5	9.05		1000	35	38.5	57	1.0	

**Grease Performance and Operating Environment**

Grease Performance	Regular Grease Filled		Heat-Resistant Grease Filled
	B6__ZZ SB6__ZZ	HHB6__ZZ HHB6__ZZ	
Thickener	Lithium Soap	PTFE	
Base Oil	Mineral Oil	Fluorinated Oil	
Base Oil Dynamic Viscosity (40°C, mm²/s)	26	420	
Worked Penetration	270	280	
Dropping Point (°C)	170-190	260	
Evaporation (wt%)	0.32 (99°Cx2h)	0.1 (99°Cx2h)	
Separation (100°Cx24h, wt%)	2.9	4.5	
In Air	-25~+120	-20~+230	
In Vacuum	Unsuitable	Unsuitable	

**Bearings with Set Screws** RoHS

**TB6\_\_ZZ**

Bearing Accuracy: JISB1514 Class 0  
\*Except I.D.  
Operating Temperature: -40~+120°C

Type	Material		
	Inner/Outer Rings, Rolling Element	Retainer, Shield	Set Screw
TB ZZ	440C Stainless Steel	304 Stainless Steel	304 Stainless Steel

Part Number	d	Tolerance	D	W	B	M (Coarse)	r (min)	Allowable Rotational Speed rpm (Reference)	Basic Load Rating		Mass (g) (Reference)	Unit Price
									Cr (Dynamic) kN	Cor (Static) kN		
TB6900ZZ	10	+0.015 0	22	13	6	M3	0.3	9100	2.70	1.27	13	
TB6000ZZ			26	15	8	M3	0.3	7800	4.55	1.96	24	
TB6200ZZ			30	17	9	M4	0.6	6800	5.10	2.39	41	
TB6901ZZ	12	+0.015 0	24	13	6	M3	0.3	5200	2.89	1.46	15	
TB6001ZZ			28	15	8	M3	0.3	7800	5.10	2.39	27	
TB6201ZZ			32	19	10	M4	0.6	7500	6.80	3.05	47	
TB6902ZZ	15	+0.015 0	28	14	7	M3	0.3	6500	4.30	2.25	22	
TB6002ZZ			32	16.5	9	M3	0.3	4500	5.60	2.84	40	
TB6202ZZ			35	20	11	M4	0.6	10000	7.65	3.75	59	
TB6904ZZ	20	+0.018 0	37	18	9	M4	0.3	9100	6.40	3.70	51	
TB6004ZZ			42	21	12	M5	0.6	7500	9.40	5.05	87	
TB6204ZZ			47	23	14	M5	1.0	5800	12.80	6.65	132	

Ordering Example **Part Number**  
KB6003ZZ  
TB6201ZZ

Days to Ship **Configure Online**

Price **Configure Online**