


Heat-Resistant Grease Filled Ball Bearings

Max Operating Temperature 160°C

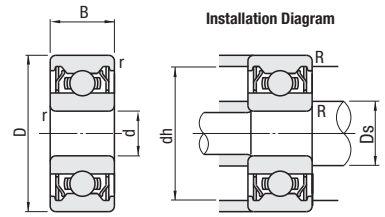
Bearings with Housings / Bearings

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



RoHS 10

HHB6 _ZZ
HHB6 _ZZ



Bearing Accuracy JIS B 1514 Class 0
Operating Temperature: -20 – +160°C

Type	Inner & Outer Ring		Shield	Rolling Element	Retainer
	Material	Hardness	Material	Material	Material
HHB _ZZ	440C Stainless Steel Equivalent	57–63 HRC	304 Stainless Steel	440C Stainless Steel	304 Stainless Steel

Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass (g) (Reference)
					Cr (Dynamic) N	Cor (Static) N		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	5		1130	406			40000		
HHB625ZZ		16	5	0.3	1470	540		36000	7	14	0.3
HHB696ZZ	6	15	5	0.2	1139	418	40000	7.6	13.4	0.2	3.8
HHB606ZZ		17	6		1924	677			38000		8
HHB626ZZ		19	6	0.3	1986	717		32000	17	17	0.3
HHB698ZZ	8	19	6	0.3	1901	734	36000	10	17	0.3	7.3
HHB608ZZ		22	7		2799	1103			34000		20
HHB628ZZ		24	8	0.3	2833	1138		28000	22	22	0.3

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Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass(g) (Reference)
					Cr (Dynamic) kN	Cor (Static) kN		Ds (min.)	dh (max.)	R (max.)	
HHB6900ZZ	10	22	6	0.3	2.29	1.01	34000	12	12.5	20	10
HHB6000ZZ		26	8		3.90	1.57			31000		13
HHB6200ZZ		30	9	0.6	4.35	1.91		24000	14	16	0.6
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
HHB6201ZZ		32	10	0.6	5.80	2.44		22000	16	17	0.6
HHB6902ZZ	15	28	7	0.3	3.70	1.80	26000	17	17	26	17
HHB6002ZZ		32	9		4.75	2.26			23000		19
HHB6202ZZ		35	11	0.6	6.50	3.00		20000	19	20.5	0.6
HHB6903ZZ	17	30	7	0.3	3.90	2.04	23000	19	19.5	28	18
HHB6003ZZ		35	10		5.10	2.60			21000		19
HHB6203ZZ		40	12	0.6	8.15	3.84		17000	21	23.5	0.6
HHB6904ZZ	20	37	9	0.3	5.40	2.96	19000	22	24	35	36
HHB6004ZZ		42	12		7.95	4.00			17000		24
HHB6204ZZ		47	14	1.0	10.90	5.28		15000	25	26.5	1.0

Part Number Example	Part Number
	HHB696ZZ
	HHB6003ZZ

Grease Performance & Operating Environment


	Grease Performance	
	Regular Grease	Heat-Resistant Grease Filled
Grease Performance	Thickener	Lithium Soap
	Base Oil	Mineral Oil
	Base Oil Dynamic Viscosity (40°C, mm ² /s)	26
	Worked Penetration	270
	Dropping Point (°C)	170–190
	Evaporation (wt%)	0.32 (99°C x 22h)
	Separation (100°C x 24h, wt%)	2.9
Operating Temperature (°C)	In Air	-25 – +120
	In Vacuum	Unsuitable

Heat-Resistant Grease Filled Ball Bearings / Bearings with Set Screws

Max Operating Temperature 230°C

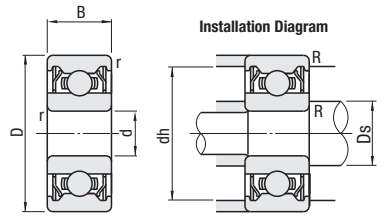
Bearings with Housings / Bearings

Heat-Resistant Grease Filled Ball Bearings – Max Operating Temperature 230°C



RoHS 10

KB6 _ZZ



Bearing Accuracy JIS B 1514 Class 0
Operating Temperature: -20 – +230°C

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


Part Number	d	D	B	r (min)	Basic Load Rating		Allowable Rotational Speed rpm (Reference)	Relative Dimensions			Mass(g) (Reference)
					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	10
KB6000ZZ		26	8		3.90	1.57			2700		13
KB6200ZZ		30	9	0.6	4.35	1.91		2500	14	16	0.6
KB6901ZZ	12	24	6	0.3	2.45	1.16	2700	14	14.5	22	11
KB6001ZZ		28	8		4.35	1.89			2500		14
KB6201ZZ		32	10	0.6	5.80	2.44		2200	16	17	0.6
KB6902ZZ	15	28	7	0.3	3.70	1.80	2300	17	17	26	17
KB6002ZZ		32	9		4.75	2.26			2100		17
KB6202ZZ		35	11	0.6	6.50	3.00		2000	19	20.5	0.6
KB6903ZZ	17	30	7	0.3	3.90	2.04	2100	19	19.5	28	18
KB6003ZZ		35	10		5.10	2.60			1900		19
KB6203ZZ		40	12	0.6	8.15	3.84		1700	21	23.5	0.6
KB6904ZZ	20	37	9	0.3	5.40	2.96	1600	22	24	35	36
KB6004ZZ		42	12		7.95	4.00			1600		24
KB6204ZZ		47	14	1.0	10.90	5.28		1400	25	26.5	1.0
KB6905ZZ	25	42	9	0.3	5.95	3.60	1300	27	28.5	40	38
KB6005ZZ		47	12		8.55	4.65			1300		29
KB6205ZZ		52	15	1.0	11.9	6.30		1200	30	32	1.0
KB6906ZZ	30	47	9	0.3	6.15	4.00	1100	32	34	45	50
KB6006ZZ		55	13		11.3	6.60			1100		35
KB6206ZZ		62	16	1.0	16.5	9.05		1000	35	38.5	1.0

Grease Performance & Operating Environment

	Grease Performance	
	Standard Grease Filled	Heat-Resistant Grease Filled
Grease Performance	Thickener	Lithium Soap
	Base Oil	Mineral Oil
	Base Oil Dynamic Viscosity (40°C, mm ² /s)	26
	Worked Penetration	270
	Dropping Point (°C)	170–190
	Evaporation (wt%)	0.32 (99°C x 22h)
	Separation (100°C x 24h, wt%)	2.9
Operating Temp. (°C)	In Air	-25 – +120
	In Vacuum	Unsuitable

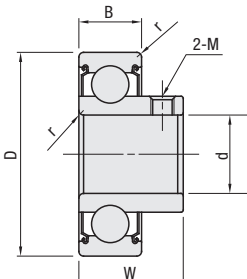
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Bearings with Set Screw Shaft Sleeve



RoHS 10

TB6 _ZZ



Features
Set screw fastens the inner race to the shaft, eliminating the need for a bearing lock nut.

Bearing Accuracy JIS B 1514 Class 0
Except Inner Diameter
Operating Temperature: -40 – +120°C

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

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Part Number	d	Tolerance	D	W	B	M (Coarse Thread)	r (min)	Allowable Rotational Speed rpm (Reference)	Basic Load Rating		Mass(g) (Reference)
									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			7800	4.55	1.96	24
TB6200ZZ			30	17	9			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			7800	5.10	2.39	27
TB6201ZZ			32	19	10			7500	6.80	3.05	47
TB6902ZZ	15	+0.018 0	28	14	7	M3	0.3	6500	4.30	2.25	22
TB6002ZZ			32	16.5	9			4500	5.60	2.84	40
TB6202ZZ			35	20	11			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			7500	9.40	5.05	87
TB6204ZZ			47	23	14			5800	12.80	6.65	132

Part Number Example	Part Number
	KB6003ZZ
	TB6201ZZ