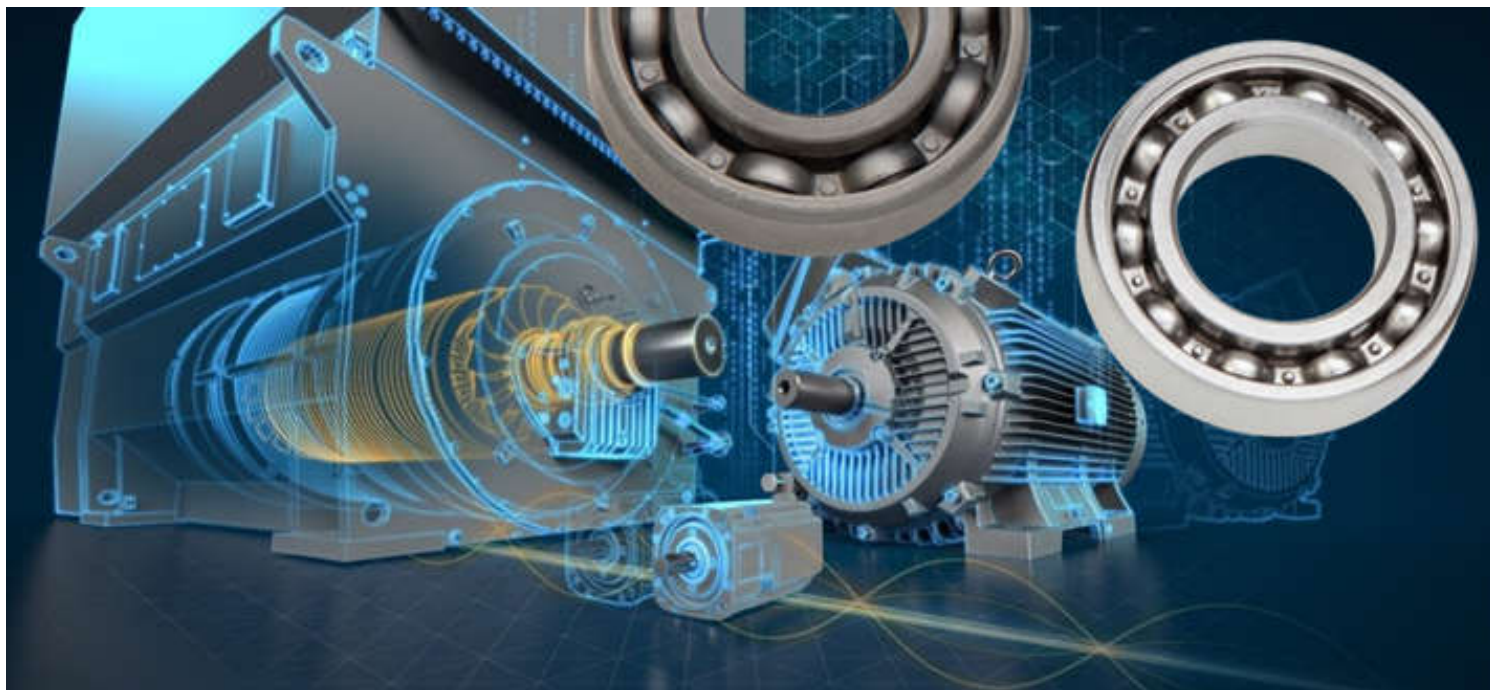


HIGH-TEMP DEEP GROOVE BALL BEARINGS FOR FAST SPEEDS



Version: 10/2023

Every care has been taken to ensure the correctness of the information contained in this document but no liability can be accepted for any errors or omissions. Subject to change without prior notice.

GMW High-temp Deep Groove Ball Bearings for fast speeds:

Besides High-temp Deep Groove Ball Bearings for slow speeds, our also offers normal bearings, which can be used for fast speeds. Due to their heat treatment, these bearings are suitable for considerably higher temperatures than normal standard bearings. Our offers two different versions:



T150 – The Basic (According to DIN 620 and DIN ISO 1132)

Every T150 bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Heat treatment of the bearing up to 150°C
- Material : AISI52100 steel
- Radial clearance: Normal clearance CN or C3
- Riveted sheet steel cage
- High Temperature Semi-Synthetic (suitable up to 180°C)
- Optional:

Steel shields (2Z) or NBR seals (2RS1)



T200 – The Standard (According to DIN 620 and DIN ISO 1132)

Every T200 bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Heat treatment of the bearing up to 200°C
- Material : AISI52100 steel
- Radial clearance: Normal clearance CN or C3
- Riveted sheet steel cage
- High Temperature Semi-Synthetic Grease Containing PTFE (suitable up to 220°C)
- Optional:

Steel shields (2Z) or NBR seals (2RS1)



T250 – The Standard (According to DIN 620 and DIN ISO 1132)

Every T250 bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Heat treatment of the bearing up to 250°C
- Material : AISI52100 steel
- Radial clearance: Normal clearance C3 or C4
- Riveted sheet steel cage
- High-quality lubricant PTFE (suitable up to 250°C)
- Optional:

Steel shields (2Z) or NBR seals (2RS1)

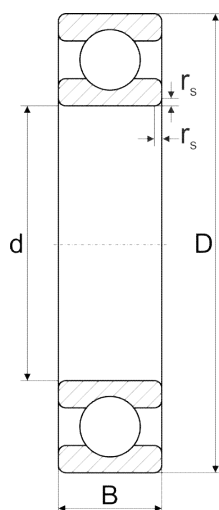
T250X The Upgrade (According to DIN 620 and DIN ISO 1132)

Every T250X bearing is filled with suitable lubricant or available as sealed bearing and comprises the following properties:

- Heat treatment of the bearing up to 250°C
- Material : AISI52100 steel
- Radial clearance: C4
- Manganese Phosphate surface treatment According DIN EN ISO 9717
- Riveted sheet steel cage
- High-quality lubricant PTFE (suitable up to 250°C)
- Optional:

Steel shields (2Z) or NBR seals (2RS1)

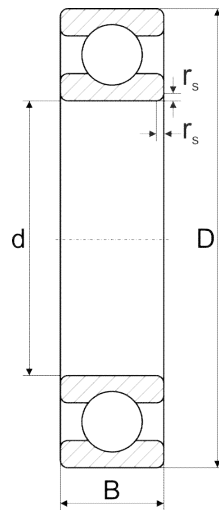
60XX



GMW	Dimensionen				Load Ratings		Max. Speed				Weight
Code	d	D	B	rs	C0	Cdyn	T150	T200	T250	T250X	
	[mm]	[mm]	[mm]	min	[kN]	[kN]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	
6000	10	26	8	0,3	1,96	4,55	22 222	19 000	16 667	2 400	0,019
6001	12	28	8	0,3	2,36	5,10	20 000	18 000	15 000	2 190	0,020
6002	15	32	9	0,3	2,85	5,60	17 021	16 000	12 766	1 950	0,031
6003	17	35	10	0,3	3,25	6,00	15 385	14 000	11 538	1 700	0,038
6004	20	42	12	0,6	5,00	9,30	12 903	12 000	9 677	1 620	0,068
6005	25	47	12	0,6	5,85	10,0	11 111	10 000	8 333	1 380	0,080
6006	30	55	13	1,0	8,00	12,7	9 412	8 500	7 059	1 195	0,122
6007	35	62	14	1,0	10,2	16,0	8 247	7 500	6 186	1 050	0,157
6008	40	68	15	1,0	11,6	16,6	7 407	6 700	5 556	890	0,194
6009	45	75	16	1,0	14,3	20,0	6 667	6 000	5 000	810	0,247
6010	50	80	16	1,0	15,6	20,8	6 154	5 600	4 615	730	0,272
6011	55	90	18	1,1	21,2	28,5	5 517	5 000	4 138	695	0,397
6012	60	95	18	1,1	23,2	29,0	5 161	4 500	3 871	620	0,404
6013	65	100	18	1,1	25,0	30,5	4 848	4 300	3 636	580	0,411
6014	70	110	20	1,1	31,0	38,0	4 444	4 000	3 333	530	0,594
6015	75	115	20	1,1	33,5	39,0	4 211	3 800	3 158	495	0,639
6016	80	125	22	1,1	40,0	47,5	3 902	3 300	2 927	450	0,844
6017	85	130	22	1,1	43,0	49,0	3 721	3 100	2 791	410	0,880
6018	90	140	24	1,5	50,0	58,5	3 478	3 000	2 609	390	1,010
6019	95	145	24	1,5	54,0	60,0	3 333	2 800	2 500	365	1,070
6020	100	150	24	1,5	54,0	60,0	3 200	2 600	2 400	320	1,140

(Remark: The weight applies for the bearing only without lubricant and shields)

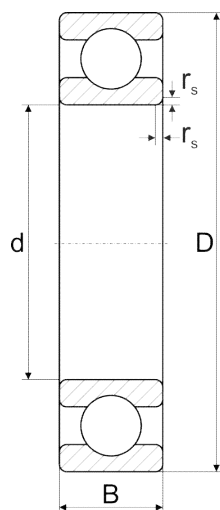
62XX



GMW	Thông số kỹ thuật / Dimensionen				Load Ratings		Max. Speed				Weight
Code	d	D	B	rs	C0	Cdyn	T150	T200	T250	T250X	
	[mm]	[mm]	[mm]	[mm]	[kN]	[kN]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	
6200	10	30	9	0,6	2,60	6,00	20 000	17 000	15 000	2 250	0,031
6201	12	32	10	0,6	3,10	6,95	18 182	16 000	13 636	1 950	0,037
6202	15	35	11	0,6	3,75	7,80	16 000	14 000	12 000	1 660	0,043
6203	17	40	12	0,6	4,75	9,50	14 035	12 000	10 526	1 450	0,065
6204	20	47	14	1,0	6,55	12,7	11 940	10 000	8 955	1 220	0,105
6205	25	52	15	1,0	7,80	14,0	10 390	9 000	7 792	1 160	0,128
6206	30	62	16	1,0	11,2	19,3	8 696	7 500	6 522	895	0,195
6207	35	72	17	1,1	15,3	25,5	7 477	6 300	5 607	770	0,291
6208	40	80	18	1,1	18,0	29,0	6 667	5 600	5 000	690	0,371
6209	45	85	19	1,1	20,4	31,0	6 154	5 300	4 615	650	0,429
6210	50	90	20	1,1	24,0	36,5	5 714	4 800	4 286	615	0,466
6211	55	100	21	1,5	29,0	43,0	5 161	4 300	3 871	570	0,616
6212	60	110	22	1,5	36,0	52,0	4 706	4 000	3 529	480	0,789
6213	65	120	23	1,5	41,5	60,0	4 324	3 600	3 243	430	0,980
6214	70	125	24	1,5	44,0	62,0	4 103	3 400	3 077	410	1,060
6215	75	130	25	1,5	49,0	65,5	3 902	3 200	2 927	390	1,170
6216	80	140	26	2,0	53,0	72,0	3 636	3 000	2 727	350	1,390
6217	85	150	28	2,0	64,0	83,0	3 404	2 800	2 553	320	1,780
6218	90	160	30	2,0	72,0	96,5	3 200	2 500	2 400	290	2,140
6219	95	170	32	2,1	81,5	108,0	3 019	2 400	2 264	265	2,610
6220	100	180	34	2,1	93,0	122,0	2 857	2 400	2 143	220	3,130

(Remark: The weight applies for the bearing only without lubricant and shields)

63XX



GMW	Dimensions				Load Ratings		Max. Speed				Weight
Code	d	D	B	rs	C0	Cdyn	T150	T200	T250	T250X	
	[mm]	[mm]	[mm]	min	[kN]	[kN]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	[min ⁻¹]	
6300	10	35	11	0,6	3,45	8,15	17 778	15 000	13 333	1 880	0,055
6301	12	37	12	1,0	4,15	9,65	16 327	13 000	12 245	1 790	0,062
6302	15	42	13	1,0	5,40	11,4	14 035	12 000	10 526	1 680	0,088
6303	17	47	14	1,0	6,55	13,4	12 500	11 000	9 375	1 550	0,114
6304	20	52	15	1,1	7,80	16,0	11 111	9 500	8 333	1 460	0,151
6305	25	62	17	1,1	11,4	22,4	9 195	7 500	6 897	1 320	0,234
6306	30	72	19	1,1	16,3	29,0	7 843	6 300	5 882	1 280	0,355
6307	35	80	21	1,5	19,0	33,5	6 957	5 600	5 217	1 195	0,471
6308	40	90	23	1,5	25,0	42,5	6 154	5 000	4 615	895	0,640
6309	45	100	25	1,5	31,5	53,0	5 517	4 500	4 138	770	0,847
6310	50	110	27	2,0	38,0	62,0	5 000	4 000	3 750	620	1,100
6311	55	120	29	2,0	47,5	76,5	4 571	3 600	3 429	550	1,390
6312	60	130	31	2,1	52,0	81,5	4 211	3 400	3 158	490	1,750
6313	65	140	33	2,1	60,0	93,0	3 902	3 000	2 927	430	2,070
6314	70	150	35	2,1	68,0	104,0	3 636	2 800	2 727	375	2,510
6315	75	160	37	2,1	76,5	114,0	3 404	2 600	2 553	340	3,010
6316	80	170	39	2,1	86,5	122,0	3 200	2 500	2 400	320	3,580
6317	85	180	41	3,0	96,5	132,0	3 019	2 400	2 264	310	4,220
6318	90	190	43	3,0	102,0	134,0	2 857	2 300	2 143	290	4,900
6319	95	200	45	3,0	112,0	143,0	2 712	2 200	2 034	265	5,660
6320	100	215	47	3,0	134,0	163,0	2 540	2 100	1 905	230	6,990

(Remark: The weight applies for the bearing only without lubricant and shields)