

LOW-TEMPERATURE DEEP GROOVE BALL BEARINGS FOR FAST SPEEDS



Version: 10/2024

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GMW Ball Bearings for Low Temperature:

The **suffix LT2 ZZ** (-73°C) bearings are developed based on the structure of a standard bearing but with appropriate treatments of stabilization, radial clearance, grease and ZZ shields that make them suitable for operation from (- 73°C) to +180°C. Their application range is extremely wide and covers many areas in particular

The **suffix LT2 ZZ** (-73°C) allows an exceptional range of safety in all applications where they can also occur temporarily and for reasons not dependent on the will of the design, temperatures particularly low

Low-temperature deep groove ball bearings offer the following advantages:

- **Wide temperature range:**
Operate from (-73°C) to +180°C
- **Special low-temperature grease:**
Maintains lubrication performance without frequent maintenance, reaching extremely low temperatures. (-73°C)
- **Increased radial clearance (multiple of C3):**
Compensates for thermal contraction at low temperatures
- **Low thermal expansion materials:**
Typically stainless bearing steels (AISI 440C / 9Cr18Mo)
- **Low anti-seizing and friction properties:**
Prevents surface wear during operation in low-temperature environments

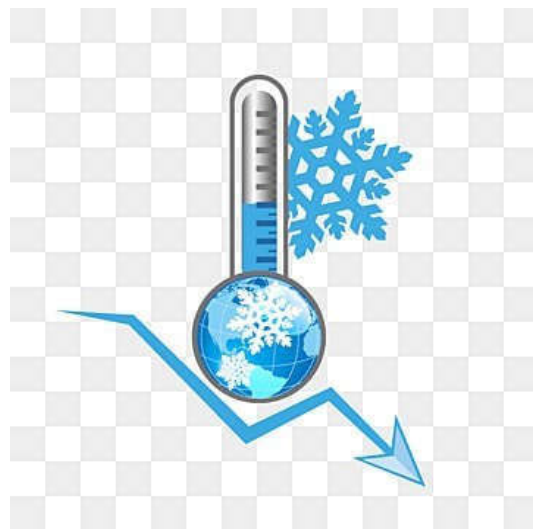
- Fields of application:

- Flash Freezing Lines
- Cryogenic Pumps- Liquid Gases
- Frozen Food Conveyors
- Ice/Dry Ice Machines
- Cold Weather Exposed Equipment

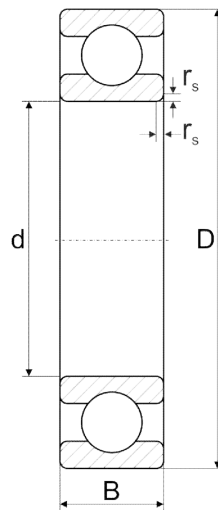
- Full range of product codes such as:

- 6000 ... 6022
- 6200 ... 6222
- 6300 ... 6322

There are many types to choose from: No cover (Open), two covers (2Z) and Nitrile rubber seals (NBR)



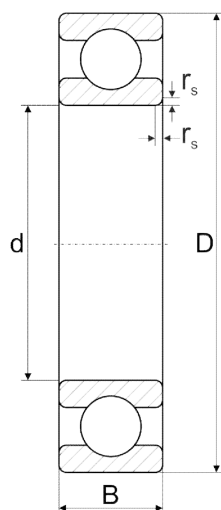
60XX



GMW - Code	Bore (B)	Diam (D)	Width (B)	Limiting Speed, RPM	Static Load, kN at -73°C	Static Load, kN at 20°C	Weight (Kgs)
6000 ZZ - LT2	10	26	8	6000	1,57	1,96	20
6001 ZZ - LT2	12	28	8	5800	1,89	2,36	25
6002 ZZ - LT2	15	32	9	5600	2,28	2,85	30
6003 ZZ - LT2	17	35	10	5400	2,60	3,25	40
6004 ZZ - LT2	20	42	12	5200	4,00	5,00	69
6005 ZZ - LT2	25	47	12	4800	4,68	5,85	80
6006 ZZ - LT2	30	55	13	4400	6,40	8,00	120
6007 ZZ - LT2	35	62	14	4000	8,32	10,4	160
6008 ZZ - LT2	40	68	15	3600	9,44	11,8	190
6009 ZZ - LT2	45	75	16	3200	11,44	14,3	250
6010 ZZ - LT2	50	80	16	2800	12,48	15,6	260
6011 ZZ - LT2	55	90	18	2400	16,96	21,2	390
6012 ZZ - LT2	60	95	18	2000	18,56	23,2	420
6013 ZZ - LT2	65	100	18	1800	20,00	25,0	440
6014 ZZ - LT2	70	110	20	1600	25,20	31,5	600
6015 ZZ - LT2	75	115	20	1400	27,20	34,0	640
6016 ZZ - LT2	80	125	22	1200	32,00	40,0	850
6017 ZZ - LT2	85	130	22	1000	34,32	42,9	890
6018 ZZ - LT2	90	140	24	900	39,92	49,9	1150
6019 ZZ - LT2	95	145	24	800	43,16	53,9	1200
6020 ZZ - LT2	100	150	24	700	43,16	53,9	1250

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

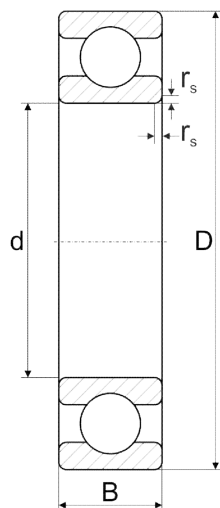
62XX



GMW - Code	Bore (B)	Diam (D)	Width (B)	Limiting Speed, RPM	Static Load, kN at -73°C	Static Load, kN at 20°C	Weight(Kgs)
6200 ZZ - LT2	10	30	9	5800	2,08	2,60	30
6201 ZZ - LT2	12	32	10	5600	2,48	3,10	37
6202 ZZ - LT2	15	35	11	5400	3,00	3,75	45
6203 ZZ - LT2	17	40	12	5200	3,80	4,75	65
6204 ZZ - LT2	20	47	14	4800	5,24	6,55	110
6205 ZZ - LT2	25	52	15	4400	6,40	8,00	130
6206 ZZ - LT2	30	62	16	4000	8,96	11,2	200
6207 ZZ - LT2	35	72	17	3600	12,2	15,3	290
6208 ZZ - LT2	40	80	18	3200	14,4	18,0	370
6209 ZZ - LT2	45	85	19	2800	16,3	20,4	410
6210 ZZ - LT2	50	90	20	2400	19,2	24,0	460
6211 ZZ - LT2	55	100	21	2000	23,2	29,0	610
6212 ZZ - LT2	60	110	22	1800	28,8	36,0	780
6213 ZZ - LT2	65	120	23	1600	33,2	41,5	990
6214 ZZ - LT2	70	125	24	1400	35,2	44,0	1040
6215 ZZ - LT2	75	130	25	1200	39,2	49,0	1210
6216 ZZ - LT2	80	140	26	1000	44,0	55,0	1400
6217 ZZ - LT2	85	150	28	900	51,2	64,0	1800
6218 ZZ - LT2	90	160	30	800	58,8	73,5	2150
6219 ZZ - LT2	95	170	32	700	65,2	81,5	2600
6220 ZZ - LT2	100	180	34	600	74,4	93,0	3150

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

63XX



GMW - Code	Bore (B)	Diam (D)	Width (W)	Limiting Speed, RPM	Static Load, kN at -73°C	Static Load, kN at 20°C	Weight (Kgs)
6300 ZZ - LT2	10	35	11	5600	2,48	3,1	52
6301 ZZ - LT2	12	37	12	5400	2,96	3,7	60
6302 ZZ - LT2	15	42	13	5200	3,84	4,8	80
6303 ZZ - LT2	17	47	14	4800	4,64	5,8	120
6304 ZZ - LT2	20	52	15	4400	6,08	7,6	140
6305 ZZ - LT2	25	62	17	4000	8,16	10,2	225
6306 ZZ - LT2	30	72	19	3600	11,68	14,6	350
6307 ZZ - LT2	35	80	21	3200	13,68	17,1	450
6308 ZZ - LT2	40	90	23	2800	18,00	22,5	620
6309 ZZ - LT2	45	100	25	2400	23,04	28,8	830
6310 ZZ - LT2	50	110	27	2000	27,36	34,2	1050
6311 ZZ - LT2	55	120	29	1800	34,16	42,7	1350
6312 ZZ - LT2	60	130	31	1600	37,44	46,8	1700
6313 ZZ - LT2	65	140	33	1400	43,20	54,0	2100
6314 ZZ - LT2	70	150	35	1200	48,96	61,2	2500
6315 ZZ - LT2	75	160	37	1000	55,04	68,8	3000
6316 ZZ - LT2	80	170	39	900	62,24	77,8	3600
6317 ZZ - LT2	85	180	41	800	69,44	86,8	4250
6318 ZZ - LT2	90	190	43	700	77,76	97,2	4900
6319 ZZ - LT2	95	200	45	600	84,96	106,2	5650
6320 ZZ - LT2	100	215	47	500	100,8	126,0	7000

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