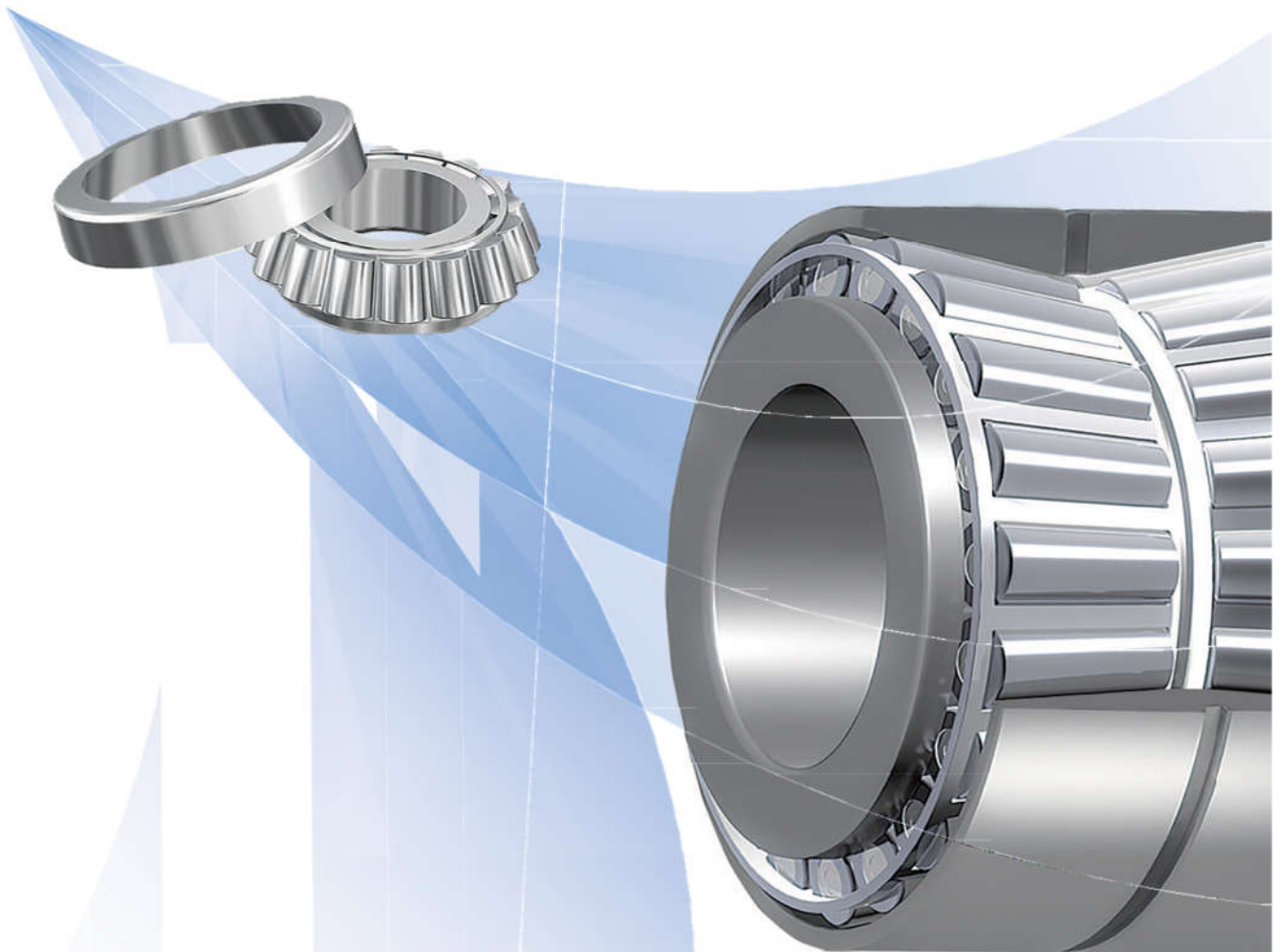


Metric Series High-Temp TAPERED ROLLER BEARINGS



Version: 10/2023

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High Temperature Tapered Roller Bearings



GMW offers High-temp Tapered Roller Bearings . They are mounted in pairs in order to obtain a bearing unit sealed at both sides. The maximum operating ranger temperature from 150°C up to 200°C

All bearings also coated with Manganese Phosphate on the roller, cage rings and possibly the entire product surface bearings have the following advantages. They are mounted in pairs in order to obtain a bearing unit sealed at both sides two bearings are used together facing one another, or two or more bearings are matched and used.

Suffix T150

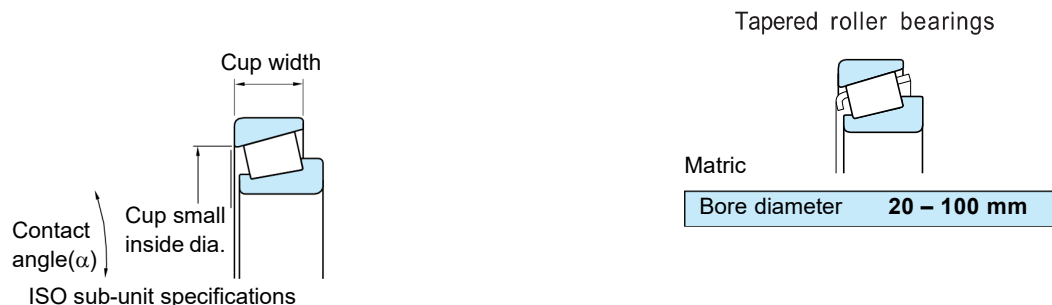
GMW offer T150 high temperature bearings are suitable for equipment with shaft diameters from 20mm – 100mm.

- Made from AISI 52100 steel material
- Can be applied at temperatures up to 150°C
- Manganese phosphate ($Mn_3(PO_4)_2$) surface coating (according to EN ISO 9717) ensures enhanced corrosion protection.
- The roller retaining cage and the roller after being coated still ensure increased performance, especially at high temperatures.
- T150 heat-resistant bearings are suitable for equipment with shaft diameters from 20mm – 100mm. They are mounted in pairs in order to obtain a bearing unit sealed at both sides

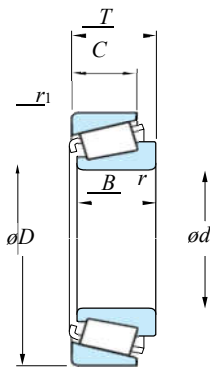
Suffix T200

GMW offer T200 high temperature bearings are suitable for equipment with shaft diameters from 20mm – 100mm.

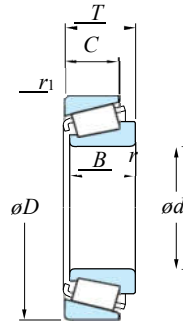
- Made from AISI 52100 steel material
- Increased radial clearance (multiple of CN)
- Can be applied at temperatures up to 200°C
- Manganese phosphate ($Mn_3(PO_4)_2$) surface coating (according to EN ISO 9717) ensures enhanced corrosion protection.
- The roller retaining cage and the roller after being coated still ensure increased performance, especially at high temperatures.
- T200 heat-resistant bearings are suitable for equipment with shaft diameters from 20mm – 100mm. They are mounted in pairs in order to obtain a bearing unit sealed at both sides



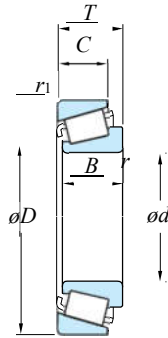
(Note) : Bearings whose cup width, cup small inside diameter and contact angle are determined in accordance with ISO 355 specifications are identified by the sup-plementary code "J" as a suffix. Cone assemblies and the cups of such bearings are interchangeable with those of bearings produced abroad if the bearing numbers are the same.



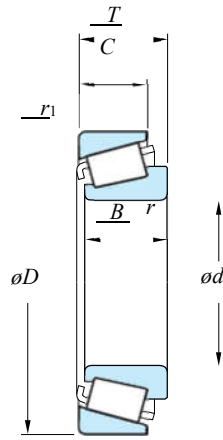
d	Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.	(Refer.) Mass (kg)
	D	T	B	C	r min.	r ₁ min.	C _r	C _{0r}	Grease lub	Oil lub		
20	42	15	15	12	0.6	0.6	27.3	31.5	9 700	13 000	32004JR	0.054
	47	15.25	14	12	1	1	27.0	27.2	8 700	12 000	30204JR	0.081
	47	19.25	18	15	1	1	33.1	34.7	8 900	12 000	32204JR	0.104
25	52	22.25	21	18	1.5	1.5	45.1	46.7	8 400	11 000	32304JR	0.170
	47	15	15	11.5	0.6	0.6	30.2	37.7	8 300	11 000	32005JR	0.125
	47	17	17	14	0.6	0.6	33.5	42.3	8 300	11 000	33005JR	0.127
	52	16.25	15	13	1	1	31.5	33.7	7 800	10 000	30205JR	0.159
	52	19.25	18	16	1	1	39.8	44.8	7 900	11 000	32205JR	0.179
	52	22	22	18	1	1	48.9	58.5	7 900	10 000	33205JR	0.244
30	62	18.25	17	13	1.5	1.5	39.8	42.5	5 700	8 000	30305DJR	0.108
	62	18.25	17	15	1.5	1.5	48.2	46.9	6 800	9 000	30305JR	0.131
	62	25.25	24	20	1.5	1.5	61.2	64.1	6 900	9 100	32305JR	0.156
	55	17	17	13	1	1	38.2	48.0	7 000	9 400	32006JR	0.225
	55	20	20	16	1	1	43.2	55.2	7 000	9 400	33006JR	0.269
	62	17.25	16	14	1	1	41.5	44.8	6 500	8 700	30206JR	0.275
	62	21.25	20	17	1	1	50.7	57.9	6 500	8 700	32206JR	0.273
	62	25	25	19.5	1	1	66.4	79.4	6 500	8 700	33206JR	0.386
	72	20.75	19	14	1.5	1.5	50.9	54.9	4 900	6 800	30306DJR	0.150
72	20.75	19	16	1.5	1.5	59.6	60.1	5 800	7 700	30306JR	0.203	
72	28.75	27	23	1.5	1.5	82.2	91.6	5 900	7 900	32306JR	0.236	



d	Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.	(Refer.) Mass (kg)
	D	T	B	C	r _{min.}	r _{1 min.}	C _r	C _{0r}	Grease Lub	Oil lub		
35	62	18	18	14	1	1	45.5	59.4	6 200	8 200	32007JR	0.231
	62	21	21	17	1	1	51.3	68.0	6 200	8 200	33007JR	0.263
	72	18.25	17	15	1.5	1.5	55.1	60.9	5 600	7 400	30207JR	0.344
	72	24.25	23	19	1.5	1.5	69.6	82.4	5 600	7 500	32207JR	0.453
	72	28	28	22	1.5	1.5	87.6	107	5 700	7 500	33207JR	0.551
	80	22.75	21	15	2	1.5	63.1	69.1	4 300	6 000	30307DJR	0.536
	80	32.75	31	25	2	1.5	101	114	5 300	7 000	32307JR	0.776
	40	68	19	19	14.5	1	1	53.5	71.4	5 600	7 400	32008JR
68		22	22	18	1	1	60.4	84.6	5 500	7 400	33008JR	0.326
75		26	26	20.5	1.5	1.5	82.2	108	5 200	6 900	33108JR	0.508
80		19.75	18	16	1.5	1.5	62.9	69.2	5 000	6 700	30208JR	0.434
80		24.75	23	19	1.5	1.5	77.7	90.8	5 000	6 600	32208JR	0.554
80		32	32	25	1.5	1.5	108	139	5 000	6 700	33208JR	0.758
90		25.25	23	17	2	1.5	80.5	90.2	3 800	5 300	30308DJR	0.757
90		25.25	23	20	2	1.5	90.6	101	4 500	6 100	30308JR	0.757
90		35.25	33	27	2	1.5	116	139	4 600	6 200	32308JR	1.06
45		75	20	20	15.5	1	1	62.8	86.5	5 000	6 600	32009JR
	75	24	24	19	1	1	69.6	101	5 000	6 700	33009JR	0.416
	80	26	26	20.5	1.5	1.5	87.5	120	4 800	6 400	33109JR	0.563
	85	20.75	19	16	1.5	1.5	67.2	77.4	4 600	6 100	30209JR	0.502
	85	32	32	25	1.5	1.5	112	149	4 600	6 200	33209JR	0.818
	100	27.25	25	18	2	1.5	95.1	107	3 400	4 700	30309DJR	0.973
	100	27.25	25	22	2	1.5	113	128	4 100	5 400	30309JR	1.01
	100	38.25	36	30	2	1.5	146	180	4 100	5 500	32309JR	1.43
50	72	15	15	12	0.6	0.6	35.9	56.3	4 900	6 600	32910JR	0.195
	80	20	20	15.5	1	1	65.7	94.5	4 600	6 100	32010JR	0.389
	80	24	24	19	1	1	73.0	110	4 600	6 100	33010JR	0.451
	85	26	26	20	1.5	1.5	89.4	127	4 400	5 900	33110JR	0.594
	90	21.75	20	17	1.5	1.5	76.5	91.7	4 300	5 700	30210JR	0.566
	90	24.75	23	19	1.5	1.5	85.0	105	4 300	5 700	32210JR	0.643
	90	32	32	24.5	1.5	1.5	119	167	4 300	5 700	33210JR	0.887
	110	29.25	27	19	2.5	2	115	133	3 100	4 300	30310DJR	1.25
	110	29.25	27	23	2.5	2	137	152	3 700	4 900	30310JR	1.32
	110	42.25	40	33	2.5	2	176	220	3 700	5 000	32310JR	1.89
55	80	17	17	14	1	1	44.6	73.3	4 400	5 900	32911JR	0.285
	90	23	23	17.5	1.5	1.5	84.6	121	4 100	5 500	32011JR	0.569
	90	27	27	21	1.5	1.5	96.5	149	4 100	5 400	33011JR	0.672
	95	30	30	23	1.5	1.5	116	161	4 000	5 300	33111JR	0.868
	100	22.75	21	18	2	1.5	94.6	113	3 900	5 200	30211JR	0.732
	100	35	35	27	2	1.5	142	189	3 900	5 200	33211JR	1.18
	120	31.5	29	21	2.5	2	129	148	2 900	4 000	30311DJR	1.59



d	Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.	(Refer.) Mass (kg)
	D	T	B	C	r min.	r ₁ min.	C _r	C _{0r}	Grease Lub	Oil lub		
55	120	31.5	29	25	2.5	2	149	170	3 300	4 500	30311JR	1.65
	120	45.5	43	35	2.5	2	200	250	3 400	4 500	32311JR	2.38
60	85	17	17	14	1	1	46.2	78.2	4 100	5 500	32912JR	0.306
	95	23	23	17.5	1.5	1.5	86.1	127	3 900	5 200	32012JR	0.621
	95	27	27	21	1.5	1.5	101	162	3 900	5 200	33012JR	0.719
	100	30	30	23	1.5	1.5	118	170	3 700	5 000	33112JR	0.923
	110	23.75	22	19	2	1.5	106	127	3 500	4 700	30212JR	0.945
	110	29.75	28	24	2	1.5	132	167	3 500	4 700	32212JR	1.19
	110	38	38	29	2	1.5	174	239	3 600	4 700	33212JR	1.57
	130	33.5	31	22	3	2.5	153	179	2 600	3 700	30312DJR	2.01
	130	33.5	31	26	3	2.5	173	201	3 100	4 100	30312JR	2.08
	130	48.5	46	37	3	2.5	244	315	3 100	4 200	32312JR	2.99
65	90	17	17	14	1	1	47.4	83.1	3 900	5 200	32913JR	0.327
	100	23	23	17.5	1.5	1.5	90.0	137	3 600	4 800	32013JR	0.664
	100	27	27	21	1.5	1.5	103	169	3 600	4 800	33013JR	0.762
	110	34	34	26.5	1.5	1.5	152	223	3 400	4 600	33113JR	1.33
	120	24.75	23	20	2	1.5	128	156	3 200	4 300	30213JR	1.18
	120	32.75	31	27	2	1.5	157	203	3 200	4 300	32213JR	1.58
	120	41	41	32	2	1.5	200	277	3 200	4 300	33213JR	2.02
	140	36	33	23	3	2.5	176	209	2 400	3 400	30313DJR	2.44
	140	36	33	28	3	2.5	204	239	2 800	3 800	30313JR	2.56
	140	51	48	39	3	2.5	276	357	2 900	3 900	32313JR	3.64
70	100	20	20	16	1	1	71.0	115	3 500	4 700	32914JR	0.496
	110	25	25	19	1.5	1.5	108	163	3 300	4 400	32014JR	0.884
	110	31	31	25.5	1.5	1.5	134	208	3 300	4 400	33014JR	1.09
	120	37	37	29	2	1.5	181	266	3 100	4 200	33114JR	1.71
	125	26.25	24	21	2	1.5	138	173	3 100	4 100	30214JR	1.32
	125	33.25	31	27	2	1.5	169	225	3 100	4 100	32214JR	1.71
	125	41	41	32	2	1.5	206	294	3 100	4 100	33214JR	2.16
	150	38	35	25	3	2.5	197	235	2 300	3 200	30314DJR	2.97
	150	38	35	30	3	2.5	230	273	2 600	3 500	30314JR	3.08
	150	54	51	42	3	2.5	317	414	2 700	3 600	32314JR	4.50



d	Boundary dimensions (mm)						Basic load ratings (kN)		Limiting speeds (min ⁻¹)		Bearing No.	(Refer.) Mass (kg)
	D	T	B	C	r _{min.}	r _{1 min.}	C _r	C _{0r}	Grease Lub	Oil lub		
75	105	20	20	16	1	1	73.6	123	3 300	4 400	32915JR	0.526
	115	25	25	19	1.5	1.5	110	169	3 100	4 200	32015JR	0.930
	115	31	31	25.5	1.5	1.5	141	225	3 200	4 200	33015JR	1.16
	125	37	37	29	2	1.5	186	280	3 000	4 000	33115JR	1.84
	130	27.25	25	22	2	1.5	142	181	2 900	3 900	30215JR	1.42
	130	33.25	31	27	2	1.5	174	234	2 900	3 900	32215JR	1.77
	130	41	41	31	2	1.5	212	310	2 900	3 900	33215JR	2.26
	160	40	37	26	3	2.5	222	266	2 100	2 900	30315DR	3.48
	160	40	37	31	3	2.5	260	311	2 500	3 300	30315JR	3.65
	160	58	55	45	3	2.5	363	481	2 500	3 300	32315JR	5.41
80	110	20	20	16	1	1	76.1	131	3 100	4 200	32916JR	0.556
	125	29	29	22	1.5	1.5	147	225	2 900	3 900	32016JR	1.32
	125	36	36	29.5	1.5	1.5	173	288	2 900	3 900	33016JR	1.63
	130	37	37	29	2	1.5	191	294	2 800	3 800	33116JR	1.93
	140	28.25	26	22	2.5	2	161	202	2 700	3 600	30216JR	1.72
	140	35.25	33	28	2.5	2	203	271	2 700	3 600	32216JR	2.17
	140	46	46	35	2.5	2	250	371	2 700	3 600	33216JR	2.99
	170	42.5	39	27	3	2.5	236	282	2 000	2 800	30316DJR	4.12
	170	42.5	39	33	3	2.5	294	355	2 300	3 100	30316JR	4.46
	170	61.5	58	48	3	2.5	383	503	2 300	3 100	32316JR	6.31
85	120	23	23	18	1.5	1.5	97.1	165	2 900	3 900	32917JR	0.794
	130	29	29	22	1.5	1.5	150	234	2 800	3 700	32017JR	1.38
	130	36	36	29.5	1.5	1.5	177	300	2 800	3 700	33017JR	1.72
	140	41	41	32	2.5	2	224	346	2 600	3 500	33117JR	2.43
	150	30.5	28	24	2.5	2	182	231	2 500	3 400	30217JR	2.17
	150	38.5	36	30	2.5	2	232	315	2 500	3 400	32217JR	2.80
	150	49	49	37	2.5	2	294	439	2 500	3 400	33217JR	3.63
	180	44.5	41	28	4	3	263	317	1 900	2 600	30317DJR	4.81
	180	44.5	41	34	4	3	316	384	2 200	2 900	30317JR	5.15
	180	63.5	60	49	4	3	439	587	2 200	3 000	32317JR	7.42
90	125	23	23	18	1.5	1.5	101	175	2 800	3 700	32918JR	0.834
	140	32	32	24	2	1.5	178	276	2 600	3 500	32018JR	1.80
	140	39	39	32.5	2	1.5	221	367	2 600	3 400	33018JR	2.22
	150	45	45	35	2.5	2	258	413	2 500	3 300	33118JR	3.13
	160	32.5	30	26	2.5	2	204	261	2 400	3 200	30218JR	2.65
	160	42.5	40	34	2.5	2	263	362	2 400	3 200	32218JR	3.47
	190	46.5	43	30	4	3	282	336	1 700	2 400	30318DR	5.60
	190	46.5	43	36	4	3	345	420	2 100	2 700	30318JR	6.04
	190	67.5	64	53	4	3	461	614	2 100	2 800	32318JR	8.61

95	145	32	32	24	2	1.5	182	287	2 500	3 300	32019JR	1.88	
	145	39	39	32.5	2	1.5	226	382	2 500	3 300	33019JR	2.31	
	160	49	49	38	2.5	2	304	473	2 300	3 100	33119JR	3.89	
	170	34.5	32	27	3	2.5	231	299	2 200	3 000	30219JR	3.20	
	170	45.5	43	37	3	2.5	311	439	2 200	3 000	32219JR	4.34	
	170	58	58	44	3	2.5	374	582	2 200	2 900	33219JR	5.66	
	200	49.5	45	32	4	3	319	391	1 700	2 300	30319DJR	6.68	
	200	49.5	45	38	4	3	372	455	2 000	2 600	30319JR	6.96	
	100	140	25	25	20	1.5	1.5	126	217	2 400	3 300	32920JR	1.19
		150	32	32	24	2	1.5	185	298	2 400	3 200	32020JR	1.95
150		39	39	32.5	2	1.5	231	397	2 400	3 200	33020JR	2.40	
165		52	52	40	2.5	2	325	523	2 200	3 000	33120JR	4.29	
180		37	34	29	3	2.5	258	338	2 100	2 800	30220JR	3.83	
180		49	46	39	3	2.5	347	495	2 100	2 800	32220JR	5.21	
180		63	63	48	3	2.5	431	680	1 100	2 800	33220JR	6.92	
215		51.5	47	34	4	3	318	374	1 500	2 100	30320D	8.02	
215		51.5	47	39	4	3	344	400	1 800	2 400	30320	7.76	
215		51.5	47	39	4	3	422	521	1 800	2 400	30320JR	8.49	
215		56.5	51	35	4	3	373	459	1 500	2 200	31320JR	8.72	
215		77.5	73	60	4	3	579	783	1 800	2 400	32320JR	13.0	



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