

TIMKEN® SPHERICAL ROLLER BEARING OFFERING



2 23 20 K EJ W33 C3

2-Row SRB

Dimension Series

Spherical roller bearings are broken down into a series based on their width (0, 1, 2, 3, 4) and outside diameter (8, 9, 0, 1, 2, 3).

RIC

Mod. Codes

Cage

Bore Code

Small and medium bore sizes

Bore code x 5 = bore size in mm
[ex., BORE = 20 x 5 = 100mm]

Large bore sizes

Bore code = bore size in mm
Example: 232/600YMBW507C08
[ex., BORE = 600mm]

Bore Style

Two bore styles

For cylindrical bore, there is no designation in the part description.

For tapered bore, a K will appear in the part description.

Series

Part Number	21300	22200	22300	23000	23100	23200	23300	23900	24000	24100
	21305	22205	22308	23022	23120	23218	23318	23926	24020	24122
	21306	22206	22309	23024	23122	23220	23320	23928	24022	24124
	21307	22207	22310	23026	23124	23222	23322	23932	24024	24126
	21308	22208	22311	23028	23126	23224	23324	23934	24026	24128
	21309	22209	22312	23030	23128	23226	23326	23936	24028	24130
	21310	22210	22313	23032	23130	23228	23328	23938	24030	24132
	21311	22211	22314	23034	23132	23230	23330	23940	24032	24134
	21312	22212	22315	23036	23134	23232	23332	23944	24034	24136
	21313	22213	22316	23038	23136	23234	23338	23948	24036	24138
	21314	22214	22317	23040	23138	23236	23340	23952	24038	24140
	21315	22215	22318	23044	23140	23238		23956	24040	24144
	21316	22216	22319	23048	23144	23240		23960	24044	24148
	21317	22217	22320	23052	23148	23244		23964	24048	24152
	21318	22218	22322	23056	23152	23248		23968	24052	24156
		22219	22324	23060	23156	23252		23972	24056	24160
		22220	22326	23064	23160	23256		23976	24060	24164
		22222	22328	23068	23164	23260		23980	24064	24168
		22224	22330	23072	23168	23264		23984	24068	24172
		22226	22332	23076	23172	23268		23988	24072	24176
		22228	22334	23080	23176	23272		23992	24076	24180
		22230	22336	23084	23180	23276		23996	24080	24184
		22232	22338	23088	23184	23280		239/500	24084	24188
		22234	22340	23092	23188	23284		239/530	24088	24192
		22236	22344	23096	23192	23288		239/560	24092	24196
		22238	22348	230/500	23196	23292		239/600	24096	241/500
		22240		230/530	231/500	23296		239/630	240/500	241/530
		22244		230/560	231/530	232/500		239/670	240/530	241/560
		22248		230/600	231/560	232/530		239/710	240/560	241/600
		22252		230/630	231/600	232/560		239/750	240/600	241/670
		22256		230/670	231/630	232/600		239/800	240/630	241/710
				230/710	231/670	232/670		239/850	240/670	241/750
				230/750	231/800	232/710		239/900	240/710	241/900
				230/800		232/750		239/950	240/750	241/950
				230/850		232/800		239/1060	240/800	
				230/900		232/900		239/1180	240/850	
				230/950		232/1060			240/900	
									240/950	
									240/1000	
									240/1060	
									240/1120	

Base Interchange

Part Number	Bore size (mm)	Family	TIMKEN New High Performance	SKF	FAG	NSK
	25	21305	21305EJW33	21305CC	21305-E1-TVPB	21305CDE4
30	21306	21306EJW33	21306CC	21306-E1-TVPB	21306CDE4	
35	21307	21307EJW33	21307CC	21307-E1-TVPB	21307CDE4	
40	21308	21308EJW33	21308CC	21308-E1	21308CDE4	
45	21309	21309EJW33	21309E	21309-E1	21309CDE4	
50	21310	21310EJW33	21310E	21310-E1	21310CDE4	
55	21311	21311EJW33	21311E	21311-E1	21311CDE4	
60	21312	21312EJW33	21312E	21312-E1	21312CDE4	
65	21313	21313EJW33	21313E	21313-E1	21313CDE4	
70	21314	21314EJW33	21314E	21314-E1	21314CDE4	
75	21315	21315EJW33	21315E	21315-E1	21315CDE4	
80	21316	21316EJW33	21316E	21316-E1	21316CDE4	
85	21317	21317EJW33	21317E	21317-E1	21317CDE4	
90	21318	21318EJW33	21318E	21318-E1	21318CDE4	
25	22205	22205EJW33	22205E	22205-E1	22205CE4	
30	22206	22206EJW33	22206E	22206-E1	22206CE4	
35	22207	22207EJW33	22207E	22207-E1	22207CE4	
40	22208	22208EJW33	22208E	22208-E1	22208EAE4	
45	22209	22209EJW33	22209E	22209-E1	22209EAE4	
50	22210	22210EJW33	22210E	22210-E1	22210EAE4	
55	22211	22211EJW33	22211E	22211-E1	22211EAE4	
60	22212	22212EJW33	22212E	22212-E1	22212EAE4	
65	22213	22213EJW33	22213E	22213-E1	22213EAE4	
70	22214	22214EJW33	22214E	22214-E1	22214EAE4	
75	22215	22215EJW33	22215E	22215-E1	22215EAE4	
80	22216	22216EJW33	22216E	22216-E1	22216EAE4	
85	22217	22217EJW33	22217E	22217-E1	22217EAE4	
90	22218	22218EJW33	22218E	22218-E1	22218EAE4	
95	22219	22219EJW33	22219E	22219-E1	22219EAE4	
100	22220	22220EJW33	22220E	22220-E1	22220EAE4	
110	22222	22222EJW33	22222E	22222-E1	22222EAE4	
120	22224	22224EJW33	22224E	22224-E1	22224EAE4	
130	22226	22226EJW33	22226E	22226-E1	22226EAE4	
140	22228	22228EJW33	22228CC/W33	22228-E1	22228CDE4	
150	22230	22230EJW33	22230CC/W33	22230-E1	22230CDE4	
160	22232	22232EJW33	22232CC/W33	22232-E1	22232CDE4	
170	22234	22234EJW33	22232CC/W33	22232-E1	22232CDE4	
180	22236	22236EJW33	22236CC/W33	22236-E1	22236CDE4	
190	22238	22238EJW33	22238CC/W33	22238-E1	22238CDE4	
200	22240	22240EMB/W33	22240CC/W33	22240-E1	22240CAE4	
220	22244	22244EMB/W33	22244CC/W33	22244-E1	22244CAE4	
40	22308	22308EJW33	22308E	22308-E1	22308-EAE4	
45	22309	22309EJW33	22309E	22309-E1	22309-EAE4	
50	22310	22310EJW33	22310E	22310-E1	22310EAE4	
55	22311	22311EJW33	22311E	22311-E1	22311EAE4	
60	22312	22312EJW33	22312E	22312-E1	22312EAE4	
65	22313	22313EJW33	22313E	22313-E1	22313EAE4	
70	22314	22314EJW33	22314E	22314-E1	22314EAE4	
75	22315	22315EJW33	22315E	22315-E1	22315EAE4	
80	22316	22316EJW33	22316E	22316-E1	22316-EAE4	

Base Interchange (cont.)

Part Number	Bore size (mm)	Family	TIMKEN New High Performance	SKF	FAG	NSK
	85	22317	22317EJW33	22317E	22317-E1	22317EAE4
90	22318	22318EJW33	22318E	22318-E1	22318EAE4	
95	22319	22319EJW33	22319E	22319-E1	22319EAE4	
100	22320	22320EJW33	22320E	22320-E1	22320EAE4	
110	22322	22322EJW33	22322E	22322-E1	22322EAE4	
120	22324	22324EJW33	22324CC/W33	22324-E1	22324EAE4	
130	22326	22326EJW33	22326CC/W33	22326-E1	22326CE4	
140	22328	22328EJW33	22328CC/W33	22328-E1	22328CE4	
150	22330	22330EJW33	22330CC/W33	22330-E1	22330CAE4	
160	22332	22332EJW33	22332CC/W33	22332-E1	22332CAE4	
170	22334	22334EMB33	22334CC/W33	22334-E1	22334CAE4	
180	22336	22336EMB33	22336CC/W33	22336-E1	22336CAE4	
190	22338	22338EMB33	22338CC/W33	22338-E1	22338CAE4	
110	23022	23022EJW33	23022CC/W33	23022-E1-TVPB	23022CDE4	
120	23024	23024EJW33	23024CC/W33	23024-E1-TVPB	23024CDE4	
130	23026	23026EJW33	23026CC/W33	23026-E1-TVPB	23026CDE4	
140	23028	23028EJW33	23028CC/W33	23028-E1-TVPB	23028CDE4	
150	23030	23030EJW33	23030CC/W33	23030-E1-TVPB	23030CDE4	
160	23032	23032EMW33	23032CC/W33	23032-E1-TVPB	23032CDE4	
170	23034	23034EMW33	23034CC/W33	23034-E1-TVPB	23034CDE4	
180	23036	23036EJW33	23036CC/W33	23036-E1-TVPB	23036CDE4	
190	23038	23038EMW33	23038CC/W33	23038-E1-TVPB	23038CAE4	
200	23040	23040EMW33	23040CC/W33	23040-E1-TVPB	23040CAE4	
220	23044	23044EMW33	23044CC/W33	23044-E1	23044CAE4	
240	23048	23048EMW33	23048CC/W33	23048-E1	23048CAE4	
260	23052	23052EMB33	23052CC/W33	23052-E1	23052CAE4	
100	23120	23120EJW33	23120CC/W33	23120-E1-TVPB	23120CE4	
110	23122	23122EJW33	23122CC/W33	23122-E1-TVPB	23122CE4	
120	23124	23124EJW33	23124CC/W33	23124-E1-TVPB	23124CE4	
130	23126	23126EJW33	23126CC/W33	23126-E1-TVPB	23126CE4	
140	23128	23128EMW33	23128CC/W33	23128-E1-TVPB	23128CE4	
150	23130	23130EMW33	23130CC/W33	23130-E1-TVPB	23130CE4	
160	23132	23132EJW33	23132CC/W33	23132-E1-TVPB	23132CE4	
170	23134	23134EMW33	23134CC/W33	23134-E1-TVPB	23134CE4	
180	23136	23136EJW33	23136CC/W33	23136-E1-TVPB	23136CE4	
190	23138	23138EMW33	23138CC/W33	23138-E1-TVPB	N/A	
200	23140	23140EMB33	23140CC/W33	23140-E1	23140CE4	
220	23144	23144EMB33	23144CC/W33	23144-E1	23144CE4	
240	23148	23148EMB33	23148CC/W33	23148-E1	23148CE4	
90	23218	23218EJW33	23218CC/W33	23218-E1-TVPB	23218CE4	
100	23220	23220EJW33	23220CC/W33	23220-E1-TVPB	23220CE4	
110	23222	23222EJW33	23222CC/W33	23222-E1-TVPB	23222CE4	
120	23224	23224EMW33	23224CC/W33	23224-E1-TVPB	23224CE4	
130	23226	23226EJW33	23226CC/W33	23226-E1-TVPB	23226CE4	
140	23228	23228EMW33	23228CC/W33	23228-E1-TVPB	23228CE4	
150	23230	23230EMW33	23230CC/W33	23230-E1-TVPB	23230CE4	
160	23232	23232EMW33	23232CC/W33	23232-E1-TVPB	23232CE4	
170	23234	23234EMW33	23234CC/W33	23234-E1-TVPB	23234CE4	
180	23236	23236EMB33	23236CC/W33	23236-E1-TVPB	23236CE4	

Base Interchange (cont.)

Part Number	Bore size (mm)	Family	TIMKEN New High Performance	SKF	FAG	NSK
	190	23238	23238EMBW33	23238CC/W33	23238-E1	23238CE4
200	23240	23240EMBW33	23240CC/W33	23240-E1	23240CE4	
220	23244	23244EMBW33	23244CC/W33	23244-E1	23244CE4	
100	24020	24020EJW33	24020CC/W33	N/A	24020CE4	
120	24024	24024EJW33	24024CC/W33	24024-E1	24024CE4	
130	24026	24026EJW33	24026CC/W33	24026-E1	24026CE4	
140	24028	24028EJW33	24028CC/W33	24028-E1	24028CE4	
150	24030	24030EJW33	24030CC/W33	24030-E1	24030CE4	
160	24032	24032EJW33	24032CC/W33	24032-E1	24032CE4	
170	24034	24034EJW33	24034CC/W33	24034-E1	24034CE4	
180	24036	24036EJW33	24036CC/W33	24036-E1	24036CE4	
190	24038	24038EJW33	24038CC/W33	24038-E1	24038CE4	
200	24040	24040EJW33	24040CC/W33	24040-E1	24040CE4	
220	24044	24044EMBW33	24044CCW33	24044-E1	24044CE4	
240	24048	24048EMBW33	24048CC/W33	24048-E1	24048CE4	
260	24052	24052EMBW33	24052CC/W33	24052-E1	24052CAE4	
110	24122	24122EJW33	24122CC/W33	24122-E1	24122CE4	
120	24124	24124EJW33	24124CC/W33	24124-E1	24124CE4	
130	24126	24126EJW33	24126CC/W33	24126-E1	24126CE4	
140	24128	24128EJW33	24128CC/W33	24128-E1	24128CE4	
150	24130	24130EJW33	24130CC/W33	24130-E1	24130CE4	
160	24132	24132EJW33	24132CC/W33	24132-E1	24132CE4	
170	24134	24134EJW33	24134CC/W33	24134-E1	24134CE4	
180	24136	24136EJW33	24136CC/W33	24136-E1	24136CE4	
190	24138	24138EJW33	24138CC/W33	24138-E1	24138CE4	
200	24140	24140EMBW33	24140CC/W33	24140-E1	24140CE4	
220	24144	24144EMBW33	24144CC/W33	24144-E1	24144CE4	
240	24148	24148EMBW33	24148CC/W33	24148-E1	N/A	

Timken® Spherical Roller Bearings Modification Codes

Timken ⁽¹⁾	SKF ⁽²⁾	FAG ⁽³⁾	NSK	Timken General Definition
EJ	E, EJA, C, CC, CCJA, EC, ECC	E1	EA	Stamped nitrided steel-cage - high-performance
EM	CA, CAC, CAF, ECA, ECAF, CCJA	M		One-piece roller-riding, machined-brass cage - high performance
EMB	CAFA, CAMA	MB		One-piece inner ring, piloted, machined-brass cage - high performance
CJ	C, CC, CCJA, EC, ECC	J	Cag, C, CD	Stamped steel cage - high performance
YM	CA, CAC, CAF, ECA, ECAF, CCJA	M	CA	One-piece roller-riding, machined-brass cage
YMB	CAFA, CAMA	MB	CAM, AM	One-piece inner ring, piloted, machined-brass cage
YMD				Two-piece inner ring, piloted, machined-brass cage
C2	C2	C2	C2	Bearing Radial Internal Clearance (RIC) smaller than normal
C3	C3	C3	C3	Bearing Radial Internal Clearance (RIC) greater than normal
C4	C4	C4	C4	Bearing Radial Internal Clearance (RIC) smaller than C3
C5	C5	C5	C5	Bearing Radial Internal Clearance (RIC) smaller than C4
C6	C6	C6	CGxx, SLxx	Specific RIC designed to bearing size
⁽⁴⁾	S1	S1	S11	Bearing rings dimensionally stabilized for use at operating temperatures up to 200°C
S2	S2	S2		Bearing rings dimensionally stabilized for use at operating temperatures up to 250°C
S3	S3	S3		Bearing rings dimensionally stabilized for use at operating temperatures up to 300°C
S4	S4	S4		Bearing rings dimensionally stabilized for use at operating temperatures up to 350°C
C02	C02	T52BE	P5B, P53	Inner ring with P5 running accuracy
C04	C04	T52BN	P5C, P52	Outer ring with P5 running accuracy, W4 (SKF does not include W4)
C08	C08	T52BW	P55	P5 running accuracy (C02+C04)
C08C3	C083	C3, T52BW	P55, C3	P5 running accuracy (C02+C04), C3 RIC
C08C4	C084	C4, T52BW	P55, C4	P5 running accuracy (C02+C04), C4 RIC
K	K	K	K	Tapered bore (1:12 on diameter 22, 23, 30, 31, 32, 33, 39 series)
K	K30	K30	K30	Tapered bore (1:30 on diameter 40, 41, 42 series)
W4	W4	J26A		Mark high and low points of eccentricity on face of rings
W6R				Engineered surface thin film coating ES302 on roller contact surfaces
W20	W20	SY	E3	Outer ring with lubrication holes
W22	W22	T50H	S(a,b)	Special reduced-OD tolerance on outer rings
W25	W73			Outer ring counter-drilled lubrication holes
W31	W31		U22	Bearing inspected to certain quality-control requirements
W33	W33	S	E4	Standard lubrication holes and groove in outer ring
W40	ECD-	W209	g	Bearing made of carburizing grade steel
W40I	HA3, ECB-	W209B	g3	Inner ring made only of carburizing grade steel
W40R			g1	Roller made only of carburizing grade steel
W40E			g2	Outer ring made only of carburizing grade steel
W45A	VE 553			Tapped lifting holes in face of outer ring to facilitate lifting and handling
W47	VA414 (incl W800&W47)	T41B (incl W22&W47)		Inner ring with oversize bore
W84	W77	H44SA, H40	E42	Outer ring with standard lubrication holes plugged
W841	W	H40		Outer ring with no lubrication hole
W88				Special reduced bore tolerance on inner ring
W89				Inner ring with lubrication holes and lubrication groove
W94	W26	H40AB	E5	Inner ring lubrication holes
W507	W507	J26A	E4U22, E4P53	W31+W33+W45A
W509	W509 (W26+W31+W33)	S.H40A	E7U22	W31+W33+W94+W45A (where feasible)
W525	W525 (W31+W77)	S.H44S		W31+W33+W84+W45A (where feasible)
W800	VA405	T41A	U15, VS	Shaker screen modification (W22+W88+Radial internal clearance in upper 2/3 of range specified range)
W906A	C083HA3	T52BW.W209B		C08+W31+W33+W40I+W40R

Timken spherical roller bearings feature specific modifications to meet your application requirements. The table below provides a list of the most popular bearing modifications. Please consult your Timken sales representative for further information and a complete modification list.

TIMKEN

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25M 04-12:29 Order No. 10051

Notes: ⁽¹⁾ Timken offers differentiated solutions for many applications. This is only a partial list of common modification codes. ⁽²⁾ E suffix for SKF Explorer bearing available in some sizes. ⁽³⁾ E1 suffix for FAG X-life bearing available in some sizes. ⁽⁴⁾ Standard for all Timken SRBs. Data in this chart has been compiled to make the information as complete as possible. Timken cannot assume any responsibility for errors, omissions or accuracy of the published data. SKF Explorer bearing and FAG X-life bearing are registered trademarks of their respective companies.