

NOMENCLATURE

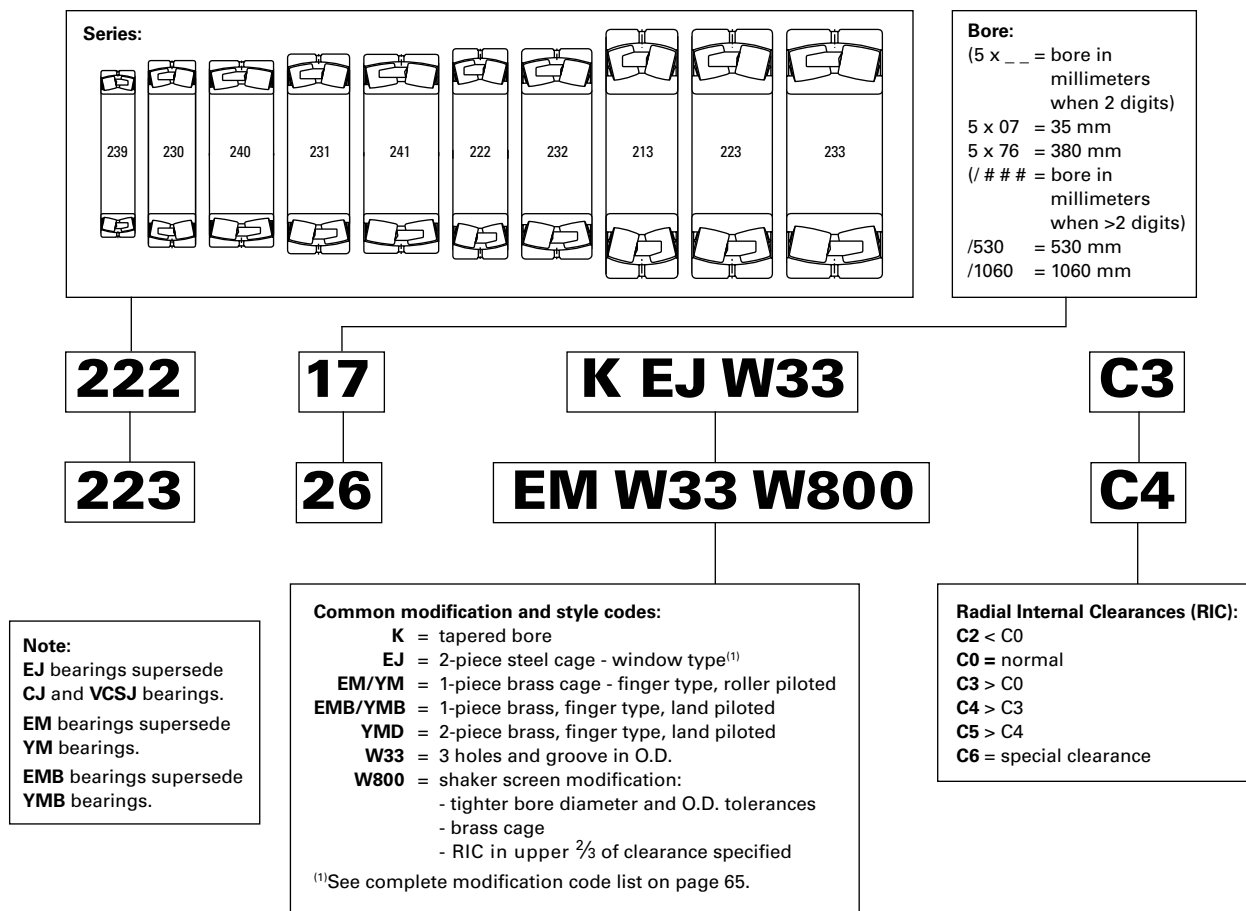
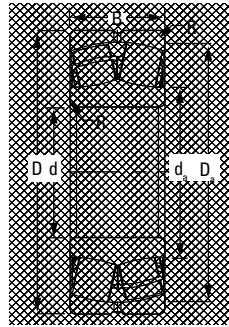
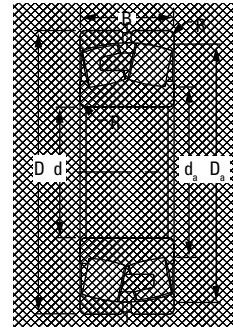


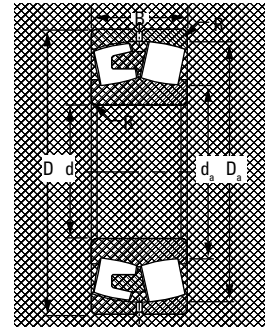
Fig. 23. Timken spherical roller bearing nomenclature.



EJ



EM/YM



EMB/YMB

Continued from previous page.

Bearing Part Number	Bearing Dimensions			Load Ratings		Cage Type	Mounting Data			Equivalent Radial Load Factors ⁽²⁾				Geometry Factor ⁽³⁾ C _g	Speed Reference			Weight
	Bore d	O.D. D	Width B	Dynamic C	Static C ₀		Fillet ⁽¹⁾ (Max.) R	Backing Diameter		Dynamic		Static	Thermal Reference Speed ⁽⁴⁾		Limiting Speed ⁽⁵⁾			
								Shaft d _a	Housing D _a	e	F _a ≤ e F _r X = 1 Y	F _a > e F _r X = 0.67 Y				In All Cases Y ₀		
	mm in.	mm in.	mm in.	kN lbf.	kN lbf.		mm in.	mm in.	mm in.						RPM	RPM	RPM	kg lbs.
23128	140 5.5118	225 8.8583	68 2.6772	766 172000	1070 240000	EJ	2 0.08	160 6.3	208 8.2	0.27	2.50	3.72	2.45	0.083	2100	1800	2960	10.4 22.9
23128	140 5.5118	225 8.8583	68 2.6772	766 172000	1070 240000	EM	2 0.08	160 6.3	208 8.2	0.27	2.50	3.72	2.45	0.083	2100	1800	3160	10.2 22.3
24128	140 5.5118	225 8.8583	85 3.3465	894 201000	1290 289000	EJ	2 0.08	157 6.2	206 8.1	0.34	2.01	2.99	1.96	0.082	1500	1300	2290	12.7 27.9
26228	140 5.5118	240 9.4488	80 3.1496	863 194000	1110 249000	EM	2.5 0.1	161 6.3	218 8.6	0.32	2.08	3.10	2.04	0.083	1500	1300	1840	14.7 32.3
22228	140 5.5118	250 9.8425	68 2.6772	863 194000	1060 237000	EJ	2.5 0.1	167 6.6	228 9.0	0.25	2.67	3.98	2.61	0.086	2600	2200	3500	14.2 31.2
22228	140 5.5118	250 9.8425	68 2.6772	863 194000	1060 237000	EM	2.5 0.1	167 6.6	228 9.0	0.25	2.67	3.98	2.61	0.086	2600	2200	3900	14.2 31.2
23228	140 5.5118	250 9.8425	88 3.4646	1090 246000	1410 317000	EJ	2.5 0.1	165 6.5	229 9.0	0.32	2.11	3.13	2.06	0.086	1700	1500	2700	18.0 39.6
23228	140 5.5118	250 9.8425	88 3.4646	1090 246000	1410 317000	EM	2.5 0.1	165 6.5	229 9.0	0.32	2.11	3.13	2.06	0.086	1700	1500	2610	18.5 40.6
22328	140 5.5118	300 11.8110	102 4.0157	1450 326000	1670 375000	EJ	3 0.1	182 7.1	270 10.6	0.33	2.06	3.06	2.01	0.091	1800	1600	2360	33.6 73.9
22328	140 5.5118	300 11.8110	102 4.0157	1450 326000	1670 375000	EM	3 0.1	182 7.1	270 10.6	0.33	2.06	3.06	2.01	0.091	1800	1600	2970	34.2 75.3
23328	140 5.5118	300 11.8110	118 4.6457	1570 352000	1910 429000	EMB	3 0.1	175 6.9	261 10.3	0.41	1.65	2.45	1.61	0.091	1200	1100	1900	41.7 91.7
23030	150 5.9055	225 8.8583	56 2.2047	621 140000	911 205000	EJ	2 0.08	169 6.7	210 8.3	0.21	3.14	4.68	3.07	0.086	2600	2100	3220	7.5 16.6
23030	150 5.9055	225 8.8583	56 2.2047	621 140000	911 205000	EM	2 0.08	169 6.7	210 8.3	0.21	3.14	4.68	3.07	0.086	2600	2100	3190	7.7 16.9
24030	150 5.9055	225 8.8583	75 2.9528	808 182000	1240 278000	EJ	2 0.08	165 6.5	209 8.2	0.29	2.32	3.46	2.27	0.085	2000	1700	2800	10.2 22.3
23130	150 5.9055	250 9.8425	80 3.1496	1000 225000	1390 312000	EJ	2 0.08	173 6.8	229 9.0	0.29	2.32	3.45	2.26	0.088	1900	1600	2690	15.5 34.2
23130	150 5.9055	250 9.8425	80 3.1496	1000 225000	1390 312000	EM	2 0.08	173 6.8	229 9.0	0.29	2.32	3.45	2.26	0.088	1900	1600	2920	15.5 34.2

⁽¹⁾Maximum shaft or housing fillet radius that bearing corners will clear.

⁽²⁾These factors apply for both inch and metric calculations. See engineering section for instructions on use.

⁽³⁾Geometry constant for Lubrication Life Factor a31 is found in the Bearing Ratings section of the Engineering Manual (order no. 10424).

⁽⁴⁾See thermal reference speed in the Engineering Manual (order no. 10424) and on page 61.

⁽⁵⁾See limiting speed on page 61.

Continued on next page.