

# FAG Spherical Roller Bearings Engineered for Vibratory Applications



**FAG Bearings Interchange for 223 Series Roller Bearings for Vibratory Applications**

CURRENT FAG P/N	REPLACES FAG P/N	SKF P/N	TORRINGTON P/N	NSK P/N
22308E1.T41A	22308E.T41A	452308M2/W502	—	22308HE4C4U15-VS
22309E1.T41A	22309E.T41A	452309M2/W502	—	22309HE4C4U15-VS
22310E1A.MA.T41A	22310EAS.MA.T41A	452310M2/W502	22310YMW33W800C4	22310HE4C4U15-VS
22311E1A.MA.T41A	22311EAS.MA.T41A	452311M2/W502	22311YMW33W800C4	22311CAME4C4U15-VS
22312E1A.MA.T41A	22312EAS.MA.T41A	452312M2/W502	22312YMW33W800C4	22312CAME4C4U15-VS
22313E1A.MA.T41A	22313EAS.MA.T41A	452313M2/W502	22313YMW33W800C4	22313CAME4C4U15-VS
22314E1A.MA.T41A	22314EAS.MA.T41A	452314M2/W502	22314YMW33W800C4	22314CAME4C4U15-VS
22315E1A.MA.T41A	22315EAS.MA.T41A	452315M2/W502	22315YMW33W800C4	22315CAME4C4U15-VS
22316E1A.MA.T41A	22316EAS.MA.T41A	452316M2/W502	22316YMW33W800C4	22316CAME4C4U15-VS
22317E1A.MA.T41A	22317EAS.MA.T41A	452317M2/W502	22317YMW33W800C4	22317CAME4C4U15-VS
22318E1A.MA.T41A	22318EAS.MA.T41A	452318M2/W502	22318YMW33W800C4	22318CAME4C4U15-VS
22319E1.T41A	22319E.T41A	452319M2/W502	22319YMW33W800C4	22319CAME4C4U15-VS
22320E1A.MA.T41A	22320EAS.MA.T41A	452320M2/W502	22320YMW33W800C4	22320CAME4C4U15-VS
22322E1A.MA.T41A	22322EAS.MA.T41A	452322M2/W502	22322YMW33W800C4	22322CAME4C4U15-VS
22324E1A.MA.T41A	22324EAS.MA.T41A	452324M2/W502	22324YMW33W800C4	22324CAME4C4U15-VS
22326E1A.MA.T41A	22326EAS.MA.T41A	452326M2/W502	22326YMW33W800C4	22326CAME4C4U15-VS
22328E1A.MA.T41A	22328EAS.MA.T41A	452328M2/W502	22328YMW33W800C4	22328CAME4C4U15-VS
22330E1A.MA.T41A	22330EAS.MA.T41A	452330M2/W502	22330YMW33W800C4	22330CAME4C4U15-VS
22332A.MA.T41A	22332A.MA.C4.F80	452332M2/W502	22332YMW33W800C4	22332CAME4C4U15-VS
22334A.MA.T41A	22334A.MA.C4.F80	—	—	22334CAME4C4U15-VS
22336A.MA.T41A	22336A.MA.C4.F80	—	—	22336CAME4C4U15-VS
22338A.MA.T41A	22338A.MA.C4.F80	—	—	22338CAME4C4U15-VS
22340A.MA.T41A	22340A.MA.C4.F80	—	22340YMW33W800C4	22340CAME4C4U15-VS
22344A.MA.T41A	22344A.MA.C4.F80	—	—	—

**FAG Bearings Interchange for 233 Series Spherical Roller Bearings for Vibratory Applications**

CURRENT FAG P/N	REPLACES FAG P/N	SKF P/N	TORRINGTON P/N	NSK P/N
23320AS.MA.T41A	23320AS.MA.C4.F80	—	—	—
23322AS.MA.T41A	23322AS.MA.C4.F80	453322M2/W502	23322YMW33W800C4	23322CAME4C4U15-VS
23324AS.MA.T41A	23324AS.MA.C4.F80	453324M2/W502	23324YMW33W800C4	23324CAME4C4U15-VS
23326AS.MA.T41A	23326AS.MA.C4.F80	453326M2/W502	23326YMW33W800C4	23326CAME4C4U15-VS
23328AS.MA.T41A	23328AS.MA.C4.F80	453328M2/W502	23328YMW33W800C4	23328CAME4C4U15-VS
23330A.MA.T41A	23330A.MA.C4.F80	—	23330YMW33W800C4	23330CAME4C4U15-VS
23332A.MA.T41A	23332A.MA.C4.F80	453332M2/W502	23332YMW33W800C4	—
23338A.MA.T41A	23338A.MA.C4.F80	—	—	—
23340A.MA.T41A	23340A.MA.C4.F80	—	—	—



Current FAG P/N	Recommended Shaft OD Dimensions (using ISO g6 shaft fit)				Recommended Housing Bore Dimensions (using ISO P6 fit)			
	Minimum (mm)	Maximum (mm)	Minimum (inch)	Maximum (inch)	Minimum (mm)	Maximum (mm)	Minimum (inch)	Maximum (inch)
223088E1.T41A	39.975	39.991	1.5738	1.5744	89.948	89.970	3.5413	3.5421
22309E1.T41A	44.975	44.991	1.7707	1.7713	99.948	99.970	3.9350	3.9358
22310E1A.MA.T41A	49.975	49.991	1.9675	1.9681	109.948	109.970	4.3287	4.3295
22311E1A.MA.T41A	54.971	54.990	2.1642	2.1650	119.948	119.970	4.7224	4.7232
22312E1A.MA.T41A	59.971	59.990	2.3611	2.3618	129.939	129.964	5.1157	5.1167
22313E1A.MA.T41A	64.971	64.990	2.5579	2.5587	139.939	139.964	5.5094	5.5104
22314E1A.MA.T41A	69.971	69.990	2.7548	2.7555	149.939	149.964	5.9031	5.9041
22315E1A.MA.T41A	74.971	74.990	2.9516	2.9524	159.939	159.964	6.2968	6.2978
22316E1A.MA.T41A	79.971	79.990	3.1485	3.1492	169.939	169.964	6.6905	6.6915
22317E1A.MA.T41A	84.966	84.988	3.3451	3.3460	179.939	179.964	7.0842	7.0852
22318E1A.MA.T41A	89.966	89.988	3.5420	3.5428	189.930	189.959	7.4776	7.4787
22319E1.T41A	94.966	94.988	3.7388	3.7397	199.930	199.959	7.8713	7.8724
22320E1A.MA.T41A	99.966	99.988	3.9357	3.9365	214.930	214.959	8.4618	8.4630
22322E1A.MA.T41A	109.966	109.988	4.3294	4.3302	239.930	239.959	9.4461	9.4472
22324E1A.MA.T41A	119.966	119.988	4.7231	4.7239	259.921	259.953	10.2331	10.2344
22326E1A.MA.T41A	129.961	129.986	5.1166	5.1176	279.921	279.953	11.0205	11.0218
22328E1A.MA.T41A	139.961	139.986	5.5103	5.5113	299.921	299.953	11.8079	11.8092
22330E1A.MA.T41A	149.961	149.986	5.9040	5.9050	319.913	319.949	12.5950	12.5964
22332A.MA.T41A	159.961	159.986	6.2977	6.2987	339.913	339.949	13.3824	13.3838
22334A.MA.T41A	169.961	169.986	6.6914	6.6924	359.913	359.949	14.1698	14.1712
22336A.MA.T41A	179.961	179.986	7.0851	7.0861	379.913	379.949	14.9572	14.9586
22338A.MA.T41A	189.956	189.985	7.4786	7.4797	399.913	399.949	15.7446	15.7460
22340A.MA.T41A	199.956	199.985	7.8723	7.8734	419.905	419.945	16.5317	16.5333
22344A.MA.T41A	219.956	219.985	8.6597	8.6608	459.905	459.945	18.1065	18.1081

23320AS.MA.T41A	99.966	99.988	3.9357	3.9365	214.930	214.959	8.4618	8.4630
23322AS.MA.T41A	109.966	109.988	4.3294	4.3302	239.930	239.959	9.4461	9.4472
23324AS.MA.T41A	119.966	119.988	4.7231	4.7239	259.921	259.953	10.2331	10.2344
23326AS.MA.T41A	129.961	129.986	5.1166	5.1176	279.921	279.953	11.0205	11.0218
23328AS.MA.T41A	139.961	139.986	5.5103	5.5113	299.921	299.953	11.8079	11.8092
23330A.MA.T41A	149.961	149.986	5.9040	5.9050	319.913	319.949	12.5950	12.5964
23332A.MA.T41A	159.961	159.986	6.2977	6.2987	339.913	339.949	13.3824	13.3838
23334A.MA.T41A	169.961	169.986	6.6914	6.6924	359.913	359.949	14.1698	14.1712
23336A.MA.T41A	179.961	179.986	7.0851	7.0861	379.913	379.949	14.9572	14.9586
23338A.MA.T41A	189.956	189.985	7.4786	7.4797	399.913	399.949	15.7446	15.7460
23340A.MA.T41A	199.956	199.985	7.8723	7.8734	419.905	419.945	16.5317	16.5333

**E1A.MA / EAS.MA / EA.MA Design** - one-piece, machined brass cage; outer ring guided

**AS.MA / A.MA Design** - two-piece, machined brass cage; outer ring guided

**E/E1 Design** - two-piece, stamped steel cage; outer ring guided

# FAG

**FAG Bearings Corporation**

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FAG SUFFIX	DESCRIPTION
<b>A</b>	modified internal design
<b>E</b>	bearing with extra capacity for longer bearing life
<b>E1</b>	bearing with optimized geometry and surface finishes, resulting in increased capacity and longer bearing life
<b>MA</b>	machined brass cage
<b>S</b>	lubrication holes and groove in outer ring
<b>T41A</b>	C4 clearance and improved tolerances for bore and OD (specifically designed for vibratory applications)