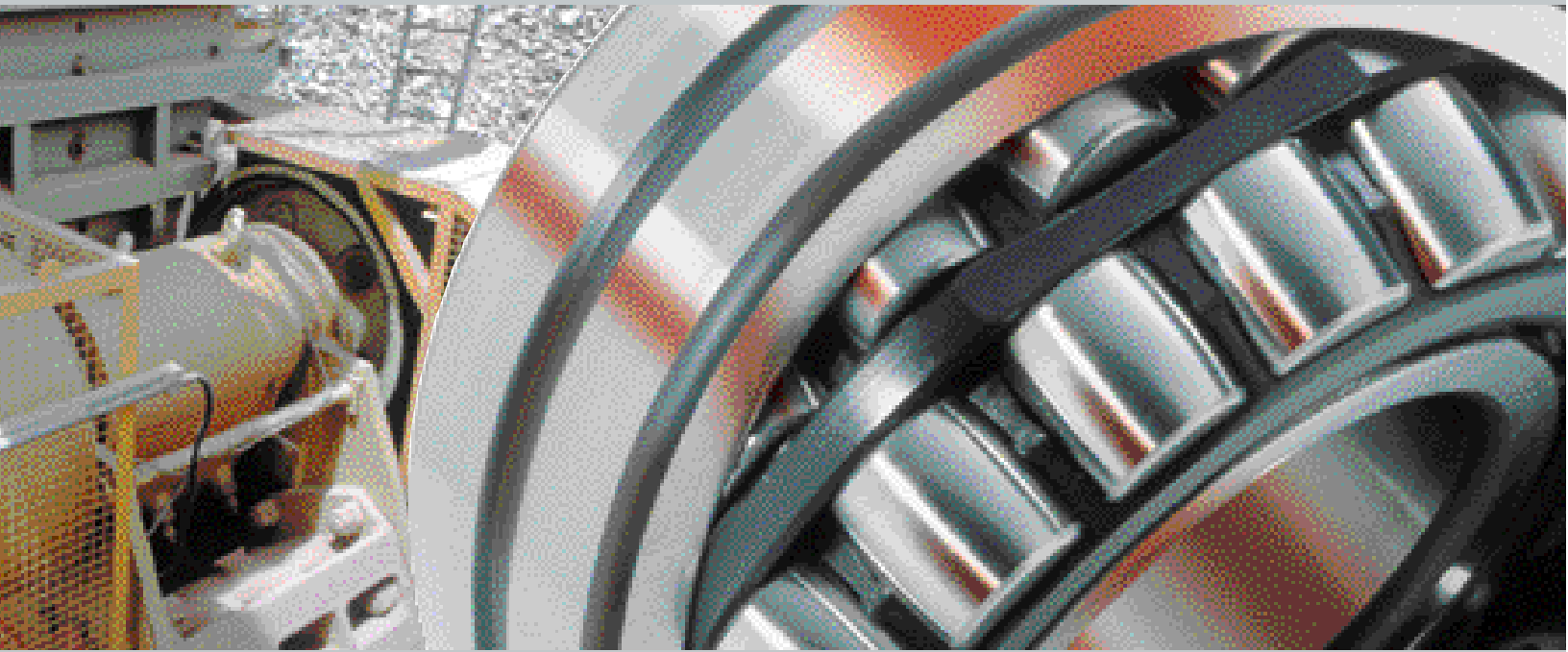


FAG



**FAG Spherical Roller Bearings
for Vibrating Machinery**

Spherical Roller Bearings For Vibrating Machinery

Vibrating screens for grading material and other machinery where vibratory stressing must be accommodated are among the most severe bearing conditions encountered in machinery construction. Special spherical roller bearings from FAG with the specification T41A are designed to accommodate the punishing operating conditions found in vibrating machinery and equipment, including:

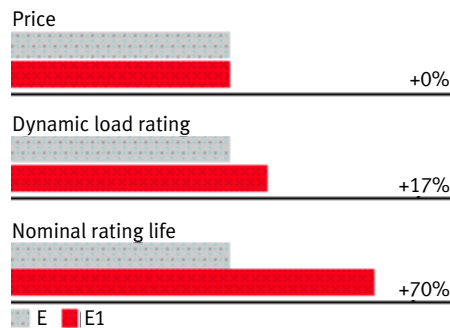
- high loads and high speeds
- high radial accelerations
- possible axial accelerations
- revolving shaft deflections
- sliding motion within the bearing

Bearing Series and Basic Design

- T41A spherical roller bearings are available in FAG dimensional series 223.. for shafts ranging from 40 to 200mm; for extreme loads, wider bearings of series 233.. are available in bore diameters from 90 to 100mm
- the specification T41A defines both the tolerance and the radial clearance of the bearing
 - spherical roller bearings for vibrating machines are produced with reduced tolerances versus standard bearings
 - increased radial clearance C4 is standard; for special requirements, other clearances (eg. C3) are available and incorporated into the bearing description
- manufactured with a cylindrical bore as standard, but also available with 1:12 tapered bore for special applications (additional suffix K)
- manufactured with S1 heat treatment for bearing and cage reliability at operating temperatures as high as 200°C or 392°F

A New Standard in Performance

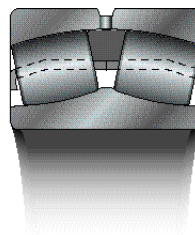
FAG spherical roller bearings for vibrating machines are available in the new E1 design for series 223.. for shaft sizes as large as 150mm. Utilizing the latest developments in kinematics, material sciences and manufacturing processes, the FAG E1 outdistances the competition with extended life owing to its superior design and technology.



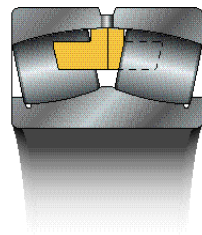
The considerably higher load carrying capacities and inherently lower bearing temperatures of E1 bearings promotes improved operational reliability, greater efficiency, increased performance and/or the opportunity for downsizing.

FAG E1 spherical roller bearings: longer life and increased performance for the same price.

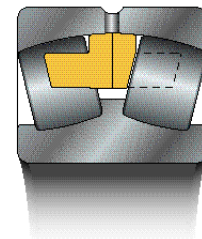
Series 223E1.T41A



Series 223E1A.MA.T41A



Series 223/233A.MA.T41A

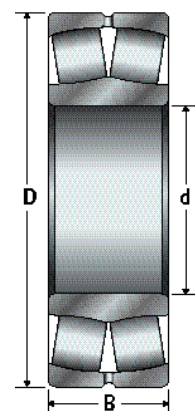
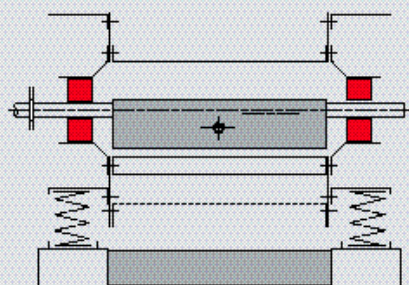


Standard Cages

Depending on the bearing size and series, FAG spherical roller bearings for vibrating machinery are available with a pressed steel or machined brass cage.

Both material options are available in 223E1 bearings for shaft diameters as large as 150mm.

For bore sizes of 160mm and above, FAG offers series 223 or 233A.MA brass cage T41A spherical roller bearings.



FAG Spherical Roller Bearings for Vibrating Machinery

Shaft	Dimensions			Load rating (dyn.)		FAG No.	Shaft	Dimensions			Load rating (dyn.)		FAG No.
	d	D	B	C	KN			d	D	B	C	KN	
	mm	mm	mm	lbf	KN		mm	mm	mm	lbf	KN		
40	40	90	33	35100	156	22308E1.T41A	110	110	240	80	213750	950	22322E1.T41A
45	45	100	36	41850	186	22309E1.T41A		110	240	80	213750	950	22322E1A.MA.T41A
50	50	110	40	51300	228	22310E1.T41A		110	240	92.1	186750	830	23322AS.MA.T41A
	50	110	40	51300	228	22310E1A.MA.T41A	120	120	260	86	243000	1080	22324E1.T41A
55	55	120	43	59625	265	22311E1.T41A		120	260	86	243000	1080	22324E1A.MA.T41A
	55	120	43	59625	265	22311E1A.MA.T41A		120	260	106	229500	1020	23324AS.MA.T41A
60	60	130	46	69750	310	22312E1.T41A	130	130	280	93	281250	1250	22326E1.T41A
	60	130	46	69750	310	22312E1A.MA.T41A		130	280	93	281250	1250	22326E1A.MA.T41A
65	65	140	48	79875	355	22313E1.T41A		130	280	112	261000	1160	23326AS.MA.T41A
	65	140	48	79875	355	22313E1A.MA.T41A	140	140	300	102	328500	1460	22328E1.T41A
70	70	150	51	87750	390	22314E1.T41A		140	300	102	328500	1460	22328E1A.MA.T41A
	70	150	51	87750	390	22314E1A.MA.T41A		140	300	118	285750	1270	23328AS.MA.T41A
75	75	160	55	99000	440	22315E1.T41A	150	150	320	108	366750	1630	22330E1.T41A
	75	160	55	99000	440	22315E1A.MA.T41A		150	320	108	366750	1630	22330E1A.MA.T41A
80	80	170	58	112500	500	22316E1.T41A		150	320	128	337500	1500	23330A.MA.T41A
	80	170	58	112500	500	22316E1A.MA.T41A	160	160	340	114	321750	1430	22332A.MA.T41A
85	85	180	60	121500	540	22317E1.T41A		160	340	136	373500	1660	23332A.MA.T41A
	85	180	60	121500	540	22317E1A.MA.T41A	170	170	360	120	360000	1600	22334A.MA.T41A
90	90	190	64	137250	610	22318E1.T41A		180	180	126	396000	1760	22336A.MA.T41A
	90	190	64	137250	610	22318E1A.MA.T41A	190	190	400	132	418500	1860	22338A.MA.T41A
	90	190	64	121500	540	23318AS.MA.T41A		190	400	155	495000	2200	23338A.MA.T41A
95	95	200	67	150750	670	22319E1.T41A	200	200	420	138	468000	2080	22340A.MA.T41A
100	100	215	73	183375	815	22320E1.T41A		200	420	165	551250	2450	23340A.MA.T41A
	100	215	73	183375	815	22320E1A.MA.T41A	220	220	460	145	522000	2320	22344A.MA.T41A
	100	215	82.6	153000	680	23320AS.MA.T41A							



Lubrication

The operating conditions, the bearing size and the specific requirements of an application determine whether grease or oil can be selected for bearing lubrication.

For typical applications in vibrating machinery and equipment, FAG

recommends grease lubrication.

However, for operating speeds above the range suitable for grease lubrication or for applications where the bearings are exposed to external heating, oil lubrication may be recommended by your FAG technical consultant.

FAG offers an extensive range of standard and specially designed bearing solutions for mining, process engineering, the cement industry, construction machinery and natural resource recovery.

With a dedication to reliable performance in the most aggressive conditions, FAG excels with application oriented, complete design solutions for bearings, housings and accessories, sealing, lubrication and maintenance equipment.

For information concerning additional FAG bearing solutions, please contact your FAG representative.



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