



E-type Spherical Roller Bearings

E-type spherical roller bearings consist of an outer ring, inner ring without ribs, symmetrical rollers, two hardened stamped steel cages, and a floating guide ring between the roller sets.

A hardened stamped steel cage and specialized symmetric spherical rollers are used in E-type spherical roller bearings. The optimized internal design adjusts the cage and roller volume to improve the performance of the bearings. On average, the dynamic load rating is increased by 25% compared to a standard design. E-type spherical roller bearings approach the capacities of spherical roller bearings with a brass cage.

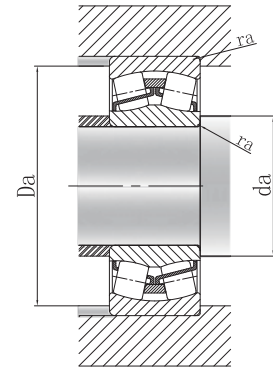
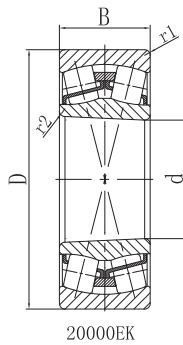
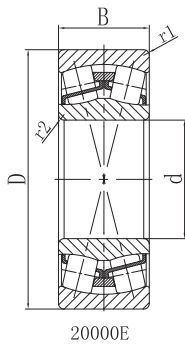
E-type spherical roller bearings are widely used in steel, metal, mining, energy, construction, transportation, textiles, paper, and other industries.

Performance Advantages

- Higher load capacity**
 The stamped cage is made from a high quality roller steel plate which has high tensile strength and load distribution. This cage material and design allows for a higher quantity and size rollers in a spherical roller bearing.
- Better lubrication performance**
 The stamped cage has less overall volume than the brass cage. This reduction in volume allows for better lubricant flow resulting in lower operating temperature and longer life of the bearing and grease.
- Better working performance**
 The roller and raceway curvatures have been optimized to improve the load capacity and operating performance.
- Better impact resistance**
 The weight of the stamped steel cage is significantly lighter than the solid brass cage. As a result, the acceleration and deceleration forces are reduced. Additionally, the cage is treated with a special surface treatment to improve the rigidity and elasticity for increased impact resistance.

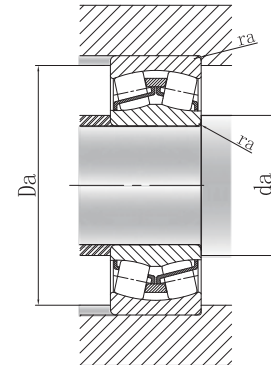
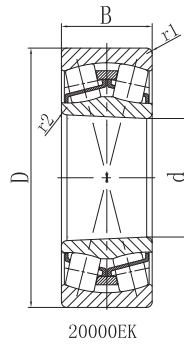
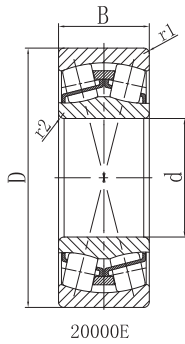


Product Catalog



Part number		Basic dimension					Load rating		Limiting	Installation dimension			Calculation factor			
Cylindrical bore	Tapered bore	d	D	B	r1,2min	Cr	Cor	rpm	Mass	damin	Damax	ramax	e	Y1	Y2	Y0
22205E	22205EK	25	52	18	1	49.9	44	17000	0.26	30.6	46.4	1	0.35	1.9	2.9	1.8
22206E	22206EK	30	62	20	1	66.1	60	14000	0.29	35.6	56.4	1	0.31	2.2	3.3	2.2
22207E	22207EK	35	72	23	1.1	88.8	85	12000	0.45	42	65	1	0.31	2.2	3.3	2.2
22208E	22208EK	40	80	23	1.1	98.5	90	11000	0.53	47	73	1	0.28	2.4	3.6	2.5
21308E	21308EK	40	90	23	1.5	107	108	9500	0.75	49	81	1.5	0.24	2.8	4.2	2.8
22308E	22308EK	40	90	33	1.5	155	140	8000	1.05	49	81	1.5	0.37	1.8	2.7	1.8
22209E	22209EK	45	85	23	1.1	104	98	10000	0.58	52	78	1	0.26	2.6	3.9	2.5
21309E	21309EK	45	100	25	1.5	129	127	8500	0.99	54	91	1.5	0.24	2.8	4.2	2.8
22309E	22309EK	45	100	36	1.5	190	183	7000	1.4	54	91	1.5	0.37	1.8	2.7	1.8
22210E	22210EK	50	90	23	1.1	107	108	9500	0.63	57	83	1	0.24	2.8	4.2	2.8
21310E	21310EK	50	110	27	2	159	166	7500	1.35	61	99	2	0.24	2.8	4.2	2.8
22310E	22310EK	50	110	40	2	228	224	6300	1.9	61	99	2	0.37	1.8	2.7	1.8
22211E	22211EK	55	100	25	1.5	129	127	8500	0.84	64	91	1.5	0.24	2.8	4.2	2.8
21311E	21311EK	55	120	29	2	159	166	7500	1.7	66	109	2	0.24	2.8	4.2	2.8
22311E	22311EK	55	120	43	2	280	280	5600	2.45	66	109	2	0.35	1.9	2.9	1.8
22212E	22212EK	60	110	28	1.5	159	166	7500	1.15	69	101	1.5	0.24	2.8	4.2	2.8

Product Catalog



Part number		Basic dimension					Load rating		Limiting		Installation dimension			Calculation factor		
Cylindrical	Tapered	mm					KN	rpm	Mass	mm			e	Y1	Y2	Y0
bore	bore	d	D	B	r1,2min	Cr	Cor			damin	Damax	ramax				
21312E	21312EK	60	130	31	2.1	217	240	6300	2.1	72	118	2	0.22	3	4.6	2.8
22312E	22312EK	60	130	46	2.1	325	335	5300	3.1	72	118	2	0.35	1.9	2.9	1.8
22213E	22213EK	65	120	31	1.5	198	216	7000	1.55	74	111	1.5	0.24	2.8	4.2	2.8
21313E	21313EK	65	140	33	2.1	243	270	6000	2.55	77	128	2	0.22	3	4.6	2.8
22313E	22313EK	65	140	48	2.1	357	360	5000	3.75	77	128	2	0.35	1.9	2.9	1.8
22214E	22214EK	70	125	31	1.5	213	228	6700	1.55	79	116	1.5	0.23	2.9	4.4	2.8
21314E	21314EK	70	150	35	2.1	291	325	5600	3.1	82	138	2	0.22	3	4.6	2.8
22314E	22314EK	70	150	51	2.1	413	430	4500	4.55	82	138	2	0.33	2	3	2
22215E	22215EK	75	130	31	1.5	217	240	6300	1.7	84	121	1.5	0.22	3	4.6	2.8
21315E	21315EK	75	160	37	2.1	291	325	5600	3.75	87	148	2	0.22	3	4.6	2.8
22315E	22315EK	75	160	55	2.1	462	475	4300	5.55	87	148	2	0.35	1.9	2.9	1.8
22216E	22216EK	80	140	33	2	243	270	6000	2.1	91	129	2	0.22	3	4.6	2.8
21316E	21316EK	80	170	39	2.1	331	375	5300	4.45	92	158	2	0.24	2.8	4.2	2.8
22316E	22316EK	80	170	58	2.1	516	530	4000	6.6	92	158	2	0.35	1.9	2.9	1.8
22217E	22217EK	85	150	36	2	291	325	5600	2.7	96	139	2	0.22	3	4.6	2.8
21317E	21317EK	85	180	41	3	331	375	5600	5.2	99	166	2.5	0.24	2.8	4.2	2.8
22317E	22317EK	85	180	60	3	577	620	3800	7.65	99	166	2.5	0.33	2	3	2
22218E	22218EK	90	160	40	2	331	375	5300	3.4	101	149	2	0.24	2.8	4.2	2.8
21318E	21318EK	90	190	43	3	393	450	4800	6.1	104	176	2.5	0.24	2.8	4.2	2.8
22318E	22318EK	90	190	64	3	637	695	3600	9.05	104	176	2.5	0.33	2	3	2
22219E	22219EK	95	170	43	2.1	393	450	4800	4.15	107	158	2	0.24	2.8	4.2	2.8
21319E	21319EK	95	200	45	3	433	490	4500	7.05	109	186	2.5	0.24	2.8	4.2	2.8
22319E	22319EK	95	200	67	3	699	765	3400	10.5	109	186	2.5	0.33	2	3	2
22220E	22220EK	100	180	46	2.1	433	490	4500	4.9	112	168	2	0.24	2.8	4.2	2.8
21320E	21320EK	100	215	47	3	433	490	4500	8.6	114	201	2.5	0.24	2.8	4.2	2.8
22320E	22320EK	100	215	73	3	847	950	3000	13.5	114	201	2.5	0.33	2	3	2
22222E	22222EK	110	200	53	2.1	572	640	4000	7	122	188	2	0.25	2.7	4	2.5
22322E	22322EK	110	240	80	3	989	1120	2800	18.5	124	226	2.5	0.33	2	3	2
22224E	22224EK	120	215	58	2.1	652	765	3800	8.7	132	203	2	0.26	2.6	3.9	2.5
22226E	22226EK	130	230	64	3	758	930	3600	11	144	216	2.5	0.27	2.5	3.7	2.5

