



SPHERICAL ROLLER BEARINGS

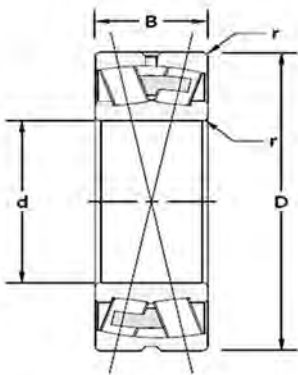


Spherical Roller bearings utilize 2 rows of rollers operating in a common sphered outer ring raceway. This design provides a self-aligning solution that is the combination of a radial & thrust bearing that operates even if the shaft and housing are, or become, misaligned under load.

This high capacity bearing performs consistently in adverse conditions such as shock loads, shaft deflections, marginal lubrication, extreme speeds, contamination, and critical application stresses.

ABT Spherical Roller Bearings are constructed with a bronze, one piece CAM cage. As compared to the older style MB cage, this design allows for a longer roller and higher overall load carrying capacity, providing better performance & greater life.

Certain special applications with higher degrees of axial load may perform better with the MB cage. MB and CC style (Steel) cages are available upon request & lead time. Minimums may apply.



ABT Spherical Roller Bearings are produced with a cylindrical bore, as well as a tapered bore in most sizes. Tapered bore bearings will carry the "K" suffix (CAKM), and can be mounted on a smooth or stepped shaft using an adapter or a withdrawal sleeve. This arrangement facilitates easy mounting & dismounting.

To facilitate efficient lubrication, the bearings are equipped with an annular groove and lubrication holes in the outer ring. This is represented by the W33 suffix.

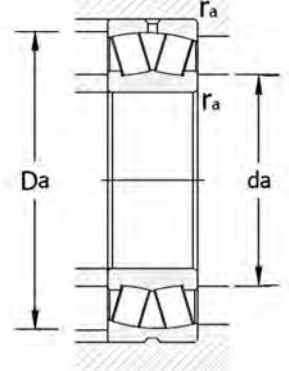
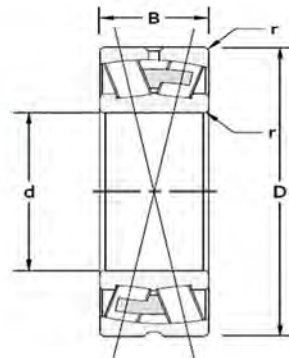
Due to superior design capabilities, Spherical Roller Bearings are used in a wide variety of applications including:

- wind power
- mining
- pulp & paper
- power generation
- shipping & cargo operations
- oil field
- aggregate
- gear drives
- rolling mills



Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"

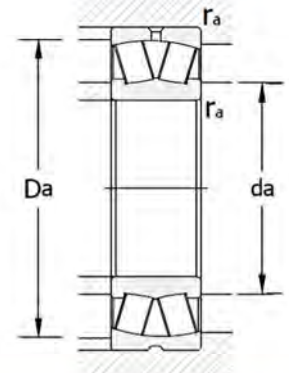
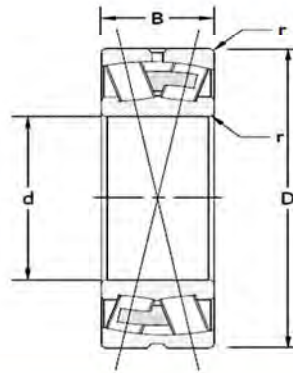


21300 - NARROW SERIES

Bearing No.	Boundary dimensions (mm)			rsmin (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
21304 CAM/C3W33	20	52	15	0.04	7126	7216	6000	7500	27	45	1.0	0.385
21305 CAM/C3W33	25	62	17	0.04	9599	10229	5300	6700	32	55	1.0	0.609
21306 CAM/C3W33	30	72	19	0.04	12926	14365	4500	6000	37	65	1.0	0.906
21307 CAM/C3W33	35	80	21	0.06	14702	16951	4000	5300	44	71	1.5	1.192
21308 CAM/C3W33	40	90	23	0.06	19963	22256	3600	4500	49	81	1.5	1.650
21309 CAM/C3W33	45	100	25	0.06	23762	26618	3200	4000	54	91	1.5	2.244
21310 CAM/C3W33	50	110	27	0.08	27786	32418	2800	3800	60	100	2.0	2.860
21311 CAM/C3W33	55	120	29	0.08	32889	39364	2600	3400	65	110	2.0	3.630
21312 CAM/C3W33	60	130	31	0.08	37520	45164	2400	3200	72	118	2.1	4.576
21313 CAM/C3W33	65	140	33	0.08	42151	52785	2200	3000	77	128	2.1	5.654
21314 CAM/C3W33	70	150	35	0.08	49098	62048	2000	2800	82	138	2.1	6.842
21315 CAM/C3W33	75	160	37	0.08	55100	69938	1900	2600	87	148	2.1	8.272
21316 CAM/C3W33	80	170	39	0.08	60204	80617	1800	2400	92	158	2.1	9.834
21317 CAM/C3W33	85	180	41	0.12	68994	89160	1700	2200	99	166	2.5	11.506
21318 CAM/C3W33	90	190	43	0.12	74097	97253	1600	2200	104	176	2.5	13.574
21319 CAM/C3W33	95	200	45	0.12	82213	112315	1700	2200	109	186	2.5	15.730
21320 CAM/C3W33	100	215	47	0.12	89159	122724	1600	2000	114	201	2.5	19.382
21321 CAM/C3W33	105	225	49	0.08	94420	129266	1500	1900	119	211	2.5	22.000
21322 CAM/C3W33	110	240	50	0.12	103412	142754	1400	1800	124	226	2.5	25.960

Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"

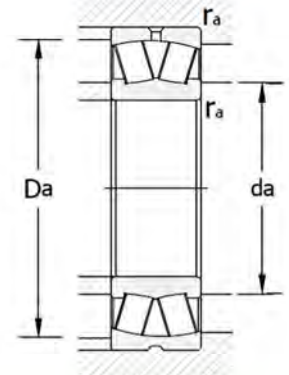
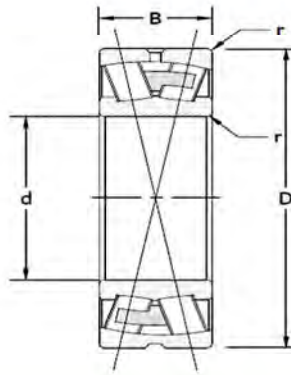


22200 - LIGHT SERIES

Bearing No.	Boundary dimensions (mm)			rsmin (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
22205 CAM/C3W33	25	52	18	0.04	8992	9442	8000	10000	30	46	1.0	0.389
22206 CAM/C3W33	30	62	20	0.04	12004	13151	6300	8000	36	56	1.0	0.660
22207 CAM/C3W33	35	72	23	0.04	15399	17715	5300	6700	42	65	1.0	0.990
22208 CAM/C3W33	40	80	23	0.04	18187	21020	5000	6000	47	73	1.0	1.188
22209 CAM/C3W33	45	85	23	0.04	18996	22571	4500	5600	52	78	1.0	1.276
22210 CAM/C3W33	50	90	23	0.04	19558	24302	4000	5000	57	83	1.0	1.364
22211 CAM/C3W33	55	100	25	0.06	23627	28956	3600	4500	64	91	1.5	1.848
22212 CAM/C3W33	60	110	28	0.06	28258	35902	3200	4000	69	101	1.5	2.640
22213 CAM/C3W33	65	120	31	0.06	34733	45142	2800	3600	74	111	1.5	3.520
22214 CAM/C3W33	70	125	31	0.06	36576	47480	2600	3400	79	116	1.5	3.740
22215 CAM/C3W33	75	130	31	0.06	37520	49795	2400	3200	84	121	1.5	3.960
22216 CAM/C3W33	80	140	33	0.08	40533	55101	2200	3000	90	130	2.0	4.840
22217 CAM/C3W33	85	150	36	0.08	48626	64363	2000	2800	95	140	2.0	5.940
22218 CAM/C3W33	90	160	40	0.08	55573	74569	1900	2600	100	150	2.0	7.216
22219 CAM/C3W33	95	170	43	0.08	64363	87991	1900	2600	107	158	2.1	9.020
22220 CAM/C3W33	100	180	46	0.08	71781	98422	1800	2400	112	168	2.1	11.000
22222 CAM/C3W33	110	200	53	0.08	93745	133088	1700	2200	122	188	2.1	15.840
22224 CAM/C3W33	120	215	58	0.08	108808	156917	1600	2000	132	203	2.1	19.800
22226 CAM/C3W33	130	230	64	0.12	127467	187492	1400	1800	144	216	2.5	24.640
22228 CAM/C3W33	140	250	68	0.12	145452	215368	1300	1700	154	236	2.5	31.900
22230 CAM/C3W33	150	270	73	0.12	170855	254035	1200	1600	164	256	2.5	40.920
22232 CAM/C3W33	160	290	80	0.12	191088	287757	1000	1400	174	276	2.5	50.820
22234 CAM/C3W33	170	310	86	0.16	219189	337215	950	1200	188	292	3.0	63.800
22236 CAM/C3W33	180	320	86	0.16	227058	357448	900	1100	198	302	3.0	66.000

Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"

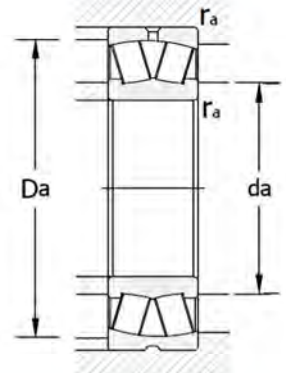
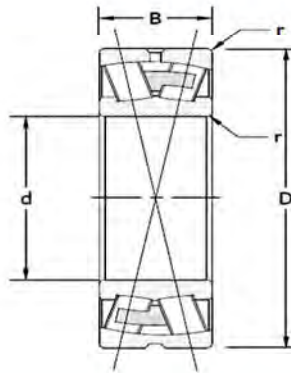


22300 - MEDIUM SERIES

Bearing No.	Boundary dimensions (mm)			r _{sm} (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
22308 CAM/C3W33	40	90	33	0.06	27786	31946	4300	5300	49	81	1.5	2.200
22309 CAM/C3W33	45	100	36	0.06	32889	39364	3800	4800	54	91	1.5	3.036
22310 CAM/C3W33	50	110	40	0.08	40533	48626	3400	4300	60	100	2.0	4.070
22311 CAM/C3W33	55	120	43	0.08	48154	57889	3000	3800	65	110	2.0	5.170
22312 CAM/C3W33	60	130	46	0.08	55100	66004	2800	3600	72	118	2.1	6.490
22313 CAM/C3W33	65	140	48	0.08	60204	72928	2400	3200	77	128	2.1	7.810
22314 CAM/C3W33	70	150	51	0.08	67622	83832	2200	3000	82	138	2.1	9.680
22315 CAM/C3W33	75	160	55	0.08	79200	101412	2000	2800	87	148	2.1	11.550
22316 CAM/C3W33	80	170	58	0.08	89159	115305	1900	2600	92	158	2.1	14.058
22317 CAM/C3W33	85	180	60	0.12	97252	125039	1800	2400	99	166	2.5	15.950
22318 CAM/C3W33	90	190	64	0.12	109999	144036	1800	2400	104	176	2.5	18.920
22319 CAM/C3W33	95	200	67	0.12	120408	159300	1700	2200	109	186	2.5	22.220
22320 CAM/C3W33	100	215	73	0.12	140776	188728	1400	1800	114	201	2.5	29.480
22322 CAM/C3W33	110	240	80	0.12	160963	216492	1500	1900	124	226	2.5	39.600
22324 CAM/C3W33	120	260	86	0.12	190414	259431	1300	1700	134	246	2.5	48.400
22326 CAM/C3W33	130	280	93	0.16	218065	301245	1200	1600	148	262	3.0	62.700
22328 CAM/C3W33	140	300	102	0.16	256283	364192	1100	1500	158	282	3.0	75.900
22330 CAM/C3W33	150	320	108	0.16	285508	415899	1100	1400	168	302	3.0	93.500

Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"

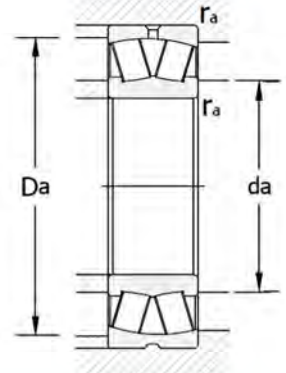
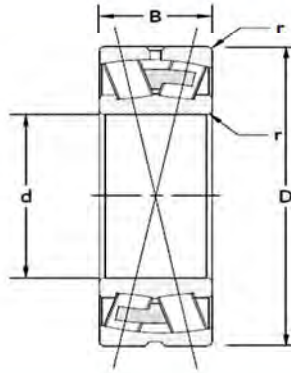


23000/23100 - LIGHT SERIES

Bearing No.	Boundary dimensions (mm)			rsmmin (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
23022 CAM/C3W33	110	170	45	0.08	62497	103637	1500	1900	120	160	2.0	8.580
23024 CAM/C3W33	120	180	46	0.08	68342	114653	1400	1800	130	170	2.0	9.460
23026 CAM/C3W33	130	200	52	0.08	86102	144778	1200	1600	140	190	2.0	13.640
23028 CAM/C3W33	140	210	53	0.08	93071	161638	1100	1500	150	200	2.0	14.740
23030 CAM/C3W33	150	225	56	0.08	101389	177600	1100	1400	162	213	2.1	17.908
23032 CAM/C3W33	160	240	60	0.08	115777	202329	1000	1300	172	228	2.1	22.000
23034 CAM/C3W33	170	260	67	0.08	140731	249989	900	1200	182	248	2.1	28.600
23036 CAM/C3W33	180	280	74	0.08	164111	290005	800	1000	192	268	2.1	38.720
23038 CAM/C3W33	190	290	75	0.08	172429	312486	800	1000	202	278	2.1	44.000
23040 CAM/C3W33	200	310	82	0.08	200080	370937	900	1100	212	298	2.1	52.800
23120 CAM/C3W33	100	165	52	0.08	74097	116946	1600	2000	110	155	2.0	11.000
23122 CAM/C3W33	110	180	56	0.08	86776	137809	1300	1700	120	170	2.0	13.750
23124 CAM/C3W33	120	200	62	0.08	104087	165460	1300	1700	130	190	2.0	16.786
23126 CAM/C3W33	130	210	64	0.08	110606	182546	1300	1700	140	200	2.0	18.678
23128 CAM/C3W33	140	225	68	0.08	126118	214244	1100	1500	152	213	2.1	23.980
23130 CAM/C3W33	150	250	80	0.08	167933	284834	1000	1300	162	238	2.1	35.420
23132 CAM/C3W33	160	270	86	0.08	195584	328223	900	1200	172	258	2.1	43.340
23134 CAM/C3W33	170	280	88	0.08	204801	351828	850	1100	182	268	2.1	46.420
23136 CAM/C3W33	180	300	96	0.12	238298	415899	800	1000	194	286	2.5	59.620
23138 CAM/C3W33	190	320	104	0.12	269772	476597	750	1000	204	306	2.5	77.660

Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"

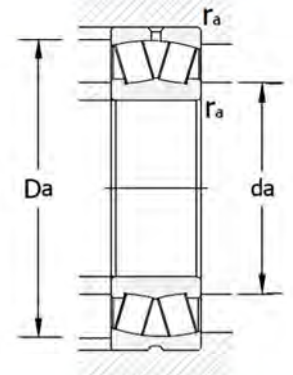
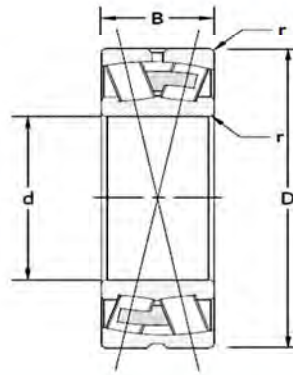


23200 - HEAVY SERIES

Bearing No.	Boundary dimensions (mm)			r _{min} (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
23218 CAM/C3W33	90	160	52.4	0.08	75243	110607	1700	2200	100	150	2.0	10.120
23220 CAM/C3W33	100	180	60.3	0.08	96106	143092	1600	2000	112	168	2.1	14.740
23222 CAM/C3W33	110	200	69.8	0.08	119149	181871	1400	1800	122	188	2.1	21.340
23224 CAM/C3W33	120	215	76	0.08	139382	217616	1300	1700	132	203	2.1	26.400
23226 CAM/C3W33	130	230	80	0.12	159165	245493	1200	1600	144	216	2.5	30.800
23228 CAM/C3W33	140	250	88	0.12	185693	296749	1000	1400	154	236	2.5	40.700
23230 CAM/C3W33	150	270	96	0.12	216492	350704	950	1300	164	256	2.5	52.800
23232 CAM/C3W33	160	290	104	0.12	249988	406906	900	1200	174	276	2.5	66.000
23234 CAM/C3W33	170	310	110	0.16	269772	456364	800	1100	188	292	3.0	78.540
23236 CAM/C3W33	180	320	112	0.16	287756	487838	1000	1200	198	302	3.0	83.380
23238 CAM/C3W33	190	340	120	0.16	325974	559777	700	1000	208	322	3.0	101.420

Features:

- 1 Piece CAM Bronze Cage
- W33 Oil Hole & Groove in OD
- Available with a tapered bore for adapter style mounting - Suffix "K"



24000/24100 - WIDE SERIES

Bearing No.	Boundary dimensions (mm)			r _{sm} (in)	Load Ratings(Lbs)		Limiting speeds(r/min)		Mounting			Weight (lbs)
	d	D	B		Dynamic (Cr)	Static (Cor)	Grease	Oil	da min	Da max	ra max	
24024 CAM/C3W33	120	180	60	0.08	85427	151747	1500	2000	130	170	2.0	11.110
24026 CAM/C3W33	130	200	69	0.08	106110	191538	1400	1800	140	190	2.0	16.610
24028 CAM/C3W33	140	210	69	0.08	109707	201205	1200	1600	150	200	2.0	17.622
24030 CAM/C3W33	150	225	75	0.08	128141	240547	1100	1400	162	213	2.1	23.320
24032 CAM/C3W33	160	240	80	0.08	146576	276516	1000	1300	172	228	2.1	26.840
24034 CAM/C3W33	170	260	90	0.08	178049	341711	900	1200	182	248	2.1	36.740
24036 CAM/C3W33	180	280	100	0.08	208623	409154	800	1000	192	268	2.1	48.620
24038 CAM/C3W33	190	290	100	0.08	219189	429387	800	1100	202	278	2.1	50.600
24040 CAM/C3W33	200	310	109	0.08	251787	499078	670	850	212	298	2.1	64.460
24122 CAM/C3W33	110	180	69	0.08	106110	179398	1600	2000	120	170	2.0	14.586
24124 CAM/C3W33	120	200	80	0.08	129265	224360	1400	1800	130	190	2.0	21.230
24126 CAM/C3W33	130	210	80	0.08	131513	231554	1200	1600	140	200	2.0	22.660
24128 CAM/C3W33	140	225	85	0.08	150622	269772	1100	1500	152	213	2.1	27.500
24130 CAM/C3W33	150	250	100	0.08	200080	359696	1000	1300	162	238	2.1	41.800
24132 CAM/C3W33	160	270	109	0.08	233802	422643	900	1200	172	258	2.1	54.120
24134 CAM/C3W33	170	280	109	0.08	240546	433883	900	1200	182	268	2.1	56.100
24136 CAM/C3W33	180	300	118	0.12	272020	499078	800	1000	194	286	2.5	70.400
24138 CAM/C3W33	190	320	128	0.12	316982	582258	700	1000	204	306	2.5	88.440

ABT Bearing manufactures a broad range of high quality ball and roller bearings. All ABT bearings are produced in strict accordance with ISO9001, QS9000, or TS16949 quality systems and meet or exceed AFBMA and ISO standards. In addition to standard and widely used product configurations, ABT provides engineered solutions for customers who require special bearings or customized assemblies. ABT is committed to providing OEMs with exceptional, competitively priced products while delivering the highest level of customer service.

Manufactured Products

- Deep Groove
- Miniature
- Spherical Roller
- Mounted Units
- Ag Products
- Inserts



Distributed Products

In addition to our manufactured products, ABT is able to supply OEM's bearings from the following manufacturers:

EZO: Miniature Ball Bearings

IBC: Precision Ball Bearings

MTK: Ball Bearings
Cylindrical Roller Bearings
Spherical Roller Bearings

Silverthin Bearings: Thin Section Bearings
Slewing Ring Turntable Bearings



SILVERTHIN™

