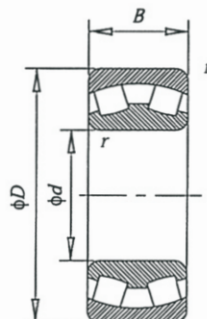


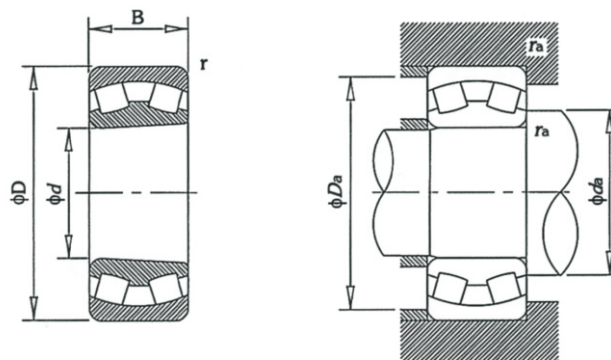
## Spherical roller bearings

*d* 25 ~ 80 mm



Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Bearing No.		Mounting dimensions (mm)			Mass (kg)
d	D	B	r min.	Cr	Cor	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	da min.	Da max.	ra max.	
25	52	18	1	35.7	35.7	8500	11000	<b>22205C</b>	<b>22205CK</b>	31	46	1	0.18
	52	18	1	43.1	44	8500	11000	<b>22205CA</b>	<b>22205CAK</b>	31	46	1	0.18
	62	17	1.1	41.4	41.5	6700	8500	<b>21305C</b>	<b>21305CK</b>	32	55	1	0.25
30	62	20	1	48.9	52	7500	9500	<b>22206C</b>	<b>22206CK</b>	36	56	1	0.28
	62	20	1	48.9	52	7500	9500	<b>22206CA</b>	<b>22206CAK</b>	36	56	1	0.32
	72	19	1.1	55.2	61	6000	7500	<b>21306C</b>	<b>21306CK</b>	37	65	1	0.38
35	72	23	1.1	67.3	73.5	6300	8000	<b>22207C</b>	<b>22207CK</b>	42	65	1	0.43
	72	23	1.1	67.3	73.5	6300	8000	<b>22207CA</b>	<b>22207CAK</b>	42	65	1	0.46
	80	21	1.5	65.6	72	5300	6700	<b>21307C</b>	<b>21307CK</b>	44	71	1.5	0.51
40	80	23	1.1	73.6	81.5	6000	7500	<b>22208C</b>	<b>22208CK</b>	47	73	1	0.52
	80	23	1.1	73.6	81.5	6000	7500	<b>22208CA</b>	<b>22208CAK</b>	47	73	1	0.54
	90	23	1.5	82.8	98	4500	5600	<b>21308C</b>	<b>21308CK</b>	49	81	1.5	0.71
	90	33	1.5	115	112	4500	5600	<b>21308C</b>	<b>21308CK</b>	49	81	1.5	1
	90	33	1.5	115	112	4500	5600	<b>22308CA</b>	<b>22308CAK</b>	49	81	1.5	1.01
45	85	23	1.1	77.1	88	5300	6700	<b>22209C</b>	<b>22209CK</b>	52	78	1	0.56
	85	23	1.1	77.1	88	5300	6700	<b>22209CA</b>	<b>22209CAK</b>	52	78	1	0.629
	100	25	1.5	101	114	4300	5300	<b>21309C</b>	<b>21309CK</b>	54	91	1.5	0.95
	100	36	1.5	138	160	3800	4800	<b>22309C</b>	<b>22309CK</b>	54	91	1.5	1.35
	100	36	1.5	138	160	3800	4800	<b>22309CA</b>	<b>22309CAK</b>	54	91	1.5	1.52
50	90	23	1.1	84.5	100	5000	6300	<b>22210C</b>	<b>22210CK</b>	57	83	1	0.6
	90	23	1.1	84.5	100	5000	6300	<b>22210CA</b>	<b>22210CAK</b>	57	83	1	0.63
	110	27	2	120	140	3600	4800	<b>21310C</b>	<b>21310CK</b>	60	100	2	1.2
	110	40	2	176	200	3400	4300	<b>22310C</b>	<b>22310CK</b>	60	100	2	1.85
	110	40	2	176	200	3400	4300	<b>22310CA</b>	<b>22310CAK</b>	60	100	2	2.17
55	100	25	1.5	99.5	118	4500	5600	<b>22211C</b>	<b>22211CK</b>	64	91	1.5	0.82
	100	25	1.5	99.5	118	4500	5600	<b>22211CA</b>	<b>22211CAK</b>	64	91	1.5	0.887
	120	29	2	138	163	3400	4300	<b>21311C</b>	<b>21311CK</b>	65	110	2	1.6
	120	43	2	199	232	3200	4000	<b>22311C</b>	<b>22311CK</b>	65	110	2	2.35

## Spherical roller bearings

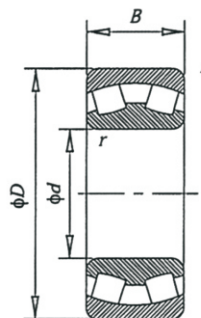


Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Bearing No.		Mounting dimensions (mm)			Mass (kg)
d	D	B	r min.	Cr	Cor	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	da min.	Da max.	ra max.	
55	120	43	2	199	232	3200	4000	22311CA	22311CAK	65	110	2	2.6
60	110	28	1.5	122	146	4000	5000	22212C	22212CK	69	101	1.5	1.1
	110	28	1.5	122	146	4000	5000	22212CA	22212CAK	69	101	1.5	1.01
	130	31	2.1	161	200	3000	3800	21312C	21312CK	72	118	2	1.95
	130	46	2.1	235	280	3000	3800	22312C	22312CK	72	118	2	2.95
	130	46	2.1	235	280	3000	3800	22312CA	22312CAK	72	118	2	3.33
65	120	31	1.5	148	183	3800	4800	22213C	22213CK	74	111	1.5	1.45
	120	31	1.5	148	183	2800	4800	22213CA	22213CAK	74	111	1.5	1.56
	140	33	2.1	184	240	2800	3600	21313C	21313CK	77	128	2	2.45
	140	48	2.1	253	300	2600	3400	22313C	22313CK	77	128	2	3.55
	140	48	2.1	253	300	2600	3400	22313CA	22313CAK	77	128	2	4.92
70	125	31	1.5	148	186	3600	4500	22214C	22214CK	79	116	1.5	1.55
	125	31	1.5	148	186	3600	4500	22214CA	22214CAK	79	116	1.5	1.83
	150	35	2.1	207	260	2600	3400	21314C	21314CK	82	138	2	3
	150	51	2.1	311	380	2400	3200	22314C/W33	22314CK/W33	82	138	2	4.3
	150	51	2.1	311	380	2400	3200	22314CA/W33	22314CAK/W33	82	138	2	5.23
75	130	31	1.5	158	208	3400	4300	22215C	22215CK	84	121	1.5	1.65
	130	31	1.5	158	208	3400	4300	22215CA	22215CAK	84	121	1.5	1.71
	160	37	2.1	235	300	2400	3200	21315C	21315CK	87	148	2	3.55
	160	37	2.1	235	300	2400	3200	21315CA	21315CAK	87	148	2	—
	160	55	2.1	345	430	2200	3000	22315C/W33	22315CK/W33	87	148	2	5.25
	160	55	2.1	345	430	2200	3000	22315CA/W33	22315CAK/W33	87	148	2	5.44
80	140	33	2	176	228	3200	4000	22216C	22216CK	90	130	2	2.05
	140	33	2	176	228	3200	4000	22216CA	22216CAK	90	130	2	2.03
	170	39	2.1	258	335	2200	3000	21316C	21316CK	92	158	2	4.2
	170	39	2.1	258	335	2200	3000	21316CA	21316CAK	92	158	2	4.48
	170	58	2.1	374	455	2000	2800	22316C/W33	22316CK/W33	92	158	2	6.2
	170	58	2.1	374	455	2000	2800	22316CA/W33	22316CAK/W33	92	158	2	7.47



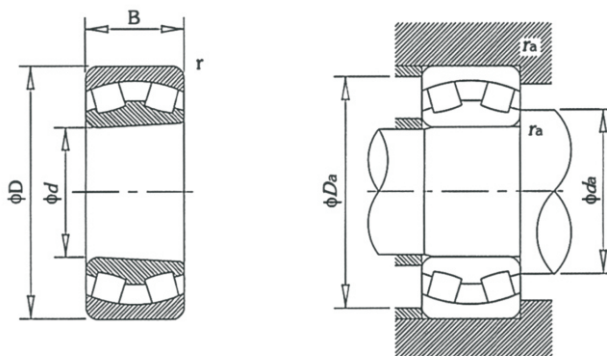
## Spherical roller bearings

$d$  85 ~ (120) mm



Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Bearing No.		Mounting dimensions (mm)			Mass (kg)
d	D	B	r min.	Cr	Cor	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	da min.	Da max.	ra max.	
85	150	36	2	210	270	3000	3800	<b>22217C/W33</b>	<b>22217CK/W33</b>	95	140	2	2.55
	150	36	2	210	270	3000	3800	<b>22217CA/W33</b>	<b>22217CAK/W33</b>	95	140	2	2.69
	180	41	3	293	375	2000	2800	<b>21317C</b>	<b>21317CK</b>	99	166	2.5	5
	180	41	3	293	375	2000	2800	<b>21317CA</b>	<b>21317CAK</b>	99	166	2.5	5.3
	180	60	3	420	520	1900	2600	<b>21317C/W33</b>	<b>21317CK/W33</b>	99	166	2.5	7.25
	180	60	3	420	520	1900	2600	<b>22317CA/W33</b>	<b>22317CAK/W33</b>	99	166	2.5	8.19
90	160	40	2	253	340	2600	3400	<b>22218C/W33</b>	<b>22218CK/W33</b>	100	150	2	3.4
	160	40	2	253	340	2600	3400	<b>22218CA/W33</b>	<b>22218CAK/W33</b>	100	150	2	3.4
	160	40	2	311	440	1900	2600	<b>23218C/W33</b>	<b>23218CK/W33</b>	100	150	2	4.6
	160	40	2	311	440	1900	2600	<b>23218CA/W33</b>	<b>23218CAK/W33</b>	100	150	2	4.82
	190	43	3	322	425	1900	2600	<b>21318C</b>	<b>21318CK</b>	104	176	2.5	5.8
	190	43	3	322	425	1900	2600	<b>21318CA</b>	<b>21318CAK</b>	104	176	2.5	6.15
	190	64	3	477	610	1800	2400	<b>22318C/W33</b>	<b>22318CK/W33</b>	104	176	2.5	8.6
	190	64	3	477	610	1800	2400	<b>22318CA/W33</b>	<b>22318CAK/W33</b>	104	176	2.5	11.5
95	170	43	2.1	282	375	2400	3200	<b>22219C/W33</b>	<b>22219CK/W33</b>	107	158	2	4
	170	43	2.1	282	375	2400	3200	<b>22219CA/W33</b>	<b>22219CAK/W33</b>	107	158	2	4.68
	200	45	3	351	480	1800	2400	<b>21319C</b>	<b>21319CK</b>	109	186	2.5	7.15
	200	45	3	351	480	1800	2400	<b>21319CA</b>	<b>21319CAK</b>	109	186	2.5	7.49
	200	67	3	518	670	1800	2400	<b>22319C/W33</b>	<b>22319CK/W33</b>	109	186	2.5	10
	200	67	3	518	670	1800	2400	<b>22319CA/W33</b>	<b>22319CAK/W33</b>	109	186	2.5	10.5
100	150	37	1.5	215	400	2400	3200	<b>23020C/W33</b>	<b>23020CK/W33</b>	110	140	2	2.51
	150	37	1.5	215	400	2400	3200	<b>23020CA/W33</b>	<b>23020CAK/W33</b>	110	140	2	2.51
	165	52	2	322	490	2000	2800	<b>23120C/W33</b>	<b>23120CK/W33</b>	110	155	2	4.4
	165	52	2	322	490	2000	2800	<b>23120CA/W33</b>	<b>23120CAK/W33</b>	110	155	2	4.42
	180	46	2.1	311	415	2200	3000	<b>22220C/W33</b>	<b>22220CK/W33</b>	112	168	2	4.85
	180	46	2.1	311	415	2200	3000	<b>22220CA/W33</b>	<b>22220CAK/W33</b>	112	168	2	5.18
	180	60.3	2.1	414	600	1700	2200	<b>23220C/W33</b>	<b>23220CK/W33</b>	112	168	2	6.7
	180	60.3	2.1	414	600	1700	2200	<b>23220CA/W33</b>	<b>23220CAK/W33</b>	112	168	2	6.58

## Spherical roller bearings

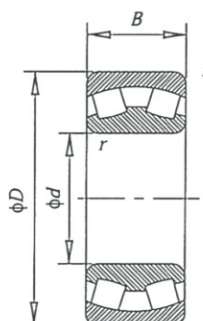


Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Bearing No.		Mounting dimensions (mm)			Mass (kg)
d	D	B	r min.	Cr	Cor	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	da min.	Da max.	ra max.	
100	215	47	3	385	530	1700	2200	<b>21320C</b>	<b>21320CK</b>	114	201	2.5	8.8
	215	47	3	385	530	1700	2200	<b>21320CA</b>	<b>21320CAK</b>	114	201	2.5	9
	215	73	3	610	800	1700	2200	<b>22320C/W33</b>	<b>22320CK/W33</b>	114	201	2.5	13
	215	73	3	610	800	1700	2200	<b>22320CA/W33</b>	<b>22320CAK/W33</b>	144	201	2.5	13.8
105	175	56	2	365	550	1900	2700	<b>23121CA</b>	<b>23121CAK</b>	115	165	2	5.48
110	170	45	2	267	440	2200	3000	<b>23022C</b>	<b>23022CK</b>	120	160	2	3.75
	170	45	2	267	440	2200	3000	<b>23022CA</b>	<b>23022CAK</b>	120	160	2	3.54
	180	56	2	374	585	1900	2600	<b>23122C/W33</b>	<b>23122CK/W33</b>	120	170	2	5.55
	180	56	2	374	585	1900	2600	<b>23122CA/W33</b>	<b>23122CAK/W33</b>	120	170	2	5.73
	180	69	2	460	750	1000	1400	<b>24122C/W33</b>	<b>24122CK30/W33</b>	120	170	2	6.85
	180	69	2	460	750	1000	1400	<b>24122CA/W33</b>	<b>24122CAK30/W33</b>	120	170	2	6.92
	200	53	2.1	408	560	2000	2800	<b>22222C/W33</b>	<b>22222CK/W33</b>	122	188	2	7
	200	53	2.1	408	560	2000	2800	<b>22222CA/W33</b>	<b>22222CAK/W33</b>	122	188	2	7.43
	200	69.8	2.1	518	765	1600	2000	<b>23222C/W33</b>	<b>23222CK/W33</b>	122	188	2	9.7
	200	69.8	2.1	518	765	1600	2000	<b>23222CA/W33</b>	<b>23222CAK/W33</b>	122	188	2	10.1
	240	50	3	460	630	1600	2000	<b>21322C</b>	<b>21322CK</b>	124	226	2.5	12
	240	50	3	460	630	1600	2000	<b>21322CA</b>	<b>21322CAK</b>	124	226	2.5	13
	240	80	3	725	965	1600	2000	<b>22322C/W33</b>	<b>22322CK/W33</b>	124	226	2.5	18
240	80	3	725	965	1600	2000	<b>22322CA/W33</b>	<b>22322CAK/W33</b>	124	226	2.5	18.9	
120	180	46	2	305	510	2000	2800	<b>23024C/W33</b>	<b>23024CK/W33</b>	130	170	2	4.2
	180	46	2	305	510	2000	2800	<b>23024CA/W33</b>	<b>23024CAK/W33</b>	130	170	2	4.44
	180	60	2	374	670	1600	2000	<b>24024C/W33</b>	<b>24024CK30/W33</b>	130	170	2	5.4
	180	60	2	374	670	1600	2000	<b>24024CA/W33</b>	<b>24024CAK30/W33</b>	130	170	2	5.83
	200	62	2	449	695	1800	2400	<b>23124C/W33</b>	<b>23124CK/W33</b>	130	190	2	7.8
	200	80	2	575	950	900	1200	<b>24124C/W33</b>	<b>24124CK30/W33</b>	130	190	2	10
	200	80	2	575	950	900	1200	<b>24124CA/W33</b>	<b>24124CAK30/W33</b>	130	190	2	10.6
	215	58	2.1	466	670	1900	2600	<b>22224C/W33</b>	<b>22224CK/W33</b>	132	203	2	8.7
	215	58	2.1	466	670	1900	2600	<b>22224CA/W33</b>	<b>22224CAK/W33</b>	132	203	2	9.87



## Spherical roller bearings

$d$  (120) ~ (160) mm



Boundary dimensions (mm)				Basic load ratings (kN)		Limiting speeds (r/min)		Bearing No.		Mounting dimensions (mm)			Mass (kg)
d	D	B	r min.	Cr	Cor	Grease lub.	Oil lub.	Cylindrical bore	Tapered bore	da min.	Da max.	ra max.	
120	215	76	2.1	610	930	1500	1900	<b>23224C/W33</b>	<b>23224CK/W33</b>	132	203	2	12
	215	76	2.1	610	930	1500	1900	<b>23224CA/W33</b>	<b>23224CAK/W33</b>	132	203	2	12.1
	260	86	3	845	1120	1400	2800	<b>22324C/W33</b>	<b>22324CK/W33</b>	134	246	2.5	22
	260	86	3	845	1120	1400	2800	<b>22324CA/W33</b>	<b>22324CAK/W33</b>	134	246	2.5	23.3
130	200	52	2	374	610	1900	2600	<b>23026C/W33</b>	<b>23026CK/W33</b>	140	190	2	6.1
	200	52	2	374	610	1900	2600	<b>23026CA/W33</b>	<b>23026CAK/W33</b>	140	190	2	7.04
	200	69	2	477	815	1500	1900	<b>24026C/W33</b>	<b>24026CK30/W33</b>	140	190	2	7.95
	200	69	2	477	815	1500	1900	<b>24026CA/W33</b>	<b>24026CAK30/W33</b>	140	190	2	8.28
	210	64	2	489	780	1700	2200	<b>23126C/W33</b>	<b>23126CK/W33</b>	140	200	2	8.55
	210	64	2	489	780	1700	2200	<b>23126CA/W33</b>	<b>23126CAK/W33</b>	140	200	2	10.7
	210	80	2	587	1000	900	1200	<b>24126C/W33</b>	<b>24126CK30/W33</b>	140	200	2	11
	210	80	2	587	1000	900	1200	<b>24126CA/W33</b>	<b>24126CAK30/W33</b>	140	200	2	12
	230	64	3	546	800	1800	2400	<b>22226C/W33</b>	<b>22226CK/W33</b>	144	216	2.5	11
	230	64	3	546	800	1800	2400	<b>22226CA/W33</b>	<b>22226CAK/W33</b>	144	216	2.5	12.4
	230	80	3	690	1060	1300	1700	<b>23226C/W33</b>	<b>23226CK/W33</b>	114	216	2.5	14
	230	93	4	978	1320	1300	1700	<b>22326C/W33</b>	<b>22326CK/W33</b>	148	262	3	28.5
	230	93	4	978	1320	1300	1700	<b>22326CA/W33</b>	<b>22326CAK/W33</b>	148	262	3	18.3
	140	210	53	2	397	680	1800	2400	<b>23028C/W33</b>	<b>23028CK/W33</b>	150	200	2
210		53	2	397	680	1800	2400	<b>23028CA/W33</b>	<b>23028CAK/W33</b>	150	200	2	6.7
210		69	2	495	900	1400	1800	<b>24028C/W33</b>	<b>24028CK30/W33</b>	150	200	2	8.45
210		69	2	495	900	1400	1800	<b>24028CA/W33</b>	<b>24028CAK30/W33</b>	150	200	2	8.65
225		68	2.1	546	900	1600	2000	<b>23128C/W33</b>	<b>23128CK/W33</b>	152	213	2	10.5
225		68	2.1	546	900	1600	2000	<b>23128CA/W33</b>	<b>23128CAK/W33</b>	152	213	2	10.9
225		85	2.1	673	1160	850	1100	<b>24128C/W33</b>	<b>24128CK/W33</b>	152	213	2	13
225		85	2.1	673	1160	850	1100	<b>24128CA/W33</b>	<b>24128CAK/W33</b>	152	213	2	13.5
250		68	3	610	900	1700	2200	<b>22228C/W33</b>	<b>22228CK/W33</b>	154	236	2.5	14
250		68	3	610	900	1700	2200	<b>22228CA/W33</b>	<b>22228CAK/W33</b>	154	236	2.5	16.2
250		88	3	799	1250	1200	1600	<b>23228C/W33</b>	<b>23228CK/W33</b>	154	236	2.5	18.5