RBI BEARING

Bearings + Technology + Solutions

TAPERED & SPHERICAL ROLLER BEARINGS FEATURES & ADVANTAGES

- Available with RBI's Armor Bearing Technology & Protection
- 52100 high carbon steel
- Various retainer guidance designs
- Multiple retainer material options
- Advanced internal design options for enhanced performance & life
- Extra-capacity design
- Sealed versions
- Single, double & multi-row tapered roller bearings

ARMOR BEARING SERIES | BEARING TECHNOLOGY & PROTECTION

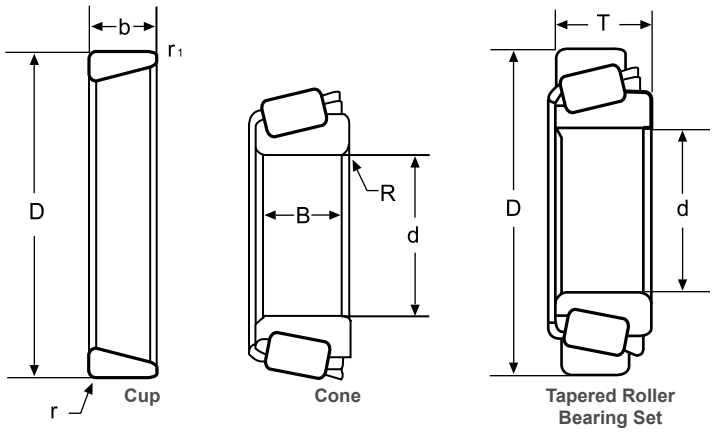
RBI offers all of our bearing products with our Armor Bearing Technology & Protection to reduce bearing friction and substantially increase bearing life - which means less downtime and reduced repair costs. We offer Armor Nano Technology, Armor Long Lasting Lubrication Technology & Armor Coated Protection. Armor Technologies do not alter the dimensional tolerances of the bearings. Armor Bearing Technologies & Protection benefit applications experiencing high heat temperatures, harsh contamination and clean environments sensitive to corrosion and chemical wash downs.

ARMOR Nano Technology
ARMOR Long Lasting Lubrication
ARMOR Coated Protection

- Significantly extend the bearings life
- Shields the bearing against harsh environments
- Increases efficiency and production
- Provides constant and consistent lubrication
- Preventing contamination ingress & corrosion
- Dramatically reducing shutdowns & the need for maintenance
- Saves time and operation costs

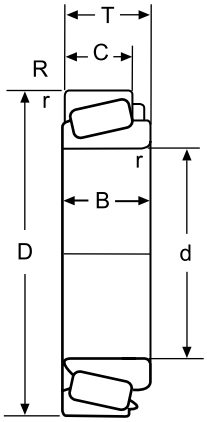
CONTENTS

TAPERED ROLLER BEARINGS - METRIC



RBI Bearing No.	Bore d		Outer Diameter D		Cone Width B		Cup Width b		Assembled Width T		Radius						Basic Load Rating lbs.		Weight lbs.
											R		r1		r		Dynamic C	Static Co	
	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.	mm.	in.			
30204	20	0.7874	47	1.8504	14	0.5512	12	0.4724	15.25	0.600	1.0	0.039	.030	0.012	1.0	0.039	5620	5840	0.276
30205	25	0.9843	52	2.0472	15	0.5906	13	0.5118	16.25	0.640	1.0	0.039	.030	0.012	1.0	0.039	6680	7500	0.337
30206	30	1.1811	62	2.4409	16	0.6299	14	0.5512	17.25	0.679	1.0	0.039	.030	0.012	1.0	0.039	9090	10000	0.507
30207	35	1.3780	72	2.8346	17	0.6693	15	0.5906	18.25	0.719	1.5	0.059	.060	0.024	1.5	0.059	10400	11400	0.716
30208	40	1.5748	80	3.1496	18	0.7087	16	0.6299	19.75	0.778	1.5	0.059	.060	0.024	1.5	0.059	12300	13600	0.926
30210	50	1.9685	90	3.5433	20	0.7874	17	0.6693	21.75	0.865	1.5	0.059	.060	0.024	1.5	0.059	15800	19600	1.19
30215	75	2.9528	130	5.1181	25	0.9843	22	0.8661	27.25	1.073	2.0	0.079	.060	0.024	1.5	0.059	28700	36900	2.93
32206	30	1.8111	62	2.4409	20	0.7874	17	0.6693	21.25	0.837	1.0	0.039	.030	0.012	1.0	0.039	11000	9100	0.631
32207	35	1.3780	72	2.8346	23	0.9050	19	0.7480	24.25	0.955	1.5	0.059	.060	0.024	1.5	0.059	14400	17100	0.948
32208	40	1.5748	80	3.1496	23	0.9055	19	0.7480	24.75	0.974	1.5	0.059	.060	0.024	1.5	0.059	15900	13100	1.16
32209	45	1.7717	85	3.3465	23	0.9055	19	0.7480	24.75	0.974	1.5	0.059	.060	0.024	1.5	0.059	16500	30300	1.27
32211	55	2.1654	100	3.9370	25	0.9843	21	0.8628	26.75	1.053	2.0	0.079	.060	0.024	1.5	0.059	22800	28700	1.85
30302	15	0.5906	42	1.6535	13	0.5118	11	0.4331	14.25	0.567	1.0	0.039	.030	0.012	1.0	0.039	4650	3000	0.207
30303	17	0.6693	47	1.8504	14	0.5512	12	0.4724	15.25	0.600	1.0	0.039	.030	0.012	1.5	0.039	5620	5110	0.287
30306	30	1.1811	72	2.8346	19	0.7480	16	0.6299	20.75	0.817	1.5	0.059	.060	0.024	1.5	0.059	11900	11900	0.849
32304	20	0.7874	52	2.0472	21	0.8268	18	0.7087	22.25	0.876	1.5	0.059	.060	0.024	1.5	0.059	9810	10200	0.487
32305	25	0.9843	62	2.4409	24	0.9449	20	0.7874	25.25	0.994	1.5	0.059	.060	0.024	1.5	0.059	10800	13600	0.774
32306	30	1.1811	72	2.8346	27	1.0630	23	0.9055	28.75	1.132	1.5	0.059	.060	0.024	1.5	0.059	17100	19200	1.17
32307	35	1.3780	80	3.1496	31	1.2205	25	0.9843	32.75	1.289	2.0	0.079	.060	0.024	1.5	0.059	21100	24600	1.61
32308	40	1.5748	90	3.5433	33	1.2992	27	1.0630	35.25	1.388	2.0	0.079	.060	0.024	1.5	0.059	25600	31600	2.18
32310	50	1.9685	110	4.3307	40	1.5748	33	1.2992	42.25	1.663	2.5	0.098	.060	0.024	2.0	0.079	39100	50100	3.86
32311	55	2.1654	120	4.7244	43	1.6929	35	1.3780	45.50	1.791	2.5	0.098	.060	0.024	2.0	0.079	44700	57300	4.93

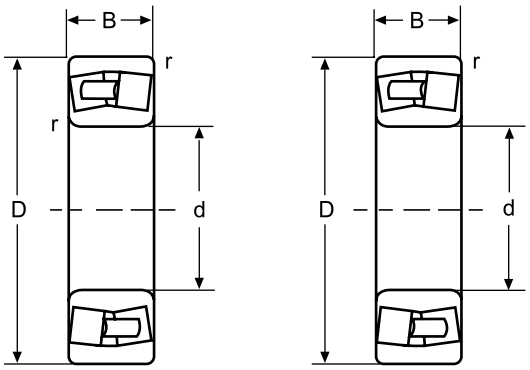
TAPERED ROLLER BEARINGS - INCH



RBI Bearing No.	Bearing Dimensions						
	d	D	B	C	T	R	r
LM11749/LM11710	0.6875	1.5700	0.5750	0.4200	0.5450	0.05	0.050
LM11949/LM11910	0.7500	1.7810	0.6550	0.4750	0.6100	0.05	0.050
M12649/M12610	0.8437	1.9687	0.7200	0.5500	0.6900	0.05	0.050
LM12749/LM12710	0.8661	1.7810	0.6550	0.4750	0.6100	0.05	0.050
LM12749/LM12711	0.8661	1.8110	0.6550	0.4750	0.6100	0.05	0.050
14125A/14276	1.2500	2.7170	0.7710	0.6250	0.7813	0.140	0.050
15123/15245	1.2500	2.4409	0.7500	0.5625	0.7150	0.142	0.050
15123/15250	1.2500	2.5000	0.7500	0.6250	0.7750	0.142	0.050
25580/25520	1.7500	3.2650	1.0000	0.7500	0.9375	0.140	0.030
25590/25520	1.7960	3.2650	1.0000	0.7500	0.9375	0.140	0.030
L44643/L44610	1.0000	1.9800	0.5800	0.4200	0.5600	0.050	0.050
L44649/L44610	1.0625	1.9800	0.5800	0.4200	0.5600	0.140	0.050
LM48548/LM48510	1.3750	2.5625	0.7200	0.5500	0.7100	0.154	0.050
LM67048A/L67010	1.25.00	2.3280	0.6600	0.4650	0.6250	0.158	0.050
LM67049A/LM67010	1.25.00	2.3280	0.6600	0.4650	0.6250	0.030	0.050
L68149/L68110	1.3780	2.3280	0.6600	0.4700	0.6250	0.203	0.050
L68149/L68111	1.3780	2.3622	0.6600	0.4700	0.6250	0.203	0.050
JL69349/JL69310	1.4961	2.4803	0.6693	0.5315	0.6693	0.140	0.050
LM102949/ LM102910	1.7812	2.8910	0.7800	0.6200	0.7700	0.140	0.030
LM104949/ LM104911	2.0000	3.2500	0.8750	0.6500	0.8500	0.140	0.050
L45449/L45410	1.1417	1.9800	0.5800	0.4200	0.5600	0.140	0.050
LM29749/LM29710	1.5000	2.5625	0.7200	0.5500	0.7100	0.090	0.050
LM603049/ LM603011	1.7812	3.0625	0.7812	0.5937	0.7812	0.140	0.030
LM603049/ LM603012	1.7812	3.0625	0.7812	0.6562	0.8437	0.140	0.030
HM212049/ HM212010	2.6250	4.8125	1.5100	1.1700	1.5000	0.140	0.060
HM212049/ HM212011	2.6250	4.8125	1.5100	1.1700	1.5000	0.140	0.130
HM218248/ HM218210	3.5433	5.7874	1.5748	1.2795	1.5748	0.280	0.140
HM518445/ HM518410	3.5000	6.0000	1.5625	1.1875	1.5625	0.250	0.130

Many Additional Inch And Metric Tapers In Stock Please Inquire

22200 SERIES

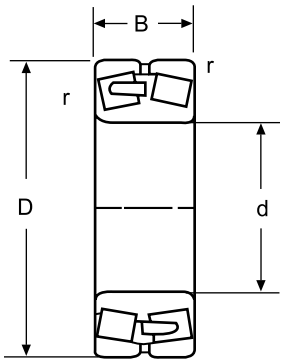


Cylindrical Bore
22200

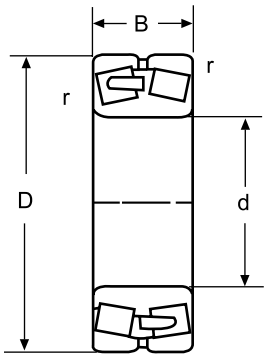
Tapered Bore
22200K

RBI Bearing No.		Bore d		Outer Diameter D		Width B		Radius r		Basic Load Ratings (lbs.)		Weight (lbs.)	
		mm.	in.	mm.	in.	mm.	in.	mm.	in.	Dynamic C	Static Co	222	222K
22205	22205K	25	0.9843	52	2.0420	18	0.7087	1.5	0.059	6850	4800	0.40	0.39
22206	22206K	30	1.1811	62	2.4409	20	0.7874	1.5	0.059	8950	6700	0.62	0.60
22207	22207K	35	1.3780	72	2.8346	23	0.9055	2.0	0.079	12200	9150	0.95	0.93
22208	22208K	40	1.5748	80	3.1496	23	0.9055	2.0	0.079	17800	19900	1.21	1.19
22209	22209K	45	1.7717	85	3.3465	23	0.9055	2.0	0.079	18600	21400	1.32	1.30
22210	22210K	50	1.9685	90	3.5433	23	0.9055	2.0	0.079	19300	23000	1.44	1.41
22211	22211K	55	2.1654	100	3.9370	25	0.9843	2.5	0.098	21000	24700	1.92	1.88
22212	22212K	60	2.3622	110	4.3307	28	1.1024	2.5	0.098	25700	33000	2.65	2.60
22213	22213K	65	2.5591	120	4.7244	31	1.2205	2.5	0.098	32000	40500	3.42	3.35
22214	22214K	70	2.7559	125	4.9213	31	1.2205	2.5	0.098	34500	45000	3.64	3.57
22215	22215K	75	2.9528	130	5.1181	31	1.2205	2.5	0.098	37000	50000	3.86	3.77
22216	22216K	80	3.1496	140	5.5118	33	1.2992	3.0	0.118	40500	53500	4.76	4.67
22217	22217K	85	3.3465	150	5.9055	36	1.4173	3.0	0.118	46500	61500	6.06	5.93
22218	22218K	90	3.5433	160	6.2992	40	1.5748	3.0	0.118	57500	77500	7.83	7.67
22219	22219K	95	3.7402	170	6.6929	43	1.6929	3.5	0.138	65500	86500	9.26	9.06
22220	22220K	100	3.9370	180	7.0866	46	1.8110	3.5	0.138	70000	92500	11.40	11.10
22222	22222K	110	4.3307	200	7.8740	53	2.0866	3.5	0.138	92500	128000	16.30	16.00
22224	22224K	120	4.7244	215	8.4646	58	2.2835	3.5	0.138	109000	158000	20.30	19.90
22226	22226K	130	5.1181	230	9.0551	64	2.5197	4.0	0.157	127000	176000	25.10	24.50
22228	22228K	140	5.5118	250	9.8425	68	2.6772	4.0	0.157	153000	218000	32.00	31.10
22230	22230K	150	5.9055	270	10.6299	73	2.8740	4.0	0.157	174000	262000	40.80	39.90
22232	22232K	160	6.2992	290	11.4173	80	3.1496	4.0	0.157	195000	290000	51.20	50.00
22234	22234K	170	6.6929	310	12.2047	86	3.3858	5.0	0.197	225000	340000	63.90	62.60
22236	22236K	180	7.0866	320	12.5984	86	3.3858	5.0	0.197	233000	360000	66.60	65.00
22238	22238K	190	7.4803	340	13.3858	92	3.6220	5.0	0.197	260000	410000	81.60	79.80
22240	22240K	200	7.8740	360	14.1732	98	3.8583	5.0	0.197	295000	450000	98.10	95.90
22244	22244K	220	8.6614	400	15.7480	108	4.2520	5.0	0.197	350000	545000	136.00	133.00
22248	22248K	240	9.4488	440	17.3228	120	4.7244	5.0	0.197	430000	680000	183.00	179.00
22252	22252K	260	10.2362	480	18.8976	130	5.1181	6.0	0.236	500000	805000	240.00	236.00
22256	22256K	280	11.0236	500	19.6850	130	5.1181	6.0	0.236	520000	855000	249.00	245.00
22260	22260K	300	11.8110	540	21.2598	140	5.5118	6.0	0.236	600000	975000	315.00	309.00
	22264K	320	12.5984	580	22.8346	150	5.9055	6.0	0.236	695000	1140000	386.00	377.00

22300 SERIES



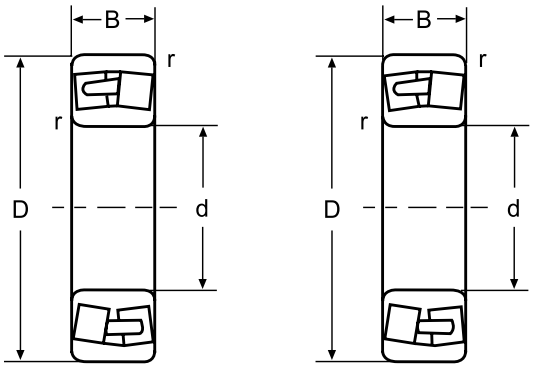
Cylindrical Bore
22300



Tapered Bore
22300K

RBI Bearing No.		Bore d		Outer Diameter D		Width B		Radius r		Basic Load Ratings (lbs.)		Weight (lbs.)	
		mm.	in.	mm.	in.	mm.	in.	mm.	in.	Dynamic C	Static Co	223	223K
22308	22308K	40	1.5748	90	3.5433	33	1.2992	2.5	0.098	27200	28800	2.27	2.23
22309	22309K	45	1.7717	100	3.9370	36	1.4173	2.5	0.098	33000	37500	3.09	3.02
22310	22310K	50	1.9685	110	4.3307	40	1.5748	3.0	0.118	42000	47500	4.19	4.10
22311	22311K	55	2.1654	120	4.7244	43	1.6929	3.0	0.118	46000	52500	5.29	5.18
22312	22312K	60	2.3622	130	5.1181	46	1.8110	3.5	0.138	53000	60500	6.61	6.46
22313	22313K	65	2.5591	140	5.5118	48	1.8898	3.5	0.138	59500	71000	7.94	7.76
22314	22314K	70	2.7559	150	5.9055	51	2.0079	3.5	0.138	72500	85000	9.95	9.39
22315	22315K	75	2.9528	160	6.2992	55	2.1654	3.5	0.138	14000	92000	11.90	11.60
22316	22316K	80	3.1496	170	6.6929	58	2.2835	3.5	0.138	86000	105000	14.00	13.70
22317	22317K	85	3.3465	180	7.0866	60	2.3622	4.0	0.157	93500	115000	16.30	16.00
22318	22318K	90	3.5433	190	7.4803	64	2.5197	4.0	0.157	107000	132000	19.40	19.00
22319	22319K	95	3.7402	200	7.8740	67	2.6378	4.0	0.157	112000	138000	22.70	22.30
22320	22320K	100	3.9370	215	8.4646	73	2.8740	4.0	0.157	136000	169000	28.70	28.00
22322	22322K	110	4.3307	240	9.4488	80	3.1496	4.0	0.157	167000	209000	39.90	39.00
22324	22324K	120	4.7244	260	10.2362	86	3.3858	4.0	0.157	118000	258000	48.70	47.60
22326	22326K	130	5.1181	280	11.0236	93	3.6614	5.0	0.197	221000	282000	62.80	61.50
22328	22328K	140	5.5118	300	11.8110	102	4.0157	5.0	0.197	250000	320000	78.50	76.70
22330	22330K	150	5.9055	320	12.5984	108	4.2520	5.0	0.197	281000	385000	93.70	91.70
22332	22332K	160	6.2992	340	13.3858	114	4.4882	5.0	0.197	315000	440000	113.00	110.00
22334	22334K	170	6.6929	360	14.1732	120	4.7244	5.0	0.197	340000	480000	131.00	128.00
22336	22336K	180	7.0866	380	14.9606	126	4.9606	5.0	0.197	385000	565000	154.00	151.00
22338	22338K	190	7.4803	400	15.7480	132	5.1969	6.0	0.236	415000	615000	179.00	175.00
22340	22340K	200	7.8740	420	16.5354	138	5.4331	6.0	0.236	460000	680000	206.00	202.00
22344	22344K	220	8.6614	460	18.1102	145	5.7087	6.0	0.236	530000	790000	269.00	265.00
22348	22348K	240	9.4488	500	19.6850	155	6.1024	6.0	0.236	605000	910000	340.00	333.00
22352	22352K	260	10.2362	540	21.2598	165	6.4961	8.0	0.315	695000	1060000	423.00	414.00
22356	22356K	280	11.0236	580	22.8346	175	6.8898	8.0	0.315	790000	1200000	516.00	507.00

23000 SERIES

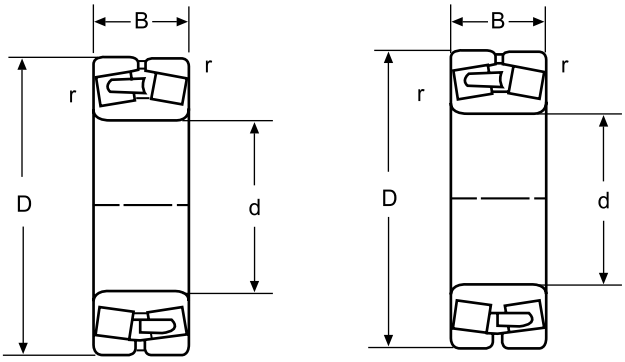


Cylindrical Bore
23000

Tapered Bore
23000K

RBI Bearing No.		Bore d		Outer Diameter D		Width B		Radius r		Basic Load Ratings (lbs.)		Weight (lbs.)	
		mm.	in.	mm.	in.	mm.	in.	mm.	in.	Dynamic C	Static Co	230	230K
23022	23022K	110	4.3307	170	6.6929	45	1.7717	3.0	0.118	63500	102000	8.60	-
23024	23024K	120	4.7244	180	7.0866	46	1.8110	3.0	0.118	66500	111000	9.48	9.17
23026	23026K	130	5.1181	200	7.8740	52	2.0472	3.0	0.118	84500	139000	13.70	13.40
23028	23028K	140	5.5118	210	8.2677	53	2.0866	3.0	0.118	90500	150000	14.80	14.40
23030	23030K	150	5.9055	225	8.8583	56	2.2047	3.5	0.138	100000	174000	17.90	17.40
23032	23032K	160	6.2992	240	9.4488	60	2.3622	3.5	0.138	114000	199000	21.90	21.30
23034	23034K	170	6.6929	260	10.2362	67	2.6378	3.5	0.138	141000	242000	29.50	28.70
23036	23036K	180	7.0866	280	11.0236	74	2.9134	3.5	0.138	166000	291000	38.80	37.70
23038	23038K	190	7.4803	290	11.4173	75	2.9528	3.5	0.138	170000	305000	41.00	39.70
23040	23040K	200	7.8740	310	12.2047	82	3.2283	3.5	0.138	205000	365000	52.50	50.90
23044	23044K	220	8.6614	340	13.3858	90	3.5433	4.0	0.157	238000	430000	69.00	37.70
23048	23048K	240	9.4488	360	14.1732	92	3.6220	4.0	0.157	255000	480000	75.90	73.60
23052	23052K	260	10.2362	400	15.7480	104	4.0945	5.0	0.197	320000	570000	110.00	107.00
23056	23056K	280	11.0236	420	16.5354	106	4.1732	5.0	0.197	340000	655000	119.00	115.00
23060	23060K	300	11.8110	460	18.1102	118	4.6457	5.0	0.197	425000	800000	164.00	159.00
23064	23064K	320	12.5984	480	18.8976	121	4.7638	5.0	0.197	440000	870000	177.00	171.00
23068	23068K	340	13.3858	520	20.4724	133	5.2362	6.0	0.236	505000	990000	236.00	229.00
23072	23072K	360	14.1732	540	21.2598	134	5.2756	6.0	0.236	535000	1060000	249.00	243.00
23076	23076K	380	14.9606	560	22.0472	135	5.3150	6.0	0.236	550000	1201000	265.00	256.00
23080	23080K	400	15.7480	600	23.6220	148	5.8268	6.0	0.236	655000	1320000	337.00	326.00
23084	23084K	420	16.5354	620	24.4094	150	5.9055	6.0	0.236	680000	1400000	357.00	346.00
23088	23088K	440	17.3228	650	25.5906	157	6.1811	8.0	0.315	735000	1540100	410.00	397.00
23092	23092K	460	18.1102	680	26.7717	163	6.4173	8.0	0.315	805000	1680000	467.00	454.00
23096	23096K	480	18.8976	700	27.5591	165	6.4961	8.0	0.315	835000	1770000	490.00	474.00

23100 SERIES

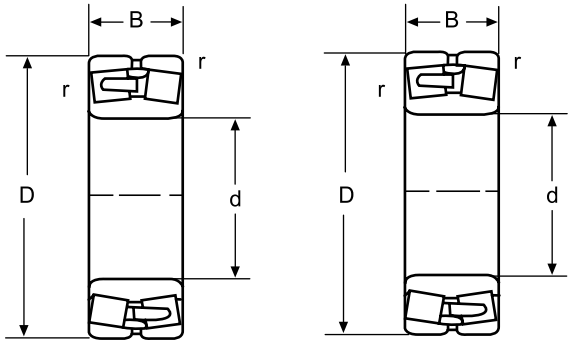


Cylindrical Bore
23100

Tapered Bore
23100K

RBI Bearing No.		Bore d		Outer Diameter D		Width B		Radius r		Basic Load Ratings (lbs.)		Weight (lbs.)	
		mm.	in.	mm.	in.	mm.	in.	mm.	in.	Dynamic C	Static Co	231	231K
23122	23122K	110	4.3307	180	7.0866	56	2.2047	3.0	0.118	83000	131000	12.90	12.50
23124	23124K	120	4.7244	200	7.8740	62	2.4409	3.0	0.118	102000	158000	17.90	17.40
23126	23126K	130	5.1181	210	8.2677	64	2.5197	3.0	0.118	111000	179000	19.60	19.00
23128	23128K	140	5.5118	225	8.8583	68	2.6772	3.5	0.138	121000	201000	23.60	22.90
23130	23130K	150	5.9055	250	9.8425	80	3.1496	3.5	0.138	165000	268000	36.20	35.10
23132	23132K	160	6.2992	270	10.6299	86	3.3858	3.5	0.138	189000	310000	45.90	44.50
23134	23134K	170	6.6929	280	11.0236	88	3.4646	3.5	0.138	198000	335000	49.20	47.60
23136	23136K	180	7.0866	300	11.8110	96	3.7795	4.0	0.157	232000	390000	62.40	60.40
23138	23138K	190	7.4803	320	12.5984	104	4.0945	4.0	0.157	268000	455000	77.80	75.40
23140	23140K	200	7.8740	340	13.3858	112	4.4094	4.0	0.157	305000	510000	95.70	92.80
23144	23144K	220	8.6614	370	14.5669	120	4.7244	5.0	0.197	350000	610000	120.00	116.00
23148	23148K	240	9.4488	400	15.7480	128	5.0394	5.0	0.197	390000	690000	148.00	144.00
23152	23152K	260	10.2362	440	17.3228	144	5.6693	5.0	0.197	470000	845000	205.00	199.00
23156	23156K	280	11.0236	460	18.1102	146	5.7480	6.0	0.236	505000	930000	219.00	213.00
23164	23164K	320	12.5984	540	21.2598	176	6.9291	6.0	0.236	700000	1300000	375.00	364.00
23168	23168K	340	13.3858	580	22.8364	190	7.4803	6.0	0.236	810000	1480000	474.00	461.00
23172	23172K	360	14.1732	600	23.6220	192	7.5591	6.0	0.236	845000	1580000	501.00	485.00
23176	23176K	380	14.9606	620	24.4094	194	7.6378	6.0	0.236	880000	1690000	527.00	512.00
23180	23180K	400	15.7480	650	25.5906	200	7.8740	8.0	0.315	940000	1810000	593.00	576.00
23184	23184K	420	16.5354	700	27.5591	224	8.8189	8.0	0.315	1150000	2200000	796.00	772.00
23188	23188K	440	17.3228	720	28.3465	226	8.8976	8.0	0.315	1170000	2260000	829.00	803.00
23192	23192K	460	18.1102	760	29.9213	240	9.4488	10.0	0.394	1290000	2560000	986.00	955.00
23196	23196K	480	18.8976	790	31.1024	248	9.7638	10.0	0.394	1410000	2810000	1100.00	1070.00

23200 SERIES



Cylindrical Bore
23200

Tapered Bore
23200K

RBI Bearing No.		Bore d		Outer Diameter D		Width B		Radius r		Basic Load Ratings (lbs.)		Weight (lbs.)	
		mm.	in.	mm.	in.	mm.	in.	mm.	in.	Dynamic C	Static Co	232	232K
23218	23218K	90	3.5443	160	6.2992	52.4	2.0630	3.0	0.118	71500	103000	9.97	9.53
23220	23220K	100	3.9370	180	7.0866	60.3	0.3740	3.5	0.138	91000	130000	14.70	14.00
23222	23222K	110	4.3307	200	7.8740	69.8	2.7480	3.5	0.138	115000	171000	22.50	21.70
23224	23224K	120	4.7244	215	8.4646	76	2.9921	3.5	0.138	132000	198000	27.10	26.20
23226	23226K	130	5.1181	230	9.0551	80	3.1496	4.0	0.157	154000	239000	32.20	31.10
23228	23228K	140	5.5118	250	9.8425	88	3.4646	4.0	0.157	250000	320000	42.30	41.00
23230	23230K	150	5.9055	270	10.6299	96	3.7795	4.0	0.157	210000	330000	54.20	52.70
23232	23232K	160	6.2992	290	11.4173	104	4.0945	4.0	0.157	315000	440000	68.40	66.40
23234	23234K	170	6.6929	310	12.2047	110	4.3307	5.0	0.197	264000	440000	83.10	80.40
23236	23236K	180	7.0866	320	12.5984	112	4.4094	5.0	0.197	284000	465000	87.80	85.10
23238	23238K	190	7.4803	340	13.3858	120	3.7244	5.0	0.197	320000	530000	107.00	104.00
23240	23240K	200	7.8740	360	14.1732	128	5.0394	5.0	0.197	365000	595000	129.00	125.00
23244	23244K	220	8.6614	400	15.7480	144	5.6693	5.0	0.197	440000	730000	181.00	175.00
23248	23248K	240	9.4488	440	17.3228	160	6.2992	5.0	0.197	535000	900000	245.00	238.00
23252	23252K	260	10.2362	480	18.8976	174	6.8504	6.0	0.236	620000	160000	317.00	309.00
23256	23256K	280	11.0236	500	19.6850	176	6.9291	6.0	0.236	660000	1160000	340.00	331.00
23260	23260K	300	11.8110	540	21.2598	192	7.5591	6.0	0.236	775000	1350000	437.00	423.00
23264	23264K	320	12.5984	580	22.8346	208	8.1890	6.0	0.236	890000	1560000	547.00	531.00
23268	23268K	340	13.3858	620	24.4094	224	8.8189	8.0	0.315	990000	1760000	679.00	657.00
23272	23272K	360	14.1732	650	25.5906	232	9.1339	8.0	0.315	1090000	1950000	767.00	741.00
23276	23276K	380	14.9606	680	26.7717	240	9.4488	8.0	0.315	1170000	2170000	862.00	831.00
23280	23280K	400	15.7480	720	28.9213	256	10.0787	8.0	0.315	1330000	2420000	1030.00	1000.00
23284	23284K	420	16.5354	760	29.9213	272	10.7087	10.0	0.394	1450000	2660000	1230.00	1190.00
23288	23288K	440	17.3228	790	31.1024	280	11.0236	10.0	0.394	1530000	2850000	1360.00	1310.00

ENGINEERING DATA

TOLERANCES

Standard ABEC / RBEC Tolerances - Inner Ring - All tolerances in number of ten-thousandths inches (.0001") and micrometers (µm)

Bearing Bore mm.		Bore Numbers Reference	Bore Dia.(1) Admp +0.0000" +0.000mm to ABEC / RBEC					Width Variation (Parallelism) VBs ABEC / RBEC					Raceway Radial Runout Kia ABEC / RBEC					Face Runout w/Bore (Squareness) Sd ABEC / RBEC			Raceway Axial Runout Sia ABEC / RBEC			Width Inner & Outer Rings ΔBs & ΔCs +0.0000" +0.000mm to ABEC / RBEC	
over	inc.		1	3	5	7	9	1	3	5	7	9	1	3	5	7	9	5	7	9	5	7	9	1,3	5,7,9
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
			mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
0	10	30-39	-3	-3	-2	-1.5	-1	6	6	2	1	0.5	4	2.5	1.5	1	05	3	1	0.5	3	1	0.5	-50	-15
			-8	-7	-5	-4	-2.5	15	15	5	2.5	1.5	10	6	4	2.5	1.5	7	3	1.5	7	3	1.5	-120	-40
10	18	00-03	-3	-3	-2	-1.5	-1	8	8	2	1	0.5	4	3	1.5	1	0.5	3	1	0.5	3	1	0.5	-50	-30
			-8	-7	-5	-4	-2.5	20	20	5	2.5	1.5	10	7	4	2.5	1.5	7	3	1.5	7	3	1.5	-120	-80
18	30	04-06	-4	-3	-2.5	-2	-1	8	8	2	1	0.5	5	3	1.5	1	1	3	1.5	0.5	3	1.5	1	-50	-50
			-10	-8	-6	-5	-2.5	20	20	5	2.5	1.5	13	8	4	3	2.5	8	4	1.5	8	4	2.5	-120	-120
30	50	07-10	-4.5	-4	-3	-2.5	-1	8	8	2	1	0.5	6	4	2	1.5	1	3	1.5	0.5	3	1.5	1	-50	-50
			-12	-10	-8	-6	-2.5	20	20	5	3	1.5	15	10	5	4	2.5	8	4	1.5	8	4	2.5	-120	-120
50	80	11-16	-6	-4.5	-3.5	-3	-1.5	10	10	2.5	1.5	0.5	8	4	2	1.5	1	3	2	0.5	3	2	1	-60	-60
			-15	-12	-9	-7	-4	25	25	6	4	1.5	20	10	5	4	2.5	8	5	1.5	8	5	2.5	-150	-150
80	120	17-24	-8	-6	-4	-3	-2	10	10	3	1.5	1	10	5	2.5	2	1	3.5	2	1	3.5	2	1	-80	-80
			-20	-15	-10	-8	-5	25	25	7	4	2.5	2.5	13	6	5	2.5	9	5	2.5	9	5	2.5	-200	-200
120	150	26-30	-10	-7	-5	-4	-3	12	12	3	2	1	12	7	3	2.5	1	4	2.5	1	4	3	1	-100	-100
			-25	-18	-13	-10	-7	30	30	8	5	2.5	30	18	8	6	2.5	10	6	2.5	10	7	2.5	-250	-250
150	180	32-36	-10	-7	-5	-4	-3	12	12	3	2	1.5	12	7	3	2.5	2	4	2.5	1.5	4	3	2	-100	-100
			-25	-18	-13	-10	-7	30	30	8	5	4	30	18	8	6	5	10	6	4	10	7	5	-250	-250
180	250	38-50	-12	-8.5	-6	-4.5	-3	12	12	4	2.5	2	16	8	4	3	2	4.5	3	2	5	3	2	-120	-120
			-30	-22	-15	-12	-8	30	30	10	6	5	40	20	10	8	5	11	7	5	13	8	5	-300	-300
250	315	52-60	-14	-10	-7	-	-	14	14	5	-	-	20	10	5	-	-	5	-	-	6	-	-	-140	-140
			-35	-25	-18	-	-	35	35	13	-	-	50	25	13	-	-	13	-	-	15	-	-	-350	-350
315	400	64-80	-16	-12	-9	-	-	16	16	6	-	-	24	12	6	-	-	6	-	-	8	-	-	-160	-160
			-40	-30	-23	-	-	40	40	15	-	-	60	30	15	-	-	15	-	-	20	-	-	-400	-400
400	500	-	-18	-14	-	-	-	20	18	-	-	-	26	14	-	-	-	-	-	-	-	-	-	-180	-
			-45	-35	-	-	-	50	45	-	-	-	65	35	-	-	-	-	-	-	-	-	-	-450	-
500	630	-	-20	-16	-	-	-	24	20	-	-	-	28	16	-	-	-	-	-	-	-	-	-	-200	-
			-50	-40	-	-	-	60	50	-	-	-	70	40	-	-	-	-	-	-	-	-	-	-500	-
630	800	-	-30	-	-	-	-	28	-	-	-	-	31	-	-	-	-	-	-	-	-	-	-	-300	-
			-75	-	-	-	-	70	-	-	-	-	80	-	-	-	-	-	-	-	-	-	-	-750	-

The tolerance in this table are in conformance with ANSI ABMA Standard 20-1987.
(1) D min. (the smallest single diameter of a bore) and dmax (the largest single diameter of a bore) may fall outside limits shown Dmin + Dmax must be within outside diameter tabulated.
For further details see ABMA Standard 20.

ENGINEERING DATA

TOLERANCES

Standard ABEC / RBEC Tolerances - Outer Ring - All tolerances in number of ten-thousandths inches (.0001") and micrometers (µm)

Bearing O.D. mm.		Ball Bearing Sizes	Outside Dia.(1) ΔDmp +0.0000" +0.000mm to ABEC / RBEC					Width Variation (Parallelism) VCs ABEC / RBEC					Raceway Radial Runout Kea ABEC / RBEC					Raceway Axial Runout Sea ABEC / RBEC			Outside Dia. Runout With Face (Squareness) SD ABEC / RBEC		
over	inc.		1	3	5	7	9	1	3	5	7	9	1	3	5	7	9	5	7	9	5	7	9
			in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
			mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
0	18	30-39	-3	-3	-2	-1.5	-1	6	6	2	1	0.5	6	4	2	1	05	3	2	0.5	3	1.5	0.5
			-8	-7	-5	-4	-2.5	15	15	5	2.5	1.5	15	8	5	3	1.5	8	5	1.5	8	4	1.5
18	30	9100-9101 200 9300-9303	-3.5	-3	-2.5	-2	-1.5	8	8	2	1	0.5	6	4	2.5	1.5	1	3	2	1	3	1.5	0.5
			9	-8	-6	-5	-4	20	20	5	2.5	1.5	15	9	6	4	2.5	8	5	2.5	8	4	1.5
30	50	9304-9306 9102-9105 200-204 300-303	-4.5	-3.5	-3	-2.5	-1.5	8	8	2	1	0.5	8	4	3	2	1	3	2	1	3	1.5	0.5
			-11	-9	-7	-6	-4	20	20	5	2.5	1.5	20	10	7	5	2.5	8	5	2.5	8	4	1.5
50	80	9307-9312 9106-9110 205-208 304-307	-5	-4.5	-3.5	-3	-1.5	10	10	2.5	1	0.5	10	5	3	2	1.5	4	2	1.5	3	1.5	0.5
			-13	-11	-9	-7	-4	25	25	6	3	1.5	25	13	8	5	4	10	5	4	8	4	1.5
80	120	9313-9317 9111-9115 209-213 308-311	-6	-5	-4	-3	-2	10	10	3	1.5	1	14	7	4	2.5	2	4.5	2.5	2	3.5	2	1
			-15	-13	-10	-8	-5	25	25	8	4	2.5	35	18	10	6	5	11	6	5	9	5	2.5
120	150	9318-9322 9116-9120 214-217 312-314	-7	-6	-4.5	-3.5	-2	12	12	3	2	1	16	8	4.5	3	2	5	3	2	4	2	1
			-18	-15	-11	-9	-5	30	30	8	5	2.5	40	20	11	7	5	13	7	5	10	5	2.5
150	180	9323-9326 9121-9326 218-220 315-317	-10	-7	-5	-4	-3	12	12	3	2	1	18	9	5	3	2	5.5	3	2	4	2	1
			-25	-18	-13	-10	-7	30	30	8	5	2.5	45	23	13	8	5	14	8	5	10	5	2.5
180	250	9126-9132 220-228 318-322	-12	-8	-6	-4.5	-3	12	12	4	3	1.5	20	10	6	4	3	6	4	3	4.5	3	1.5
			-30	-20	-15	-11	-8	30	30	10	7	4	50	25	15	10	7	15	10	7	11	7	4
250	315	9134-9140 230-234 324-328	-14	-10	-7	-5	-3	14	14	4.5	3	2	24	12	7	4.5	3	7	4	3	5	3	2
			-35	-25	-18	-13	-8	35	35	11	7	5	60	30	18	11	7	18	10	7	13	8	5
315	400	9144-9152 236-244 330-338	-16	-11	-8	-6	-4	16	16	5	3	3	28	14	8	5	3	8	5	3	5	4	3
			-40	-28	-20	-15	-10	40	40	13	8	7	70	35	20	13	8	20	13	8	13	10	7
400	500	9156-9164 246-256 340-348	-18	-13	-9	-	-	18	18	6	-	-	31	16	9	-	-	9	-	-	6	-	-
			-45	-33	-23	-	-	45	45	15	-	-	80	40	23	-	-	23	-	-	15	-	-
500	630	9180 260-264 352-356	-20	-15	-11	-	-	20	20	7	-	-	39	20	10	-	-	10	-	-	7	-	-
			-50	-38	-28	-	-	50	50	18	-	-	100	50	25	-	-	25	-	-	18	-	-
630	800	-	-30	-18	-14	-	-	-	-	8	-	-	47	24	12	-	-	12	-	-	8	-	-
			-75	-45	-35	-	-	-	-	20	-	-	120	60	30	-	-	30	-	-	20	-	-
800	1000	-	-40	-24	-	-	-	-	-	-	-	-	55	30	-	-	-	-	-	-	-	-	-
			-100	-60	-	-	-	-	-	-	-	-	140	75	-	-	-	-	-	-	-	-	-
1000	1250	-	-50	-	-	-	-	-	-	-	-		63	-	-	-	-	-	-	-	-	-	-
			-125	-	-	-	-	-	-	-	-	-	160	-	-	-	-	-	-	-	-	-	-

The tolerance in this table conform with ANSI/ABMA Standard 20-1987.
(1) D min. (the smallest single diameter of an OD) and Dmax (the largest single diameter of an OD) may fall outside limits shown ^{D}min + ^{D}max must be within outside diameter tabulated.
For further details see ABMA Standard 20.

ENGINEERING DATA
TOLERANCES

Radial Tapered Roller Bearings - *All data on this page are in inches/millimeters*

Cone Bore Cup O.D.		Cone Bore		Cup O.D.			Radial Runout Assembled Bearing (Based on Cup O.D.)			Cone and Cup Width (Based on Cone Bore)											
										Bearing Types											
										TS / TSS						TDI / TDO / TDOC					
		Tolerance		Tolerance						Tolerance						Tolerance					
over	incl.	Class 2&4 -0	Class 3 -0	Class 4 -0	Class 2 -0	Class 3 -0	Class 4 -0	Class 2 -0	Class 3 -0	Class 2 + -		Class 4 + -		Class 3 + -		Class 2 + -		Class 4 + -		Class 3 + -	
in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.	mm.
7.500	12.0000	+0.0010	+0.0005	+0.0010	+0.0010	+0.0005	0.0020	0.0015	0.0003	0.008	0	0.014	0.010	0.008	0.008	0.016	0.008	0.028	0.020	0.016	0.016
190.500	304.800	+0.025	+0.013	+0.025	+0.025	+0.013	0.051	0.038	0.008	0.203	0	0.356	0.254	0.203	0.203	0.406	0.203	0.711	0.508	0.406	0.406
12.0000	24.0000	+0.0020	+0.0010	+0.0020	+0.0020	+0.0010	0.0020	0.0015	0.0007	0.015	0.015	0.015	0.015	*	*	0.030	0.030	0.030	0.030	**	**
304.8000	609.600	+0.051	+0.025	+0.051	+0.051	+0.025	0.051	0.038	0.018	0.381	0.381	0.381	0.381	*	*	0.762	0.762	0.762	0.762	**	**
24.0000	36.0000	+0.0030	+0.0015	+0.0030	+0.0020	+0.0015	0.0030	0.0020	0.0020	-	-	0.015	0.015	0.015	0.015	-	-	0.030	0.030	0.016	0.016
609.600	914.400	+0.076[1]	+0.038	+0.076	+0.051	+0.038	0.076	0.051	0.051	-	-	0.381	0.381	0.381	0.381	-	-	0.762	0.762	0.762	0.762
36.0000	48.0000	+0.0040	+0.0020	+0.0040	-	+0.0020	0.0030	-	0.0030	-	-	0.015	0.015	0.015	0.015	-	-	0.030	0.030	0.016	0.016
914.400	1219.200	+0.102[1]	+0.051	+0.102	-	+0.051	0.076	-	0.076	-	-	0.381	0.381	0.381	0.381	-	-	0.762	0.762	0.762	0.762
48.0000	-	+0.0050	+0.0030	+0.0050	-	+0.0030	0.0030	-	0.0030	-	-	0.015	0.015	0.015	0.015	-	-	0.030	0.030	0.016	0.016
1219.200	-	+0.127[1]	+0.076	+0.127	-	+0.076	0.076	-	0.076	-	-	0.381	0.381	0.381	0.381	-	-	0.762	0.762	0.762	0.762

The tolerances in this table conform to ANSI/ABMA Standard 19.2
(1) Applies to class 4 only. * Cup O.D. ≤ 20" = ± .008"; >20"= ± .015" / ** Cup O.D. ≤ 20" = ± .015"; >20"= ± .030"

FITS

Fitting Practices for Industrial Equipment - Table in inches. (a) Recommended Cone Fitting Practice.

Mounting Condition	Shaft Finish	Service	Cone Bore					
			Up to 3 inclusive			Over 3 to 12 inclusive		
			Cone Bore Equals B1	Fit	Cone Seat Equals B1	Cone Bore Equals B1	Fit	Cone Seat Equals B1
Rotating Cone	Ground	Steady Load with Moderate Shock	+.0005 -.0000	.0005 tight .0015 tight	+.0015 +.0010	+.0010 -.0000	.0005 tight .0025 tight	+.0025 +.0015
Rotating or Stationary Cone	Unground or Ground	Heavy Loads High Speeds or Shock	+.0005 -.0000	.0010 tight .0025 tight	+.0025 +.0015	+.0010 -.0000	Used turned shaft fitting practice. See note 2.	
Stationary Cone	Unground	Moderate Loads No Shock	+.0005 -.0000	.0005 loose .0005 tight	+.0005 +.0000	+.0010 -.0000	.0010 loose .0000 tight	+.0010 +.0000
	Unground	Special Sheaves, etc.	+.0005 -.0000	.0010 loose .0000 loose	-.0000 -.0005	+.0010 -.0000	.0020 loose .0000 loose	-.0000 -.0010
	Ground	Moderate Load no Shock						
	Hardened and Ground	Wheel Spindles	+.0005 -.0000	.0012 loose .0002 loose	-.0002 -.0007	+.0010 -.0000	.0022 loose .0002 loose	-.0002 -.0012

Notes: (1) B is nominal cone bore. (2) It is recommended that all cone seats be ground. In those cases where this is impossible a minimum cone seat should be provided equal to the nominal cone bore plus .0005" (0.013) per inch (25.400 mm) of cone bore. To this value add the cone bore tolerance.

Fitting Practices for Industrial Equipment - Table in inches. (b) Recommended Cup Fitting Practice.

Mounting Condition		Cup Outside Diameter								
		Up to 3 inclusive			Over 3 to 5 inclusive			Over 5 to 12 inclusive		
		Cup OD Equals D1	Fit	Cup Seat Equals D1	Cup OD Equals D1	Fit	Cup Seat Equals D1	Cup OD Equals D1	Fit	Cup Seat Equals D1
Stationary Cup	Adjustable	+.0010 -.0000	.0010 loose .0010 tight	+.0000 +.0010	+.0010 -.0000	.0010 loose .0010 tight	+.0000 +.0010	+.0010 -.0000	.0020 loose .0010 tight	+.0000 +.0020
Stationary or Rotating Cup	Non-adjustable	+.0010 -.0000	.0005 tight .0025 tight	-.0015 -.0005	+.0010 -.0000	.0010 tight .0030 tight	-.0020 -.0010	+.0010 -.0000	.0010 tight .0030 tight	-.0020 -.0010

Notes: 1 - D is nominal cup outside diameter.

ENGINEERING DATA

UNIT CONVERSIONS

Multiply	By	To Obtain
Celcius Temperature [°c]	9/5(°c)+32	Fahrenheit Temperature [°F]
Centimeter [cm]	0.3937	Inch [in]
Centimeter [cm]	10	Millimeter [mm]
Dyne	0.0001	Newton [N]
Dyne Centimeter	10^{-7}	Newton-Meter [N-m]
Fahrenheit Temperature [°F]	5/9(°F)-32	Celcius Temperature [°c]
Foot [ft]	30.48	Centimeter [cm]
Foot [ft]	0.3048	Meter [m]
Gallon, US Liquid [gal]	3.7854	Liter [l]
Gram [g]	0.0353	Ounce [oz]
Horsepower [hp]	0.7457	Kilowatt [kW]
Horsepower [hp]	7456999.00	Watt [W]
Inch [in]	2.54	Centimeter [cm]
Inch [in]	0.0254	Meter [m]
Inch [in]	25.4	Millimeter [mm]
Joule [J]	0.009478	British Thermal Unit [Btu]
Kilogram [kg]	2.20	Pound [lb]
Kilogram-Force [kgf]	9.81	Newton [N]
Kilometer [km]	0.6214	Mile [mi]
Liter [l]	0.3531	Cubic Foot [ft^3]
Liter [l]	0.001	Cubic Meter [m^3]
Liter [l]	0.2642	Gallon, US Liquid [gal]
Meter [m]	39.37	Inch [in]
Meter [m]	3.28	Foot [ft]
Meter [m]	1.0936	Yard [yd]
Micron [µm]	1000.00	Millimeter [mm]
Micron [µm]	10^{6}	Meter [m]
Mile [mi]	1.6093	Kilometer [km]
Millimeter [mm]	0.03937	Inch [in]
Millimeter [mm]	0.003281	Foot [ft]
Newton [N]	0.2248	Pound-Force [lbf]
Ounce [oz]	28.3495	Gram [g]
Pound [lb]	0.4536	Kilogram [kg]
Pound-Force [lbf]	4.448	N̄ewton [N]
Yard [yd]	0.9144	Meter [m]

ENGINEERING DATA

METRIC CONVERSIONS

Inches		Millimeters	Inches		Millimeters	Inches		Millimeters
Fractions	Decimals		Fractions	Decimals		Fractions	Decimals	
	.00394	.1		.28125	7.1438	21/32	.65625	16.6688
	.00787	.2	19/64	.296875	7.5406		.66929	17.00
	.01181	.3	5/16	.3125	7.9375	43/64	.671875	17.0657
1/64	.015625	.3969		.31496	8.00	11/16	.6875	17.4625
	.01575	.4	21/64	.328125	8.3344	45/64	.703125	17.8594
	.01969	.5	11/32	.34375	8.7313		.70866	18.00
	.02362	.6		.35433	9.00	23/32	.71875	18.2563
	.02756	.7	23/64	.359375	9.1281	47/64	.734375	18.6532
1/32	.03125	.7938	3/8	.375	9.525		.74803	19.00
	.0315	.8	25/64	.390625	9.9219	3/4	.7500	19.05
	.03543	.9		.3937	10.00	49/64	.765625	19.4469
	.03937	1.00	13/32	.40625	10.3188	25/32	.78125	19.8438
3/64	.046875	1.1906	27/64	.421875	10.7156		.7874	20.00
1/16	.0625	1.5875		.4331	11.00	51/64	.796875	20.2407
5/64	.078125	1.9844	7/16	.4375	11.1125	13/16	.8125	20.6375
	.04874	2.00	29/64	.453125	11.5094		.82677	21.00
3/32	.09375	2.3813	15/32	.46875	11.9063	53/64	.828125	21.0344
7/64	.109375	2.7781		.47244	12.00	27/32	.84375	21.4313
	.11811	3.00	31/64	.484375	12.3031	55/64	.859375	21.8282
1/8	.125	3.175	1/2	.5000	12.70		.86614	22.00
9/64	.140625	3.5719		.51181	13.00	7/8	.875	22.225
5/32	.15625	3.9688	33/64	.515625	13.0969	57/64	.890625	22.6219
	.15748	4.00	17/32	.53125	13.4938		.90551	23.00
11/64	.171875	4.3656	35/64	.546875	13.8907	29/32	.90625	23.0188
	.1875	4.7625		.55118	14.00	59/64	.921875	23.4157
3/16	.19685	5.00	9/16	.5625	14.2875	15/16	.9375	23.8125
13/64	.203125	5.1594	37/64	.578125	14.6844		.94488	24.00
7/32	.21875	5.5563		.59055	15.00	61/64	.953125	24.2094
15/64	.234375	5.9531	19/32	.59375	15.0813	31/32	.96875	24.6063
	.23622	6.00	39/64	.609375	15.4782		.98425	25.00
1/4	.2500	6.35	5/8	.625	15.875	63/64	.984375	25.0032
17/64	.265625	6.7469		.62992	16.00		1.0000	25.4001
	.27559	7.00	41/64	.640625	16.2719			

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