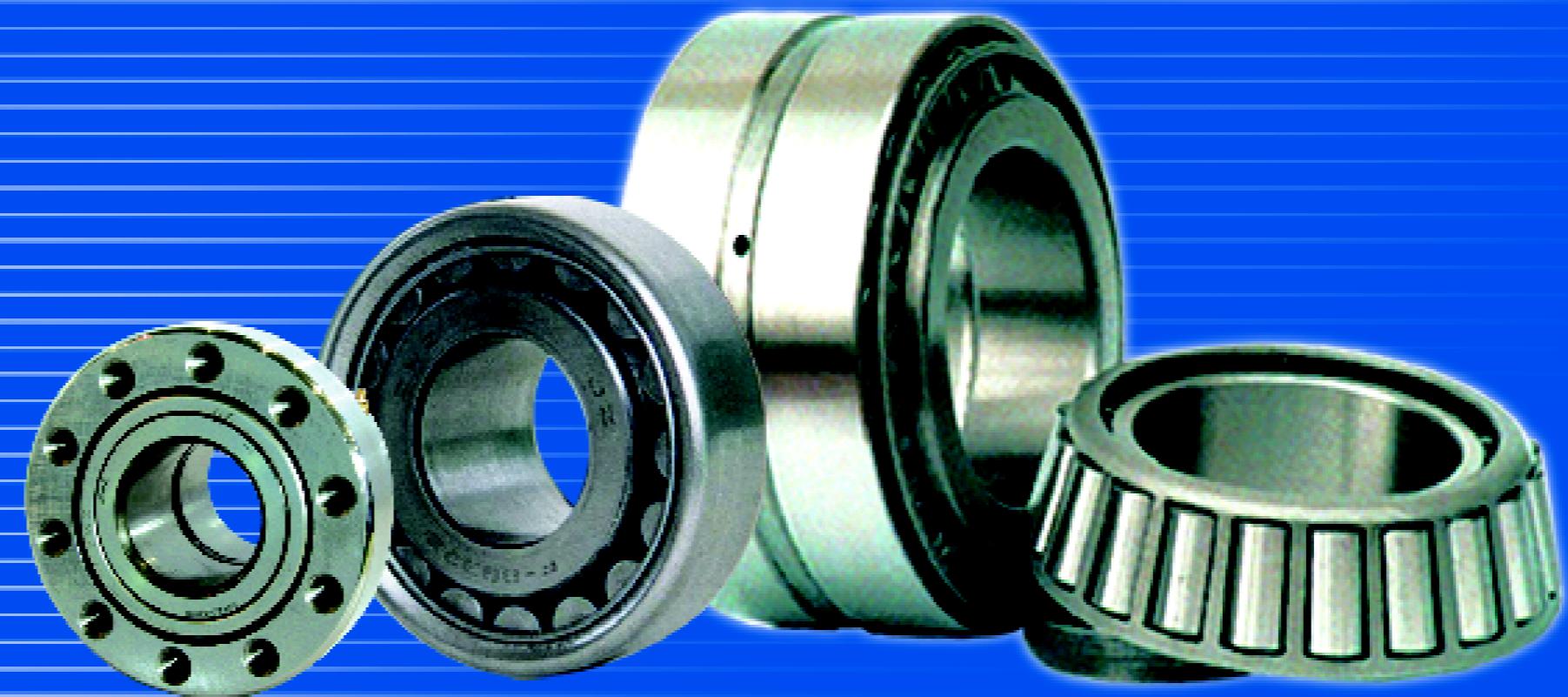


ZWZ

Automobile Bearing Catalogue



ZWZ

Automobile Bearing

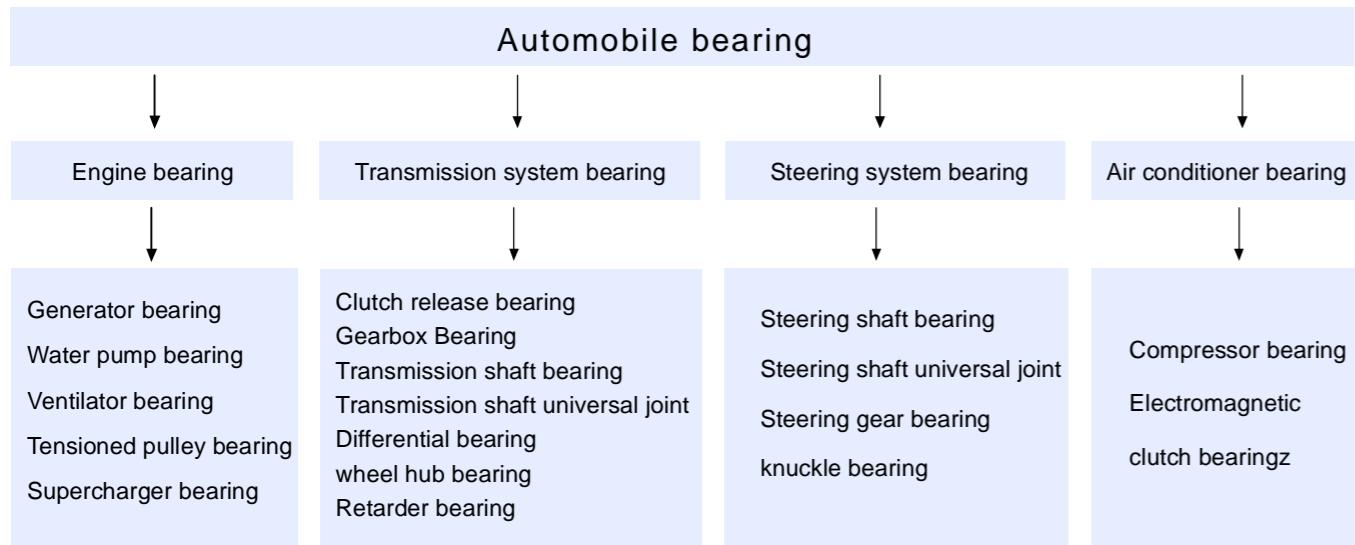
- ZWZ manufacture automobile bearings such as ball bearings,cylindrical roller bearings and tapered roller bearings, applies to the wheel hub, reducer,differential,gear box,retarder and clutch for cars, passenger vehicle, truck,mining vehicle and engineering vehicles, fulfills the safety, energy saving,environmental requirements.
- ZWZ annually productivity :40million sets.



ZWZ automobile bearing overview

Automobile bearing concludes all kinds general and special bearings used in automobile parts. The main development of ZWZ automobile is expanding the scope of general bearing application; improving the performance and life of general bearing and special bearing. ZWZ automobile special bearing is more convenient for automobile installation, to make the bearing installation lightweight integration long life, high reliability, low torque change (low energy consumption) and low cost.

Classified by automobile bearing installation and used parts



ZWZ batch production bearing

ZWZ Automobile bearing have the structure and function closely connection to the automobile application.

ZWZ first generation wheel hub bearing unit**integrate lubrication, sealing, adjusting clearance functions into bearing. ZWZ second generation wheel hub bearing unit**include the structure and function of first generation wheel hub bearing, also make the first generation wheel hub bearing outer or inner ring with flange, this structure and function expanded the supporting structure of wheel hub, decrease the quantity of wheel hub parts, make installment more easier. Install induction gear ring or ABS magnetic induction coil in the out ring of bearing rotating parts, Realize ABS sensor and wheel hub bearing integration.

ZWZ third generation wheel hub bearing unit**the structure and function of wheel hub bearing have further expansion to the third generation wheel hub bearing, combine the functions of bearing integration, light weighting, and no need to adjust clearance. The inner ring flange supporting wheel and the

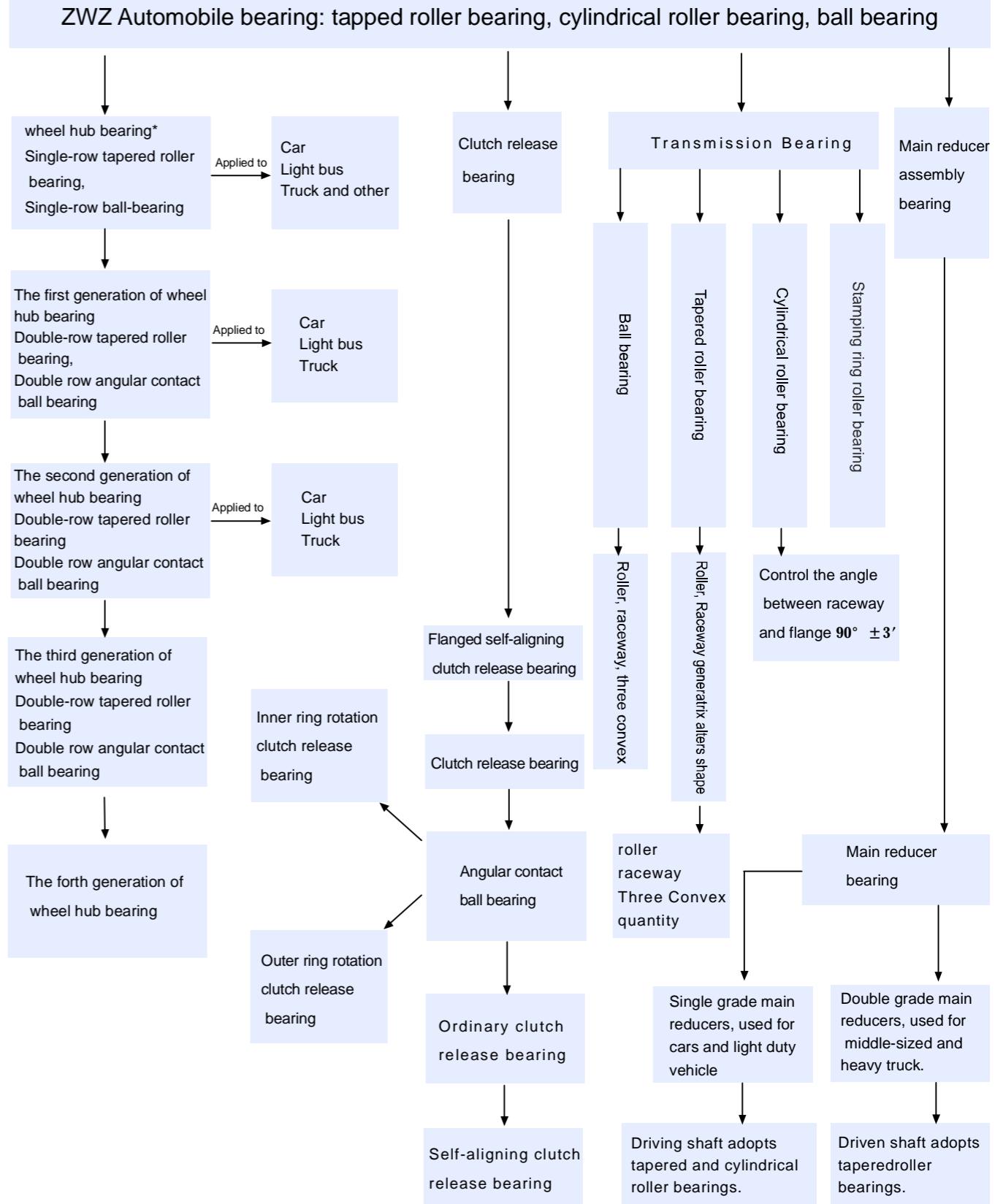
brake disc, the out ring flange for connecting suspension system. The third generation wheel hub bearing is featured by simplify auto wheels and suspension system design, reduce the volume, simplify assembly, avoid installation error and reduce cost etc. Install induction gear ring or ABS magnetic induction coil in the out ring of bearing rotating parts, Realize ABS sensor and wheel hub bearing integration.

The third generation wheel hub bearing connects and integrate with universal joint further constitute the fourth generation wheel hub bearing.

ZWZ Self-aligning clutch release bearing**solved differential slip which generated by the clutch diaphragm spring and bearing inner ring contact force, and solve the deviation which caused by bearing center and diaphragm spring center, ensure the bearing and diaphragm spring self-aligning rotation.

ZWZ produce automatic tensioner pulley, pump shaft bearing and other special engine bearing.

ZWZ Automobile bearing development flow chart



ZWZ automobile bearing overview

wheel hub bearing

The wheels are the car running system of automobile, and different from automobile drive system, so ZWZ wheel hub bearing structure type and its application are also different. ZWZ bearing applies to automobile wheel hub, there are deep groove ball bearing, angular contact ball bearing, tapered roller bearing and wheel hub bearing unit, coexist with various structures. ZWZ automobile bearing unit develop from the first generation wheel hub bearing unit to the forth generation wheel hub bearing unit, and also widely used in cars, miniature, light vehicle, medium vehicle and truck.

(1) Optimize design, increase the bearing rated load, improve the bearing rated life, and realize the lightweight.

(2) Using high purity bearing material, control detrimental impurity in material and use special heat treatment method, reduce the influence of impurity to bearing life.

(3) Improve the bearing precision, dimensional tolerance , form and position tolerance.

(4) Raceway generatrix alters shape processing, reduce the edge stress concentration, and improve the life of bearing.

(5) Realize bearing and ABS (gear ring type or magnetic induction) sensor integration.

(6) Clearance adjustment and grease lubrication injection, reduce installation process for automobile factory .

Code method of wheel hub bearing

Automobile wheel hub bearing unit code was composed by bearing unit type code, dimension of bearing unit size fit to installation characteristics and postposition code component.

The sequence is according to table 1

Table 1

Bearing unit basic code	Postposition code
Type code	Postposition code

Type code

Using an alphabet-based rating scale for

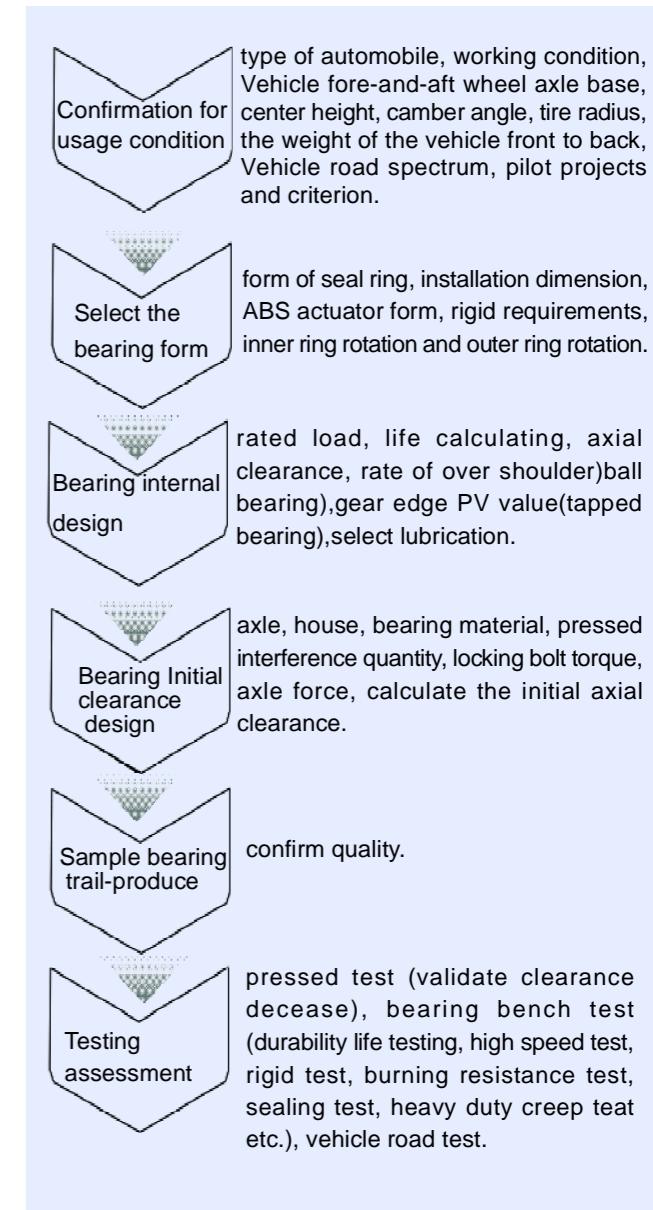
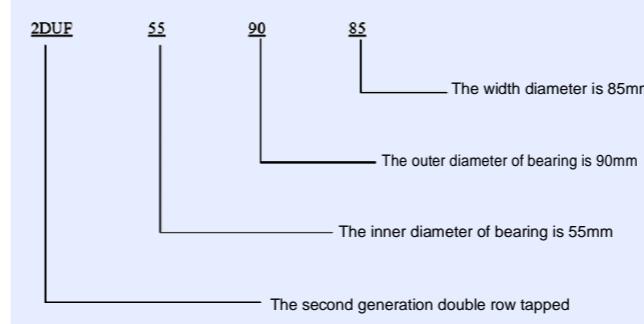
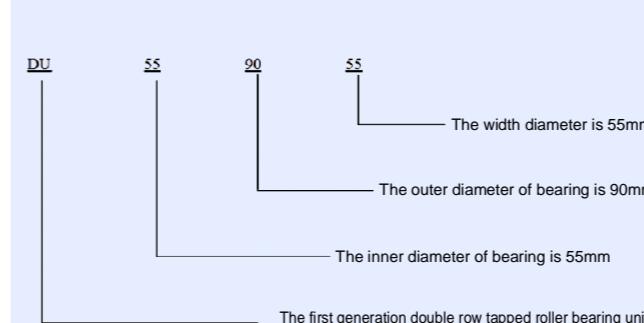
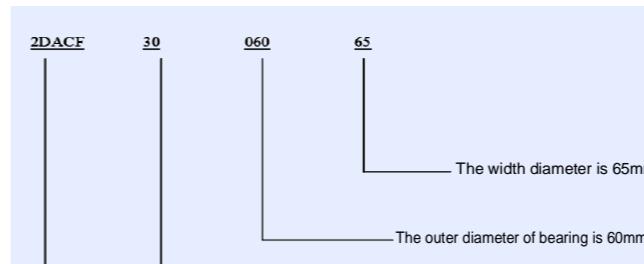
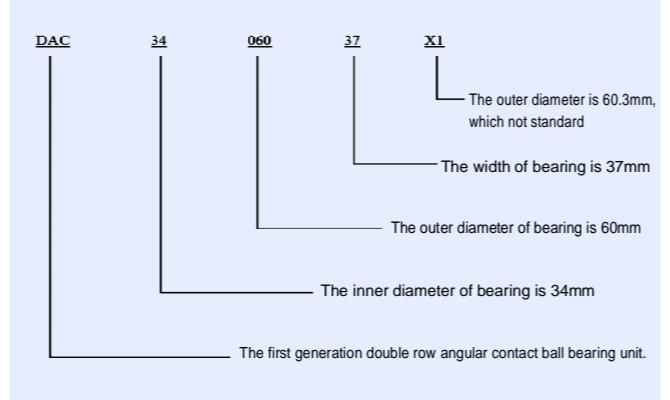
Type code	Meaning
DAC	The first generation double row angular contact ball bearing unit
2Dacf	The second generation double row angular contact ball bearing unit(Inner or outer ring with flange)
3Dacf	The third generation double row angular contact ball bearing unit(Inner or outer ring with flange)
DU	The first generation double row tapered roller bearing unit
2DUF	The second generation double row tapered roller bearing unit(Inner or outer ring with flange)
3 DUF	The third generation double row tapered roller bearing unit(Inner or outer ring with flange)

Dimension code

7 Arabic numeral represent for the dimension code, the two initial digitals indicate bearing unit inner diameter d millimeter, the middle three digitals indicate bearing unit outer diameter D (outer ring with flange type indicate flange diameter F) millimeter; the last two digitals indicate bearing unit width B or C maximum millimeter.

Postposition code

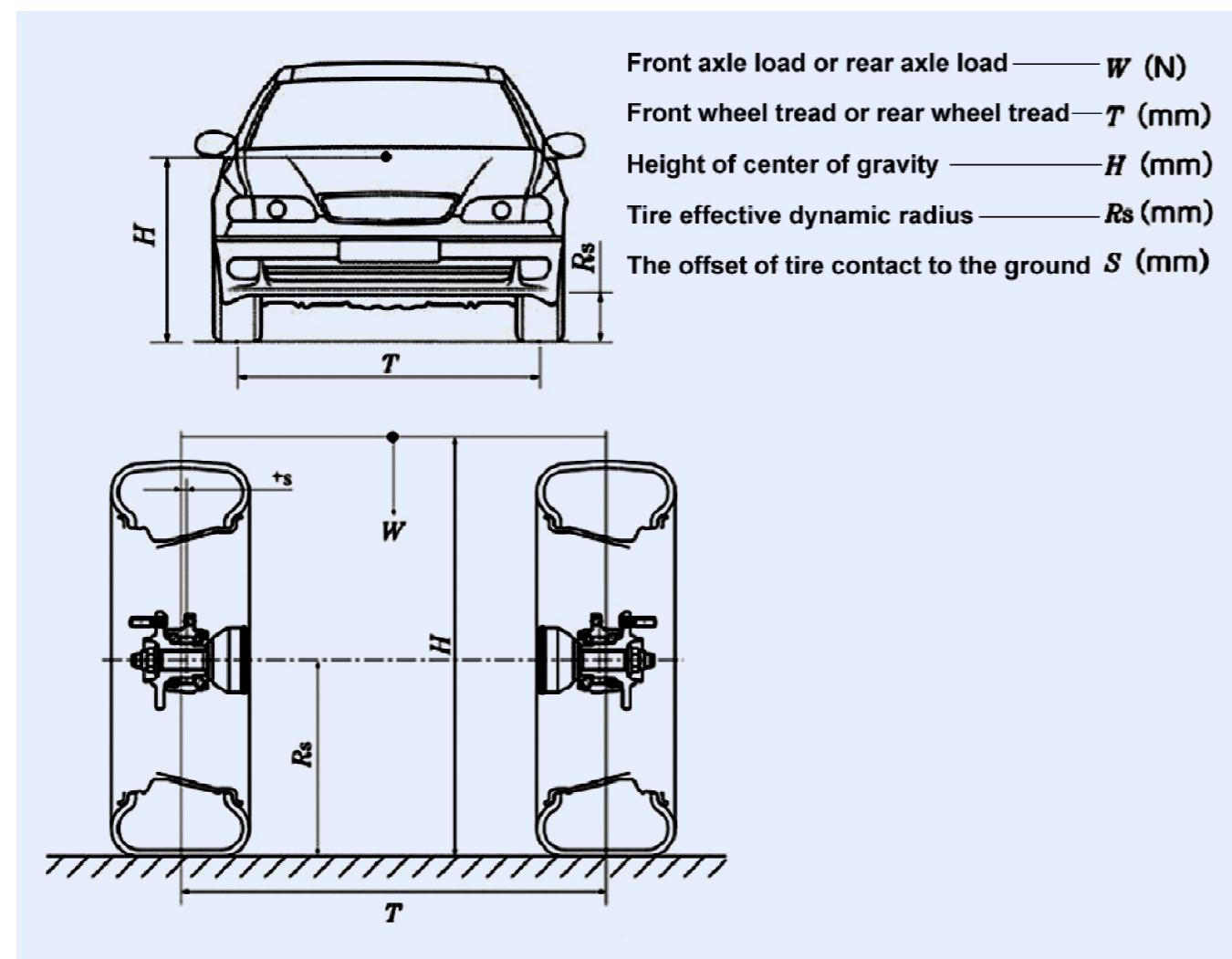
When the bearing unit changed in structure, dimension, tolerance, counting requirement, it need to add supplementary code after the basic code, the sequence of postposition code is according to the requirement of GB/T272*JN/T2974.



ZWZ automobile bearing overview

Life calculation

According to vehicle driving road spectrum condition and vehicle parameter to calculate the braced force (axial and radial force) from the road face to the wheel bearing. Life calculation is to separately calculate the single-row bearing's life, take the shortest life of single bearing as bearing unit life.



Transmission Bearing

Transmission is an important part in automotive transmission system. Its function is to increase and reduce speed, realize fix gear, neutral gear and reverse gear. So it's very important to require bearing with long life, high strength, resistance to mesh, and low torque, especially the long life and high strength. Apply optimal design standard to meet the need of automobile Transmission Box, develop special sealed clean ball bearing and long life roller bearing for gearbox.

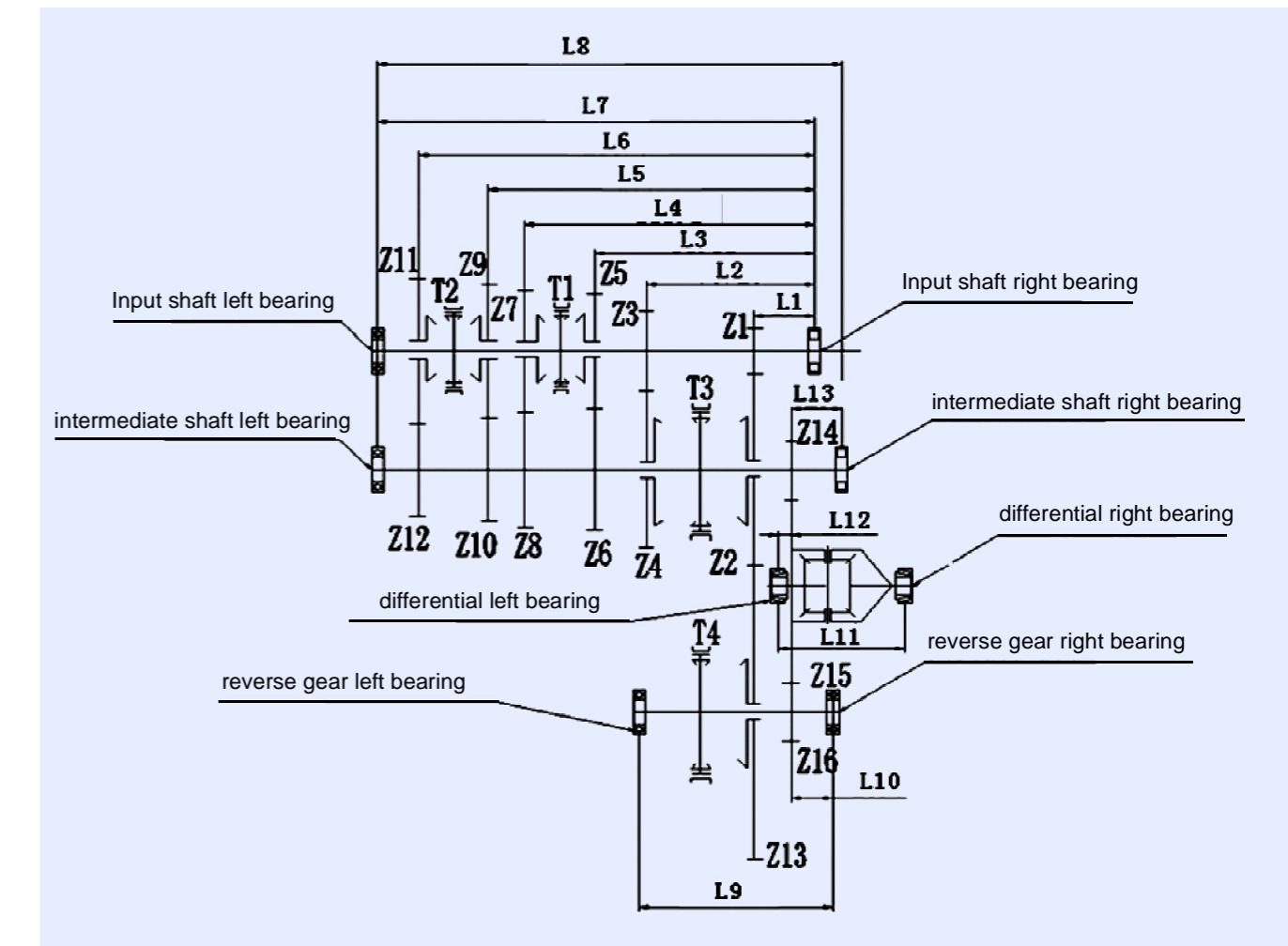
Special sealed clean ball bearings are filled with lubrication grease that can compatible with gear oil.

Apply sealed structure that prevent foreign matter, and allow lubrication oil into the seal lip. Greatly improve the bearing fatigue life.

Contact sealed bearings with low friction torque and tapered roller bearings with low friction torque.

Roll generatrix for long life roller bearings should apply crown form, to reduce bearing edge stress amass, and increase bearing life.

Gear Box bearing designation input condition
 Simple chart for gear Box's structure, all using space in bearings



ZWZ automobile bearing overview

Dimension requirement for bearing mounting

Dimension requirement for bearing mounting		d(mm)	D(mm)	B(mm)
Input shaft right bearing				
Input shaft left bearing				
Middle shaft right bearing				
Middle shaft left bearing				
Reverse gear shaft left and right bearing				
Differential mechanism left and right bearing				

Gear parameter table

Gear parameter	First gear		Second gear		Third gear		Forth gear		Fifth gear		Sixth gear		Reverse gear		Main reduction			
	Z1	Z2	Z3	Z4	Z5	Z6	Z7	Z8	Z9	Z10	Z11	Z12	Z1	Z2	Z2	Z13	Z14\Z16	Z15
Module																		
Gear No.																		
angular α																		
Helical angle β																		
Spiral direction	R	L	R	L	R	L	R	L	R	L	R	L	R	L	L	R	L	R
Pitch diameter																		
Gear width																		

Transmission load spectrum

Gear shifts	Temperature (°C)	Time(hour)	Rotation speed(rpm)	One input shaft torque (N.m)	One inputshaft torque (N.m)	Speed ratio (Z2/Z1)	Output shaft bearing axial force [kN]	Middle shaft bearing radial force [kN]	Output shaft bearing axial force [kN]
First gear									
Second gear									
Third gear									
Forth gear									
Fifth gear									
Sixth gear									
....									
Reverse gear									

Life calculation

$$L_{nmr} = \frac{\sum q_i}{\sum \frac{q_i}{L_{nmri}}}$$

In formula: L_{nmr} — multiple modify life L_{nmri} — Bearing life to i level load
 q_i — i level load's ratio in total rotation time.

Main reducer bearing:

Drive axle main reducer have many structures such as single reduction final drive, double reduction final drive , through type double reduction final drive; single reduction final drive mainly used for sedan and light duty truck, double reduction final drive and through type double reduction final drive mainly used for middle and heavy duty truck.

(1)Optimize design, increase bearings' load ratings, and improve bearings' rated life.

(2)Low friction torque, long life tapered roller bearings, apply crown type, reduce bearing edge stress concentration*improve bearing life.

ZWZ automobile bearing overview

Clutch release bearing broken reason

1) Overheating from excess working temperature

Half step the clutch when making a turn or slow down, or the foot is still on the clutch after put into gear, or vehicle free stroke adjustment is too large, these lead to clutch's halfway separation, in half joint half separation condition, lead to static friction and a lot of heat to the release bearing. If the bearing heated over the limit temperature, lubrication will melt or dilute & flow, when the temperature increased higher, bearing will be burnout when reached specific temperature.

2) No or little lubricant oil, abrasion loss is about several or dozens of times than the condition with lubricant oil of the clutch bearing. The more abrasion loss, the higher is the temperature, and the bearing is much more easier be damaged.

3) Free path is too little or too much load times

Per the request, generally interval between clutch release bearing and the release lever is 2.5mm. Free path is 30-40mm on clutch pedal, too little free path or no free path will keep release bearing and the release lever in constant joint. Based on the fatigue failure principle, the bearing working longer, the damage will more serious; the more loading frequency of the bearing have, the separate bearing are more easier to fatigue and failure, the higher temperature the bearing has, its easier to let bearing get burnout and the bearing life reduced.

4) Whether the release lever is smooth, and return spring is fine, this 2 elements have big influence to release bearing's damage.

Fan bearing:

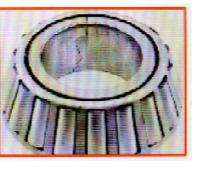
In order to keep engine in best working temperature and reduce power consumption as far as possible, modern engine usually introduced adjustable fan, to adjust temperature. Firstly, fan bearing must consider lubrication, seal and noise, then fan bearing should can resist large torque load.

(1)Optimize design, improve bearing's load ratings, and improve bearings' rated life.
 (2)Take full consideration of lubrication and seal, and take strict control of impurity quantity of lubrication grease.

Retarder bearing

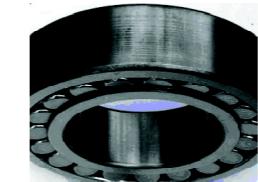
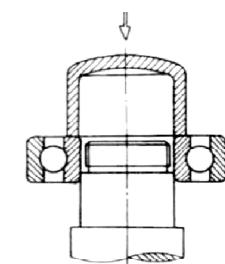
ZWZ can provide bearings used for hydrodynamic retarder and eddy current retarder, bearings have high temperature resistance and impact resistance, dimension stability.

Normal damage mode , reason and solution in bearing application

Item	Phenomenon	Reason	Measure
Peel	working face peeled Obvious crown after peel 	over load bad installation bad axle or bearing box's precision clearance too small foreign matter intrude hardness decrease caused by extremely high temperature	re-develop working condition re-choose bearing re-consider clearance check the machining precision of axle and bearing housing research designation for bearing around check install method check lubrication and lubricant way
burn	Bearing heat and change color, then burnout cannot rotate	clearance is too small lubrication is not enough or lubricant is not right over load rollers deflect	set profit clearance(increase clearance) check lubricant kind and injection volume check application condition avoid position error improve bearing assembling method
Crack defect	Some parts have gap and crack 	impact load is too much interference is too much have big peal friction crack bad assemble precision (fillet is too big) bad installation (use hammer, foreign matter in)	check application condition design proper interference improve bearing assembling and application method avoid friction crack check lubricant
Cage damage	rivet loose or cracked cage cracked 	overload torque high speed rotation or frequently speed change bad lubrication big vibration foreign matters get stuck bad mounting (incline when mounting) abnormal temperature rise (for resin cage)	check using condition check lubricant condition restudy the choose of cage notice bearing application research rigidity of axle and bearing housing
Bruise and block injury	surface is rough, and little crown ring flange and roller end knocked wounded	insufficient lubrication foreign matters intrude into bearing roller's tilt from bearing's tilt flange face out of oil caused by axial overload surface roughness is too much big rolling element's slide	re-research lubricant, lubrication method check application condition set proper preload enhance seal capability take right way to apply bearing

ZWZ automobile bearing overview

Item	Phenomenon	Reason	Measure
Rust	partly or all of the surface rusted, rust shaped as rolling pitch	poor storage poor package insufficient rust preventer water or acid solution invade take bearings by hand directly	Avoid rust in storage Enhance sealing capability Check lubricant oil regularly notice bearing application.
Ablation	there're red rust shaped as worn powder on fitting surface	not enough interference insufficient lubricant Non stability load vibration during transportation	Check lubricant and lubricant coating condition Re-choose lubricant Re-choose bearing
Wear down	Check lubricant and lubricant coating condition Re-choose lubricant Re-choose bearing	foreign matters mixed into lubricant insufficient lubrication rollers deflect	Check lubricant and lubrication method Enhance sealing capability Avoid position error
Electric corrosion	rolling face has bocca or concave shaped pit	rolling surface electrified	Take insulation measures, avoid electric through bearing
Inner Ring Sliding		Mark of slide between axle and inner hole surface.	Fitting between axle and inner hole is so loosen lead to slide between axle and inner hole surface. Slide friction will cause heat, and get the bearing broken cause of heat.
		inner ring face end has heat crack, heat crack continuously extend, lead to crack of inner ring during using.	When*inner ring sliding* happens, slide friction between axle and inner ring will make high temperature, because the contact face between inner ring face end and axle shoulder is very small, the temperature will be much higher.
		a d h e r e b e t w e e n a x l e a n d i n n e r b o r e a f t e r h e a t i n g	Because*go inner ring* make slide friction between inner hole and axle, high temperature from it can melt surface and cause adhere.

Item	Phenomenon	Reason	Measure
Outer ring sliding		mark of slide between diameter of shell hole and outer diameter surface	Fit for shell hole and outer diameter is so loosen, cause slide between surface of them. Slide friction will case heat, and get the bearing broken cause of heat.
Bearing with nock bad flange			Installation with hit bearing directly by hammer is prohibited. Sleeve should be put on inner ring(outer ring) end face, then hit the sleeve with hammer to mounting bearing.
Trace of inner and outer race			
Black		heat temperature is too high during installation bearing heated by acetylene spray gun, surface is black	

ZWZ automobile bearing overview

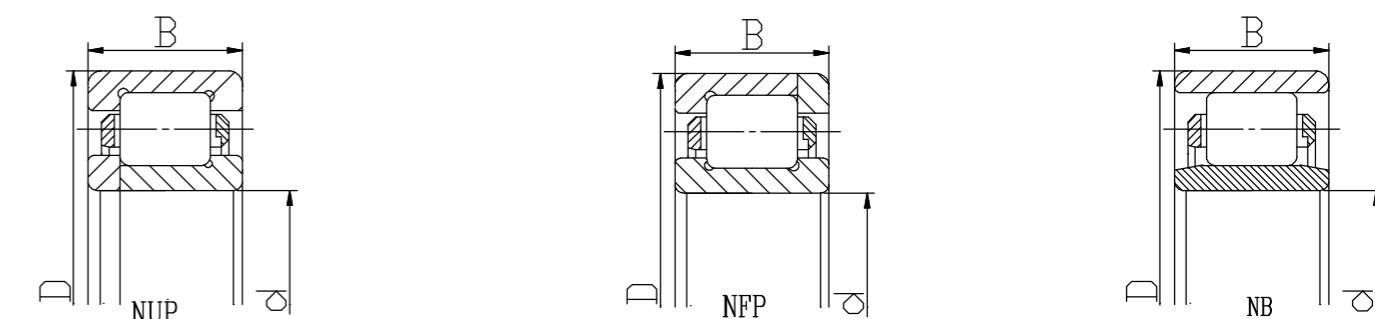
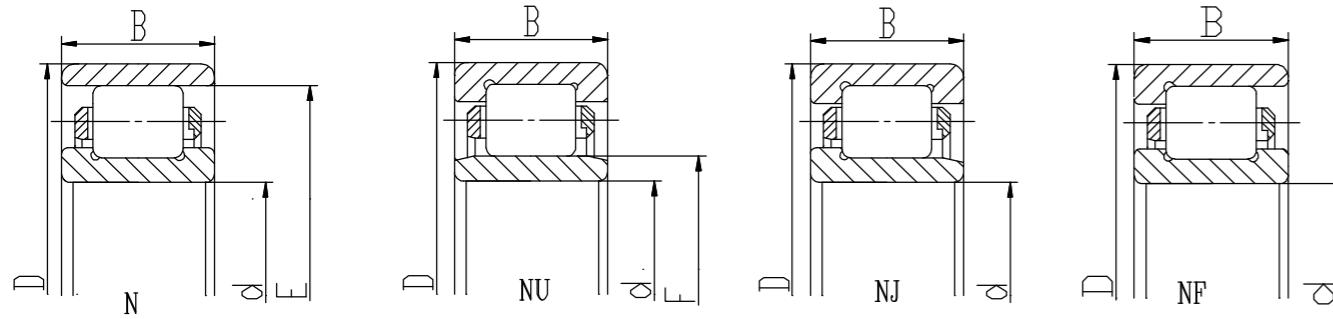
Item	Phenomenon	Reason	Measure
Unilateral raceway and rollers broken	 <p>Self-aligning roller bearing, one row rollers resists the force but the other row are not, lead to one side race and one row of rollers broken of the inner ring and outer ring</p>	Installation does not reach the designated position make the bearing resist force on just one side	
Creep	inner diameter face or outer diameter face slips, lead to mirror surface or color change, sometimes get stuck	interference shortage in fit place sleeve's fasten is not enough abnormal increase of temperature over load	Restudy magnitude of interference Restudy application condition. check axle and bearing box precision
Impress injury	Cause of solid foreign matter stuck, or impact, there's concave and bruise when installing	solid matter invade impact and drop due to poor installation. installation in heeling condition Metal stripping tablet stuck	Improve installation method and application method. Prevent foreign matters from invade. If it's caused by metal sheet, then should check other parts.

Automobile Bearing Catalogue

Automobile Cylindrical Roller Bearings

ZWZ

Single-row Cylindrical Roller Bearings



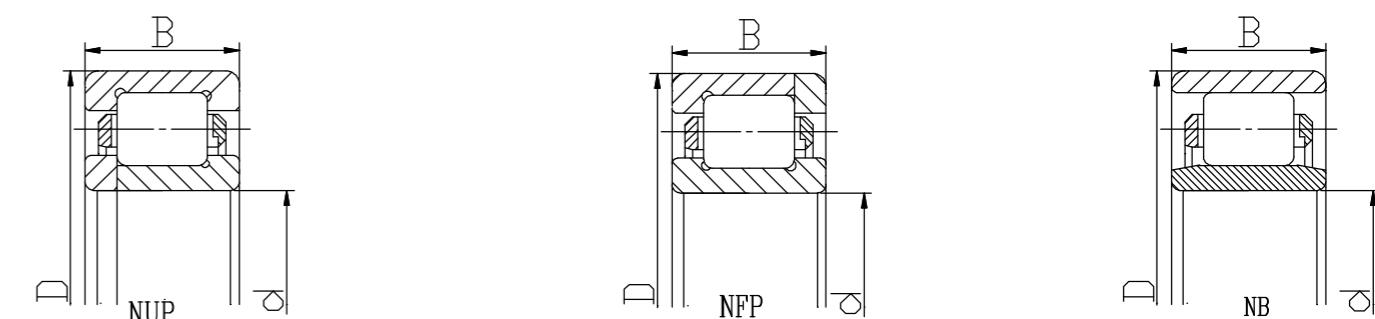
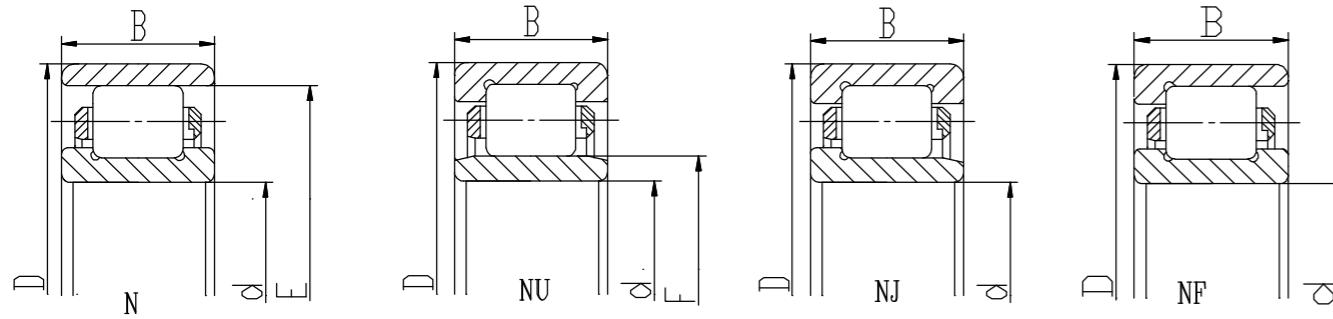
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
45	85	30.16	55.52		94.6	119	NU5209XPC3	0.843
	100	25		86.5	83.6	84.0	N309M	0.920
	100	25		86.5	83.6	84.0	N309J	0.820
	100	25	58.5		83.6	84.0	NU309M/C3	0.992
	100	25	58.5		100	93.5	NJ309EM	1.00
	100	25		88.5	100	101	N309EM	0.959
	100	25	58.5		100	102	NUP309E	1.01
	100	25		88.5	100	109	N309E	0.964
	100	25		88.5	100	109	N309ETN1	0.846
	100	25		88.5	100	109	NF309E	0.995
	100	25	58.5		100	109	NJ309E	1.01
	100	25	58.5		100	109	NU309E	0.986
	100	25	58.5		100	102	NUP309ETN1/HAC3YA6	0.892
	100	31		88	119	120	NF2309X2J/YA6	1.12
	100	36	58.5		145	157	NU2309EM/C3	1.49
	100	36	58.5		145	164	NJ2309E	1.45
	100	36	58.5		145	164	NJ2309EM	1.52
	100	36	58.5		145	164	NU2309E	1.42
	120	29		100.5	124	123	N409M	1.67
	120	29	64.5		124	123	NU409M	1.87
	120	29	64.5		124	123	NJ409M	1.88
50	80	16	57.5		39.3	46.5	NJ1010M	0.316
	90	20		80.4	57.2	64.0	N210M	0.559
	90	20		80.4	57.2	64.0	NF210M	0.565
	90	20	60.4		57.2	64.0	NU210M	0.564
	90	20	60.4		57.2	64.0	NU210Q1	0.557
	90	20	59.5		70.4	67.5	NU210EM	0.562
	90	20	59.5		70.4	74.0	NJ210EM	0.573

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
50	90	20	59.5		81.5	70.4	78.0	0.578
	90	20		59.5		70.4	78.0	NUP210E
	90	23		59.5		82.5	90	NU2210EM
	90	23		59.5		82.5	90	NJ2210EM
	90	30.16	60.45		95	99.0	128	NU5210XPC3
	110	27				94.6	97.0	N310M
	110	27				94.6	97.0	NJ310M
	110	27				94.6	97.0	NU310M/C3
	110	27				119	115	N310EM
	110	27				119	125	N310E
	110	27				119	125	NJ310E
	110	27				119	125	NU310E
	110	27				94.5	97	NUP310M
	110	40	65			128	142	NU2310M
	110	40	65			171	198	NJ2310E
	110	40	65			171	198	NJ2310EM
	110	40	65			171	198	NU2310E
	110	40	65			155	198	NU2310EM
	110	40	65			155	198	NU2310ETN1
	130	31		110	151	151	151	N410M
	130	31		110	151	151	151	N410
	130	31	70			151	151	NU410M
	130	31	70			151	151	NU410
	130	31	70			151	151	NJ410
	130	31	70			151	151	NJ410M
	55	90	18	64.5		42	50	NU1011M
	100	21		88.5		80.0	84.5	NF211M
	100	21		90		91.3	106	NF211E

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



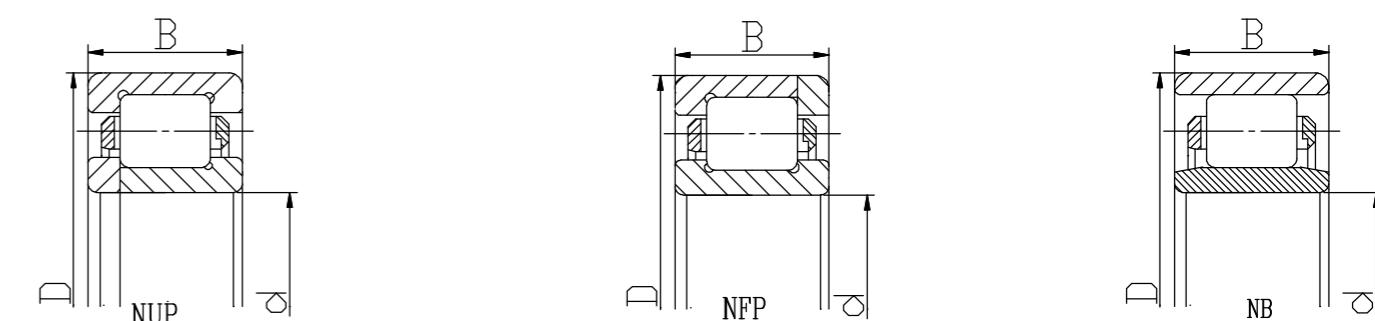
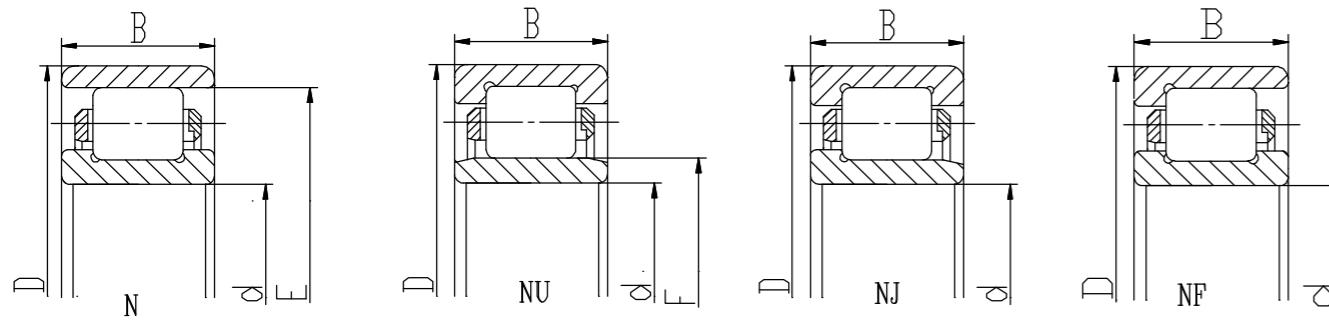
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
55	100	21	66		91.3	106	NJ211E	0.767
	100	21	66		85	95	NUP211EM	0.762
	100	25	66		101	122	NJ2211EM	0.783
	100	25	66		101	122	NU2211EM	0.763
	100	33.3		88.9	73.7	85.0	N3211M	1.20
	100	33.34	66.9		118	155	NU5211XPC3	1.21
	120	29		104.5	120	123	NF311M	1.7
	120	29		104.5	120	123	N311M	1.65
	120	29		104.5	120	123	N311J	1.45
	120	29	70.5		120	123	NU311M	1.74
	120	29	70.5		120	123	NJ311M	1.75
	120	29	70.5		120	123	NUP311M	1.76
	120	29	70.5		120	123	NJ311M/YA6	1.75
	120	29	68.75		138	145	NUP311NJC	1.65
	120	29	68.75		138	145	NUP311NRJC	1.71
	120	29		106.5	139	144	N311EM	1.60
	120	29		106.5	139	156	N311E	1.61
	120	29	70.5		139	156	NJ311E	1.67
	120	29	70.5		139	156	NU311E	1.64
	120	29	70.5		139	156	NUP311E	1.69
	120	29		106.5	139	156	N311ETN1	1.42
	120	29	70.5		139	156	NU311EM	1.64
	120	29	70.5		139	156	NU311EM/C9	1.63
	120	43	70.5		156	174	NU2311M	2.43
	120	43		106.5	210	246	N2311E	2.56
	120	43	70.5		210	246	NJ2311E	2.62
	120	43	70.5		210	246	NU2311E	2.59
	140	33		117.2	162	168	N411M	2.86
	140	33	77.2		162	168	NJ411M/C5	2.95

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
60	95	18			85.5		50.6	66.0
	95	18					50.6	66.0
	110	22					80.3	85.0
	110	22					80.3	93.0
	110	22						NU212M
	110	22						0.938
	110	22						NJ212M
	110	22						0.952
	110	22						NJ212E
	110	22						0.947
	110	22						NJ212EM
	110	28						0.938
	110	28						NUP2212M
	110	28						1.27
	110	28						NU2212EM
	110	28						1.21
	110	28						NJ2212EM
	110	36.51						1.23
	110	36.51						NU5212XPC3
	110	60						1.75
	110	60						NU2212WBM/C3
	110	60						1.57
	130	31						N312M
	130	31						2.04
	130	31						NU312M
	130	31						2.06
	130	31						NU312Q1
	130	31						2.03
	130	31						NJ312M
	130	31						2.10
	130	31						N312E
	130	31						1.94
	130	31						N312EM
	130	31						2.06
	130	31						N312ETN1
	130	31						1.79
	130	31						NF312E
	130	31						2.00
	130	31						NF312EM
	130	31						2.12
	130	31						NJ312E
	130	31						1.98
	130	31						NU312E
	130	31						1.94
	130	31						NU312EM
	130	31						2.06
	130	31						NUP312E
	130	31						2.03
	130	31						NUP312E/C9
	130	31						2.03
	130	31						NUP312ENRM
	130	31						2.2
	130	31						NUP312ENRJ/C3
	130	31						1.92
	130	46						N2312M
	130	46						2.95

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



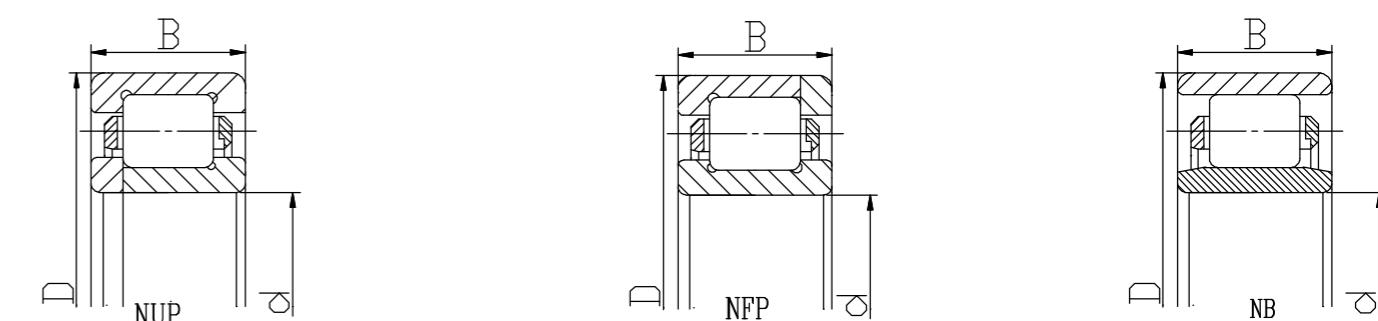
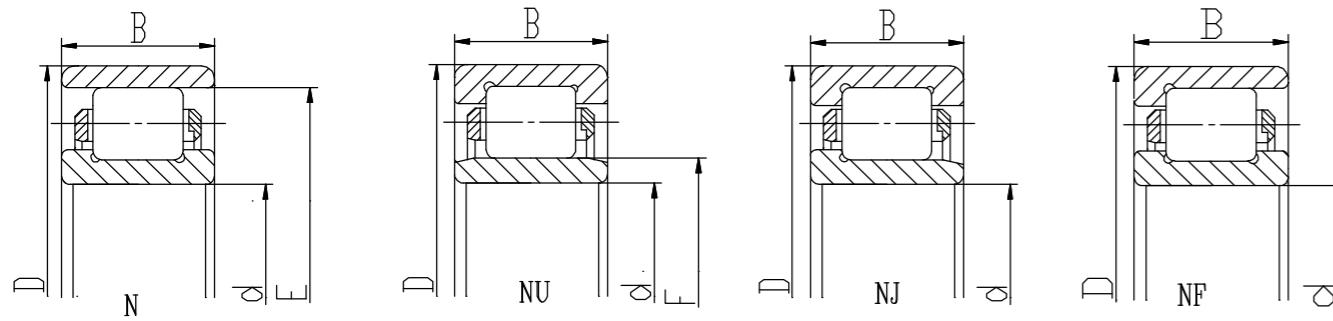
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
60	130	46	77		188	217	NU2312M	3.37
	130	46	77		188	217	NJ2312M	3.38
	130	46		115	234	279	N2312E	2.93
	130	46	77		234	279	NU2312E	2.95
	130	46	77		234	279	NJ2312E	3.00
	140	51		122	252	282		3.47
	140	51	122		268	310	N612M	3.96
	140	51	122		268	310	N612M/C9	3.96
	150	35		127	193	202	N412M	3.29
	150	35	127		193	202	N412	3.18
	150	35	83		193	202	NU412M	3.23
	150	35	83		193	202	NU412	3.13
	150	35	83		193	202	NJ412J	3.13
	150	35	83		193	202	NJ412M	3.36
	150	35	83		193	202	NJ412	3.25
	150	35	83		193	202	NUP412	3.43
	150	35	83		193	202	NUP412J	3.31
	150	35	83		193	202	NUP412M	3.42
65	120	23		105.6	89.1	102	N213M	1.11
	120	23	79.6		89.1	102	NU213M	1.12
	120	23	79.6		89.1	102	NJ213M	1.14
	120	23	79.6		89.1	102	NUP213M	1.22
	120	23		108.5	118	133	NF213E	1.14
	120	23	78.5	108.5	118	133	N213E	1.05
	120	23	78.5		118	133	NU213E	0.994
	120	23	78.5		118	133	NJ213E	1.13
	120	23	78.5		118	133	NUP213E	1.16
	120	23	78.5		118	133	NUP213EM	1.22

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
65	120	23			153	133	NU213ETN1	1.00
	120	31			131	167	NJ2213M	1.65
	120	31			131	167	NU2213M	1.65
	120	31			131	167	NUP2213M	1.75
	120	31	78.5		149	182	NU2213EM	1.61
	120	38.1	80.42		166	218	NU5213XPC3	1.96
	140	33		121.5	156	168	N313	2.24
	140	33		121.5	156	168	N313M	2.45
	140	33	83.5		156	168	NJ313M	2.60
	140	33	83.5		156	168	NU313M	2.54
	140	33	83.5		156	168	NU313Q1	2.46
	140	33	82.5		173	157	NJ313EM	2.5
	140	33		124.5	173	194	N313EM	2.42
	140	33	82.5		173	194	NU313EM	2.45
	140	33		124.5	173	211	N313E	2.43
	140	33	82.5		173	211	NJ313E	2.59
	140	33	82.5		173	211	NU313E	2.46
	140	33	82.5		183	194	NUP313EM	2.64
	140	48	83.5		211	248	NJ2313M	3.67
	140	48	83.5		211	248	NU2313M	3.60
	140	48		124.5	261	305	NF2313E	3.60
	140	48	82.5		261	305	NJ2313E	3.55
	140	48	82.5		261	305	NU2313E	3.48
	160	37		135.5	209	222	N413M	4.01
	160	37		135.5	209	222	N413	3.92
	160	37	89.5		209	222	NU413M	4.03
	160	37	89.5		209	222	NU413	3.94
	160	37	89.5		209	222	NJ413M	4.09
	160	37	89.5		209	222	NJ413W1	4.00
	160	37	89.5		209	222	NUP413M	4.19

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



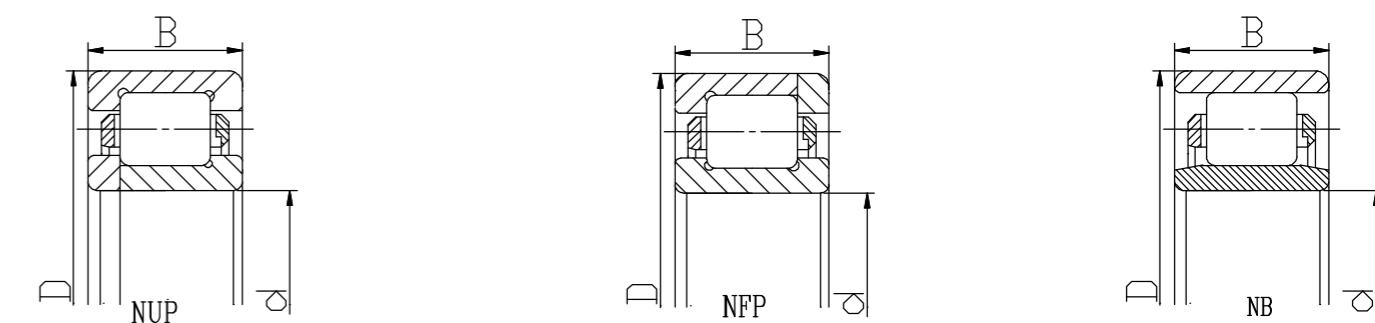
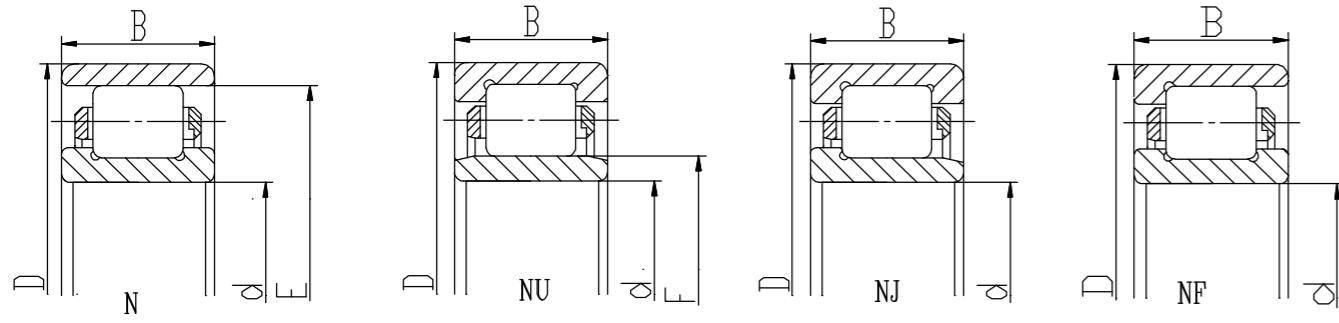
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
70	125	24	84.5	92.4	96	NUP214M	1.35	
	125	24	110.5	92.4	110	N214M	1.27	
	125	24	110.5	92.4	110	NF214M	1.30	
	125	24	84.5	92.4	116	NU214Q1	1.23	
	125	24	84.5	92.4	116	NU214M	1.24	
	125	24	113.5	123	143	NF214EJ/C9YB2	1.21	
	125	24	113.5	129	152	N214E	1.29	
	125	24	113.5	129	152	NF214E	1.31	
	125	24	113.5	129	152	NF214E/C9YB2	1.33	
	125	24	113.5	129	152	NF214ETN1/C9YB2	1.17	
	125	24	83.5	129	152	NUP214E	1.39	
	125	24	83.5	129	152	NJ214E	1.34	
	125	24	83.5	129	152	NJ214E/YA6	1.34	
	125	24	83.5	129	152	NU214E	1.32	
	125	31	84.5	130	155	NUP2214M	1.8	
	125	31	84.5	130	155	N2214M	1.68	
	125	31	84.5	130	169	NU2214M	1.70	
	125	31	84.5	130	169	NJ2214M	1.73	
	125	39.69	84.76	166	232	NU5214XPC3	2.17	
	125	41	84.5	130	155	NU2214WBM/C2	1.88	
	150	35	90	182	202	NJ314Q1	3.11	
	150	35	130	182	202	N314M	3.00	
	150	35	130	182	202	N314J	2.78	
	150	35	90	182	202	NU314M	3.05	
	150	35	90	182	202	NJ314M	3.12	
	150	35	130	182	202	NF314M	3.08	
	150	35	90	182	202	NU314Q1	3.03	
	150	35	90	182	202	NU314NRM/YAB	3.05	
	150	35	133	219	242	N314E	3.00	

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
70	150	35	89	133	219	242	N314EM	3.08
	150	35	89		219	242	NJ314E/C9	3.06
	150	35	89		219	242	NU314E	3.01
	150	35	89		219	242	NJ314E	3.06
	150	35	89		219	242	NUP314E	3.14
	150	35	89		189	226	NU314EM	3.45
	150	51	90		248	300	NU2314M	4.52
	150	51	90		248	300	NJ2314M	4.62
	150	51	90	133	286	345	N2314E	4.27
	150	51	89		286	345	NU2314E	4.24
	150	51	89		286	345	NJ2314E	4.33
	180	42	151	262	283	N414M	5.66	
	180	42	99	152	262	283	N414	6.40
	180	42	100		262	283	NU414M	5.79
	180	42	100		262	283	NU414	6.38
	180	42	100		262	283	NJ414	6.68
	180	42	100		262	283	NJ414M	5.94
	75	115	20	85	64.9	83.0	NU1015M	0.739
	130	25	116.5	107	127		N215M	1.40
	130	25	88.5	107	127		NU215M	1.42
	130	25	88.5	107	127		NJ215M	1.45
	130	25	118.5	141	173		N215E	1.38
	130	25	88.5	141	173		NU215E	1.39
	130	25	88.5	141	173		NJ215E	1.38
	130	25	88.5	146	161		NU215EL3/HAP53	1.3
	130	25	88.5	146	161		NUP215EL3/HAP53	1.35
	130	30	88.5	132	166		NUP2215M	2.03
	130	31	88.5	132	166		NU2215M	1.75

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



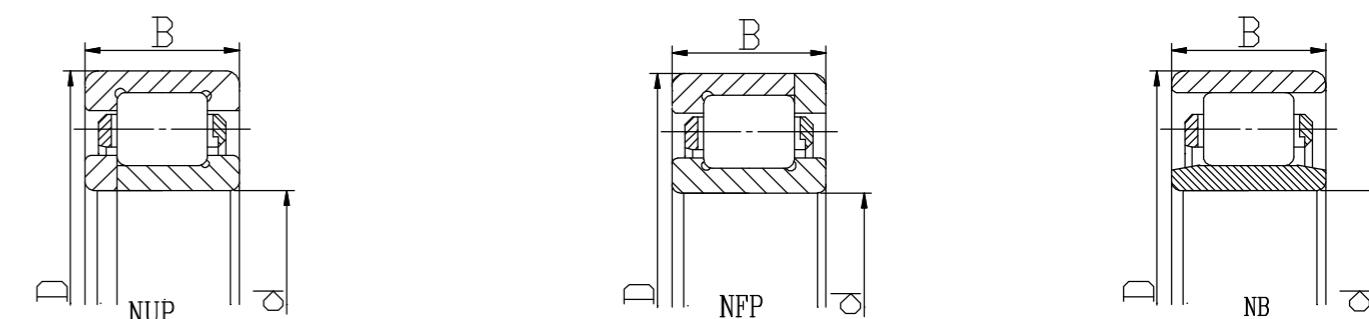
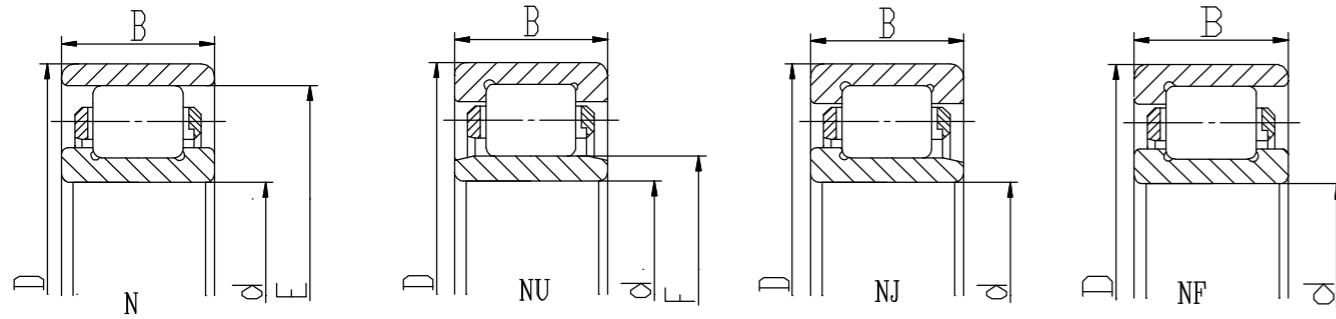
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
75	130	31	89	116.5	132	166	N2215M	1.77
	130	41.28	89		204	268	NU5215XPC3	2.27
	160	37	95.5		204	226	NJ315Q1	3.75
	160	37		139.5	204	264	N315EM	3.65
	160	37		139.5	204	226	N315J	3.28
	160	37	95		204	264	NU315EM	3.62
	160	37	95.5		204	226	NU315Q1	3.68
	160	37		143	241	285	N315E	3.59
	160	37	95		241	285	NU315ETN1	3.25
	160	37	95		241	264	NUP315EM	3.75
	160	37		139.5	255	226	N315M	3.59
	160	37	95.5		255	226	NU315M	3.56
	160	37	95		300	285	NU315E	3.56
	160	37	95.5		255	226	NJ315M	3.63
	160	37	95		300	285	NJ315E	3.64
	160	55		139.5	287	345	N2315M	5.30
	160	55		139.5	287	345	N2315Q1	5.84
	160	55	95.5		287	345	NJ2315M	5.86
	160	55	95.5		287	345	NU2315M	5.96
	190	45	104.5		300	325	NJ415M	7.14
	190	45		160.5	300	325	N415M	6.86
	190	45	104.5		300	325	NU415M	6.94
80	125	22		113.5	78.1	100	N1016M	1.00
	125	22	91.5		78.1	100	NU1016M	1.21
	140	26		125	120	144	NF216M	1.72
	140	26		125	127	154	N216M	1.66
	140	26	95		127	154	NJ216M	1.73
	140	26	95		127	154	NU216M	1.69

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
80	140	26	95		127	154	NUP216M	1.77
	140	26	95.3		151	184	NU216E	1.65
	140	26	95.3		151	184	NUP216E	1.72
	140	26		127.3	151	184	N216E	1.67
	140	26	95.3		151	184	NJ216E	1.68
	140	26	95.3		160	184	NUP216ENRJ/C3YA6	1.66
	140	26	95.3		160	184	NUP216ENRM/YA6	1.81
	140	33	59.3		152	195	NU2216M	2.32
	140	33	95.3		152	226	NJ2216M	2.35
	140	33	95.3		197	238	NU2216EM	2.39
	140	33	95.3		197	247	NJ2216E	2.34
	140	33	95.3		197	260	NU2216E	2.30
	140	33		127.3	197	260	N2216E	2.16
	140	33	95.3		197	260	NUP2216E	2.13
	140	44.5	95.28		217	305	NU5216	3.03
	170	39		151	217	246	N316M	4.30
	170	39	103		217	246	NU316M	4.37
	170	39	103		217	246	NU316Q1	4.45
	170	39	103		217	246	NJ316M	4.47
	170	39	103		217	246	NUP316M	4.58
	170	39	101		275	285	NJ316EM	4.32
	170	39		151	275	286	N316EM	4.22
	170	39	101		275	286	NU316EM	4.26
	170	39		151	275	310	N316E	3.98
	170	39	101		275	310	NJ316E	4.08
	170	39	101		275	310	NU316E	4.25
	170	58		147	304	380	N2316M	6.15
	170	58	103		304	380	NU2316M	6.34

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



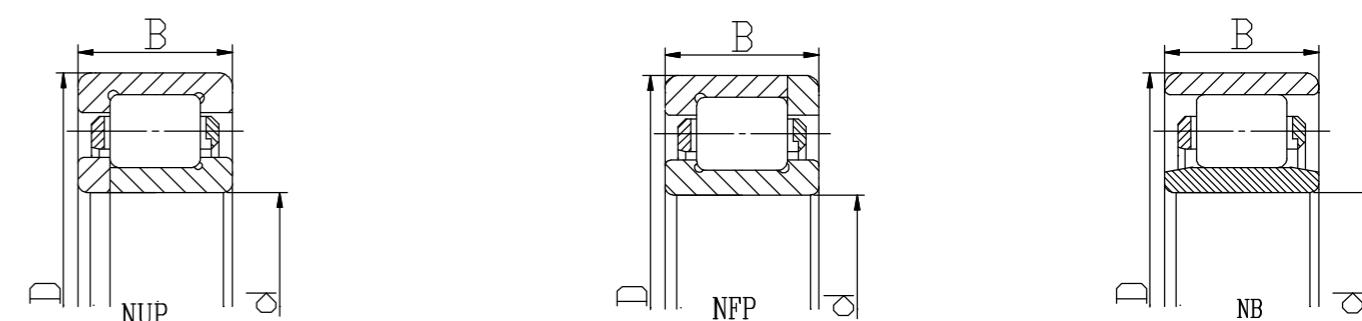
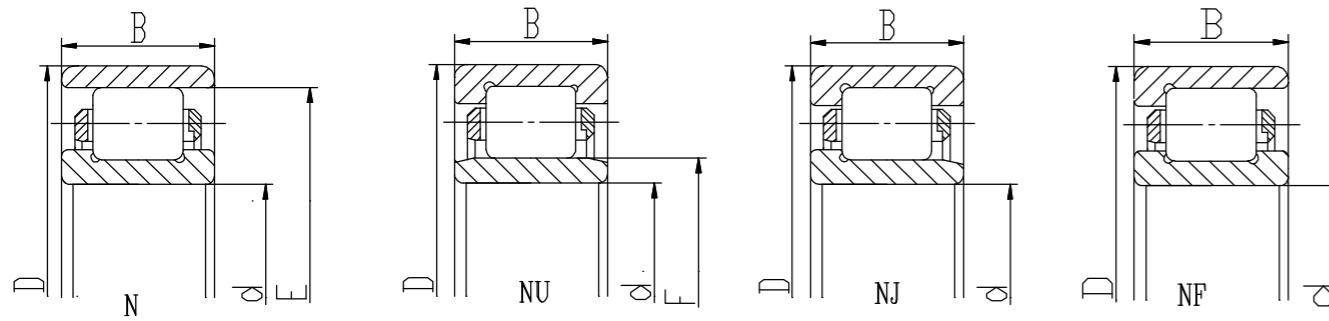
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
80	170	58	103		304	380	NJ2316M	6.44
	170	58	101		374	460	NU2316E	6.28
	170	58		151	374	460	N2316E	6.26
	170	58	101		374	460	NJ2316E	6.94
	200	48		170	341	375	N416M	8.02
	200	48	110		341	375	NU416M	8.19
	200	48	110		341	375	NJ416M	8.31
85	150	28		133.8	143	175	N217M	2.08
	150	28	101.8		143	175	NU217M	2.09
	150	28	101.8		143	175	NJ217M	2.15
	150	28		136.5	179	217	N217E	2.08
	150	28	100.5		179	217	NU217E	2.08
	150	28	100.5		179	217	NJ217E	2.12
	150	28	100.5		179	217	NUP217EM	2.27
	150	36	101.8		196	263	NU2217M/C3	2.8
	150	36	100.5		218	279	NU2217EM	2.82
	150	36	100.5		215	279	NJ2217EM	2.86
	150	49.2	102		223	310	NU3217M/C3	3.88
	150	49.21	102		252	350	NU5217XPC3	3.88
	180	41		160	298	208	IS-N317EM	5.2
	180	41		160	312	360	N317EQ1	5.20
	180	41	108		312	360	NJ317EQ1	5.27
	180	41	108		312	360	NU317E	5.12
	180	41	108		312	360	NU317EM	5.16
	180	41	108		312	360	NU317EQ1	5.18
	180	41		160	312	360	N317E	5.14
	180	41		160	312	360	N317EM	5.20
	180	41		160	312	360	N317EN1T	4.59

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
85	180	41	108		312	360	NJ317E	5.21
	180	41	108		312	360	NJ317EM	5.27
	180	60	108		347	435	NU2317M	7.36
	180	60	108		347	435	NJ2317M	7.81
	180	60	108	160	413	515	N2317E	7.44
	180	60	108	160	413	515	NU2317E	7.40
	180	60	108	179.5	413	515	NJ2317E	7.57
	210	52	115.5		385	425	N417M	9.48
	210	52	115.5		385	425	NU417M	9.66
	210	52	115.5		385	425	NJ417M	9.83
	210	52	115.5		385	425	NUP417M	10.1
90	140	24	103		88.0	114	NUP1018M	1.4
	160	30		143	163	195	N218J	2.37
	160	30		143	163	195	N218J1	2.47
	160	30		143	171	207	NF218M	2.71
	160	30		143	171	207	N218M	2.64
	160	30	107		171	207	NU218M	2.66
	160	30	107		171	207	NJ218M	2.72
	160	30	145	197	241	241	NF218E	2.55
	160	30	145	197	241	241	N218E	2.49
	160	30	107	197	241	241	NU218E	2.49
	160	30	107	197	241	241	NJ218E	2.54
	160	40		143	215	287	N2218M	3.62
	160	40	107		256	335	NUP2218EM	3.68
	160	40	107		256	335	NU2218ETN1	3.12
	160	40	107		256	335	NUP2218EM	3.59
	160	52.4	107.218		281	390	NU3218A	4.50
	160	52.4	107.218		281	390	NU5218XPC3	4.50

Automobile Cylindrical Roller Bearings

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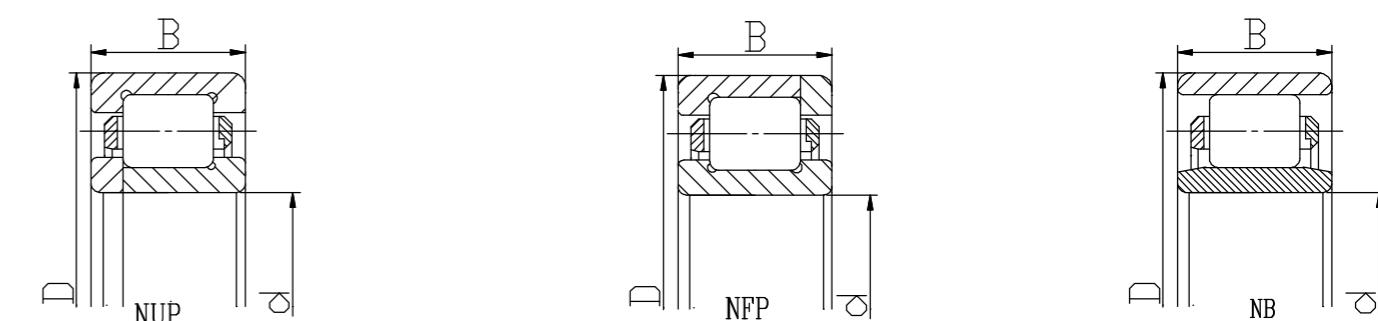
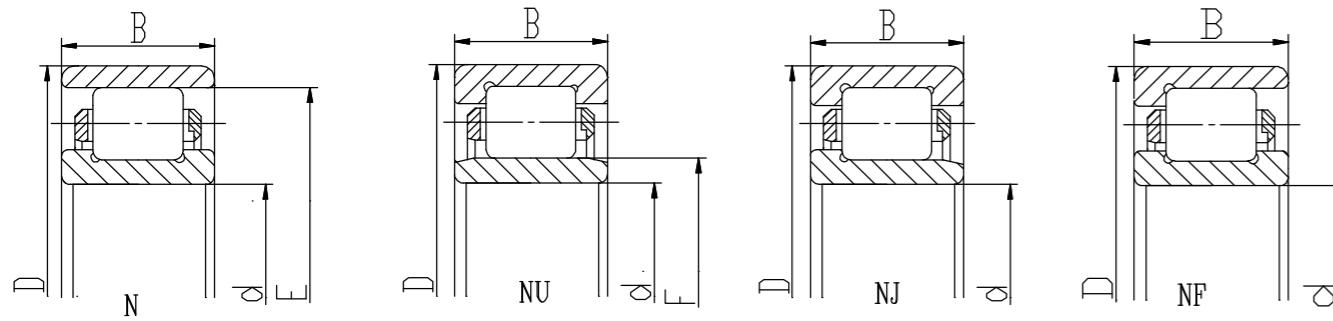
Single-row Cylindrical Roller Bearings



Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
90	190	43		165	274	295	NF318	5.78
	190	43		165	274	315	NF318M	6.21
	190	43		165	274	315	N318M	6.05
	190	43	115		274	315	NU318M	6.06
	190	43	115		274	315	NU318Q1	5.88
	190	43	115		274	315	NJ318M	6.19
	190	43	115		274	315	NUP318M	6.33
	190	43		169.5	336	385	N318EM	5.99
	190	43	113.5		336	385	NU318EM	5.9
	190	43		169.5	336	385	N318E	5.93
	190	43	113.5		336	385	NJ318E	6.09
	190	43	113.5		336	385	NUP318E	6.05
	190	43	113.5		336	385	NU318E	5.84
	190	43	113.5		363	300	NH318EQ1/YB2	6.64
	190	43	113.5		284	305	NJ318M/C4YA8	6.37
	190	64	115		396	505	NJ2318M/C4	9.29
	190	64	113.5		451	565	NJ2318E	8.84
	190	64	113.5		451	565	NU2318E	8.69
	190	64	115		400	505	NUP2318M	9.36
	225	54		191.5	429	480	N418M	11.3
	225	54	123.5		429	480	NU418M	11.5
	225	54	123.5		429	480	NJ418M/C5	11.9
95	145	24	108		117	166	NJ1019M	1.53
	170	32		151.5	189	231	N219M	3.07
	170	32	113.5		189	231	NU219M	3.13
	170	32	112.5		189	231	NJ219M	3.23
	170	32	113.5		201	236	N219EJ	2.91
	170	32		154.5	238	291	N219E	3.07

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
95	170	32	112.5		238	291	NU219E	3.06
	170	32	112.5		238	291	NJ219E	3.12
	170	32	112.5		238	291	NJ219EM	3.24
	170	32		154.5	237	291	N219EM	3.19
	170	43		151.5	272	315	N2219M	4.27
	170	43	113.5		242	315	NU2219M	4.31
	170	55.56		149.61	305	445	NU5219XPC3	5.48
	200	45		173.5	295	340	N319M	6.67
	200	45		173.5	295	340	N319J	6.74
	200	45	121.5		295	340	NU319M	7.00
	200	45	121.5		295	340	NJ319M	7.06
	200	45	121.5		319	365	NU319EM/Z1	6.68
	200	45		177.5	358	420	N319EM	7.00
	200	45		177.5	358	420	N319E	6.92
	200	45		177.5	358	420	N319ETN1	6.31
	200	45	121.5		358	420	NJ319E	6.86
	200	45	121.5		358	420	NU319E	6.74
	200	67	121.5		413	530	NU2319Q1	9.86
	200	67	121.5		435	565	NU2319M	10.3
	200	67	121.5		435	565	NJ2319M	10.2
	200	67	121.5		479	615	NU2319E	9.84
	200	67	121.5		479	615	NJ2319E	9.77
	200	67		177.5	479	615	N2319E	9.76
	200	67	121.5		435	565	NJ2319M/W20	10.2
	240	55		201.5	457	525	N419M	13.3
	240	55	133.5		457	525	NU419M	13.6
	240	55	133.5		457	525	NJ419M	13.9
	240	55	133.5		457	525	NUP419M	14.2

Single-row Cylindrical Roller Bearings



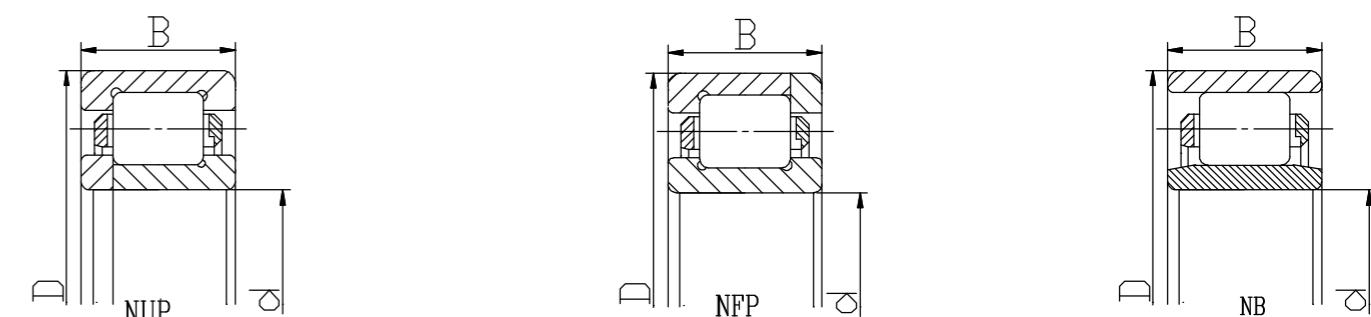
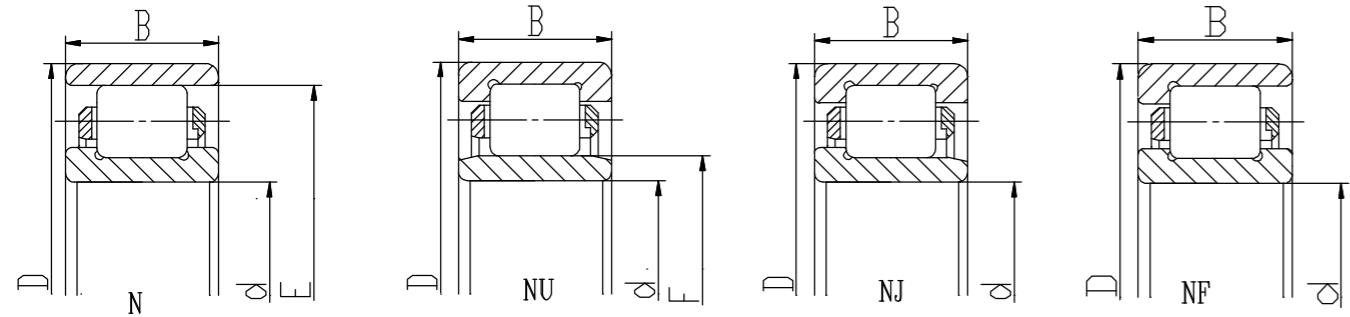
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
107.95	165.1	57.15	127		285	590	NA6/107X4/C9	5.11
110	170	28	125	155	143	194	N1022M	2.31
	170	28	125		143	194	NU1022M	2.32
	170	28	125		143	194	NUP1022M	2.45
	170	28	125		143	194	NUP1022TN1/C9YB2	2.17
200	38	132.5	178.5	257	315	N222J	4.70	
	38	132.5		257	315	NU222M/YA8	5.30	
	38	132.5		257	315	NU222Q1	5.36	
	38	132.5	178.5	270	335	N222M	5.02	
	38	132.5		270	335	NJ222M	5.10	
	38	132.5		270	335	NU222M	5.05	
	38	132.5	180.5	297	370	N222EM	5.27	
	38	132.5		297	372	NJ222EM	5.38	
200	38	132.5	180.5	311	395	N222E	5.11	
	38	132.5		311	395	NU222E	5.12	
	38	132.5		311	395	NJ222E	5.02	
	53	132		352	470	NUP2222M	7.95	
200	53	132		352	470	NU2222M	7.63	
	53	132		352	470	NJ2222M	7.83	
	69.8	132.5		451	655	NU3222M/C3	9.92	
	50	207		407	480	N322	10.2	
240	50	143	207	429	515	N322M	11.4	
	50	143		429	515	NJ322M	11.8	
	50	143		429	515	NU322M	11.6	
	50	143		429	515	NU322Q1	11.6	
240	50	143		429	515	NUP322M	10.3	
	50	211		462	530	N322EM	11.4	
	50	143		462	530	NU322EM	11.5	

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN		kg	
110	240	50	143	211	484	575	N322E	11.2
	240	50	143		484	575	NJ322E	11.4
	240	50	143		484	575	NU322E	11.3
	240	50	143		484	575	NU322EQ1/C9	11.8
	240	80	143		648	795	NU2322EQ1	17.6
240	80	143			666	800	NJ2322EM	18.7
	80	143			666	800	NU2322EM	18.3
	80	143			666	800	NU2322M/C9	18.3
	80	143			704	930	NU2322E	17.6
280	80	143	211	704	930	N2322E	17.5	
	65	235			616	725	N422M	21.8
	65	155			616	725	NU422M	22.0
	65	155			616	725	NJ422M	22.3
120	180	28	135		146	205	NU1024M	2.96
	180	28	135		146	205	NJ1024M	3.09
	40	143.5			292	210	NU224M/P59	6.27
	40	191.5			304	390	N224M	6.11
215	40	143.5			304	390	NJ224M	6.39
	40	143.5			304	390	NU224M	6.27
	40	195.5			358	460	N224E	6.32
	40	143.5			358	460	NU224E	6.73
215	40	143.5			358	460	NJ224E	6.67
	40	143.5			358	460	NUP224E	6.80
	40	143.5			374	485	NU224EQ1	6.88
	40	143.5			355	460	NU224EM	6.8
215	58	191.5			396	550	N2224M	8.92
	58	143.5			396	550	NU2224M	9.31
	58	143.5			396	550	NJ2224M	9.46

Automobile Cylindrical Roller Bearings

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Single-row Cylindrical Roller Bearings



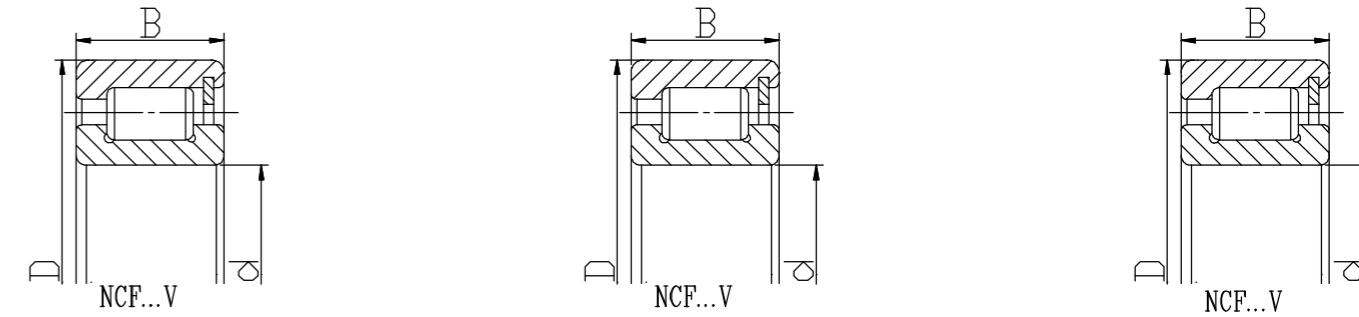
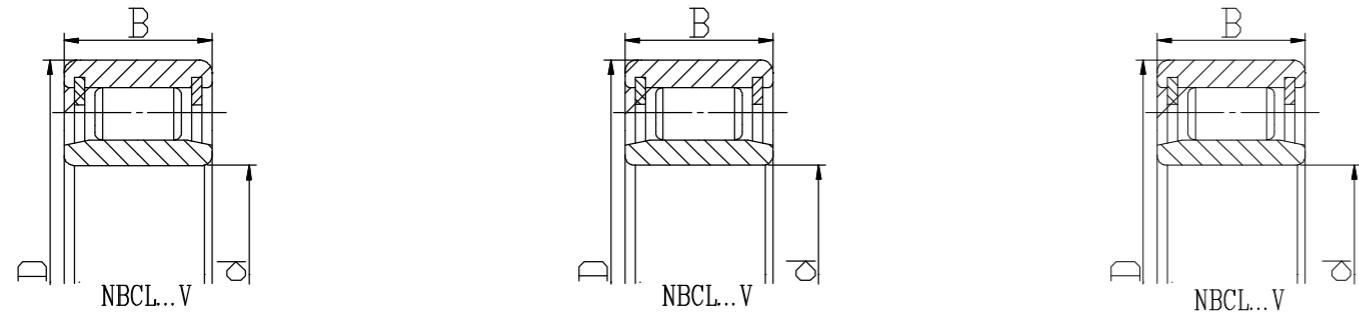
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN			kg
120	215	58	195.5	451	620	NF2224EM	9.72	
	215	58	195.5	473	660	N2224E	9.15	
	215	58	143.5	473	660	NU2224E	9.00	
	215	58	143.5	473	660	NU2224ETN1	8.33	
	215	58	143.5	473	660	NJ2224E	9.15	
	215	76	145.14	517	780	NU3224M/C4	12.4	
	215	76.2	145.14	550	845	NU5224XPC3	12.6	
	240	80	150	583	790	NJ624M	17.7	
	260	55	226	506	600	NF324M	14.3	
	260	55	226	539	645	N324M	15.1	
	260	55	226	539	645	N324J	13.9	
	260	55	154	539	645	NU324M	15.4	
	260	55	154	539	645	NU324Q1	15.2	

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	E	Cr	Cor		
mm					KN			kg
120	260	55	154	539	539	645	NJ324M	15.7
	260	55	154	539	539	645	NUP324M	16.0
	260	55	230	594	594	710	N324E	14.3
	260	55	154	594	594	710	NU324E	15.8
	260	55	154	594	594	710	NJ324E	16.0
	260	86	226	737	737	970	N2324M	22.9
	260	86	154	737	737	970	NU2324M	23.1
	260	86	154	737	737	970	NJ2324M	23.6
	260	86	154	737	737	970	NJ2324M/C4YA8	24.6
	310	106	230	990	990	1380	NF3324Q1	29.9
	310	72	260	770	770	915	N424M	29.0
	310	72	170	770	770	915	NU424M	29.1
	310	72	170	770	770	915	NU424Q1	28.8
	310	72	170	770	770	915	NJ424M	29.7

Automobile Cylindrical Roller Bearings

ZWZ

single row full complement cylindrical roller bearings



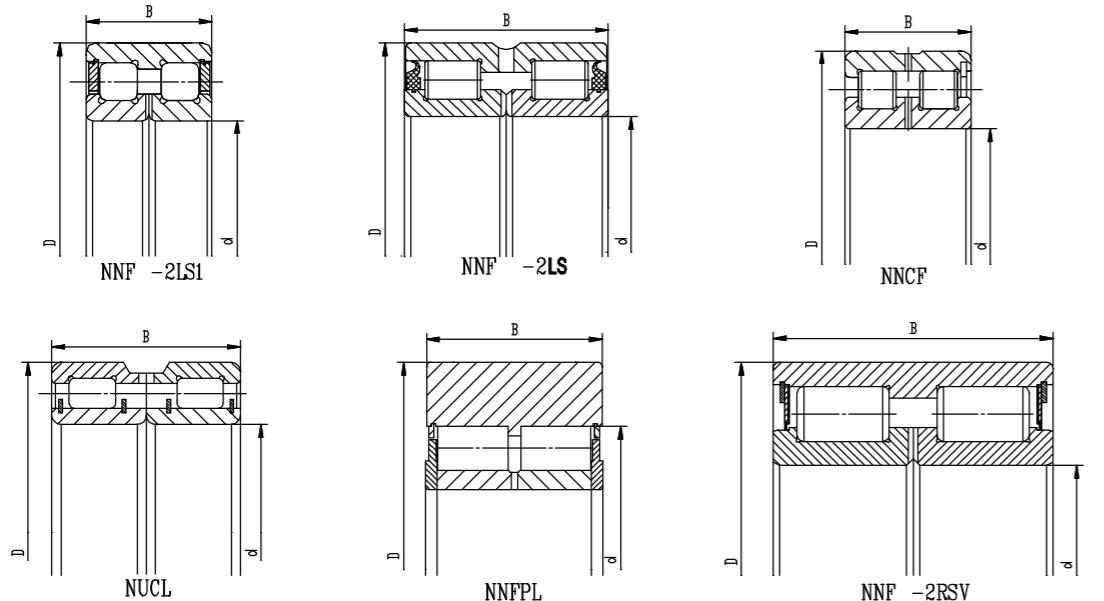
Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	Cr	Cor		
mm				KN		kg	
25	252	18	31	46.2	51.0	NUP2205NV/C91YAD	0.193
	52	18	31	41.3	43.5	NU2205V/C9YA6	0.176
	52	18	31	47.9	48	NUP2205NV/HAC9YA	0.193
	52	18	30.998	38.5	35	NUP2205NV/HAC9Y	0.173
	62	20	34	59.4	60.5	NJ305X2V/C3YA46	0.321
	62	24	34	69.3	74.0	NJ2305V/C3YA46	0.378
	62	24	34.35	61.6	66.0	NUP2305V	0.401
30	62	19	38.2	51.7	58.5	NCL2206X2V/YA6	0.272
	72	19	40.4	80.0	60.5	NU306EV/C9YA6	0.399
	72	21	38.5	80.0	68.5	NU306X2V/C3	0.431
	72	30.162	60.409	275	445	NCL3306X2V	0.647
	80	21	43.8	86.9	90.0	NU306X3V	0.565
35	80	21	46.2	103	89.0	NJ307NV/C9	0.548
	80	21	46.2	103	89.0	NUP307NV/C9	0.579
	80	21	46.2	103	89.0	NJ307EV/C3	0.540
	80	21	46.2	103	89.0	NJ307EV/YA4	0.540
	80	21	45.806	103	106	NJ307EV/C9YAD	0.537
	80	23	45.8	103	48.0	NJ607V	0.568
	82	23	64.5	79.0	112	NFP2207X1V	0.681
	90	23	49.7	96.0	102	NUP2207X1V/C9YB2	0.795
	90	23	49.7	96.0	102	NJ2207X1V/C9YB2	0.780
	90	23	49	112	95.0	NUP407X3V/C9YA6	0.75
	90	23	48.5	112	83.5	NCF407X3V/C9YA6	0.763
	90	29	48	124	131	NJ607NV	0.998
40	90	23	53.44	140	110	NUP308NV	0.499
	90	23	53.44	140	110	NJ308V	0.719

Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	F	Cr	Cor		
mm				KN		kg	
40	90	23	53.44	140	110	NUP308V	0.719
	90	23	53.44	140	110	NJ308V	0.719
	90	23	53.44	140	110	NCF308X2V	0.755
	90	23	53.44	140	110	NJ2308V/C9YA6	1.02
	90	23	53.44	140	110	NJ608V/YA13	1.02
	90	23	53.44	140	110	NJ309V	0.904
	90	23	53.44	140	110	NUP309ENRV/C3YA6	1.02
45	100	25	57.85	136	127	NJ2309X2NRV/C3YA6	1.21
	100	25	57.85	136	127	NJ309V	0.904
	100	31	57.3	118	126	NUP309ENRV/C3YA6	1.02
	100	31	57.3	118	126	NJ2309X2NRV/C3YA6	1.21
	110	27	58.5	94.5	177	NU4010X2V/YAB	0.575
	110	27	66.72	160	156	NUP310NV	1.28
	110	27	66.72	160	156	NJ310V	1.25
50	80	28	58.5	94.5	177	NJ310V/HAC3YA6	1.25
	80	28	58.5	94.5	177	NUP310NRV/HAC3YA6	1.32
	110	27	66.72	160	156	NUP311NV	1.63
	110	27	66.72	160	156	NUP311NRV	1.69
	110	27	66.72	160	156	NUP6/56V	7.29
	110	27	66.72	160	156	NUP313NV	2.15
	110	27	66.72	160	156	NUP313NRV/HAC3YA6	2.59
55	120	29	68.75	169	166	NUP313NRV/C3	2.59
	120	29	68.75	169	166	NUP314NV/HA	2.96
	120	29	68.75	169	166	NUP314NV/YA6	2.96
	140	33	82.7	212	249	NCL6/114.3V/W33X	2.81
	140	33	82.7	212	249		
	140	33	82.7	212	249		
	150	35	90.97	320	272		
70	150	35	90.97	320	272		
	150	35	90.97	320	272		
114.3	152.4	51.05	127.05	198	545		
	152.4	51.05	127.05	198	545		

Automobile Cylindrical Roller Bearings

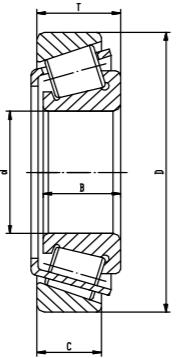
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Double row full complement cylindrical roller bearings



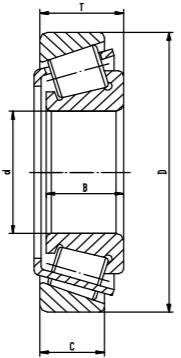
Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	Ew. Fw.	Cr	Cor		
mm				KN			kg
40	68	38	60.8	60.8	129	NNF5008V	0.553
	68	38	60.8	60.8	129	NNF5008- 2LSV	0.553
	68	38	60.8	60.8	129	NNCF5008V	0.553
70	110	54	100	100	325	NNF5014- 2LSNV	1.85
85	130	60	121.4	121.4	510	NNCF5017V/W33	2.73
89	125	58	97.22	97.22	375	NUCL6/89V/YA3DF	1.87
90	125	58	97.22	97.22	375	NUCL3918X2V/YA3DF	1.81
	140	67	130	130	660	NNCF5018V	3.68
100	150	67	138	138	590	NNF5020- 2RSV	3.99
110	170	80	154.5	154.5	805	NNCF5022V	6.49
	170	80	154	154	790	NNF5022- 2LSV	6.93
	260	110	132	132	1500	NNFPL2422X3V/HAP59	34
120	180	80	164	164	885	NNF5024- 2LSNV	7.41

Tapered Roller Bearings Inch Series



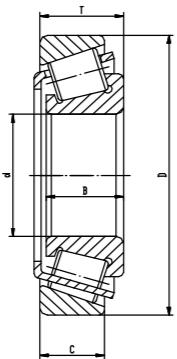
Basic Dimensions										Bearing Designations	Basic Load Ratings		Weight	
d		D		T		B		C			Cr	Cor		
mm	in	mm	in	mm	in	mm	in	mm	in		KN			
17.462	0.6875	39.878	1.57	13.843	0.545	14.605	0.575	10.668	0.42	KLM11749/KLM11710	25.6	28	0.0758	
19.05	0.75	45.237	1.781	15.494	0.61	16.637	0.655	12.065	0.475	KLM11949/KLM11910 K09067/K09195 K09067/K09196 K09074/K09194	31.5	28.9	0.123	
		49.225	1.938	18.034	0.71	19.05	0.75	14.288	0.5625		37.5	37	0.176	
		49.225	1.938	21.209	0.835	19.05	0.75	17.462	0.6875		37.5	37	0.195	
		49.225	1.938	23.02	0.9063	21.539	0.848	17.462	0.6875		37.5	37	0.201	
20.625	0.812	49.225	1.938	23.02	0.9063	21.539	0.848	17.462	0.6875	K09081/K09196	37.5	37	0.197	
21.43	0.8437	50.005	1.9687	17.526	0.69	18.288	0.72	13.97	0.55	KM12649/KM12610 K2M12649/K2M12610	45	43.5	0.169	
		50.005	1.9687	17.526	0.69	18.288	0.72	13.97	0.55		45	43.5	0.169	
21.979	0.8653	45.237	1.781	15.494	0.61	16.637	0.655	12.065	0.475	KLM12749/KLM12710 KLM12749/KLM12711	35.5	40	0.116	
		45.974	1.81	15.494	0.61	16.637	0.655	12.065	0.475		29.5	34	0.118	
22.225		50.8	2	15.011	0.591	14.26	0.5614	12.7	0.5	K07087X/K07210X	30.5	33	0.104	
25.4	1	50.292	1.98	14.224	0.56	14.732	0.58	10.668	0.42	L44643/L44610 K07100S/K07210X KM84548/KM84510	29.5	34	0.128	
		50.8	2	15.011	0.591	14.26	0.5614	12.7	0.5		30.5	33	0.0908	
		57.15	2.25	19.431	0.765	19.431	0.765	14.732	0.58		42	49	0.237	
26*		57.15	2.25	17.462	0.6875	17.462	0.6875	13.495	0.5313	K15579X/K15520	38	43.5	0.207	
26.988	1.0625	50.292	1.98	14.224	0.56	14.732	0.58	10.668	0.42	L44649/L44610 K15106/K15250X	29.5	34	0.126	
		63.5	2.5	20.638	0.8125	20.638	0.8125	15.875	0.625		46	53	0.316	
28*		57.15	2.25	17.462	0.6875	17.462	0.6875	13.495	0.5313	KJ15585/K15520	38	43.5	0.207	
28.575	1.125	60.325	2.375	19.845	0.7813	19.355	0.762	15.875	0.625	K1988/K1931	39	42.5	0.244	

Tapered Roller Bearings Inch Series



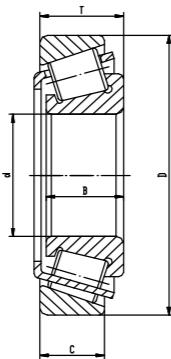
Basic Dimensions										Bearing Designations	Basic Load Ratings		Weight	
d		D		T		B		C			Cr	Cor		
mm	in	mm	in	mm	in	mm	in	mm	in		KN			
66.675		117.475	4.625	30.162	1.1875	30.162	1.1875	23.812	0.9375		123	180	1.37	
		122.238	4.8125	38.1	1.5	38.354	1.51	29.718	1.17		233	154	1.90	
		122.238	4.8125	38.1	1.5	38.354	1.51	29.718	1.17		233	154	1.90	
		136.525	5.375	41.275	1.625	41.275	1.625	31.75	1.25		199	271	2.74	
		136.525	5.375	46.038	1.8125	46.038	1.8125	36.512	1.4375		249	405	3.24	
		122.238	4.8125	38.1	1.5	38.354	1.51	29.718	1.17		233	154		
68.262	2.6875	136.525	5.375	41.275	1.625	41.275	1.625	31.75	1.25		199	271	2.69	
		136.525	5.375	46.038	1.8125	46.038	1.8125	36.512	1.4375		238	380	3.18	
		161.925	6.375	49.212	1.9375	46.038	1.8125	31.75	1.25		248	490	4.58	
69.85	2.75	120	4.7244	29.795	1.173	29.007	1.142	24.237	0.9542		135	188	1.32	
		130.175	5.125	41.275	1.625	41.275	1.625	31.75	1.25		199	271	2.30	
		146.05	5.75	41.275	1.625	39.688	1.5625	25.4	1		206	240	2.97	
		112.712	4.4375	25.4	1	25.4	1	19.05	0.75		98	156	0.952	
		120	4.7244	32.545	1.2813	32.545	1.2813	26.195	1.0313		157	229	1.50	
70*		110*		26		25		20.5		KJLM813049/KJLM813010	102	156	0.894	
71.438	2.8125	117.475	4.625	30.162	1.1875	30.162	1.1875	23.812	0.9375		118	180	1.24	
		136.525	5.375	41.275	1.625	41.275	1.625	31.75	1.25		242	300	2.59	
		136.525	5.375	41.275	1.625	41.275	1.625	31.75	1.25		199	271	2.55	
73.025	2.875	112.712	4.4375	25.4	1	25.4	1	19.05	0.75		98	156	0.878	
		117.475	4.625	30.162	1.1875	30.162	1.1875	23.812	0.9375		118	180	1.21	
		150.089	5.909	44.45	1.75	46.672	1.8375	36.512	1.4375		264	365	3.74	
75*		115*		25		25		19		KJLM714149/KJLM714110	105	152	8.58	
		120*		31		29.5		25		KJM714249/KJM714210	128	204	1.28	

Tapered Roller Bearings Inch Series



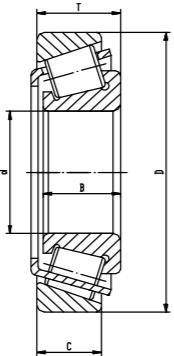
Basic Dimensions										Bearing Designations	Basic Load Ratings		Weight		
d		D		T		B		C			Cr	Cor			
mm	in	mm	in	mm	in	mm	in	mm	in						
75.987	2.9916	131.976	5.1959	39	1.5354	39	1.5354	32	1.2598	KHM215249/KHM215210	203	305	2.14		
76.2	3	125.412	4.9375	25.4	1	25.4	1	19.845	0.7813	K27684/K27620	91	160	1.25		
		127	5	30.162	1.1875	31	1.2205	22.225	0.875	K42687/K42620	184	220	1.44		
		127	5	30.162	1.1875	31	1.2205	22.225	0.875	K42688/K42620	184	220	1.44		
		135.733	5.3438	44.45	1.75	46.1	1.815	34.925	1.375	K5760/K5735	215	340	2.73		
		136.525	5.375	30.162	1.1875	29.769	1.1716	22.225	0.875	K495A/K493	134	198	1.82		
		139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.125	K575/K572	187	290	2.44		
		150.089	5.909	44.45	1.75	46.672	1.8375	36.512	1.4375	K748S/K742	264	365	3.62		
		161.925	6.375	47.625	1.875	48.26	1.9	38.1	1.5	K755/K752	273	390	4.85		
		161.925	6.375	53.975	2.125	55.1	2.1693	42.862	1.6875	K6576/K6535	315	475	5.46		
		171.45	6.75	49.212	1.9375	46.038	1.8125	31.75	1.25	K9380/K9321	267	325	5.20		
		180.975	7.125	53.975	2.125	53.183	2.0938	35.72	1.4063	KH917840/KH917810	207	210	6.56		
77.788	3.0625	135.733	5.3438	44.45	1.75	46.1	1.815	34.925	1.375	K5795/K5735	215	340	2.73		
80*		130*		35		34		28.5		KJM515649/KJM515610	175	280	1.82		
80.962	3.1875	136.525	5.375	30.162	1.1875	29.769	1.172	22.225	0.875	K496/K493	134	198	1.75		
82.55	3.25	125.412	4.9375	25.4	1	25.4	1	19.845	0.7813	27687/27620	140	151	1.10		
		133.35	5.25	33.338	1.3125	33.338	1.3125	26.195	1.0313	K47687/K47620	142	218	1.74		
		133.35	5.25	33.338	1.3125	33.338	1.3125	26.195	1.0313	K47686/K47620	142	218	1.80		
		133.35	5.25	39.688	1.5625	39.688	1.5625	32.545	1.2813	KHM516449/KHM516410	186	310	2.12		
		139.7	5.5	36.512	1.4375	36.098	1.4212	28.575	1.125	K580/K572X	187	290	2.21		
		139.992	5.5115	36.512	1.4375	36.098	1.4212	28.575	1.125	K580/K572	217	275	2.21		
		146.05	5.75	41.275	1.625	41.275	1.625	31.75	1.25	K663/K653	265	360	2.87		
		150	5.9055	44.45	1.75	46.672	1.8375	36.512	1.4375	K749A/K742A	264	365	3.33		

Tapered Roller Bearings Inch Series



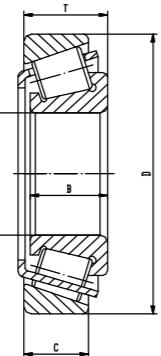
Basic Dimensions										Bearing Designations	Basic Load Ratings		Weight kg	
d		D		T		B		C			Cr	Cor		
mm	in	mm	in	mm	in	mm	in	mm	in		KN			
83.345	3.2813	125.412	4.9375	25.4	1	25.4	1	19.845	0.7813	K27690/K27620	100	160	1.08	
84.138	3.3125	133.35	5.25	30.162	1.1875	29.769	1.172	22.225	0.875	K498/K492A	134	198	1.47	
84.976	3.3455	125.412	4.9375	25.4	1	25.4	1	19.845	0.7813	K27695/K27620	100	160	1.01	
85*		130*		30		29		24		KJM716649/KJM716610	138	216	1.39	
85.026	3.3475	150.089	5.909	44.45	1.75	46.672	1.8375	36.512	1.4375	K749/K742	264	365	3.22	
		150.089	5.909	44.45	1.75	46.672	1.8375	36.512	1.4375	K749S/K742	264	365	3.20	
85.725	3.375	136.525	5.375	30.163	1.1875	29.769	1.172	22.225	0.875	K497/K493	134	198	1.60	
	152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K596/K592A	315	167	2.92	
	133.35	5.25	30.162	1.1875	29.769	1.172	22.225	0.875		K497/K492A	134	198	1.47	
	142.138	5.596	42.862	1.6875	42.862	1.6875	34.133	1.3438		KHM617049/KHM617010	220	345	2.63	
	146.05	5.75	41.275	1.625	41.275	1.625	31.75	1.25		K665A/K653	217	315	2.74	
88.9	3.5	118.618	4.67	39.688	1.5625	39.688	1.5625	30.162	1.1875	KHM518445/KHM518410	286	350	2.86	
	152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K593A/K592A	184	286	2.80	
	152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K593/K592A	207	169	2.63	
	152.4	6	39.688	1.5625	39.688	1.5625	30.162	1.1875		KHM518445A6/KHM518410A6	255	370	2.86	
	161.925	6.375	53.975	2.125	55.1	2.1693	42.862	1.6875		K6580/K6535	315	475	4.73	
	168.275	6.625	41.275	1.625	41.275	1.625	30.162	1.1875		K679/K672	205	350	4.03	
	190.5	7.5	57.15	2.25	57.531	2.265	44.45	1.75		K855/K854	380	555	7.69	
	190.5	7.5	57.15	2.25	57.531	2.265	46.038	1.8125		KHH221434/KHH221410	445	610	7.87	

Tapered Roller Bearings Inch Series



Basic Dimensions										Bearing Designations	Basic Load Ratings		Weight	
d		D		T		B		C			Cr	Cor		
mm	in	mm	in	mm	in	mm	in	mm	in		KN			
90*		145*		35		34		27			KJM718149A/KJM718110	189	315	2.17
		147*		40		40		32.5			KHM218248/KHM218210	216	345	2.51
		147*		40		40		32.5			KHM218248SH/KHM218210SH	253	370	2.58
		147*		40		40		32.5			KHM218248A6/KHM218210A6	215	345	2.51
92.075	3.625	150	9.9055	35.992	1.417	36.322	1.43	27	1.063		598A/593X	184	286	2.37
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		598A/592A	232	315	2.67
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K598/K592A	232	315	2.66
		180.975	7.125	47.625	1.875	48.006	1.89	38.1	1.5		K778/K772	288	435	5.55
95*		150*		35		34		27			KJM719149/KJM719113	187	290	2.23
95.25	3.75	147.638	5.8125	35.717	1.4062	36.322	1.43	26.192	1.0312		594A/592XE	228	310	2.13
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		594A/592A	228	310	2.54
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K594A/K592A	228	310	2.54
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K594/K592A	207	169	2.54
		152.4	6	39.688	1.5625	36.322	1.43	30.162	1.1875		K594R/K592A	207	169	2.52
		168.275	6.625	41.275	1.625	41.275	1.625	30.162	1.1875		K683/K672	221	350	3.75
96.838	3.8125	148.43	5.8437	28.575	1.125	28.971	1.1406	21.433	0.8438		K42381/K42584	146	230	1.68
		188.912	7.4375	50.8	2	46.038	1.8125	31.75	1.25		K90381/K90744	270	345	5.63
99.975	3.936	212.725	8.375	66.675	2.625	66.675	2.625	53.975	2.125		KHH224334/KHH224310	600	830	11.2
100*		145*		24		22.5		17.5			KJP10049A/KJP10010	116	171	1.13
		155*		36		35		28			KJM720249/KJM720210	231	260	2.34
		157		42		42		34			KHM220149A6/KHM220110A6	253	400	2.89

Tapered Roller Bearings Metric Series



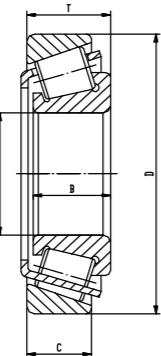
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
20	47	15	14	12	30.5	28.5	30204X2/P6XYB5	0.123
	47	15.25	14	12	32	28	30204	0.121
	47	15.25	14	12	34	32.5	30204/YA8	0.124
	47	19.25	18	15	38	37	32204	0.158
	52	16.25	15	13	39	32.5	30304	0.167
	52	22.25	21	18	51	45.5	32304	0.238
25	47	17	17	14	35.5	42.5	33005	0.129
	52	16.25	15	13	35.5	33.5	30205	0.160
	52	16.25	15	13	40	41.5	30205/YA8	0.166
	52	19.25	18	16	41.5	44	32205	0.199
	52	22	22	18	54	56	33205	0.216
	52	23.75	22.5	13	38.5	39.5	30205X2	0.200
	62	18.25	17	13	48.5	47	31305A	0.268
	62	18.25	17	13	44.6	43	30305	0.250
	62	18.25	17	15	53.5	48	30305X2	0.267
	62	25.25	24	20	48.5	47	32305	0.422
28	52	16	16	12	36.5	40	320/28/YB2	0.145
	52	16	16	12	36.5	40	320/28	0.145
30	55	17	17	13	40.5	44	32006/P6XYB5	0.171
	62	17.25	16	14	46.5	44	30206	0.230
	62	21.25	20	17	58.5	57	32206	0.356
	62	21.25	20	17	39	46.5	32206/YA8	0.366
	62	25	25	19.5	75	76.5	33206	0.343
	72	20.75	19	14	56	51	31306B/HAP5	0.370
	72	20.75	19	14	56	51	31306B/P6X	0.370
	72	20.75	19	16	64	56	30306	0.390

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
30	72	20.75	19	16	67	62.5	30306/HA	0.397
	72	20.75	19	16	67	62.5	30306/HAP6X	0.397
	72	20.75	20	14	59.5	59.5	31306WB1	0.489
	72	24	23	16.5	60.5	56.5	31306X2A/HAP5- 1	0.455
	72	24.35	23	18	60.5	56.5	31306X2A	0.489
	72	28.75	27	23	88	85	32306	0.554
32	75	29.75	28	23	87.5	90.5	T5FD032	0.647
	62	18	18	14	43	49	32007	0.384
	65	18	18	14	49	56	30607	0.229
	65	18	18	14	47.5	60.5	30607- 1	0.251
	72	18.25	17	15	58.5	56	30207	0.318
	72	24.25	23	19	76.5	78	32207	0.452
	72	28	28	22	96.5	106	33207	0.519
	80	22.75	21	15	71	67	31307	0.515
	80	22.75	21	18	83	73.5	30307	0.515
	80	32.75	31	25	95	107	32307A/HAP5	0.768
35	80	32.75	31	25	95	107	32307	0.755
	80	32.75	31	25	107	109	32307/HAP6X	0.755
	89	38	38	27.5	128	148	32307X3A/HAP5	1.22
	89	38	38	27.5	128	148	32307X3A/HAP5	1.22
40	68	19	19	14.5	60	71	32008/P6X	0.297
	68	19	19	14.5	60	71	32008	0.297
	72	19	19	16	57	71.5	32008X1WC	0.315
	75	26	26	20.5	91.5	104	33108	0.499
	80	19.75	18	16	71	68	30208	0.430
	80	24.75	23	19	85	86.5	32208	0.561
	80	30	29	23	99.5	115	33208X2A	0.669

Automobile Tapered Roller Bearings

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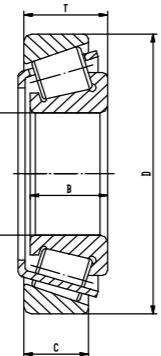
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
40	80	32	32	25	120	132	33208	0.701
	90	25.25	23	17	85	81.5	31308	0.731
	90	25.25	23	20	100	95	30308	0.734
	90	25.25	23	20	108	114	30308R/YA6	0.783
	90	35.25	33	27	125	137	32308/YA8	1.020
	90	35.25	33	27	117	140	32308	1.080
	90	35.25	33	27	124	147	32308B	1.06
42	100	38.25	36	30	163	185	323/42R	1.55
	75	20	20	15.5	67	80	32009	0.343
45	75	20	20	15.5	67	80	32009/HA	0.343
	80	26	26	20.5	96.5	114	33109R	0.538
	85	20.75	19	16	76.5	76.5	30209	0.464
	85	24.75	23	19	91.5	98	32209	0.576
50	85	24.75	23.5	20	76.5	90	32209X2A	0.621
	85	32	32	25	108	143	33209	0.789
	100	27.25	25	18	106	102	31309	0.977
	100	27.25	25	22	125	120	30309	0.987
	100	31.8	29	20.5	108	108	32309X2A	1.14
55	100	32	29	20.5	122	131	31309X2	1.16
	100	32	29	20.5	125	120	30309X2B	1.08
	100	38.25	36	30	140	170	32309	1.44
	100	43	43	37	174	205	306/47	1.66
	80	20	20	15.5	69.5	88	32010	0.381
50	80	22	20	17.5	68	91.5	32010X2A/HAP5-1	0.388
	80	24	24	19	80	102	33010	0.442

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
50	82	21.5	21.5	17	75.5	94	30610	0.331
	83	20.5	20.5	15.5	74.5	86.5	32010X3A/HAP5	0.430
	90	21.75	20	17	86.5	91.5	30210	0.550
	90	24.75	23	19	95	100	32210	0.654
	90	25	23	19	80.5	96	32210A	0.612
	90	32	32	24.5	114	160	33210	1.17
	100	36	35	30	159	195	T2ED050	1.31
	110	29.25	27	23	143	140	30310	1.26
	110	29.25	27	19	122	120	31310	1.25
	110	42.25	40	33	199	231	32310/YA6	1.97
50.8	110	42.25	40	33	172	212	32310	1.26
	100	35	35	27	156	196	339/50.8	1.267
	100	35	35	29	157	194	306/50.8	1.27
	90	23	23	17.5	93	116	32011	0.564
	90	27	27	21	104	137	33011	0.839
	95	30	30	23	119	161	33111/P6XYB	0.881
	95	30	30	23	110	156	33111/HA	0.881
	95	30	30	23	120	163	33111/P6XYB2	0.881
	100	22.75	21	18	104	106	30211	0.713
	100	22.75	21	18	99.5	108	30211/YA	0.689
55	100	26.75	25	21	106	129	32211	0.878
	100	26.75	25	21	123	141	32211/YA6	0.875
	100	26.75	25	21	123	141	32211/HAP6X	0.878
	100	32	31	24.5	139	166	33211X2A	1.01
	100	35	35	27	138	190	33211	1.17
	100	35	35	27	139	166	33211/HAP6X	1.17
47	120	31.5	29	25	166	163	30311	1.65

Automobile Tapered Roller Bearings

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Tapered Roller Bearings Metric Series



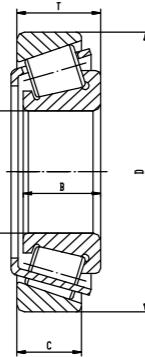
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
40	80	32	32	25	120	132	33208	0.701
	90	25.25	23	17	85	81.5	31308	0.731
	90	25.25	23	20	100	95	30308	0.734
	90	25.25	23	20	108	114	30308R/YA6	0.783
	90	35.25	33	27	125	137	32308/YA8	1.020
	90	35.25	33	27	117	140	32308	1.080
	90	35.25	33	27	124	147	32308B	1.06
42	100	38.25	36	30	163	185	323/42R	1.55
45	75	20	20	15.5	67	80	32009	0.343
	75	20	20	15.5	67	80	32009/HA	0.343
	80	26	26	20.5	96.5	114	33109R	0.538
	85	20.75	19	16	76.5	76.5	30209	0.464
	85	24.75	23	19	91.5	98	32209	0.576
	85	24.75	23.5	20	76.5	90	32209X2A	0.621
	85	32	32	25	108	143	33209	0.789
	100	27.25	25	18	106	102	31309	0.977
	100	27.25	25	22	125	120	30309	0.987
	100	31.8	29	20.5	108	108	32309X2A	1.14
	100	32	29	20.5	122	131	31309X2	1.16
	100	32	29	20.5	125	120	30309X2B	1.08
	100	38.25	36	30	140	170	32309	1.44
47	100	43	43	37	174	205	306/47	1.66
50	80	20	20	15.5	69.5	88	32010	0.381
	80	22	20	17.5	68	91.5	32010X2A/HAP5-1	0.388
	80	24	24	19	80	102	33010	0.442

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
50	82	21.5	21.5	17	75.5	94	30610	0.331
	83	20.5	20.5	15.5	74.5	86.5	32010X3A/HAP5	0.430
	90	21.75	20	17	86.5	91.5	30210	0.550
	90	24.75	23	19	95	100	32210	0.654
	90	25	23	19	80.5	96	32210A	0.612
	90	32	32	24.5	114	160	33210	1.17
	100	36	35	30	159	195	T2ED050	1.31
	110	29.25	27	23	143	140	30310	1.26
	110	29.25	27	19	122	120	31310	1.25
	110	42.25	40	33	199	231	32310/YA6	1.97
	110	42.25	40	33	172	212	32310	1.26
50.8	100	35	35	27	156	196	339/50.8	1.267
	100	35	35	29	157	194	306/50.8	1.27
	55	90	23	23	93	116	32011	0.564
	90	27	27	21	104	137	33011	0.839
	95	30	30	23	119	161	33111/P6XYB	0.881
	95	30	30	23	110	156	33111/HA	0.881
	95	30	30	23	120	163	33111/P6XYB2	0.881
	100	22.75	21	18	104	106	30211	0.713
	100	22.75	21	18	99.5	108	30211/YA	0.689
	100	26.75	25	21	106	129	32211	0.878
	100	26.75	25	21	123	141	32211/YA6	0.875
	100	26.75	25	21	123	141	32211/HAP6X	0.878
	100	32	31	24.5	139	166	33211X2A	1.01
	100	35	35	27	138	190	33211	1.17
	100	35	35	27	139	166	33211/HAP6X	1.17
	120	31.5	29	25	166	163	30311	1.65

Automobile Tapered Roller Bearings

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Tapered Roller Bearings Metric Series



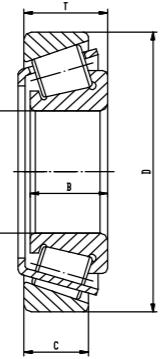
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
70	125	33.25	31	27	157	208	32214	1.66
	125	33.25	31	27	188	231	32214/YA6	1.66
	130	57	56	35	264	333	30214X3/YA6	2.92
	150	38	35	25	216	220	31314	2.87
	150	38	35	30	220	260	30314	3.08
	150	38	35	30	247	267	30314/YA6	3.08
	150	54	51	42	284	379	T5GD070	4.54
	150	54	51	42	297	380	32314	4.38
	150	54	51	42	328	388	32314/YA6	4.38
75	115	25	25	19	122	163	32015	0.922
	115	31	31	25.5	134	228	33015	1.10
	125	37	37	29	176	265	33115	1.80
	130	27.25	25	22	140	176	30215	1.40
	130	33.25	31	27	161	212	32215	1.76
	130	33.25	31	27	191	236	32215/YA6	1.76
	130	33.5	31	27	166	207	32215A/YA6	1.74
	130	41	41	31	209	300	33215	2.27
	135	44	45	35	233	316	33215X2A- 1	2.66
	135	44.5	45	35	224	300	33215X2A	2.58
	135	44.5	45	36.5	253	344	30615	2.79
	160	40	37	31	246	290	30315	3.71
	160	40	37	26	240	245	31315	3.40
	150	30.5	29	20	165	181	31315X3	2.24
	160	58	55	45	336	440	32315	5.35
	180	63.65	60	45	398	484	32315X3	7.90
	180	63.5	60	45	398	484	32315X3- 1	7.89

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
80	110	20	19	16	69.5	106	32916X2A	0.500
	125	29	29	22	138	216	32016	1.26
	125	36	36	29.5	168	285	33016	1.62
	130	32	31	25	185	252	33116X2A	1.60
	130	37	37	29	179	280	33116	2.79
	140	28.25	26	22	151	183	30216	1.56
	140	35.25	33	28	187	345	32216	2.19
	140	35.25	33	28	222	272	32216/YA6- 1	2.19
	140	35.5	33	28	192	241	32216A/YA6	2.13
	140	45	45	36.5	267	363	33216X2	2.77
	140	46	46	35	251	375	33216	2.89
	170	42.5	39	27	260	265	31316	3.65
	170	42.5	39	33	270	320	30316	4.32
	170	61.5	58	48	380	500	32316	6.43
85	130	29	29	22	140	224	32017	1.33
	130	36	36	29.5	183	310	33017	1.70
	140	41	41	32	220	340	33117	2.43
	150	30.5	28	24	176	220	30217	2.05
	150	38.5	36	30	212	285	32217	2.70
	150	49	49	37	286	430	33217	3.64
	180	44.5	41	28	242	285	31317	4.92
	180	44.5	41	34	303	365	30317	5.39
	180	63.5	60	49	402	530	32317	7.37
90	140	32	32	24	168	270	32018	1.77
	140	32.4	30	26	159	214	32018X2A	1.71
	140	39	39	32.5	216	355	33018	2.24
	150	38.5	36	30	226	295	33118X2(TR181504)	2.57

Automobile Tapered Roller Bearings

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Tapered Roller Bearings Metric Series



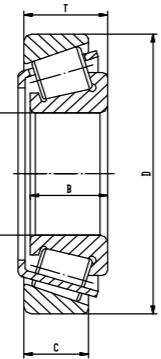
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
70	125	33.25	31	27	157	208	32214	1.66
	125	33.25	31	27	188	231	32214/YA6	1.66
	130	57	56	35	264	333	30214X3/YA6	2.92
	150	38	35	25	216	220	31314	2.87
	150	38	35	30	220	260	30314	3.08
	150	38	35	30	247	267	30314/YA6	3.08
	150	54	51	42	284	379	T5GD070	4.54
	150	54	51	42	297	380	32314	4.38
	150	54	51	42	328	388	32314/YA6	4.38
75	115	25	25	19	122	163	32015	0.922
	115	31	31	25.5	134	228	33015	1.10
	125	37	37	29	176	265	33115	1.80
	130	27.25	25	22	140	176	30215	1.40
	130	33.25	31	27	161	212	32215	1.76
	130	33.25	31	27	191	236	32215/YA6	1.76
	130	33.5	31	27	166	207	32215A/YA6	1.74
	130	41	41	31	209	300	33215	2.27
	135	44	45	35	233	316	33215X2A- 1	2.66
	135	44.5	45	35	224	300	33215X2A	2.58
	135	44.5	45	36.5	253	344	30615	2.79
	160	40	37	31	246	290	30315	3.71
	160	40	37	26	240	245	31315	3.40
	150	30.5	29	20	165	181	31315X3	2.24
	160	58	55	45	336	440	32315	5.35
	180	63.65	60	45	398	484	32315X3	7.90
	180	63.5	60	45	398	484	32315X3- 1	7.89

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
80	110	20	19	16	69.5	106	32916X2A	0.500
	125	29	29	22	138	216	32016	1.26
	125	36	36	29.5	168	285	33016	1.62
	130	32	31	25	185	252	33116X2A	1.60
	130	37	37	29	179	280	33116	2.79
	140	28.25	26	22	151	183	30216	1.56
	140	35.25	33	28	187	345	32216	2.19
	140	35.25	33	28	222	272	32216/YA6- 1	2.19
	140	35.5	33	28	192	241	32216A/YA6	2.13
	140	45	45	36.5	267	363	33216X2	2.77
	140	46	46	35	251	375	33216	2.89
	170	42.5	39	27	260	265	31316	3.65
	170	42.5	39	33	270	320	30316	4.32
	170	61.5	58	48	380	500	32316	6.43
85	130	29	29	22	140	224	32017	1.33
	130	36	36	29.5	183	310	33017	1.70
	140	41	41	32	220	340	33117	2.43
	150	30.5	28	24	176	220	30217	2.05
	150	38.5	36	30	212	285	32217	2.70
	150	49	49	37	286	430	33217	3.64
	180	44.5	41	28	242	285	31317	4.92
	180	44.5	41	34	303	365	30317	5.39
	180	63.5	60	49	402	530	32317	7.37
90	140	32	32	24	168	270	32018	1.77
	140	32.4	30	26	159	214	32018X2A	1.71
	140	39	39	32.5	216	355	33018	2.24
	150	38.5	36	30	226	295	33118X2(TR181504)	2.57

Automobile Tapered Roller Bearings

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Tapered Roller Bearings Metric Series



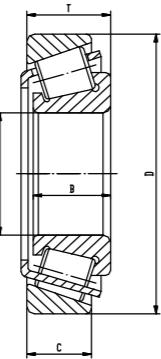
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
90	150	45	45	35	251	390	33118	3.22
	150	45	45	35	363	392	33118/YB2	3.22
	150	45	45	35	251	390	33118/HA	3.15
	160	32.5	30	26	194	245	30218	2.73
	160	32.5	30	26	194	245	30218/YA6	2.73
	160	42.5	40	34	251	340	32218	3.61
	160	42.5	40	34	251	316	32218R/YA6	3.47
	160	42.5	40	34	251	316	32218/YA6	3.36
	160	50	46	39	270	343	33218X2A	3.82
	160	55	55	42	357	495	33218	4.77
	170	62	59.5	49	407	549	30618	6.04
	190	46.5	43	30	264	315	31318	5.53
	190	46.5	43	36	330	400	30318	5.76
	190	67.5	64	53	457	610	32318	8.97
95	130	23	22	18	87	135	32919X2A	0.786
	145	32	32	24	168	270	32019	1.87
	145	32.4	30	26	173	244	32019X2A	1.80
	145	39	39	32.5	220	375	33019	2.32
	160	47	47	38	311	433	30619	3.79
	160	47	47	38	323	438	7819E	3.73
	170	34.5	32	27	216	275	30219	3.27
	170	45.5	43	37	281	390	32219	4.34
	170	47	47	37	325	458	33020X3A/HA	4.26
	170	58	58	44	374	560	33219	5.54
	200	49.5	45	32	292	355	31319	6.84
	200	49.5	45	38	330	390	30319	6.91
	200	71.5	67	55	501	670	32319	10.0

Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
100	150	32	32	24	172	280	32020	1.87
	150	39	39	32.5	224	390	33020	2.36
	180	37	34	29	246	320	30220	3.56
	180	49	46	39	319	440	32220	5.31
	180	63	63	48	429	655	33220	6.58
	215	51.5	47	39	402	490	30320	8.09
	215	77.5	73	60	572	780	32320	13.2
105	160	35	35	26	201	335	32021	2.38
	160	43	43	34	246	430	33021	2.98
	160	43	43	34	267	408	33021/YA6	2.98
	160	43	43	34	267	408	33021/YA6-1	2.98
	190	39	36	30	270	355	30221	4.47
	190	53	50	43	358	510	32221	6.34
	215	78	73	60	616	781	32321X3	12.3
	225	53.5	49	41	485	548	30321	9.38
	225	81.5	77	63	605	815	32321	15.0
110	150	25.4	24	20	111	165	32922X2A	1.18
	170	38	38	29	233	390	32022	3.08
	170	38	38	29	298	405	32022/YA8	3.11
	170	38.4	36	31	233	329	32022X2A	3.10
	170	47	47	37	281	500	33022	3.75
	180	56	56	43	369	630	33122	5.56
	190	49	49	39	340	522	33022X3A/HA	5.87
	200	41	38	32	308	405	30222	5.27
	200	56	53	46	402	570	32222	7.62
	200	56	53	46	469	623	32222/YA8	7.58
	240	54.5	50	42	473	585	30322	11.1

Automobile Tapered Roller Bearings

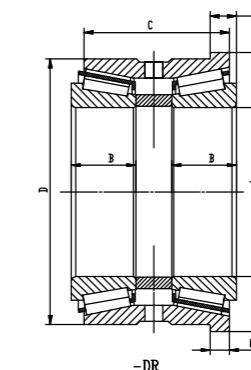
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Tapered Roller Bearings Metric Series



Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	B	C	Cr	Cor		
mm					KN		kg	
110	240	63	57	38	457	585	31322	12.5
	240	84.5	80	65	627	830	32322	18.0
115	190	49	49	35	324	469	30623	5.13
120	165	29	29	23	165	305	32924	1.79
	180	38	38	29	242	415	32024	3.31
	180	38.4	36	31	245	359	32024X2A	3.66
	180	48	48	38	292	540	33024	4.07
215	43.5	40	34	341	465	30224	6.32	
	61.5	58	50	468	695	32224	9.60	
	59.5	55	46	561	710	30324	14.2	
	68	62	42	539	695	31324	15.6	
	90.5	86	69	792	1120	32324	22.4	

Tapered Roller Bearings Metric Series with Stop Flange

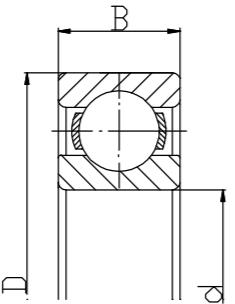


Basic Dimensions							Basic Load Ratings		Bearing Designations	Weight
d	D	T2	C	B	b	D1	Cr	Cor		
mm							KN		kg	
100	165	80	36	60	6.5	175	570	1190	350620DRTN1	5.09
120	180	85	36	66	7	188	400	765	352024X2DR	6.77
140	210	95	42	75	7	220	495	920	352028X2DR	8.41
140	215	100	45	80	8	225	485	900	350628DR	13.0
150	225	105	45	80	7.5	236	495	930	352030X2DR	13.8
76	119.4	11.7	65.3	29	8.5	125.4	203	400	3506/76DR	2.93
76	119.4	11.7	59.43	29	8.5	125.4	203	400	3506/76X2DR	2.72
70.36/69.86	117	7.18	54	27.5/23.5	3.98	126	170	281	350614X4DR	2.59
100	165	16.5	60	36	6.5	175	380	599	350620DRTN1	5.09
140	215	18	80	45	9	225	523	897	350628DR	13
120	180	16.5	66	36	7	188	420	719	352024X2DR	6.77
150	225	20	80	45	7.5	236	534	936	352030X2DR	13.6

Automobile Deep groove ball bearing

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Basic Deep Groove Ball Bearings



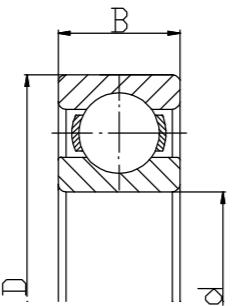
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
10	30	9	5.60	2.59	6200	0.0277
12	32	10	6.90	3.10	6201	0.0365
15	35	11	7.75	3.75	6202	0.0431
17	40	12	9.60	4.80	6203	0.0661
20	47	14	13.0	6.70	6204	0.110
	47	14	13.0	6.70	6204TN1	0.104
	62	16	19.5	11.2	6304X3/C3	0.252
22	56	16	18.5	9.30	63/22/C3	0.183
	56	15	18.5	9.30	66/23/P53YB2	0.131
25	56	15	18.5	9.30	66/23/P53Z2	0.125
	42	9	7.30	4.55	61905	0.0415
	47	8	8.35	5.15	16005	0.0562
	47	12	11.5	6.55	6005	0.0780
	52	15	14.3	8.00	6205	0.134
	52	15	14.3	8.00	6205TN1	0.126
	62	17	22.4	11.5	6305	0.214
	68	18	26.3	12.9	6305X3/C3YA5	0.296
	80	21	37.0	19.0	6405	0.530
	25.995	68	21.55(14.5)	31.0	16.4	6605WBTN1 (536906C)

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
28	68	18	25.0	13.9	63/28/HA	0.299
28.575	71.483	20.638	23.6	13.3	66/28X4	0.400
30	47	9	7.60	5.10	61906	0.0433
	59	22	13.2	8.30	1-0005	0.191
	62	16	19.5	11.2	6206	0.218
	72	19	28.4	16.0	6306	0.354
	90	23	44.5	23.0	6406	0.805
35	62	14	16.2	10.4	6007	0.148
	72	17	25.7	15.3	6207	0.284
	80	21	33.5	19.2	6307	0.456
	80	21	33.5	19.2	6307TN1	0.443
	100	25	53.0	31.0	6407	0.919
40	68	9	13.3	9.15	16008	0.130
	68	15	16.8	11.6	6008/C3	0.191
	80	18	31.0	19.0	6208	0.361
	80	18	31.0	19.0	6208/HAP6	0.361
	80	18	31.0	19.0	6208/P5YB2	0.361
	90	23	41.0	24.0	6308/P5YB2	0.642
	90	23	41.0	24.0	6308	0.642
	90	23	41.0	24.0	6308TN1	0.611
	90	23	41.0	24.0	6308/HA	0.642
	110	27	67.5	36.5	6408	1.20
41	80	17	31.0	19.0	62/41/HAP53	0.342

Automobile Deep groove ball bearing

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Basic Deep Groove Ball Bearings



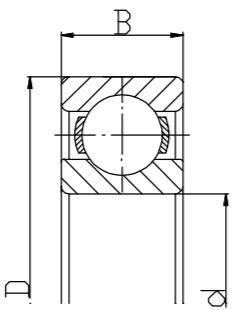
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
10	30	9	5.60	2.59	6200	0.0277
12	32	10	6.90	3.10	6201	0.0365
15	35	11	7.75	3.75	6202	0.0431
17	40	12	9.60	4.80	6203	0.0661
20	47	14	13.0	6.70	6204	0.110
	47	14	13.0	6.70	6204TN1	0.104
	62	16	19.5	11.2	6304X3/C3	0.252
22	56	16	18.5	9.30	63/22/C3	0.183
	56	15	18.5	9.30	66/23/P53YB2	0.131
	56	15	18.5	9.30	66/23/P53Z2	0.125
25	42	9	7.30	4.55	61905	0.0415
	47	8	8.35	5.15	16005	0.0562
	47	12	11.5	6.55	6005	0.0780
	52	15	14.3	8.00	6205	0.134
	52	15	14.3	8.00	6205TN1	0.126
	62	17	22.4	11.5	6305	0.214
	68	18	26.3	12.9	6305X3/C3YA5	0.296
	80	21	37.0	19.0	6405	0.530
	25.995	68	21.55(14.5)	31.0	16.4	6605WBTN1 (536906C)

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
28	68	18	25.0	13.9	63/28/HA	0.299
28.575	71.483	20.638	23.6	13.3	66/28X4	0.400
30	47	9	7.60	5.10	61906	0.0433
	59	22	13.2	8.30	1-0005	0.191
	62	16	19.5	11.2	6206	0.218
	72	19	28.4	16.0	6306	0.354
	90	23	44.5	23.0	6406	0.805
35	62	14	16.2	10.4	6007	0.148
	72	17	25.7	15.3	6207	0.284
	80	21	33.5	19.2	6307	0.456
	80	21	33.5	19.2	6307TN1	0.443
	100	25	53.0	31.0	6407	0.919
	68	9	13.3	9.15	16008	0.130
40	68	15	16.8	11.6	6008/C3	0.191
	80	18	31.0	19.0	6208	0.361
	80	18	31.0	19.0	6208/HAP6	0.361
	80	18	31.0	19.0	6208/P5YB2	0.361
	90	23	41.0	24.0	6308/P5YB2	0.642
	90	23	41.0	24.0	6308	0.642
	90	23	41.0	24.0	6308TN1	0.611
	90	23	41.0	24.0	6308/HA	0.642
	110	27	67.5	36.5	6408	1.20
	41	80	17	31.0	19.0	62/41/HAP53

Automobile Deep groove ball bearing

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Basic Deep Groove Ball Bearings



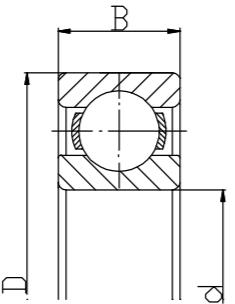
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN			kg
45	75	16	21.2	14.6	6009	0.246
	85	19	33.5	21.6	6209	0.428
	85	19	33.5	21.6	6209TN1	0.416
	85	19	33.5	21.6	6209K	0.419
	85	19	33.5	21.6	6209MA	0.492
	85	19	38.0	32.5	209	0.492
	100	25	57.0	46.5	309/YA8	0.880
	100	25	53.0	31.5	6309	0.850
	100	25	53.0	31.5	6309A	0.859
	100	25	53.0	31.5	6309/YB5	0.850
	100	25	53.0	31.5	6309/HAC3V2YA7	0.807
	100	25	53.0	31.5	6309TN1	0.811
	120	29	77.5	45.5	6409	1.69
50	72	12	13.5	11.0	61910	0.134
	80	16	22.0	16.3	6010	0.248
	90	20	35.0	23.2	6210/HA	0.504
	90	20	35.0	23.2	6210/C9YA6	0.474
	90	20	35.0	23.2	6210	0.504
	90	20	37.0	23.2	6210	0.460
	90	20	37.0	23.2	6010/C3	0.460
	90	20	37.0	23.2	6210/P5C3	0.460
	110	27	62.0	38.0	6310	1.07
	110	27	65.0	38.0	6310	1.05
	110	27	62.0	38.0	6310A	1.12
	110	27	62.0	38.0	6310TN1	0.998
	110	27	62.0	38.0	6310TN11	0.998
	111	27	62.0	38.0	810	1.10
	130	31	92.0	55.0	6410	1.85

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN			kg
55	90	18	28.3	21.3	6011	0.384
	100	21	44.5	29.2	6211K	0.620
	100	21	44.5	29.2	6211	0.605
	120	29	71.5	45.0	6311	1.39
	120	29	71.5	45.0	6311/C3YA6	1.35
	120	29	71.5	45.0	6311TN1	1.31
	140	33	100	62.0	6411	2.31
60	85	13	16.4	14.2	61912	0.201
	95	18	29.4	23.2	6012	0.426
	95	18	29.4	23.2	6012M	0.497
	110	22	53.0	36.0	6212	0.793
	110	22	53.0	36.0	212	0.793
	110	22	53.0	36.0	212U	0.793
	110	22	53.0	36.0	212U1	0.793
	110	22	53.0	36.0	6212/YA5	0.772
	110	22	53.0	36.0	6212K	0.781
	130	31	82.0	52.5	6312A	1.75
	130	31	82.0	52.5	6312	1.71
	130	31	82.0	52.5	6312Q1	2.07
	130	31	82.0	52.5	6312TN1	1.64
	150	35	109	70.0	6412	2.78
65	90	13	20.0	17.5	61913	0.203
	100	18	32.0	24.9	6013	0.428
	100	18	32.0	24.9	6013M	0.553
	120	23	57.0	40.0	6213	0.973
	120	23	57.0	40.0	6213MA	1.23
	120	23	57.0	40.0	6213A	1.00

Automobile Deep groove ball bearing

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Basic Deep Groove Ball Bearings



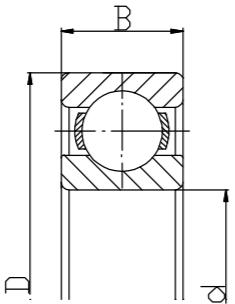
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
45	75	16	21.2	14.6	6009	0.246
	85	19	33.5	21.6	6209	0.428
	85	19	33.5	21.6	6209TN1	0.416
	85	19	33.5	21.6	6209K	0.419
	85	19	33.5	21.6	6209MA	0.492
	85	19	38.0	32.5	209	0.492
	100	25	57.0	46.5	309/YA8	0.880
	100	25	53.0	31.5	6309	0.850
	100	25	53.0	31.5	6309A	0.859
	100	25	53.0	31.5	6309/YB5	0.850
	100	25	53.0	31.5	6309/HAC3V2YA7	0.807
	100	25	53.0	31.5	6309TN1	0.811
	120	29	77.5	45.5	6409	1.69
50	72	12	13.5	11.0	61910	0.134
	80	16	22.0	16.3	6010	0.248
	90	20	35.0	23.2	6210/HA	0.504
	90	20	35.0	23.2	6210/C9YA6	0.474
	90	20	35.0	23.2	6210	0.504
	90	20	37.0	23.2	6210	0.460
	90	20	37.0	23.2	6010/C3	0.460
	90	20	37.0	23.2	6210/P5C3	0.460
	110	27	62.0	38.0	6310	1.07
	110	27	65.0	38.0	6310	1.05
	110	27	62.0	38.0	6310A	1.12
	110	27	62.0	38.0	6310TN1	0.998
	110	27	62.0	38.0	6310TN11	0.998
	111	27	62.0	38.0	810	1.10
	130	31	92.0	55.0	6410	1.85

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
55	90	18	28.3	21.3	6011	0.384
	100	21	44.5	29.2	6211K	0.620
	100	21	44.5	29.2	6211	0.605
	120	29	71.5	45.0	6311	1.39
	120	29	71.5	45.0	6311/C3YA6	1.35
	120	29	71.5	45.0	6311TN1	1.31
	140	33	100	62.0	6411	2.31
60	85	13	16.4	14.2	61912	0.201
	95	18	29.4	23.2	6012	0.426
	95	18	29.4	23.2	6012M	0.497
	110	22	53.0	36.0	6212	0.793
	110	22	53.0	36.0	212	0.793
	110	22	53.0	36.0	212U	0.793
	110	22	53.0	36.0	212U1	0.793
	110	22	53.0	36.0	6212/YA5	0.772
	110	22	53.0	36.0	6212K	0.781
	130	31	82.0	52.5	6312A	1.75
	130	31	82.0	52.5	6312	1.71
	130	31	82.0	52.5	6312Q1	2.07
	130	31	82.0	52.5	6312TN1	1.64
	150	35	109	70.0	6412	2.78
65	90	13	20.0	17.5	61913	0.203
	100	18	32.0	24.9	6013	0.428
	100	18	32.0	24.9	6013M	0.553
	120	23	57.0	40.0	6213	0.973
	120	23	57.0	40.0	6213MA	1.23
	120	23	57.0	40.0	6213A	1.00

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Basic Deep Groove Ball Bearings



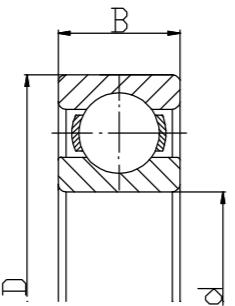
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
65	120	23	57.0	40.0	213G	1.01
	120	23	57.0	40.0	180213	1.06
	140	33	92.5	59.5	6313	2.10
	140	33	92.5	59.5	6313A	1.85
	140	33	92.5	59.5	6313/YA6	2.09
	140	33	92.5	59.5	6313M	2.10
	160	37	118	78.5	6413	3.25
70	110	20	38.0	31.0	6014	0.620
	110	20	38.0	31.0	6014M	0.757
	125	24	61.0	45.0	6214	1.34
	125	24	61.0	45.0	6214A	1.12
	150	35	104	68.0	6314A	2.60
	150	35	104	68.0	6314/P6CMV2	2.55
	150	35	104	68.0	314U1	2.55
	150	35	104	68.0	6314	2.55
	150	35	104	68.0	6314/C9	2.55
	150	35	104	68.0	6314/YA6	2.55
	150	35	104	68.0	6314TN1	2.46
	180	42	144	104	6414	4.73
72	110	20	38.0	31.0	60/72	0.584
75	115	13	29.0	26.0	16015	0.583
	115	20	40.0	33.0	6015	0.630
	115	20	40.0	33.0	6015M	0.804
	130	25	66.0	49.5	6215	1.16
	130	25	66.0	49.5	6215/P5	2.04
	130	25	66.0	49.5	6215A	1.21

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
75	130	25	66.0	49.5	6215M	1.45
	130	25	66.0	49.5	6215K	1.16
	160	37	113	77.0	6315	3.10
	160	37	113	77.0	6315A	3.03
	160	37	113	77.0	315U1	3.02
	160	37	113	77.0	6315/YA8	3.03
	160	37	113	77.0	6315M	3.77
	190	45	153	114	6415	5.57
80	110	16	27.6	25.3	61916	0.350
	125	14	33.0	30.5	16016	0.599
	125	22	47.5	40.0	6016	0.860
	125	22	47.5	40.0	6016M	1.08
	140	26	71.5	54.5	6216	1.43
	140	26	71.5	54.5	6216A	1.47
	170	39	123	86.5	6316	3.64
	170	39	123	86.5	6316M/HQ1	4.54
	170	39	123	86.5	6316A	3.68
	200	48	163	125	6416	6.63
85	120	18	30.5	30.0	61917	0.557
	130	14	34.5	33.0	16017	0.636
	130	22	51.0	43.0	6017	0.935
	130	22	51.0	43.0	6017M	1.12
	150	28	83.0	64.0	6217	1.80
	150	28	83.0	64.0	6217K	1.81
	150	28	83.0	64.0	6217A	1.85
	150	28	83.0	64.0	6217/HA	1.80
	150	28	83.0	64.0	6217M	1.91

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Basic Deep Groove Ball Bearings



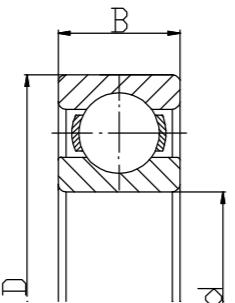
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
85	150	28	83.0	64.0	6217R/C3Z1	1.80
	150	28	83.0	64.0	6217R/C3Z1YA6	1.80
	180	41	133	96.5	6317	4.33
	180	41	133	96.5	6317/P6CMV2	4.33
	180	41	133	96.5	6317M	4.97
	180	41	133	96.5	317U1	4.33
	210	52	173	136	6417	8.12
90	125	18	33.0	31.5	61918	0.572
	125	18	33.0	31.5	61918M	0.680
	125	18	33.0	31.5	61918/YA6	0.572
	125	18	33.0	31.5	61918/YA6	0.590
	140	16	40.0	38.5	16018M	0.941
	140	24	58.0	49.5	6018	1.16
	140	24	58.0	49.5	6018M	1.39
	160	30	98.0	73.0	6218	2.19
	160	30	98.0	73.0	218U1	2.19
	190	43	143	107	6318	4.97
	190	43	143	107	6318/CM	4.97
	190	43	143	107	6318M/C4	6.37
	190	43	143	107	6318/YA6	4.97
	225	54	189	154	6418	9.47
95	120	13	19.3	20.5	61819	0.288
	130	18	33.5	33.5	61919	0.610
	145	16	44.0	42.0	16019	0.884
	145	24	58.0	50.0	6019	1.14
	170	32	109	81.5	6219	2.61
	170	32	109	81.5	6219M	3.26

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
95	200	45	153	118	6319	5.65
	200	45	153	118	6319/CM	5.58
	200	45	153	118	6319A	5.84
	200	45	153	118	6319F1/HQ1	6.93
	200	45	153	118	6319M/HQ1	7.11
	240	55	204	171	6419M	13.4
100	140	20	40.0	39.0	61920M	0.960
	140	20	40.0	39.0	61920	0.850
	150	16	45.0	43.5	16020	0.916
	150	24	63.5	55.5	6020	1.17
	150	24	63.5	55.5	6020M	1.40
	180	28	116	92.0	720	2.70
	180	34	122	93.0	6220	3.20
	215	47	173	140	6320	7.01
	215	47	173	140	6320A	7.10
	215	47	173	140	6320M	8.94
	215	47	173	140	6320MA	9.28
	215	47	173	140	6320/YA8	7.11
	250	58	223	195	6420	12.8
	250	58	223	195	6420M	15.4
105	130	13	19.9	21.9	61821M	0.362
	160	26	72.5	65.5	6021	1.62
	160	26	72.5	65.5	6021A	1.65
	160	26	72.5	65.5	6021M	1.92
	180	22	68.0	65.0	721	2.61
	190	36	133	104	6221	3.66
	225	49	184	153	6321	7.84

Automobile Deep groove ball bearing

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Basic Deep Groove Ball Bearings



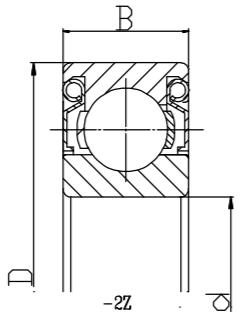
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
110	140	16	24.9	28.0	61822	0.505
	150	20	43.5	44.5	61922	0.888
	150	20	43.5	44.5	61922M	1.01
	170	19	57.5	56.5	16022	1.48
	170	28	82.0	73.0	6022	2.09
	170	28	82.0	73.0	6022M	2.72
	170	28	82.0	73.0	6022M/YB5	2.71
	200	38	144	117	6222	4.29
	200	38	144	117	6222M	5.46
	240	50	205	178	6322	9.49
	240	50	205	178	6322A	9.72
	240	50	205	178	6322M	11.8
	280	65	265	249	6422	18.3
	280	65	265	249	6422M	19.0

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
120	150	16	26.0	28.0	61824	0.568
	165	22	53.0	54.0	61924	1.21
	165	22	53.0	54.0	61924M	1.54
	180	19	61.0	64.0	16024	1.64
	180	19	61.0	64.0	16024M	1.82
	180	28	88.0	79.5	6024	2.21
	180	28	88.0	79.5	6024A	2.02
	180	28	88.0	79.5	6024M	2.68
	215	40	155	131	6224	5.26
	215	40	155	131	6224M	6.33
	260	55	228	207	6324	12.2
	260	55	228	207	6324A	12.5
	260	55	228	207	6324M/C3	13.7
	260	55	228	207	6324F1/HQ1	13.4

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Shield(s)



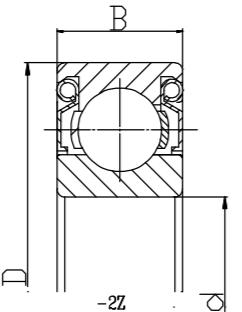
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
10	30	9	5.60	2.59	6200- Z	0.0271
	30	9	5.60	2.59	6200- 2Z	0.0270
12	32	10	6.90	3.10	6201- Z	0.0369
	32	10	6.90	3.10	6201- 2Z	0.0373
15	35	11	7.75	3.75	6202- Z	0.0432
	35	11	7.75	3.75	6202- 2Z	0.0450
17	40	12	9.60	4.80	6203- 2Z	0.0642
	40	12	9.60	4.80	6203- Z	0.0665
20	47	14	13.0	6.70	6204- 2Z	0.111
	47	14	13.0	6.70	6204- Z	0.109
25	52	15	14.3	8.00	6205- 2Z	0.135
	52	15	14.3	8.00	6205- Z	0.136
	62	17	22.4	11.5	6305- 2Z	0.218
30	55	13	13.8	8.30	6006- 2Z	0.120
	62	16	19.5	11.2	6206- 2Z	0.224
	62	16	19.5	11.2	6206- Z	0.223
	62	16	19.5	11.2	6206- ZS	0.223
	72	19	28.4	16.0	6306- 2Z	0.357
	72	19	28.4	16.0	6306- Z	0.356
35	62	14	16.2	10.4	6007- Z/C3	0.154
	72	17	25.7	15.3	6207- 2Z	0.300
	72	17	25.7	15.3	6207- Z	0.290

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
35	80	21	33.5	19.2	6307- 2Z	0.476
	80	21	33.5	19.2	6307- Z	0.466
40	68	15	16.8	11.6	6008- 2Z	0.191
	80	18	31.0	19.0	6208- 2Z	0.380
	80	18	31.0	19.0	6208- Z	0.371
	90	23	41.0	24.0	6208- 2RZ	0.408
	90	23	41.0	24.0	6308- 2Z	0.651
	90	23	41.0	24.0	6308- 2Z/YA7	0.641
	90	23	41.0	24.0	6308- Z	0.644
45	75	16	21.2	14.6	6009- 2Z	0.245
	75	16	21.2	14.6	6009- 2Z/C3	0.245
	85	19	33.5	21.6	6209- 2Z	0.435
	85	19	33.5	21.6	6209- Z	0.436
	85	19	33.5	21.6	6209- 2Z/YA7	0.429
	100	25	53.0	31.5	6309- 2Z	0.850
	100	25	53.0	31.5	6309- Z	0.846
	100	25	53.0	31.5	6309- 2Z/YA7	0.836
50	80	16	22.0	16.3	6010- 2Z	0.257
	90	20	35.0	23.2	6210- 2Z	0.484
	90	20	35.0	23.2	6210- Z	0.468
	90	20	35.0	23.2	6210- 2Z/YA7	0.432
	110	27	62.0	38.0	6310- 2Z	1.09
	110	27	62.0	38.0	6310- Z	1.09
	110	27	62.0	38.0	6310- 2Z/YA7	1.07

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Shield(s)



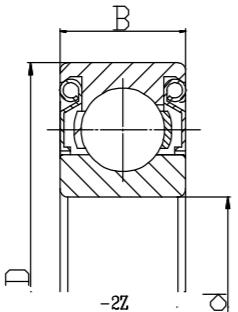
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
55	90	18	28.3	21.3	6011- Z	0.388
	90	18	28.3	21.3	6011- 2Z	0.386
	100	21	44.5	29.2	6211- Z	0.582
	100	21	44.5	29.2	6211- 2Z	0.639
	100	21	44.5	29.2	6211- 2Z/YA7	0.551
	120	29	71.5	45.0	6311- 2Z	1.39
	120	29	71.5	45.0	6311- Z	1.40
	120	29	71.5	45.0	6311- 2Z/YA7	1.38
60	95	18	29.4	23.2	6012- 2Z	0.417
	110	22	53.0	36.0	6212- Z	0.794
	110	22	53.0	36.0	6212- 2Z/YA7	0.792
	130	31	82.0	52.5	6312- 2Z	1.69
	130	31	82.0	52.5	6312- 2Z/YA7	1.66
	130	31	82.0	52.5	6312- Z	1.66
65	100	18	32.0	24.9	6013- 2Z	0.459
	120	23	57.0	40.0	6213- 2Z	1.02
	120	23	57.0	40.0	6213- Z	1.01
	120	23	57.0	40.0	6213- Z/HQ1	1.05
	120	23	57.0	40.0	6213- 2Z/YA7	1.00
	140	33	92.5	59.5	6313- 2Z/YA7	2.15
	140	33	92.5	59.5	6313- 2Z	2.12
	140	33	92.5	59.5	6313- Z	2.12
70	110	20	38.0	31.0	6014- 2Z	0.625
	125	24	61.0	45.0	6214- 2Z/YA7	1.15
	125	24	61.0	45.0	6214- 2Z	1.13
	125	24	61.0	45.0	6214- Z	1.16

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
70	150	35	104	68.0	6314- 2Z	2.35
	150	35	104	68.0	6314- 2Z/P6CMV2	2.51
	150	35	104	68.0	6314- 2Z/YA7	2.51
	150	35	104	68.0	6314- Z	2.58
75	115	20	40.0	33.0	6015- 2Z	0.624
	115	20	40.0	33.0	6015- Z	0.658
	130	25	66.0	49.5	6215- 2Z	1.18
	130	25	66.0	49.5	6215- Z	1.16
	130	25	66.0	49.5	6215- Z/HQ1	1.22
	130	25	66.0	49.5	6215- 2Z/YA7	1.17
	160	37	113	77.0	6315- 2Z	3.17
	160	37	113	77.0	6315- Z	3.01
	160	37	113	77.0	6315- 2Z/YA7	3.14
80	125	22	47.5	40.0	6016- Z	0.86
	125	22	47.5	40.0	6016- 2Z	0.848
	140	26	71.5	54.5	6216- 2Z/YA7	1.42
	140	26	71.5	54.5	6216- 2Z	1.46
	140	26	71.5	54.5	6216- Z	1.44
	170	39	123	86.5	6316- Z	3.36
	170	39	123	86.5	6316- 2Z	3.72
	170	39	123	86.5	6316- 2Z/YA7	3.67
85	130	22	51.0	43.0	6017- 2Z	0.965
	150	28	83.0	64.0	6217- Z	1.85
	150	28	83.0	64.0	6217- 2Z	1.85
	150	28	83.0	64.0	6217- 2Z/YA7	1.78
	180	41	133	96.5	6317- Z	4.35

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Shield(s)



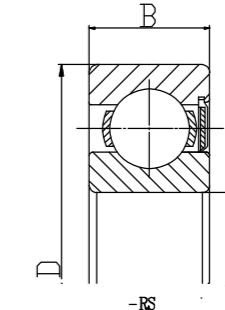
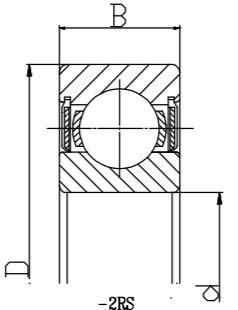
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
85	180	41	133	96.5	6317- 2Z	4.35
	180	41	133	96.5	6317- 2Z/YA7	4.35
	180	41	133	96.5	IS- 6317- 2Z/P6CMV2	4.30
	180	41	133	96.5	6317- 2Z/P6CMV2	4.30
90	140	24	58.0	49.5	6018- Z	1.16
	140	24	58.0	49.5	6018- 2Z	1.18
	160	30	98.0	73.0	6218- Z	2.21
	160	30	98.0	73.0	6218- 2Z	2.21
	160	30	98.0	73.0	6218- 2Z/YA7	2.20
	190	43	143	107	6318- 2Z/YA7	5.04
	190	43	143	107	6318M- Z/YA8P54	6.39
	190	43	143	107	6318- 2Z	5.07
	190	43	143	107	6318- Z	5.04
95	145	24	58.0	50.0	6019- Z	1.16
	145	24	58.0	50.0	6019- Z/HQ1	1.31
	145	24	58.0	50.0	6019- 2Z	1.17
	170	32	109	81.5	6219- Z	2.63
	170	32	109	81.5	6219- 2Z	2.65
	170	32	109	81.5	6219- 2Z/YA7	2.38
	200	45	153	118	6319- 2Z	5.93
	200	45	153	118	6319- 2Z/YA7	5.72
100	150	24	63.5	55.5	6020- 2Z	1.20
	150	24	63.5	55.5	6020- 2Z/C9	1.16
	150	24	63.5	55.5	6020- Z	1.19
	180	34	122	93.0	6220- Z	3.26
	180	34	122	93.0	6220- 2Z	3.22

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
100	180	34	122	93.0	6220- 2Z/YA7	3.20
	215	47	173	140	6320- Z	7.12
	215	47	173	140	6320- 2Z	7.14
	215	47	173	140	6320- 2Z/YA7	6.93
105	160	26	72.5	65.5	6021- 2Z/C3Z1	1.66
	190	36	133	104	6221- 2Z	3.94
110	170	28	82.0	73.0	6022- Z/HQ1	2.40
	170	28	82.0	73.0	6022- 2Z	2.14
	175	31	84.0	73.5	60722	2.67
	200	38	144	117	6222- Z	4.58
	200	38	144	117	6222- 2Z	4.61
	240	50	205	178	6322- 2Z	9.55
	240	50	205	178	6322- 2Z/YA7	9.59
120	180	28	88.0	79.5	6024- 2Z	2.13
	180	28	88.0	79.5	6024- Z	2.26
	180	28	88.0	79.5	6024- Z/C9	2.26
	215	40	155	131	6224- 2Z	5.24

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Seal(s)



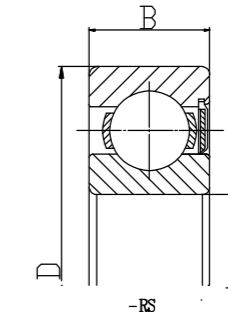
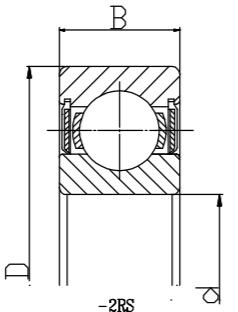
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
20	47	14	13.0	6.70	6204- 2RS	0.121
25	47	12	11.5	6.55	6005- 2RS	0.0787
	52	15	14.3	8.00	6205- 2RS	0.130
	52	15	14.3	8.00	6205- 2RZ	0.125
	52	15	14.3	8.00	6205- RS2	0.130
	52	15	14.3	8.00	6205- RS	0.130
	52	15	14.3	8.00	6205- 2RS/FR	0.130
	62	17	22.4	11.5	6305- 2RS	0.232
	62	17	22.4	11.5	6305- RS	0.223
28	68	18	25.0	13.9	63/28- RS/HA	0.305
30	55	13	13.8	8.30	6006- 2RS	0.120
	62	16	19.5	11.2	6206- RS	0.224
	62	16	19.5	11.2	6206- RS2	0.212
	62	16	19.5	11.2	6206- 2RS	0.214
	62	16	19.5	11.2	6206- 2RZ	0.240
	72	19	28.4	16.0	6306- 2RS	0.355
	72	19	28.4	16.0	6306- RS	0.353
	72	19	28.4	16.0	6306- 2RS/YA6	0.338
	75	20	33.0	17.5	450706K	0.474
32	80	23	36.5	19.6	4507/32KU	0.534
35	64	14	16.2	10.4	6007X1- 2RS/C3	0.196
	62	14	16.2	10.4	6007- 2RZ	0.169
	62	14	16.2	10.4	6007- 2RS	0.175
	72	17	25.7	15.3	6207- RS	0.296

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
35	72	17	25.7	15.3	6207- RS2	0.296
	72	17	25.7	15.3	6207- 2RS2	0.299
	72	17	25.7	15.3	6207- 2RS	0.291
	80	21	33.5	19.2	6307- RS	0.480
	80	21	33.5	19.2	6307- 2RS	0.491
40	80	18	31.0	19.0	6208- RS	0.385
	80	18	31.0	19.0	6208- RS2	0.385
	80	18	31.0	19.0	6208- 2RS	0.406
	80	21	31.0	19.0	62208X2WB- 2RS/P53	0.525
	85	22	32.5	20.4	6308X3- 2RS	0.704
	90	23	41.0	24.0	6308- RS	0.617
	90	23	41.0	24.0	6308- 2RS	0.610
	90	23	41.0	24.0	6308- 2RZ	0.643
	109.5	31	41.0	24.0	6308X3- 2RS/YA6	1.48
45	75	16	21.2	14.6	6009- RS	0.245
	75	16	21.2	14.6	6009- RS2	0.245
	75	16	21.2	14.6	6009- 2RS	0.250
	75	16	21.2	14.6	6009- 2RS/FR	0.250
	85	19	33.5	21.6	6209- RS	0.441
	85	19	33.5	21.6	6209- 2RZ	0.435
	85	19	33.5	21.6	6209- RS2	0.435
	85	19	33.5	21.6	6209- 2RS	0.452
	85	19	33.5	21.6	6209- 2RSK	0.433
	85	21	33.5	21.6	62209X2WB- 2RS/P53	0.544
	100	25	53.0	31.5	6309- 2RS	0.619
	100	25	53.0	31.5	6309- RS	0.604
	100	25	53.0	31.5	6309- 2RZ	0.861

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Seal(s)



Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
45	127	31.5	53.0	31.5	6309X3- 2RS/YA6	2.04
	100	36	53.0	31.5	62309- 2RS	1.18
50	80	16	22.0	16.3	6010- 2RZ	0.255
	80	16	22.0	16.3	6010- 2RS	0.258
	90	20	35.0	23.2	6210- 2RS	0.494
	110	27	62.0	38.0	6310- 2RS	1.13
	110	27	62.0	38.0	6310- 2RS/HAC3V2YA7	1.07
	110	27	62.0	38.0	6310TN1- 2RZ/C4L	1.08
	163	46	62.0	38.0	6310X3- 2RS	5.84
55	90	18	28.3	21.3	6011- 2RS	0.389
	100	21	44.5	29.2	6211- 2RS	0.594
	120	29	71.5	45.0	6311- 2RS	1.39
	120	29	71.5	45.0	6311- RS	1.40
60	120	49.2	71.5	45.0	63311TN1- 2RZ/C3H	2.2
	95	18	29.4	23.2	6012- 2RS	0.443
60	95	18	29.4	23.2	6012- RS	0.431
	110	22	53.0	36.0	6212- 2RS	0.780
	110	22	53.0	36.0	6212- 2RS/HAC3V2YA7	0.788
	110	22	53.0	36.0	6212WB- 2RS/P53	0.974
	110	22	53.0	36.0	6212/HAC3YAB- 2RSZ	0.928
	110	22	53.0	36.0	6212- 2RS2/HAYA57	0.792
	130	31	82.0	52.5	6312- 2RS	1.73
	130	31	82.0	52.5	6312- RS	1.68
130	31	82.0	52.5	6312- 2RZ	1.75	

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
65	100	18	32.0	24.9	6013- 2RS	0.444
	120	23	57.0	40.0	6213- 2RSR/C3Z1YA6	1.14
	140	33	92.5	59.5	6313- 2RS	2.30
	140	33	92.5	59.5	6313- RS	2.19
70	110	20	38.0	31.0	6014- 2RS	0.606
	125	24	61.0	45.0	6214- 2RS	1.06
	130	41	61.0	45.0	180714	2.05
	150	35	104	68.0	6314- 2RS	2.57
	150	35	104	68.0	6314- RS	2.59
	75	20	40.0	33.0	6015- 2RS	0.604
	130	25	66.0	49.5	6215- 2RS	1.19
80	160	37	113	77.0	6315- 2RS	3.00
	125	22	47.5	40.0	6016- 2RS	0.829
	140	26	71.5	54.5	6216- 2RS	1.49
	170	39	123	86.5	6316- RS	3.64
85	170	39	123	86.5	6316- 2RS	3.75
	130	22	51.0	43.0	6017- 2RS	0.966
	150	28	83.0	64.0	6217- 2RS	1.81
	180	41	133	96.5	6317- RS	4.32
	180	41	133	96.5	6317- 2RS	4.35
90	140	24	58.0	49.5	6018- 2RS	1.18
	160	30	98.0	73.0	6218- 2RS	2.21
	190	43	143	107	6318- 2RS	5.10

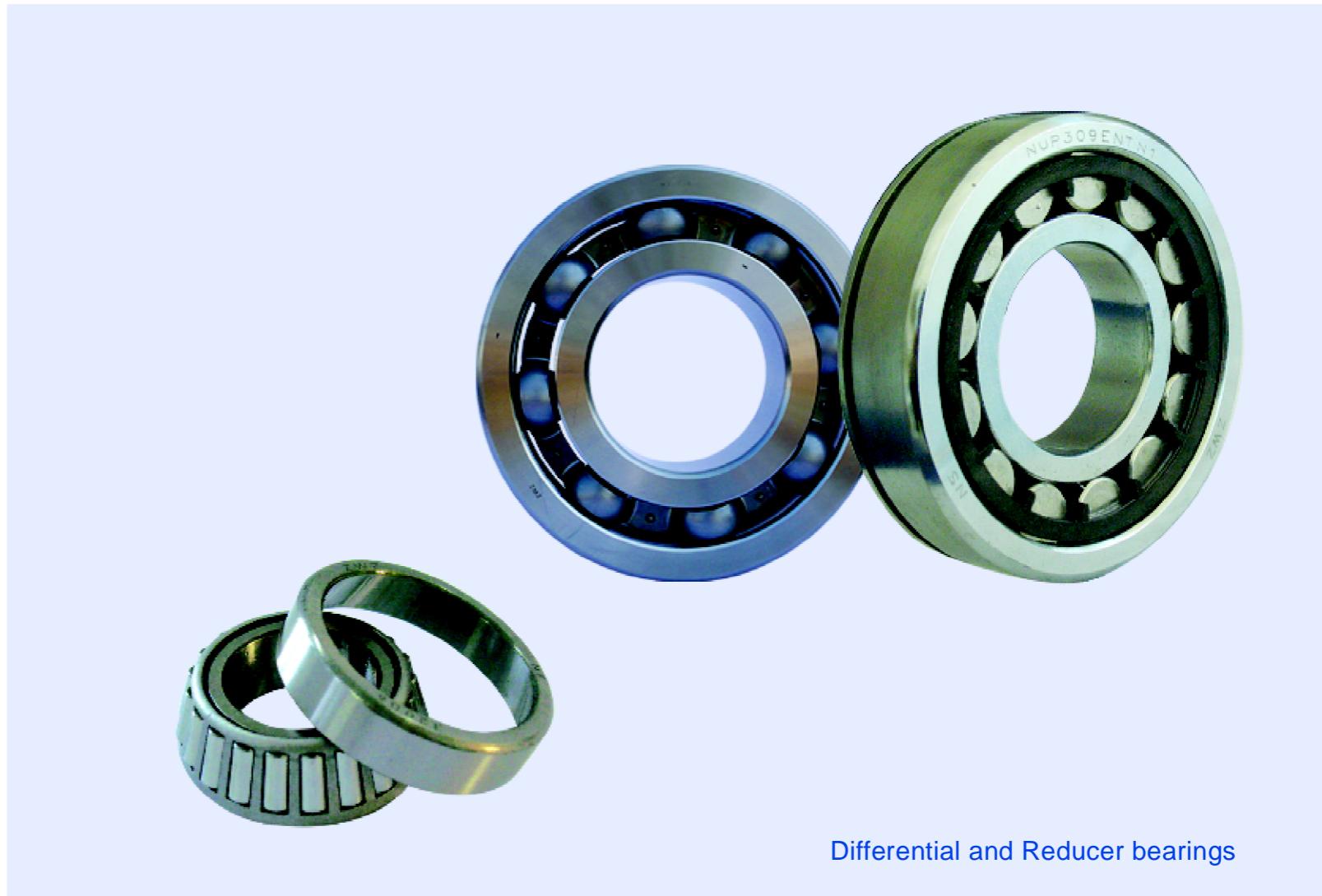
Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with Seal(s)



Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight kg
d mm	D mm	B mm	Cr KN	Cor		
95	145	24	58.0	50.0	6019- 2RS/C3	1.17
	170	32	109	81.5	6219- 2RS	2.44
	200	45	153	118	6319- RS	5.68
	200	45	153	118	6319- 2RS	5.92
100	150	24	63.5	55.5	6020- 2RS	1.20
	180	34	122	93.0	6220- 2RS	3.25
105	160	26	72.5	65.5	6021- 2RS	1.65
110	140	16	24.9	28.0	61822- 2RS2/S3YA7	0.517
	170	28	82.0	73.0	6022- 2RS	1.98
120	180	28	88.0	79.5	6024- 2RS	2.48
	260	55	228	207	6324- 2RS	12.7

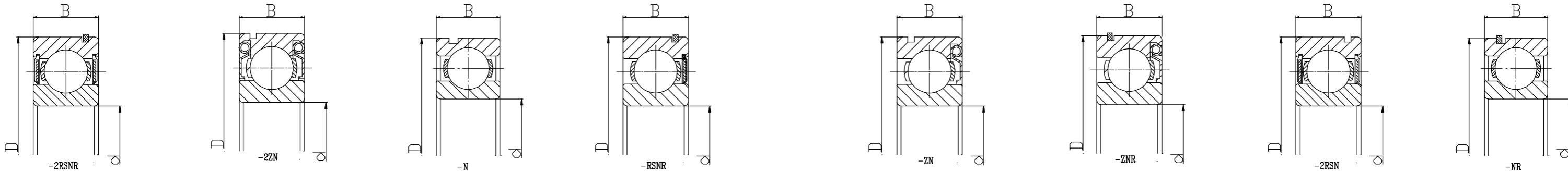


Differential and Reducer bearings

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

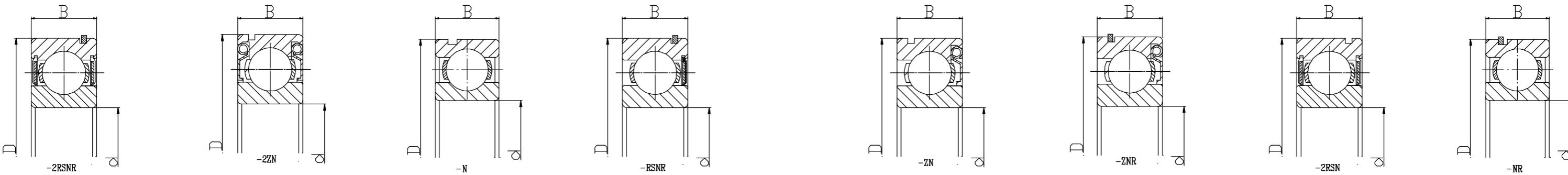


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max	
mm			KN									kg
25	52	15	14.3	8.00	57.9	1.12	6205N/C3 6205- ZNR 6205N 6305N	49.73	2.46	1.35	0.4	0.131
	52	15	14.3	8.00				49.73	2.46	1.35	0.4	0.136
	52	15	14.3	8.00				49.73	2.46	1.35	0.4	0.131
	62	17	22.4	11.5				59.61	3.28	1.9	0.6	0.230
28	58	16	16.6	9.55			62/28- ZN 63/28- ZN	55.6	2.46	1.35	0.4	0.179
	68	18	25.0	13.9				64.82	3.28	1.9	0.6	0.294
30	62	16	19.5	11.2	78.6	1.7	6206N 6306N 6306- 2RZN/C4 6306- ZNR 6306X3- 2RSN/HAY	59.61	3.28	1.9	0.6	0.200
	72	19	28.4	16.0				68.81	3.28	1.9	0.6	0.350
	72	19	28.4	16.0				68.81	3.28	1.9	0.6	0.340
	72	19	28.4	16.0				68.81	3.28	1.9	0.6	0.365
	75	21	33.0	17.5				71.83	3.28	1.9	0.6	0.477
32	75	20	28.3	16.0			63/32N 63/32- 2RSN 63/32X3- 2RSN/HAY	71.83	3.28	1.9	0.6	0.391
	75	20	28.3	16.0				71.83	3.28	1.9	0.6	0.413
	80	23	36.5	19.6				77.3	4.78	1.9	0.6	0.534
35	62	14	16.2	10.4	78.2	1.7	6007- RSNB 6207- 2RSN 6207- XRSN 6207N 6207- 2RSNR/P53YAB 6207NKTN1- 2RZ/C3H 6307N 6307- ZN 6407N	59.61	2.08	1.9	0.6	0.161
	72	17	25.7	15.3				68.81	3.28	1.9	0.6	0.298
	72	17	25.7	15.3				68.81	3.28	1.9	0.6	0.294
	72	17	25.7	15.3				68.81	3.28	1.9	0.6	0.291
	72	17	25.7	15.3				68	3.3	1.8	0.3	0.305
	72	17	25.7	15.3				68.81	3.28	1.9	0.6	0.278
	80	21	33.5	19.2				76.81	3.28	1.9	0.6	0.443
	80	21	33.5	19.2				76.81	3.28	1.9	0.6	0.443
	100	25	53.0	31.0				96.8	3.28	2.7	0.6	0.901

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

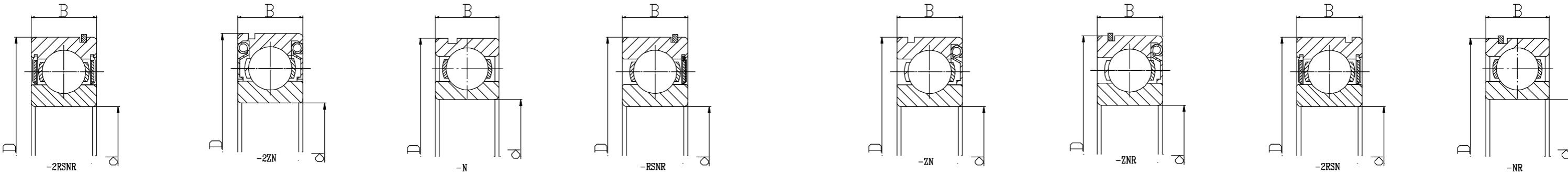


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight		
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max			
mm			KN									kg		
40	80	18	31.0	19.0	86.6	1.7	6208N	76.81	3.28	1.9	0.6	0.354		
	80	18	31.0	19.0				77.81	3.28	1.9	0.6	0.364		
	80	18	31.0	19.0				78.81	3.28	1.9	0.6	0.382		
	90	23	41.0	24.0				86.79	3.28	2.7	0.6	0.640		
	90	23	41.0	24.0	96.5	2.46	6308- ZNR	86.79	3.28	2.7	0.6	0.673		
	90	23	41.0	24.0	96.5	2.46	6308N/HAP63	86.79	3.28	2.7	0.6	0.640		
	90	20	41.0	24.0			6308X2NR/C3	86.79	3.28	2.7	0.6	0.600		
	90	23	41.0	24.0			6308- ZN	86.79	3.28	2.7	0.6	0.642		
	90	23	41.0	24.0	6308- 2RSN	2.46	6308- 2RSN	86.79	3.28	2.7	0.6	0.622		
	43	100	25	65.0	43.5		30/43NR- 2Z/YAD	96.8	3.28	2.7	0.6	0.994		
45	110	27	67.5	36.5	91.6	1.7	6408N	106.81	3.28	2.7	0.6	1.19		
	85	19	33.5	21.6				6209N	81.81	3.28	1.9	0.6	0.422	
	85	19	33.5	21.6				6209- ZN	81.81	3.28	1.9	0.6	0.379	
	85	19	33.5	21.6				6209- ZNR	81.81	3.28	1.9	0.6	0.434	
	100	21	52.5	30.0	106.5	2.46	6309X2NR/C3	96.8	3.28	2.7	0.6	0.735		
	100	25	53.0	31.5	106.5	2.46		6309N	96.8	3.28	2.7	0.6	0.840	
	100	25	53.0	31.5				6309- ZN	96.8	3.28	2.7	0.6	0.837	
	100	25	53.0	31.5				6309NR	96.8	3.28	2.7	0.6	0.861	
	100	25	57.0	46.5	106.5	2.46	309NR/HAYAB- DC	96.8	3.28	2.69	0.6	0.900		
	100	25	57.0	46.5	106.5	2.46		309N/HAYAB	96.8	3.28	2.69	0.6	0.900	
50	120	29	77.5	45.5		6409N	115.21	4.06	3.1	0.6	1.57			
	90	20	35.0	23.2	96.5		2.46		6210N	86.79	3.28	2.7	0.6	0.494
	90	20	35.0	23.2		6210- ZN	86.79	3.28	2.7	0.6	0.469			
	90	20	35.0	23.2			6210- ZNR	86.79	3.28	2.7	0.6	0.605		
	90	20	35.0	23.2	116.6	2.46	6210- ZNB- FST	86.79	3.28	2.7	0.6	0.469		
	110	27	62.0	38.0				6310N	106.81	3.28	2.7	0.6	1.03	
	110	27	62.0	38.0				6310- ZNR	106.81	3.28	2.7	0.6	1.23	

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

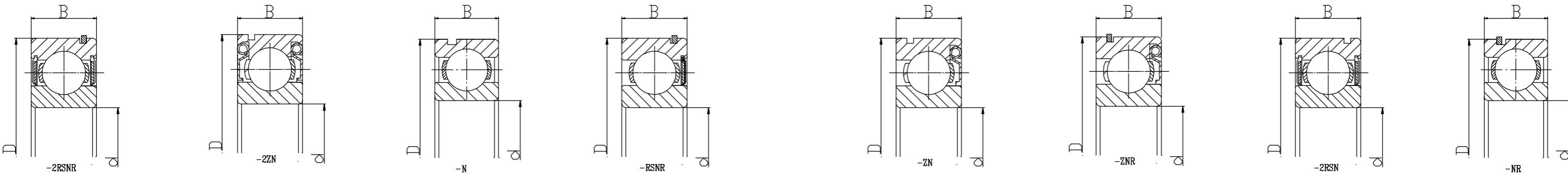


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight kg
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max	
mm			KN									
50	130	31	92.0	55.0	139.7	2.82	6410N 6410NR/C3YA6	125.22 125.22	4.06 4.06	3.1 3.1	0.6 0.6	1.89 1.90
	130	31	92.0	55.0								
55	100	21	44.5	29.2	106.5	2.46	6211N 6211-ZNR 62211WB-2RSZN 6311-2ZN	96.8 96.8 96.8 115.21	3.28 3.28 3.28 4.06	2.7 2.7 2.7 3.1	0.6 0.6 0.6 0.6	0.595 0.645 1.06 1.37
	100	21	44.5	29.2								
	100	25	44.5	29.2								
	120	29	71.5	45.0								
	120	29	71.5	45.0	129.7	2.82	6311N 6311-2RSN 6311-2RSNR 6611NR 6411N	115.21 115.21 115.21 125.22 135.23	4.06 4.06 4.06 4.06 4.9	3.1 3.1 3.1 3.1 3.1	0.6 0.6 0.6 0.6 0.6	1.37 1.35 1.41 1.89 2.29
	120	29	71.5	45.0								
	120	29	71.5	45.0								
	120	29	71.5	45.0	139.7	2.77						
	130	31	77.0	49.0								
	140	33	100	62.0								
60	110	22	53.0	36.0	116.6	2.46	6212-ZNBR/YB2 6212-ZN 6212N-FST 6212-ZNB/HAYAB	106.81 106.81 106.81 106.81	3.28 3.28 3.28 3.28	2.7 2.7 2.7 2.7	0.6 0.6 0.6 0.6	0.794 0.766 0.778 0.782
	110	22	53.0	36.0								
	110	22	53.0	36.0								
	110	22	53.0	36.0	116.6	2.46	6212-ZNR 6312N 6312-ZN 6412N	106.81 125.22 125.22 145.24	3.28 4.06 4.06 4.9	2.7 3.1 3.1 3.1	0.6 0.6 0.6 0.6	0.778 1.67 1.73 2.75
	110	22	53.0	36.0								
	130	31	82.0	52.5								
	130	31	82.0	52.5								
	150	35	109	70.0								
65	100	18	32.0	24.9			6013N 6213N 6213N-FST 6313N	96.8 115.21 115.21 135.23	2.87 4.06 4.06 4.9	2.7 3.1 3.1 3.1	0.6 0.6 0.6 0.6	0.440 1.04 1.04 2.13
	120	23	57.0	40.0								
	120	23	57.0	40.0								
	140	33	92.5	59.5			6313N/YAB-FST 6313NR/C3YA6 6313NR/C3	135.23 135.23 135.23	4.9 4.9 4.9	3.1 3.1 3.1	0.6 0.6 0.6	2.13 2.17 2.20
	140	33	92.5	59.5	149.7	2.82						
	140	33	92.5	59.5	149.7	2.82						
	140	33	92.5	59.5	169.7	2.82						
	160	37	118	78.5	169.7	2.82	6413NR/C3	155.22	4.9	3.1	0.6	3.26

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

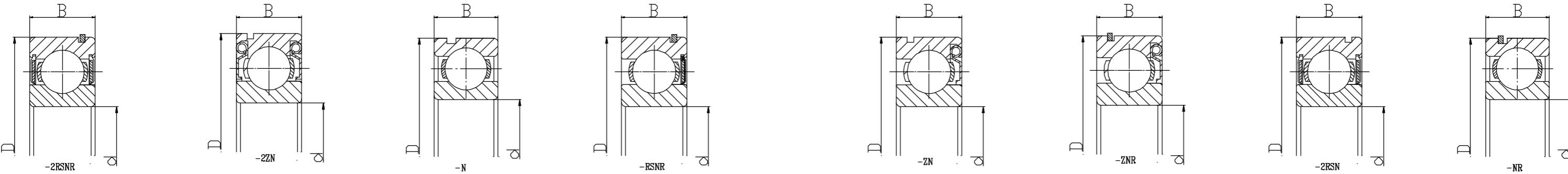


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight kg
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max	
mm			KN									
50	130	31	92.0	55.0	139.7	2.82	6410N 6410NR/C3YA6	125.22 125.22	4.06 4.06	3.1 3.1	0.6 0.6	1.89 1.90
	130	31	92.0	55.0								
55	100	21	44.5	29.2	106.5	2.46	6211N 6211-ZNR 62211WB-2RSZN 6311-2ZN	96.8 96.8 96.8 115.21	3.28 3.28 3.28 4.06	2.7 2.7 2.7 3.1	0.6 0.6 0.6 0.6	0.595 0.645 1.06 1.37
	100	21	44.5	29.2								
	100	25	44.5	29.2								
	120	29	71.5	45.0								
	120	29	71.5	45.0	129.7	2.82	6311N 6311-2RSN 6311-2RSNR 6611NR 6411N	115.21 115.21 115.21 125.22 135.23	4.06 4.06 4.06 4.06 4.9	3.1 3.1 3.1 3.1 3.1	0.6 0.6 0.6 0.6 0.6	1.37 1.35 1.41 1.89 2.29
	120	29	71.5	45.0								
	120	29	71.5	45.0								
	120	29	71.5	45.0	139.7	2.77						
	130	31	77.0	49.0								
	140	33	100	62.0								
60	110	22	53.0	36.0	116.6	2.46	6212-ZNBR/YB2 6212-ZN 6212N-FST 6212-ZNB/HAYAB	106.81 106.81 106.81 106.81	3.28 3.28 3.28 3.28	2.7 2.7 2.7 2.7	0.6 0.6 0.6 0.6	0.794 0.766 0.778 0.782
	110	22	53.0	36.0								
	110	22	53.0	36.0								
	110	22	53.0	36.0	116.6	2.46						
	110	22	53.0	36.0								
	110	22	53.0	36.0								
	110	22	53.0	36.0	116.6	2.46						
	110	22	53.0	36.0								
	130	31	82.0	52.5			6212-ZNR 6312N 6312-ZN 6412N	106.81 125.22 125.22 145.24	3.28 4.06 4.06 4.9	2.7 3.1 3.1 3.1	0.6 0.6 0.6 0.6	0.778 1.67 1.73 2.75
	130	31	82.0	52.5								
	130	31	82.0	52.5								
	150	35	109	70.0								
65	100	18	32.0	24.9			6013N 6213N 6213N-FST 6313N	96.8 115.21 115.21 135.23	2.87 4.06 4.06 4.9	2.7 3.1 3.1 3.1	0.6 0.6 0.6 0.6	0.440 1.04 1.04 2.13
	120	23	57.0	40.0								
	120	23	57.0	40.0								
	140	33	92.5	59.5								
	140	33	92.5	59.5	149.7	2.82	6313N/YAB-FST 6313NR/C3YA6 6313NR/C3	135.23 135.23 135.23	4.9 4.9 4.9	3.1 3.1 3.1	0.6 0.6 0.6	2.13 2.17 2.20
	140	33	92.5	59.5	149.7	2.82						
	140	33	92.5	59.5	169.7	2.82						
	160	37	118	78.5	169.7	2.82	6413NR/C3	155.22	4.9	3.1	0.6	3.26

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

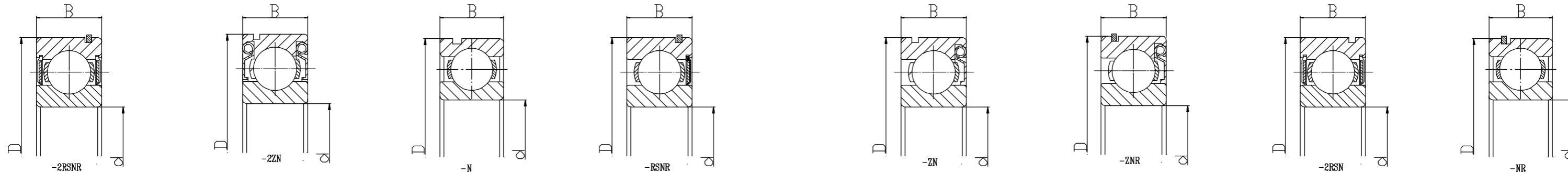


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight kg	
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max		
mm			KN										
70	110	20	38.0	31.0	116.6	2.46	6014NR	106.81	2.87	2.7	0.6	0.655	
	125	24	61.0	45.0				120.22	4.06	3.1	0.6	1.10	
	150	35	104	68.0				145.24	4.9	3.1	0.6	2.54	
	150	35	104	68.0				145.24	4.9	3.1	0.6	2.54	
	150	35	104	68.0	159.7	2.82		145.24	4.9	3.1	0.6	2.62	
75	115	20	40.0	33.0	169.7	2.82	6015N- FST	111.81	2.87	2.7	0.6	0.622	
	130	25	66.0	49.5				125.2	4.06	3.1	0.6	1.18	
	160	37	126	115				155.22	4.9	3.1	0.6	4.27	
	160	37	126	115				155.22	4.9	3.1	0.6	4.27	
80	140	26	71.5	54.5			6216N	135.23	4.9	3.1	0.6	1.41	
	170	39	123	86.5				163.65	5.69	3.5	0.6	3.63	
	200	48	163	125				193.6	5.7	3.5	0.6	6.78	
85	130	22	51.0	43.0			6017N	125.22	2.87	3.1	0.6	0.903	
	130	22	51.0	43.0				125.22	4.06	3.1	0.6	0.903	
	150	28	83.0	64.0				145.24	4.9	3.1	0.6	1.92	
	150	28	83.0	64.0				145.24	4.9	3.1	0.6	1.82	
	160	30	87.0	64.5				155.22	4.9	3.1	0.6	2.44	
90	140	24	58.0	49.5		149.7	2.82	6018N	135.23	3.71	3.1	0.6	1.15
	140	24	58.0	49.5					135.23	3.68	3.1	0.6	1.12
	140	24	58.0	49.5					135.23	3.68	3.1	0.6	1.15
	140	24	58.0	49.5					135.23	3.71	3.1	0.6	1.11
	140	24	58.0	49.5	149.7	2.82	6018NR/YAB- 2	135.23	3.71	3.1	0.6	1.22	
	140	24	58.0	49.5	149.7	2.82		135.23	3.71	3.1	0.6	1.22	
	140	24	58.0	49.5	149.7	2.82		135.23	3.71	3.1	0.6	1.22	
	160	30	98.0	73.0			6218N	155.22	4.9	3.1	0.6	2.18	
	190	43	143	107				183.64	5.69	3.5	0.6	4.73	

Automobile Deep groove ball bearing

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Deep Groove Ball Bearings with stop ring slot

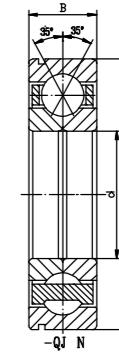
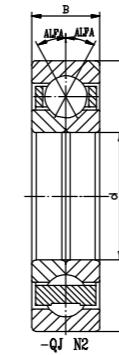
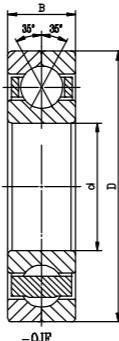
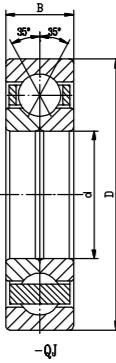


Basic Dimensions			Basic Load Ratings		Ring Dimensions		Bearing Designations	Ring Groove Dimensions				Weight kg
d	D	B	Cr	Cor	D2	f		D1 max	a1	b	r0 max	
mm			KN									
95	200	45	153	118			6319N	193.65	5.69	3.5	0.6	5.79
100	150	24	63.5	55.5			6020N	145.24	3.71	3.1	0.6	1.13
	250	58	223	195			6420N	242	6.5	4.5	1	13.1
105	190	36	133	104			6221N	183.64	5.69	3.5	0.6	3.79

Automobile Deep groove ball bearing

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Four Point Contact Ball Bearings



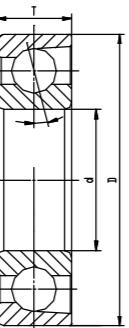
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN			kg
40	80	18	56	46	QJ208 QJ308	1.07
45	100	25	88.9	72	QJ309M	1.08
55	100	21	98	71	QJ211 QJ311N	0.798
60	110	22	92.3	87	QJ212M	0.928
65	140	33	153	132	QJ213N/YB2 QJ313M	2.34
	140	33	153	132	QJ313N/YAB	2.34
70	150	35	185	166	QJ314M	3.28
75	130	25	117	123	QJ215M	1.38
80	125	22	80	91.5	QJ1016	1.07

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN			kg
85	180	41	248	255	QJ317N2	5.45
90	160	30	164	174	QJ218N2	2.87
	160	30	164	174	QJ218	2.87
95	170	32	174	188	QJ219N2	3.30
	200	45	285	310	QJ319N2	7.52
100	150	24	103	128	QJF1020	1.63
	180	34	198	215	QJ220	3.91
	215	47	300	370	QJ320N2	8.78
105	160	26	120	150	QJ1021M	2
110	170	28	147	186	QJ1022M	2.68
	200	38	252	284	QJF222	5.67
	200	38	252	284	QJ222	5.71
	240	50	365	440	QJ322	12.0

Automobile Deep groove ball bearing

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Angular Contact Ball Bearings



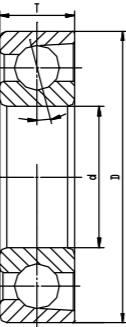
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
25	62	17	28.6	16.0	7305C	0.224
	62	17	24.7	14.0	7305BM	0.277
30	72	19	31.8	21.0	7306C	0.346
	72	19	31.0	19.5	7306ACM	0.413
	72	19	33.6	18.0	7306BM	0.371
35	72	17	32.5	22.0	7207C	0.304
	72	17	29.0	18.0	7207BM	0.328
	80	21	40.3	26.0	7307C	0.335
	80	21	39.0	25.0	7307ACM	58.5
	80	21	39.0	25.0	7307BM	0.551
	80	21	39.0	25.0	7307B	0.481
	100	25	70.2	42.0	7407ACM	1.14
40	80	18	36.4	25.0	7208C	0.364
	80	18	36.4	25.0	B7208C	0.383
	80	18	47.2	21.5	7208CTN1/HQ1	0.312
	90	23	46.8	32.5	7308C	0.624
	90	23	46.8	31.0	7308ACM	0.711
	90	23	46.8	30.0	7308B	0.653
	90	23	46.8	30.0	7308BM	0.711
	110	27	90.5	39.0	7408BM	1.47
45	85	19	40.3	29.0	B7209C	0.418
	85	19	40.3	29.0	7209C	0.403
	100	25	63.7	42.5	7309C	0.834
	100	25	65.0	45.0	7309ACM	1.02
	100	25	68.3	39.5	7309BM	1.02

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
50	80	16	26.5	17.3	7010CM	0.309
	80	16	25.0	20.5	7010ACM	0.314
	90	20	42.9	32.0	7210C	0.458
	90	20	42.9	32.0	B7210C	0.506
	90	20	40.3	30.0	7210AC	0.460
	90	20	37.7	29.0	7210B	0.487
	110	27	71.5	49.0	7310ACM	1.16
	110	27	70.0	44.0	7310BM	1.16
	110	27	75.4	51.0	7310C	1.04
	110	27	75.4	51.0	7310CM	1.16
	110	27	70.0	44.0	7310B	1.05
	130	31	105	70.0	7410ACM	2.30
	130	31	96.4	64.0	7410BM	2.36
	55	90	31.2	26.0	7011AC	0.385
	100	21	53.3	40.0	7211C	0.599
	100	21	53.3	40.0	B7211C	0.600
	100	21	50.7	38.0	7211AC	0.599
	100	21	53.3	40.0	7211CM	0.698
	100	21	50.7	32.0	7211C/HQ1	0.578
	100	21	34.0	34.0	7211BM	1.698
	120	29	92.3	65.0	7311CM	1.65
	120	29	92.3	65.0	7311C	1.44
	120	29	91.0	65.0	7311AC	1.44
	120	29	88.4	63.0	7311ACM	1.65
	120	29	88.4	63.0	7311ACQ1	1.64
	120	29	81.0	56.0	7311BM	1.61
	140	33	121	84.0	7411ACM	2.79

Automobile Deep groove ball bearing

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Angular Contact Ball Bearings



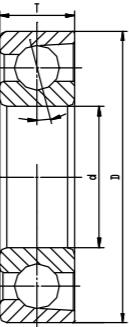
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
60	95	18	35.1	30.0	7012AC	0.392
	110	22	55.9	43.0	7212AC	0.786
	110	22	55.9	43.0	7212ACM	0.951
	110	22	58.5	45.0	7212C	0.786
	110	22	49.4	36.0	7212BM	0.947
	130	31	94.9	67.0	7312AC	1.80
	130	31	94.9	67.0	7312ACM	2.02
	130	31	91.0	60.0	7312BM	2.11
	130	31	91.0	60.0	7312B	1.86
	150	35	131	95.0	7412ACM	3.65
	150	35	120	86.0	7412BM	3.42
65	100	18	33.8	31.0	7013AC	0.414
	100	18	37.7	34.0	7013ACJ	0.410
	100	18	33.8	31.0	7013ACM	0.504
	120	23	72.8	59.0	7213C	1.02
	120	23	72.8	56.0	7213AC/P5	1.02
	120	23	70.2	56.0	7213ACM	1.16
	120	23	70.2	56.0	7213AC/YB5	1.02
	120	23	72.8	59.0	7213CM	1.16
	140	33	120	88.0	7313CM	2.60
	140	33	120	88.0	7313CJ	2.23
	140	33	120	88.0	7313C	2.23
	140	33	114	84.0	7313ACM	2.61
	140	33	114	84.0	7313ACJ	2.24
	140	33	114	84.0	7313AC	2.24
	140	33	101	75.0	7313BM	2.48
	140	33	114	84.0	B7313ACM	2.61
	140	33	101	75.0	7313B	1.95
	160	37	129	97.0	7413BM	3.82

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
70	110	20	44.2	41.0	7014AC	0.626
	110	20	44.2	41.0	7014ACM	0.725
	125	24	79.3	65.0	7214CM	1.26
	125	24	79.3	65.0	7214C	1.10
	125	24	75.4	62.0	7214ACM	1.26
	125	24	75.4	62.0	7214AC	1.10
	125	24	79.3	65.0	B7214C	1.16
	125	24	79.3	65.0	7214CTN1	1.09
	125	24	68.0	54.0	7214BM	1.27
	150	35	134	100	7314C	2.69
	150	35	134	100	7314CM	3.01
	150	35	129	96.0	7314AC	2.69
	150	35	129	96.0	7314ACM	3.01
	150	35	114	86.0	7314B	2.85
	150	35	114	86.0	7314BM	3.20
	180	42	164	131	7414ACM	5.22
	180	42	164	131	7414ACJ	4.86
	180	42	148	118	7414BM	5.64
75	130	25	78.7	66.5	7215C/P5	1.24
	130	25	79.3	67.0	7215ACM	1.29
	130	25	79.3	67.0	7215AC	1.18
	130	25	79.3	67.0	7215ACJ	1.18
	130	25	79.3	67.0	7215ACTN1	1.21
	160	37	146	113	7315CM	3.57
	160	37	146	113	7315CJ	3.11
	160	37	140	109	7315AC	3.11
	160	37	140	109	7315ACM	3.57
	160	37	140	109	7315ACQ1	3.52

Automobile Deep groove ball bearing

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Angular Contact Ball Bearings



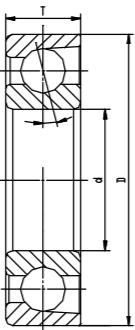
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
60	95	18	35.1	30.0	7012AC	0.392
	110	22	55.9	43.0	7212AC	0.786
	110	22	55.9	43.0	7212ACM	0.951
	110	22	58.5	45.0	7212C	0.786
	110	22	49.4	36.0	7212BM	0.947
	130	31	94.9	67.0	7312AC	1.80
	130	31	94.9	67.0	7312ACM	2.02
	130	31	91.0	60.0	7312BM	2.11
	130	31	91.0	60.0	7312B	1.86
	150	35	131	95.0	7412ACM	3.65
	150	35	120	86.0	7412BM	3.42
65	100	18	33.8	31.0	7013AC	0.414
	100	18	37.7	34.0	7013ACJ	0.410
	100	18	33.8	31.0	7013ACM	0.504
	120	23	72.8	59.0	7213C	1.02
	120	23	72.8	56.0	7213AC/P5	1.02
	120	23	70.2	56.0	7213ACM	1.16
	120	23	70.2	56.0	7213AC/YB5	1.02
	120	23	72.8	59.0	7213CM	1.16
	140	33	120	88.0	7313CM	2.60
	140	33	120	88.0	7313CJ	2.23
	140	33	120	88.0	7313C	2.23
	140	33	114	84.0	7313ACM	2.61
	140	33	114	84.0	7313ACJ	2.24
	140	33	114	84.0	7313AC	2.24
	140	33	101	75.0	7313BM	2.48
	140	33	114	84.0	B7313ACM	2.61
	140	33	101	75.0	7313B	1.95
	160	37	129	97.0	7413BM	3.82

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
75	160	37	125	97.0	7315BM	3.64
	160	37	125	97.0	7315B	3.26
	160	37	140	109	7315ACJ	3.10
	160	37	140	109	7315ACTN1	3.08
	190	45	159	130	7415BM	6.80
80	125	22	55.9	53.0	7016CA/P4	0.845
	125	22	55.9	53.0	7016CA/HQ1P4	0.845
	125	22	55.9	53.0	7016ACJ	0.849
	125	22	55.9	53.0	7016ACM	0.983
	140	26	97.5	83.0	7216CM	1.74
	140	26	92.3	79.0	7216ACM	1.73
	140	26	97.5	83.0	B7216C	1.47
	140	26	92.3	79.0	7216AC	1.48
	170	39	152	122	7316ACM	4.21
	170	39	152	122	7316ACJ	3.88
	170	39	152	122	7316AC	3.59
	170	39	152	122	7316ACF3	4.15
	170	39	135	109	7316BM	4.25
	200	48	195	168	7416ACM	8.60
	200	48	195	168	7416AC	7.18
	200	48	195	168	7416ACJ	7.22
	200	48	178	153	7416BM	8.05
85	130	22	57.2	56.0	7017ACM	1.12
	130	22	57.2	56.0	7017AC	0.95
	150	28	104	90.0	7217CM	1.72
	150	28	104	90.0	7217CJ	1.96
	150	28	98.8	86.0	7217AC	1.91

Automobile Deep groove ball bearing

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Angular Contact Ball Bearings



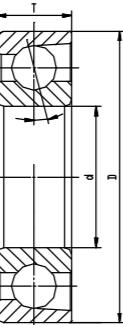
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
85	150	28	98.8	86.0	7217ACTN1	1.96
	150	28	98.8	86.0	7217ACM	1.72
	150	28	98.8	86.0	7217ACJ	1.97
	150	28	85.8	75.0	7217BM	2.23
	180	41	164	137	7317ACM	4.99
	180	41	146	122	7317BM	4.98
	180	41	146	122	7317BT	4.34
	180	41	146	122	7317BTN1	4.26
90	140	24	67.6	66.0	7018ACM	1.39
	140	24	69.0	66.0	7018ACMA/P5	1.37
	140	24	58.5	57.0	7018BM	1.43
	160	30	122	105	7218CM	2.47
	160	30	122	105	7218C	2.09
	160	30	117	100	7218ACM	2.35
	160	30	117	100	7218ACJ	2.16
	160	30	117	100	7218AC	2.11
	160	30	103	88.0	7218BM	3.38
	190	43	183	158	7318CM	5.79
	190	43	176	152	7318ACM	6.18
	190	43	156	135	7318BM	5.26
	190	43	172	145	B7318C	4.90
	190	43	156	135	7318B	4.94
	225	54	233	214	7418ACM	11.5
	225	54	210	193	7418BM	11.4
95	145	24	53.5	69.0	7019ACM	1.44
	170	32	139	120	7219CM	3.20
	170	32	139	120	7219CJ	2.76

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN		kg	
95	170	32	133	114	7219ACM	2.97
	170	32	133	114	7219ACJ	2.76
	170	32	116	101	7219B	3.00
	200	45	196	174	7319CM	6.67
	200	45	189	167	7319ACM	6.67
	200	45	168	150	7319BM	6.67
100	150	24	76.7	77.0	7020AC	1.25
	180	34	156	136	7220CM	3.71
	180	34	148	130	7220ACM	3.74
	180	34	130	114	7220BM	4.00
	180	34	148	130	7220AC	3.25
	215	47	213	199	7320ACM	9.61
	215	47	190	177	7320BM	8.41
	215	47	190	177	7320B	7.29
	215	47	190	177	7320BT	7.58
105	225	49	202	193	7321BM	9.51
110	170	21	76.7	82.0	7022AX2M	1.86
	170	28	98.8	101	7022ACJ	1.90
	170	28	98.8	101	B7022AC	2.03
	170	28	98.8	101	7022ACM	2.41
	170	28	98.8	101	7022AC	2.16
	175	30	103	104	46722K	2.38
	200	38	185	171	7222CM	5.03
	200	38	185	171	7222CJ	4.14
	200	38	185	171	7222C	4.07
	200	38	176	164	7222ACM	4.81

Automobile Deep groove ball bearing

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Angular Contact Ball Bearings



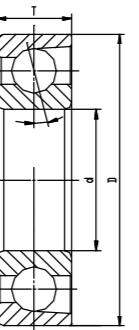
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm	mm	mm	KN	KN		kg
85	150	28	98.8	86.0	7217ACTN1	1.96
	150	28	98.8	86.0	7217ACM	1.72
	150	28	98.8	86.0	7217ACJ	1.97
	150	28	85.8	75.0	7217BM	2.23
	180	41	164	137	7317ACM	4.99
	180	41	146	122	7317BM	4.98
	180	41	146	122	7317BT	4.34
	180	41	146	122	7317BTN1	4.26
90	140	24	67.6	66.0	7018ACM	1.39
	140	24	69.0	66.0	7018ACMA/P5	1.37
	140	24	58.5	57.0	7018BM	1.43
	160	30	122	105	7218CM	2.47
	160	30	122	105	7218C	2.09
	160	30	117	100	7218ACM	2.35
	160	30	117	100	7218ACJ	2.16
	160	30	117	100	7218AC	2.11
	160	30	103	88.0	7218BM	3.38
	190	43	183	158	7318CM	5.79
	190	43	176	152	7318ACM	6.18
	190	43	156	135	7318BM	5.26
	190	43	172	145	B7318C	4.90
	190	43	156	135	7318B	4.94
	225	54	233	214	7418ACM	11.5
	225	54	210	193	7418BM	11.4
95	145	24	53.5	69.0	7019ACM	1.44
	170	32	139	120	7219CM	3.20
	170	32	139	120	7219CJ	2.76

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm	mm	mm	KN	KN		kg
95	170	32	133	114	7219ACM	2.97
	170	32	133	114	7219ACJ	2.76
	170	32	116	101	7219B	3.00
	200	45	196	174	7319CM	6.67
	200	45	189	167	7319ACM	6.67
	200	45	168	150	7319BM	6.67
100	150	24	76.7	77.0	7020AC	1.25
	180	34	156	136	7220CM	3.71
	180	34	148	130	7220ACM	3.74
	180	34	130	114	7220BM	4.00
	180	34	148	130	7220AC	3.25
	215	47	213	199	7320ACM	9.61
	215	47	190	177	7320BM	8.41
	215	47	190	177	7320B	7.29
	215	47	190	177	7320BT	7.58
105	225	49	202	193	7321BM	9.51
110	170	21	76.7	82.0	7022AX2M	1.86
	170	28	98.8	101	7022ACJ	1.90
	170	28	98.8	101	B7022AC	2.03
	170	28	98.8	101	7022ACM	2.41
	170	28	98.8	101	7022AC	2.16
	175	30	103	104	46722K	2.38
	200	38	185	171	7222CM	5.03
	200	38	185	171	7222CJ	4.14
	200	38	185	171	7222C	4.07
	200	38	176	164	7222ACM	4.81

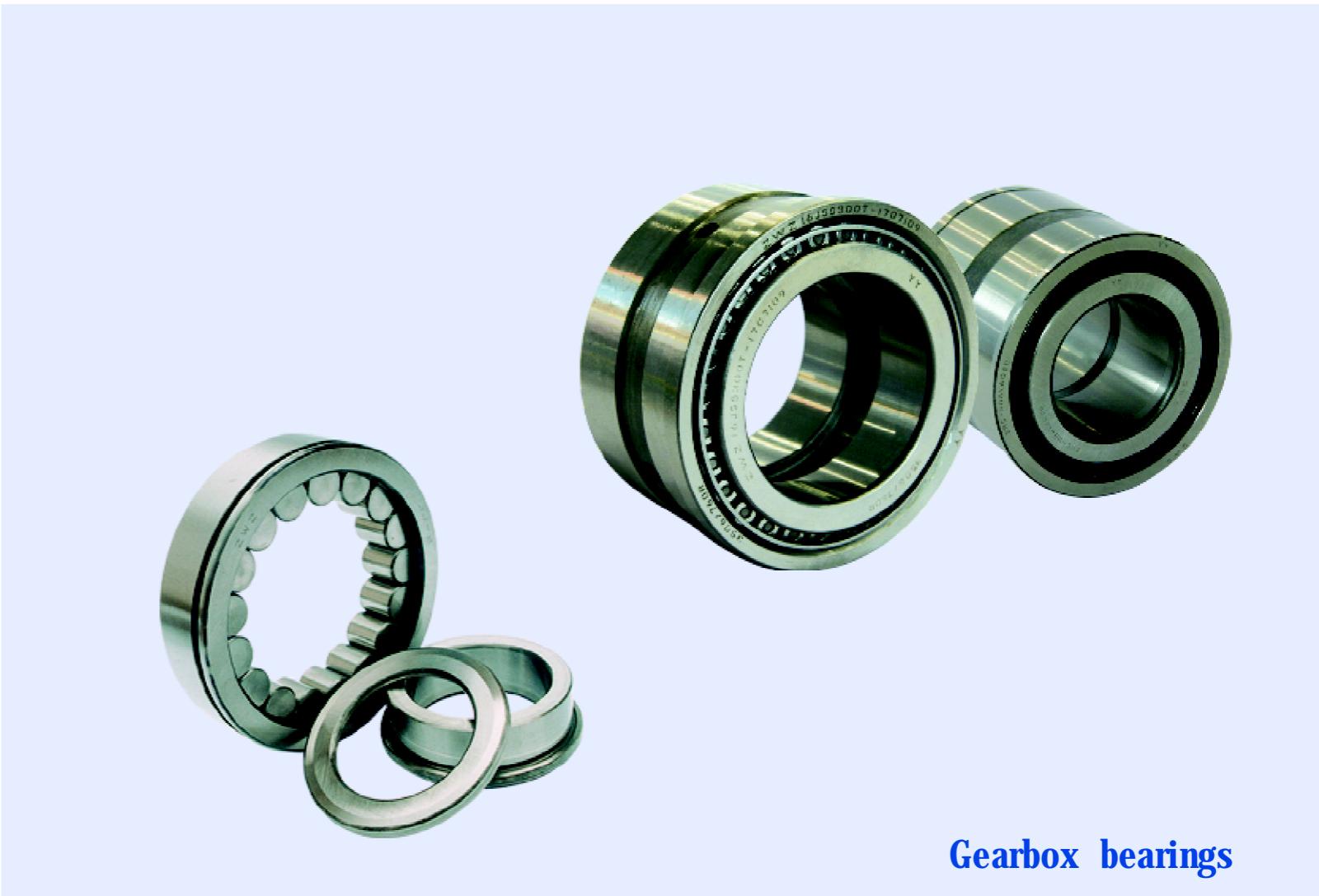
Automobile Deep groove ball bearing

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Angular Contact Ball Bearings

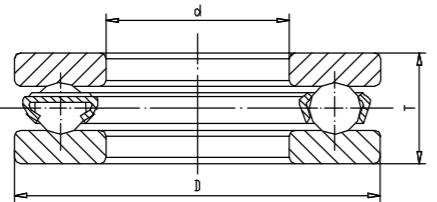


Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B	Cr	Cor		
mm			KN			kg
110	200	38	176	164	7222AC	4.07
	200	38	176	164	7222ACJ	4.14
	200	38	153	144	7222BM	3.95
	240	50	191	240	7322CM	9.67
	240	50	239	231	7322ACM	9.97
	240	50	213	212	7322BM	11.5
	240	50	213	212	7322BM/YA8	11.7
	240	50	213	212	7322B	9.84
	240	50	213	212	B7322BQ1	11.4
<hr/>						
120	180	28	100	107	7024ACM	2.62
	180	28	100	107	7024AC	2.31
	215	40	190	184	7224ACM	6.04
	215	40	247	184	B7224ACQ1/HAS0	6.45
	260	55	251	262	7324B	14.6
	260	55	278	288	B7324CM	14.2
	260	55	268	277	B7324ACM	14.2
	260	55	268	277	B7324ACQ1	14.0
	260	55	265	269	7324AC	13.7



Gearbox bearings

Basic Thrust Ball Bearing



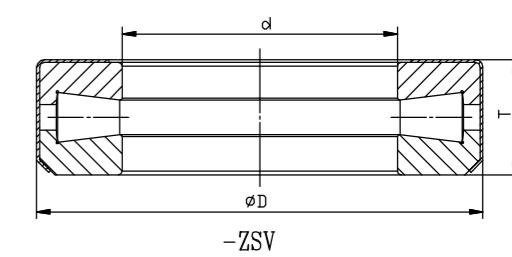
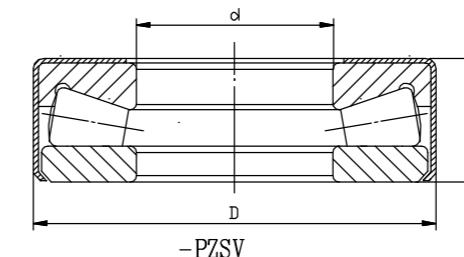
Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	rmin	Ca	Coa		
mm				KN		kg	
25	42	11	0.6	18.2	28.0	51105	0.0589
	52	18	1	35.0	42.0	51305	0.165
30	52	16	0.6	27.3	40.0	51206	0.138
	60	21	1	42.5	56.0		0.266
	70	28	1	69.0	74.0	51406	3.94
35	52	12	0.6	20.8	36.0	51107	0.0779
	52	12	0.6	20.8	36.0		0.0817
	62	18	1	37.3	55.5	51207	0.193
	68	24	1	55.5	73.8	51307	0.361
	68	24	1	55.5	73.8	51307/YA6	0.301
36.6	53.8	12	0.7	15.2	28.7		0.089
40	60	13	0.6	27.3	51.0	51108	0.118
	60	13	0.6	27.3	51.0	51108M	0.118
	68	19	1	46.8	78.0	51208	0.273
	68	19	1	46.8	78.0	51208M	0.324
	78	26	1	68.5	95.0	51308	0.521
	100	28	1.1	75.5	151		0.970
42	60	13	0.6	27.3	51.0		0.115
45	65	14	0.6	26.7	50.0	51109	0.139
	65	14	0.6	26.7	50.0	51109M	0.139
	73	20	1	37.0	81.0	51209	0.332
	85	28	1	72.3	96.0	51309	0.656

Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	rmin	Ca	Coa		
mm				KN		kg	
50	70	14	0.6	27.3	58.0	51110	0.155
	70	14	0.6	27.3	58.0	51110M	0.155
78	22	1		54.6	94.0	51210	0.374
95	31	1.1		96.2	145	51310	0.942
110	43	1.5		159	197	51410M	1.86
55	78	16	0.6	33.5	72.0	51111	0.226
	78	16	0.6	33.5	72.0	51111M	0.226
90	25	1		68.9	123	51211	0.571
105	35	1.1		119	174	51311	1.35
120	48	1.5		191	226	51411	2.61
60	85	17	1	39.5	87.0	51112	0.263
	85	17	1	39.5	87.0	51112M	0.263
95	26	1		74.0	141	51212	0.695
95	26	1		74.0	141	51212M	0.752
110	35	1.1		100	208	51313	1.39
130	51	1.5		200	262	51412M	3.48
65	90	18	1	45.5	103	51113	0.315
	90	18	1	45.5	103	51113M	0.363
100	27	1		75.4	151	51213	0.733
115	36	1.1		107	228	51313	1.54
140	56	2		239	330	51413M	4.17
70	95	18	1	49.4	119	51114	0.351
	95	18	1	49.4	119	51114M	0.377
105	27	1		76.7	161	51214	0.764
	105	27	1	76.7	161		0.756

Basic Thrust Ball Bearing

Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	B	rmin	Ca	Coa		
mm				KN		kg	
70	125	40	1. 1	148	270	51314	2. 00
	125	40	1. 1	148	270	51314M	2. 85
	150	60	2	257	350	51414M	5. 06
75	100	19	1	48. 1	120	51115	0. 382
	100	19	1	48. 1	120	51115M	0. 382
	110	27	1	64. 2	173	51215	0. 83
	135	44	1. 5	175	288	51315	2. 61
	160	65	2	251	438	51415	6. 61
80	105	19	1	49. 4	130	51116	0. 399
	115	28	1	87. 1	193	51216	0. 92
	140	44	1. 5	182	315	51316	2. 63
	170	68	1. 1	317	485	51416	7. 89
85	110	19	1	49. 4	132	51117	0. 419
	125	31	1	111	237	51217	1. 21
	150	49	1. 5	223	475	51317	3. 49
	150	49	1. 5	223	475	51317M	3. 97
	180	72	1. 1	336	534	51417M	8. 60
	180	72	1. 1	336	534	51417	8. 35
90	120	22	1	65. 0	170	51118	0. 632
	120	22	1	65. 0	170	51118M/P4	0. 721
	135	35	1. 1	132	285	51218	1. 67
	155	50	1. 5	232	517	51318	4. 02
	155	50	1. 5	232	517	51318M	4. 44
	190	77	2. 1	381	621	51418M	9. 91

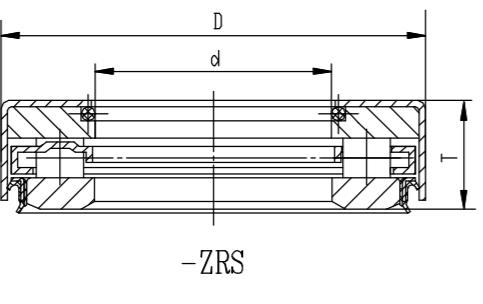
Single Row Thrust Tapered Roller Bearings



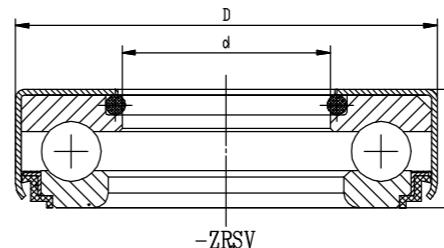
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	T	R	r	Ca	Coa		
mm					KN		kg	
38. 4	66	18	0. 6	0. 6	106	300	917/38. 4PZSV	0. 250
42. 1	70	18	1	1	117	224	917/42. 1PZSV	0. 272
45. 1	73	18	1	1	110	350	917/45. 1PZSV	0. 297
47	78	22	1	1	98. 0	325	917/47ZSV/YA	0. 409
50. 1	83	22	0. 8	0. 8	132	350	917/50. 1PZSV	0. 446
52. 4	85	22	1	1	134	460	917/52. 4ZSV	0. 505
52. 4	90	22	1	1	134	460	917/52. 4ZSV- 1	0. 606

Thrust Cylindrical Roller Bearings

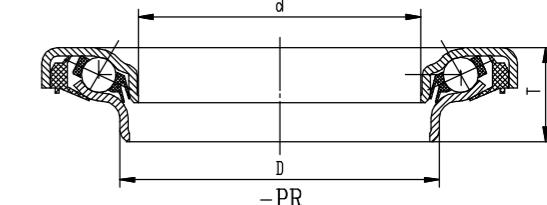
Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	T	Ca	Coa		
mm			KN			kg
30	52	16	59.4	121	81206TN1	0.127
	54	13.8	41.3	113	81206X2ZRS	0.113
38.5	66.7	18	71	190	817/38.5-ZS	0.232
42	65	14	45.1	113	811/42TN1	0.147
50	78.6	22	103	300	81210X1ZSTN1	0.381
	82	22	69	223	81210X1ZRS	0.439
	80	18.89	72.5	245	81210X2ZRS	0.333
110	160	38	264	250	81222	2.80



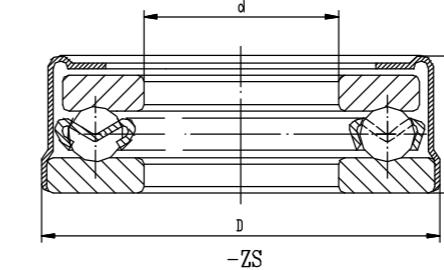
-ZRS



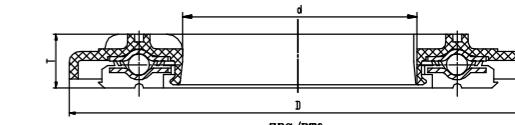
-ZRSV



-PR



-ZS



-ZRS/RT6

Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	H	Ca	Coa		
mm			KN			kg
12.15	36.6	10.18	10	20	517/12.15ZSV/YA	0.054
32.1	60.5	18	24.5	67	517/32-2ZSV	0.211
42.1	73	23	40	95	517/42-ZRSV	0.127
47	77.9	23	49	105	517/47ZRSV	0.399
52	83	23	49	114	517/52.5ZRSV	0.457
52.388	84.5	20.7	19	37	517/52X4ZS	0.372
54.23	90.2	20.2	23.2	66	517/54X4ZSTN1	0.402
64.6	71.35	17	10.6	32	*5617/64.6PR	0.166
69.84	114.3	22.1	42	96	517/69X4ZSTN1	0.642
86.6	137	12	20.7	95	517/86.6ZSV/RT6	0.145
86.6	142.1	31.5	20.7	95	517/86.6ZSV/RT6ZC	0.17

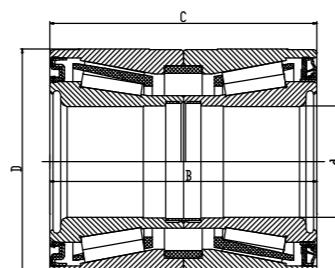
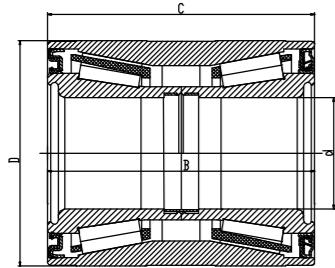
Basic Dimensions					Basic Load Ratings		Bearing Designations	Weight
d	D	B	C	T	Cr	Cor		
mm					KN			kg
75	130	25	22	27.25	157	231	30215	1. 4
45	100	36	36	36	145	164	NJ2309EM	1. 46
40	90	23	23	23	72	58	QJ308	0. 793
105	160	26	26	26	108	168	NU1021MA	1. 89
110	170	28	28	28	75. 5	67. 5	6022- 2RS	1. 98
110	170	38	29	38	210	365	32022- RS	3. 03
75	115	31	25. 5	31	118	213	33015- RS	1. 1
65	120	23	23	23	105	104	QJ213N/YB2	1. 23
65	140	33	33	33	165	146	QJ313N/YAB	2. 62
55	120	29	29	29	127	109	QJ311N	1. 72
105	160	26	26	26	108	168	NU1021M	1. 89
75	130	22	22	22	70	100	NU1017M	0. 716



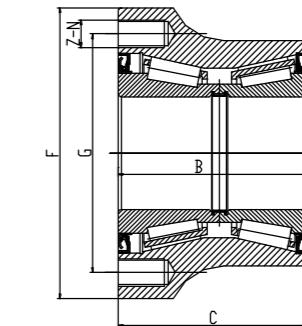
Automobile Wheelhub Bearing Unit

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First Generation Wheelhub Bearing Unit



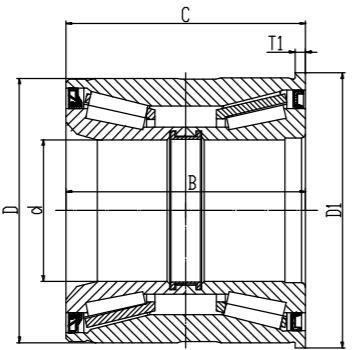
The Second Generation Wheelhub Bearing Unit



Basic Dimensions			Basic Load Ratings		Bearing Designations	Weight
d	D	B&C	Cr	Cor		
mm			KN			kg
25	52	37	35	38	DU 2505237	0.36
35	64	37	34	41	DU 3506437	0.50
39	68	37	36	45.5	DU 3906837	0.54
40	73	55	90	162	352208X1D1TN1- 2RS	1.04
42	76	39	48	56.5	DU 4207639	0.73
45	88	55	157	213	352209X1D1TN1- 2RS	1.49
55	90	60	143	279	352011X2D1TN1	1.59
55	90	55	136	234	DU559055	1.33
78	130	90	269	540	3506/78D1- 2RS	4.70
105	165	140	430	880	DU105165140	9.90
105	165	140	430	880	DU105165140YA	9.68

Basic Dimensions						Basic Load Ratings		Bearing Designations	Weight
d	D	B&C	G	N	Z	Cr	Cor		
mm						KN			kg
55	145	100	120	M12x1.25	10	286	470	DUF55145100	7.93
55	168	100	138	M16x1.5	10	330	500	DUF55168100	9.61
55	168	100	138	M16x1.5	5	330	500	DUF55168100YA	9.78
65	168	110	138	M16x1.5	10	295	570	DUF65168110	9.40
70	193	115	165	M16x1.5	10	370	635	DUF70193115	13.4

Flanged Outer Ring Wheelhub Bearing Unit



Basic Dimensions				Basic Load Ratings		Bearing Designations	Weight
d	D	D1	B&C	Cr	Cor		
mm				KN			kg
68	127.3	132	115	315	555	3506/68R- 2RS	6.38



Wheelhub Bearing Uint



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